

# The University of Texas at Tyler

## Self-Study Report

Submitted for ATMAE Reaccreditation

By Dr. Mark Miller, Chair  
Department of Technology  
3900 University Blvd.  
Tyler, TX 75799



### **Programs pursuing ATMAE accreditation:**

1. Bachelor of Science in Industrial Technology
2. Master of Science in Industrial Management

# Table of Contents

I. On-Site Visit Information.....	6
A. Date of the Visit.....	6
B. Visiting team members (Include name, organization, email, phone) .....	6
C. Proposed on-site visit agenda .....	6
D. Current accreditation status of program/options(s) under review .....	8
II. Institution Information.....	8
A. Number of students enrolled .....	8
B. Total full-time equivalent faculty .....	8
C. Operating budget .....	9
D. Institutional accreditation organization(s) and dates of accreditation.....	9
E. Institution’s history of accreditation by the ATMAE .....	10
F. Administration of the Institution .....	10
G. Major academic units within the institution.....	10
H. Institutional mission and goals.....	11
I. Relationship of institution to superior governing body .....	13
III. Administrative Unit(s) Information .....	13
A. Name of College or School, if appropriate and/or department/administrative unit(s) .....	13
B. Name(s), title(s), email, phone for dean(s) and/or department head(s). .....	13
C. Names of other Departments in the administrative unit.....	13
D. Names, titles, and contact information of others with program/option administration and/or coordination responsibility at the College, School, and Administrative Unit. ....	13
E. Titles of degree(s), program(s), and option(s) for which accreditation is being requested.....	14
F. Operating Budget for the administrative unit in which the program/option(s) reside, with a breakdown identifying the budget for the degree, program, and options. ....	14
IV. Program’s Compliance with ATMAE Accreditation Standards.....	16
Standard 1: Program Goals .....	16
Standard 2: Program Learning Outcomes .....	25
Standard 3: Program Structure & Course Sequencing .....	45
Standard 4: Student Admission, Enrollment & Retention .....	49
Standard 5: Administrative Support & Faculty Qualifications .....	52

Standard 6: Facilities, Equipment, Support & Safety .....	65
Standard 7: Program Operation .....	72
Standard 8: Graduate Satisfaction .....	81
Standard 9: Employer Satisfaction .....	91
Standard 10: Industrial Advisory Committee .....	92
Standard 11: Outcome measures used to Improve Program .....	99
Standard 12: Program Transparency to the Public .....	101

### List of Tables

Table 1: The University of Texas at Tyler FTE Enrollment.....	8
Table 2: Information Regarding Faculty Employment for UT Tyler.....	8
Table 3: Most Current Operating Budget Available for The University of Texas at Tyler.....	9
Table 4: Current Operating Budget for the Department of Technology at UT Tyler.....	14
Table 5: Five-year History of the Operating Budget for the Dept. of Technology at UT Tyler.....	14
Table 6: Assessment Method for Core Competencies and Student Learning Outcomes.....	27
Table 7: Core Competencies Mapped with Courses.....	27
Table 8: Industrial Technology Program Learning Outcomes Mapped to Course SLOs.....	29
Table 9: Mapping of Industrial Management Course Student Learning Outcomes to PLOs.....	38
Table 10: Industrial Technology Program Course Prerequisites.....	46
Table 11: The University of Texas at Tyler Undergraduate Admissions by Major for Fall 2023.....	49
Table 12: The University of Texas at Tyler Graduate Admissions by Major for Fall 2023.....	51
Table 13: Number of Students Enrolled in the Industrial Technology Program from 2019-2023.....	52
Table 14: Number of Industrial Technology & Industrial Management Degrees Conferred From 2019-23.....	53
Table 15: Number of Students Enrolled in the Industrial Management Program from 2019-2023.....	54
Table 16: The University of Texas at Tyler Undergraduate Retention Rates by Major.....	55
Table 17: Retention Rate of Industrial Technology Majors from 2018-2022.....	56
Table 18: Retention Rate of Graduate Students by Major at UT Tyler from 2018-2022.....	57
Table 19: Retention Rates of Industrial Management students from 2018-2022.....	58
Table 20: Academic Preparation of Full-Time Faculty Teaching TECH Courses.....	62
Table 21: Equipment, Supplies, and Materials Purchases for the Department of Technology.....	67
Table 22: 2024-2020 Budgets of the Technology and Computer Science Departments.....	77

### List of Tables

Table 23: Industrial Technology Graduates Satisfaction Rates for the Program and Other Resources.....	81
Table 24: Industrial Technology Graduates Perceived Effectiveness of Learning the Following Skills.....	81
Table 25: Industrial Management Graduates Satisfaction with the Program and Other Resources.....	82
Table 26: Industrial Management Graduates Perceived Effectiveness of Learning & Research Opps.....	83
Table 27: Starting Salary Ranges for Industrial Technology Graduates from 2019-2022.....	83
Table 28: UT Tyler Industrial Technology Graduates Average Salaries after 1, 5, and 10 Years.....	84
Table 29: UT Tyler College of Business Graduates Average Salaries after 1, 5, and 10 Years.....	85
Table 30: Employment and Advanced Degree Information for 2021-2023 Industrial Technology Graduates.....	85
Table 31: Employment, Location, Job Titles, and Salaries of Industrial Technology Majors from UT Tyler.....	87
Table 32: Starting Salary Ranges for Industrial Management Graduates from 2019-2022.....	88
Table 33: UT Tyler Industrial Technology Graduates Average Salaries after 1, 5, and 10 Years.....	89
Table 34: UT Tyler Masters Programs Graduates Average Salaries after 1, 5, and 10 Years.....	89
Table 35: Employment and Advanced Degree Info. for 2021-2023 Industrial Management Graduates.....	90
Table 36: Employment, Location, Job Titles, and Salaries of Industrial Management Majors from UT Tyler.....	90
Table 37: Average Time it Takes Industrial Technology Majors to Graduate.....	102
Table 38: Average Time it Takes Industrial Management Majors to Graduate.....	102
Table 39: Scholarships Awarded to Industrial Technology Majors from 2019-2023.....	103
Table 40: Grand Total of Scholarship Money Awarded to Industrial Technology Majors from 2019-2023.....	105
Table 41: Scholarships Awards to Industrial Management Majors from 2019-2023.....	106
Table 42: Grand Total of Scholarship Money Awarded to Industrial Management Majors.....	107
Table 43: Retention Rates for Industrial Technology Majors.....	108

### List of Figures

Figure 1 - Technology Department Laboratory Safety Policy Form.....	73
---	----

### Appendices

Appendix A: Degree Foundation Semester Hour Requirement Tables.....	109
Appendix B: Outcomes Measures Used to Improve Program.....	113
Appendix C: ATMAE Accreditation Site Team Visit Agenda.....	124
Appendix D: Soules College of Business Tenure and Promotion Policy.....	126

## Appendices

Appendix E: Laboratory Safety Information.....	146
Appendix F: Peer Review Form.....	149
Appendix G: Faculty Evaluation Form.....	162
Appendix H: Program Graduate Exit Information.....	165
Appendix I: Advisory Committee Meeting Information.....	297
Appendix J: Faculty Credentials .....	316
Appendix K: Continuous Improvement Model.....	400
Appendix L: ATMAE Certification Exam Information.....	402

# I. On-Site Visit Information

## A. Date of the Visit

April 21-23, 2024

## B. Visiting team members (Include name, organization, email, phone)

1. TEAM CHAIR: Dr. Ravindra Thamma  
Employer: Central Connecticut State University  
City, State: Hartford, Connecticut  
Cell Phone: (860) 329-6509  
Email Address: [thammarav@ccsu.edu](mailto:thammarav@ccsu.edu)
  
- 2: Team Member 2: Dr. Afzel Noore  
Employer: Texas A&M University - Kingsville  
City, State: Kingsville, TX  
Cell Phone: (304) 282-3232  
Email Address: [afzel.noore@tamuk.edu](mailto:afzel.noore@tamuk.edu)
  
3. Team Member 3: Dr. Mehmet (Emre) Bahadir  
Employer: Southeastern Louisiana University  
City, State: Hammond, Louisiana  
Cell Phone: (319) 290-7955  
Email Address: [mehmet.bahadir@selu.edu](mailto:mehmet.bahadir@selu.edu)

## C. Proposed on-site visit agenda

### **Sunday, April 21, 2024**

Arrive in Tyler

6:30 pm Dinner with Department Chair

8:30 pm Visiting Team meeting

### **Monday, April 22, 2024**

8:15 am Introductions and tour of facilities

9:30 am Faculty interviews

- Dr. Mark R. Miller, Professor and Chair
- Dr. Dominick Fazarro, Professor
- Dr. Heshium Lawrence, Associate Professor
- Dr. Mohammed Ali, Associate Professor
- Dr. Dennis Jones, Assistant Professor
- Ms. RaeJean Griffin, Lecturer

10:30 am Meet with:

- Dr. Krist Swimberghe, Dean of the Soules College of Business

- 11:15 am Meet with Assessment Personnel
- Meet with Halley Graham, Soules College of Business Assessment Coordinator
  - Meet with Dr. Lou Ann Berman, Associate Provost for Assessment and Institutional Effectiveness
- 12:00 am Lunch with Advisory Committee
- 1:15 pm Meet with University Personnel: Dr. Afzel Noore
- Becky McKay, Executive Director of Robert R. Muntz Library
  - Ona Tolliver, Senior Vice President for Student Success
  - David Barron, Associate Vice President for Enrollment Management
  - Meet with Administrators: Dr. Ravindra Thamma
  - Dwain Morris, Chief Business Officer
  - Dr. Amir Mirmiran, Provost and Executive Vice President for Academic Affairs; Chief Academic Officer
  - Dr. Krist Swimberghe, Dean, Soules College of Business
- 4:00 pm Team Meeting in Conference Room
- 5:00 pm Adjourn to Hotel
- 7:00 pm Dinner
- 9:00pm Team Meeting in Hotel - Review preliminary findings & assessments

**Tuesday, April 23, 2024**

- 8:00 am Review materials
- 9:30 am Meet with students
- 10:00 am Team Meeting Work Session
- 12:00 am Lunch (Working Lunch)
- 2:15 pm Exit interview with
- Dr. Kirk Calhoun, President
  - Dr. Amir Mirmiran, Provost and Executive Vice President for Academic Affairs; Chief Academic Officer
  - Dr. Krist Swimberghe, Dean of the Soules College of Business
  - Dr. Mark Miller, Chair of the Department of Technology
- 3:00 pm Team Meeting in Conference Room
- 3:30 pm Depart Campus

**D. Current accreditation status of program/options(s) under review**

BS in Industrial Technology reaccredited in 2019

MS in Industrial Management initial accreditation in 2019

**II. Institution Information**

**A. Number of students enrolled**

1. Total: 9,678
2. Full-time: 5,826
3. Part-time: 3,852
4. Full-time equivalent: 7,110

**TABLE 1: The University of Texas at Tyler FTE Enrollment**

	Undergraduate Headcount	Graduate Headcount	Total
Full-time	5,073	753	5,826
Part-time	2,214	1,638	3,852
Total	7,287	2,391	9,678
<b>Full-Time Equivalent (FTE)</b>	<b>5,811</b>	<b>1,299</b>	<b>7,110</b>

*Source: Office of Information Analysis*

**B. Total full-time equivalent faculty: 369**

**TABLE 2: Information Regarding Faculty Employment for UT Tyler**

I-1.		Full-Time	Part-Time	Total
A	Total number of instructional faculty	369	247	616
B	Total number who are members of minority groups	41	37	78
C	Total number who are women	199	161	360
D	Total number who are men	170	86	256
E	Total number who are nonresidents (international)	18	7	25
F	Total number with doctorate, or other terminal degree	264	63	327
G	Total number whose highest degree is a master's but not a terminal master's	82	76	158
H	Total number whose highest degree is a bachelor's	2	3	5
I	Total number whose highest degree is unknown or other (Note: Items f, g, h, and i must sum up to item a.)	21	105	126
J	Total number in stand-alone graduate/professional programs in which faculty teach virtually only graduate-level students	291	20	311

*Common Data Set 2022-2023, p 25* <https://www.uttyler.edu/information-analysis/common-data-sets/cds-2022-2023.pdf>

**C. Operating budget**

1. Current

The most current operating budget for the university is listed in Table 3.

2. Five-year history

The following links are to the UT Tyler Fact Book which includes everything you want to know about UT Tyler.

The operating budget is listed on the page number listed to each link.

2022-2023 Fact Book: <https://www.uttyler.edu/information-analysis/files/2022-2023-factbook.pdf> pg.90.

2021-2022 Fact Book: <https://www.uttyler.edu/information-analysis/files/2021-2022-factbook.pdf> pg.90.

2020-2021 Fact Book: <https://www.uttyler.edu/information-analysis/files/2020-2021-factbook.pdf> pg. 83.

2019-2020 Fact Book: <https://www.uttyler.edu/information-analysis/files/2019-2020-factbook.pdf> pg. 83.

2018-2019 Fact Book: <https://www.uttyler.edu/information-analysis/files/2018-2019-factbook.pdf> pg. 82.

**TABLE 3: Most Current Operating Budget Available for The University of Texas at Tyler**

**Operating Budget - Fiscal Year Ending August 31, 2023**

Adjusted FY 2022 Budget		Educational and General*	Designated*	Auxiliary*	Restricted *	Available University Fund*	Unexpended Plant Funds*	Subtotal*	Adjustments*	FY 2023 Total Operating Budget*
\$ 87,850,570	<b>Operating Revenues:</b>	13,104,533	67,946,470	7,623,514	-	-	-	88,674,517	-	88,674,517
(25,796,100)	Tuition and Fees	-	-	-	-	-	-	-	(27,754,516)	(27,754,516)
14,500,079	Federal Sponsored Programs	-	3,040,980	-	-	18,865,639	-	21,906,619	-	21,906,619
19,170,941	State Sponsored Programs	4,166,241	9,446,790	-	-	6,033,076	-	19,646,107	-	19,646,107
68,105,807	Local and Private Sponsored Programs	465,390	74,917,068	-	-	4,906,199	-	80,288,657	-	80,288,657
18,071,381	Net Sales and Services of Educational Activities	3,569,175	8,410,357	-	-	8,796	-	11,988,328	-	11,988,328
149,004,974	Net Sales and Services of Hospital and Clinics	163,613,557	10,491	-	-	-	-	163,624,048	-	163,624,048
24,842,205	Net Professional Fees	-	18,650,658	-	-	-	-	18,650,658	-	18,650,658
9,806,193	Net Auxiliary Enterprises	-	-	10,973,165	-	-	-	10,973,165	-	10,973,165
31,951,325	Other Operating Revenues	346,042	17,878,756	-	-	-	-	18,224,800	-	18,224,800
397,507,375	<b>Total Operating Revenues</b>	185,264,938	200,301,572	18,596,679	-	29,813,710	-	433,976,899	(27,754,516)	406,222,383
	<b>Operating Expenses:</b>									
86,491,976	Instruction	47,913,528	39,347,679	-	-	3,575,023	-	90,836,230	(262,478)	90,573,752
21,952,455	Academic Support	11,249,899	10,869,381	-	-	436,574	-	22,555,854	(244,273)	22,311,581
36,597,328	Research	11,185,132	3,924,381	-	-	27,515,422	-	42,624,935	(504,841)	42,120,094
1,192,936	Public Service	-	627,120	-	-	320,588	-	947,708	-	947,708
256,310,153	Hospitals and Clinics	163,387,733	102,964,130	-	-	90,092	-	266,441,955	(1,497,649)	264,944,306
31,094,587	Institutional Support	15,834,806	12,859,088	-	-	948,810	-	29,642,704	(1,011,915)	28,630,789
13,895,774	Student Services	4,069,358	10,183,346	-	-	238,507	-	14,491,211	(118,981)	14,372,230
19,874,161	Operation and Maintenance of Plant	13,914,856	6,753,959	-	-	11,956	-	20,680,771	(75,169)	20,605,602
18,507,304	Scholarships and Fellowships	4,178,000	13,516,837	-	-	23,792,562	-	41,487,399	(27,754,516)	13,732,883
15,343,361	Auxiliary Enterprises	-	-	14,820,799	-	-	-	14,820,799	(175,675)	14,645,124
37,498,495	Depreciation and Amortization	-	-	-	-	-	-	-	36,481,151	36,481,151
538,558,530	<b>Total Operating Expenses</b>	271,733,312	201,045,921	14,820,799	-	56,929,534	-	544,529,566	4,835,654	549,365,220
(141,051,155)	<b>Operating Surplus/Deficit</b>	(86,468,374)	(744,349)	3,775,880	-	(27,115,824)	-	(110,552,667)	(32,590,170)	(143,142,837)
	<b>Budgeted Nonoperating Revenues (Expenses):</b>									
88,970,584	State Appropriations	87,163,613	-	-	-	-	-	87,163,613	-	87,163,613
21,049,694	Federal Sponsored Programs - Nonoperating	-	-	-	-	20,695,923	-	20,695,923	-	20,695,923
8,120,036	State Sponsored Programs - Nonoperating	-	1,015,985	97,000	-	-	-	9,242,832	-	9,355,817
11,316,178	Gifts in Support of Operations	117,178	6,504,144	-	-	5,807,425	-	12,428,747	-	12,428,747
-	Net Investment Income	-	-	-	-	-	-	-	-	-
-	Other Non-Operating Revenue	-	-	-	-	-	-	5,673	-	5,673
-	Other Non-Operating (Expenses)	-	-	-	-	-	-	-	-	-
129,456,492	<b>Net Budgeted Non-Operating Revenue/(Expenses)</b>	87,280,791	7,520,129	97,000	-	34,751,853	-	129,649,773	-	129,649,773
	<b>Transfers and Other:</b>									
219,453	AUF Transfers Received	2,846,263	-	-	-	-	-	2,846,263	-	2,846,263
-	AUF Transfers (Made)	-	-	-	-	-	-	-	-	-
(3,862,942)	Transfers for Debt Service - Interest	(1,041,465)	(688,809)	(2,321,713)	-	-	-	(4,051,987)	(58,631)	(4,110,618)
(2,123,495)	Transfers for Debt Service - Principal	(5,546,168)	(1,015,000)	(2,013,000)	-	-	-	(8,574,168)	(1,872,350)	(10,446,518)
(158,547)	Budget Transfers	2,928,953	(1,943,038)	-	-	(1,148,652)	-	(162,737)	-	(162,737)
(5,925,531)	<b>Total Transfers and Other</b>	(812,417)	(3,646,847)	(4,334,713)	-	(1,148,652)	-	(9,942,829)	(1,930,981)	(11,873,810)
\$ (17,520,194)	<b>Budget Surplus (Deficit)</b>	-	3,128,933	(461,833)	-	6,487,377	-	9,154,477	(34,521,151)	(25,366,674)
\$ 527,183,320	<b>Total Revenues and AUF Transfers</b>	275,391,992	207,821,701	18,693,679	-	64,565,563	-	566,472,935	(27,754,516)	538,718,419
(542,421,472)	<b>Total Expenses and Transfers for Interest</b>	(272,774,777)	(201,734,730)	(17,142,512)	-	(56,929,534)	-	(548,581,553)	(4,894,285)	(553,475,838)
\$ (15,238,152)	<b>Excess (Deficiency) of Revenue over Expenses</b>	2,617,215	6,086,971	1,551,167	-	7,636,029	-	17,891,382	(32,648,801)	(14,757,419)

\*Includes Health Science Center financial data.

**D. Institutional accreditation organization(s) and dates of accreditation.**

(An institution shall document any actions taken by other accrediting agencies which have either denied the institution or program/option accreditation or pre-accreditation status, have placed the institution or

program/option on public probationary status, or have revoked the accreditation or pre-accreditation status of the institution or program/option.)

The University of Texas at Tyler is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award bachelor's, master's and doctoral degrees. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of The University of Texas at Tyler may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website ([www.sacscoc.org](http://www.sacscoc.org)) Every 10 years, a SACSCOC accredited institution must undergo a review to demonstrate compliance with the Principles of Accreditation. The review consists of:

- Compliance Certification
- Off-Site Peer Review
- Quality Enhancement Plan (QEP)
- On-Site Visit
- Review/Approval by SACSCOC Board of Trustees

Next Reaffirmation of Accreditation: 2031

#### **E. Institution's history of accreditation by the ATMAE**

The Department of Technology became its own separate department again in the fall semester of 2015. Prior to that date, it was combined with Human Resource Development (HRD) in 2005. At that time, the Department of HRD & Technology had four programs accredited by ATMAE in 2006. Following recommendations by the Administration, the Industrial Safety program was eliminated due to low enrollment, the HRD program is now recognized by the Society for Human Resource Management and not accredited by anyone, and the BAAS program is no longer seeking accreditation nor part of either department. In 2012 (the first ATMAE reaccreditation visit), only the Bachelor of Science in Industrial Technology program was seeking ATMAE accreditation and is now under the separate Department of Technology. Furthermore, the graduate Industrial Management program was accredited for the first time in 2019 with the successful second reaccreditation of the undergraduate Industrial Technology program. The Surveying and Mapping emphasis in Industrial Technology is not seeking accreditation.

#### **F. Administration of the Institution**

1. Name and title of Head of Institution

Dr. Kirk A. Calhoun, President

2. Name and title of Chief Academic Officer

Dr. Amir Mirmiran, Provost and Executive Vice President for Academic Affairs

#### **G. Major academic units within the institution**

- College of Arts and Sciences
- College of Education and Psychology
- College of Engineering

School of Health Professions  
School of Medicine  
School of Nursing  
Soules College of Business  
The Ben and Maytee Fisch College of Pharmacy

#### H. Institutional mission and goals

Office of the President

#### **UT Tyler Mission Statement**

UT Tyler is a comprehensive public university. We help our students, patients, and community members achieve their educational and health goals by offering a combination of excellence in higher education, research, public service, and advanced healthcare delivery.

#### **UT Tyler Vision Statement**

We aspire to be an impactful, values-centered institution unified in common purpose; a community that fosters opportunity, committed to providing a uniquely balanced student experience and improving the quality of human life.

#### **UT Tyler Values**

Servant Leadership: We put the needs of our students, patients, colleagues, and community, first.

Excellence: We work collaboratively every day to be better and strive to establish and achieve exemplary outcomes.

Accountability: We hold ourselves to the highest ethical standards and manage the resources of UT Tyler wisely.

Diversity: We respect and value diversity in ideas, peoples, and cultures and strive to create an inclusive and equitable community.

#### **Enrich the Student Experience Goals**

Increase student mentorship, experiential learning, and professional development opportunities for students.

Promote student engagement.

Increase research experiences to be broadly available to all graduate and undergraduate students.

Support a growing student body by advancing a culture of equal opportunity and success.

#### **Elevate Economic Opportunity and Social Mobility for our Students Goals**

Increase educational impact to meet the demands of Texas learners through enrollment growth to 15,000 students by 2027.

Enhance the delivery of flexible programs and additional supports for students.

Increase the number of quality academic and cocurricular programs across all disciplines.

Be the destination institution for students seeking careers in health professions.

Ensure student success through achieving excellence in outcomes assessment.

### **Partner & Collaborate in Service to our Community Goals**

Be a Carnegie Community-Engaged University.

Establish a workforce pipeline that creates a positive impact on the community and all East Texas.

Foster communication and an inclusive culture among all stakeholders.

Lead innovation on care delivery and research models for complex populations in rural communities.

### **Ensure Sustainability and Foster Accountability Goals**

Establish efficiencies to make college education more affordable.

Grow philanthropic giving necessary to support the institution's mission.

Create a culture of accountability and transparency.

Expand infrastructure and facilities to support university growth.

Pursue opportunities to diversify revenue sources.

### **Advance Excellence in Teaching, Research, and Healthcare Goals**

Invest in current faculty and staff, creating a campus culture of belonging.

Double research expenditures by 2027.

Leverage growth trajectory and reputational momentum to attract diverse talent.

Grow medical education and other health education programs to serve East Texas providers and caregivers.

<https://www.uttyler.edu/president/files/2022-ut-tyler-strategic-plan.pdf>

**I. Relationship of institution to superior governing body**

The University of Texas at Tyler is part of the prestigious University of Texas System that includes 14 institutions located throughout the state. Chancellor James B. Milliken is the chief executive officer of the UT System and reports to the Board of Regents. He has direct line responsibility for all aspects of the UT System's operations. The Board of Regents, the governing body for The University of Texas System, is composed of nine members who are appointed by the Governor and confirmed by the Senate. Terms for Regents are scheduled for six years each and staggered so that three members' terms will usually expire on February 1 of odd-numbered years. In addition, the Governor appoints a Student Regent for a one-year term.

Throughout the more than 100-year history of the UT System, the Board has been composed of dedicated and distinguished Texans who have been strong advocates of excellence in academic programs, scientific inquiry, and responsible public service. Founded in 1971, UT Tyler today enrolls nearly 10,000 students and consists of seven colleges.

**III. Administrative Unit(s) Information**

**A. Name of College or School, if appropriate and/or department/administrative unit(s)**

The Soules College of Business, School of Technology, Department of Technology

**B. Name(s), title(s), email, phone for dean(s) and/or department head(s).**

Dr. Krist Swimberghe, Dean  
Soules College of Business  
[kswimberghe@uttyler.edu](mailto:kswimberghe@uttyler.edu)  
903-566-7360

Dr. Mark Miller, Chair  
Department of Technology  
[mmiller@uttyler.edu](mailto:mmiller@uttyler.edu)  
903-566-7186

**C. Names of other Departments in the administrative unit.**

The Department of Management & Marketing

The Department of Accounting, Finance, & Business Law

The Department of Human Resource Development

The Department of Computer Science

**D. Names, titles, and contact information of others with program/option administration and/or coordination responsibility at the College, School, and Administrative Unit.**

Dr. Mohammed Ali  
Industrial Technology Program Coordinator for Longview  
Phone: (903) 236-2040  
[mohammedali@uttyler.edu](mailto:mohammedali@uttyler.edu)

E. Titles of degree(s), program(s), and option(s) for which accreditation is being requested.

Bachelor of Science in Industrial Technology  
 Master of Science in Industrial Management

F. Operating Budget for the administrative unit in which the program/option(s) reside, with a breakdown identifying the budget for the degree, program, and options.

1. Current

TABLE 4: Current Operating Budget for the Department of Technology at UT Tyler

**2024 Technology Budget**

Account Description	Fund Code Description	Class Description	Account	Cost Center	ChartField1 Description	Budget	Available Budget*
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	0	-17,679.59
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	0	-1,832.50
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	0	-362,659.89
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	0	-82,320.35
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	0	-50,248.82
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	0	-235.24
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	0	-13,208.10
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	60,000.00	44,548.01
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	0	-3,438.12
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	898.16	898.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	7,654.00	-3,913.59

2. Five-year history

The following table lists the operating budgets for the last five years for the Department of Technology.

**Table 5: Five-year History of the Operating Budget for the Dept. of Technology at UT Tyler**

**2024 Technology Budget**

Account Description	Fund Code Description	Class Description	Account	Cost Center	ChartField1 Description	Budget	Available Budget*
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	0	-17,679.59
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	0	-1,832.50
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	0	-362,659.89
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	0	-82,320.35
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	0	-50,248.82
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	0	-235.24
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	0	-13,208.10
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	60,000.00	44,548.01
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	0	-3,438.12
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	898.16	898.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	7,654.00	-3,913.59

<b>2023 Technology Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	19,312.50
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	5,003.00
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	394,508.98
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	118,497.85
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	142,791.85
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	338.67
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	32,972.29
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	86,634.38
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	12,000.00
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	623.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	12,440.61

<b>2022 Technology Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	18,750.00
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	10,138.50
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	380,056.53
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	115,046.09
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	134,282.46
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	369.83
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	31,406.16
Operating Expenses	E&G Special Items (i.e. SALS)	Instruction	A4000	21001291	Technology General Funds	-7,925.52
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	75,965.85
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	13,010.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	1,346.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	15,324.98
Expense Transfers	E&G Special Items (i.e. SALS)	Instruction	A7000	21001291	Technology General Funds	7,925.52
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001726	Technology ISF	-1,254.18
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002159	Technology SSUCF	-10.75
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001727	Technology DT	-2,724.88

2021 Technology Budget						
Account Description	Fund Code Description	Class Description	Account	Cost Center	ChartField1 Description	Budget
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	16,681.35
Wages	DES Designated Tuition	Instruction	A1200	31001727	Technology DT	1,273.00
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	372,604.44
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	112,790.28
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	129,242.88
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	37,187.00
Operating Expenses	E&G Special Items (i.e. SALS)	Instruction	A4000	21001291	Technology General Funds	-6,786.70
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	65,613.74
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	28,234.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	13,996.33
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	1,366.81
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	734.14
Expense Transfers	E&G Special Items (i.e. SALS)	Instruction	A7000	21001291	Technology General Funds	6,786.70
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001726	Technology ISF	9,856.26
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002159	Technology SSUCF	3.67
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001727	Technology DT	5,646.87

2020 Technology Budget						
Account Description	Fund Code Description	Class Description	Account	Cost Center	ChartField1 Description	Budget
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	16,681.35
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	6,981.00
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	458,476.41
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	31,790.29
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	136,847.40
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	250.08
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	7,455.11
Operating Expenses	E&G Special Items (i.e. SALS)	Instruction	A4000	21001291	Technology General Funds	-104,224.68
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	162,885.33
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	19,264.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	10,003.45
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001724	Technology Summer SF - DT	10.74
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	5,873.86
Expense Transfers	E&G Special Items (i.e. SALS)	Instruction	A7000	21001291	Technology General Funds	104,749.97
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001726	Technology ISF	-6,836.71
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002159	Technology SSUCF	-3.45
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001724	Technology Summer SF - DT	-10.74
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001727	Technology DT	4,195.27

## IV. Program's Compliance with ATMAE Accreditation Standards

### STANDARD 1: PROGRAM GOALS

Each program/option shall have both short- and long-term operational goals and plans for achieving these goals. The goals shall align with the administrative unit and institution goals and shall be measurable, achievable, and specific to the continuous improvement of the program/option. Maintaining and improving facilities and equipment goals shall be included and aligned with Standard 6.

Evidence shall be provided of past goals, the plans for achieving them, how they were achieved, and how they were used to improve the program/option.

## **INSTITUTION'S RESPONSE TO STANDARD 1:**

Both Programs have the same response. This is typically the case because the University and College goals are general in nature which effect the faculty who teach in both programs; accreditation which is used to assess the quality of both programs, and other general policies that equally apply to both programs being offered.

### **Program Goals for 2019-2022 & 2022-2026:**

The Industrial Technology and Industrial Management program goals have been developed to be supportive of the goals and objectives of the university-wide mission statement and the goals and objectives of the college. Both the university and college mission statements changed in 2019 and again in 2022 to align them with changes in the community, SACSCOC reaffirmation standards, and the vision of new administrative personnel trying to improve the university and college. The university faculty, staff, and other support personnel were queried by the university administration to developed goals that were deemed most appropriate to the mission of the University. Departmental long and short-range goals were developed to implement the mission and goals of the university and college.

Because the mission and goal statements of the university span several years, the program's goals were broken down into long range and short range goals. The long range goals are derived from those of the university and college and the short range goals break the long range goals down into one or two year deliverables that can be assessed, reevaluated, and revised accordingly. In this way, a feedback loop can be implemented to continuously improve the program.

(lrg) = Long Range Goals (srg) = Short Range Goals

The Industrial Technology and Industrial Management program goals are aligned with the relevant goals outlined by the university and college. The university listed six main goals in order to carry out its vision and mission. The program's goals are aligned with five of the six goals because the University's Goal 4 deals with arts and culture, specifically listing improvements in the fine arts centers around campus. The 2019 program goals will be listed first since there has been time to measure and obtain data to how well they were achieved. The new goals for the 2022-2026 Strategic Plan were just approved and instituted in the fall 2023 semester and will just be listed here since there has not been enough time to obtain data on how well they have been achieved.

### **Department of Technology Goals for 2019-2022**

#### **University Goal One: TEACHING AND LEARNING**

UT Tyler will enhance student success, becoming nationally known for academic excellence in undergraduate and graduate programs.

☑ The programs will be known to have the same reputation for quality as the best programs in the country (lrg).

o The programs will maintain ATMAE accreditation (srg).

Not only did the BS in Industrial Technology program become reaccredited with no partial or non-compliances to ATMAE standards, but the MS in Industrial Management earned its initial ATMAE accreditation with the same outcome. No other department in the country that year obtained the same outcome for its ATMAE accredited programs.

o The programs will continue to produce graduates that can pass national certification exams (srg).

Although most graduates from the Industrial Technology program passed the ATMAE CMS certification exam, the pass rate was not as high as pre-COVID levels. Due to the lower pass rates, a new ATMAE Certified Manufacturing Specialist (CMS) Review Guide was developed that students could use to help them prepare for the exam. In addition, it can be used as part of the open book materials that are allowed by students who take the exam. It was noted by previous students that the online video session was too long and that they did not want to watch the entire review session. The ATMAE Review Guide is a short and concise written booklet that lists and explains all the material that is covered on the CMS exam. It was first used in December of 2023, and the two Industrial Technology majors who took the exam passed with high marks. It was concluded that students taking the exam in the future will be required to study and use the ATMAE Review Guide before and during the exam so more graduates can be certified thereby, helping them launch successful careers.

Graduate students of the Industrial Management program are encouraged to take the ATMAE Certified Lean Six Sigma (CLSS) exam since a major portion of their coursework deals with lean and six sigma quality. In addition, if the students pass the ATMAE CLSS exam at the green or black belt level and complete their related graduate coursework with a B or better, then they can become a Certified Lean Six Sigma Black Belt (CLSSBB) from the university which is listed on their official transcripts. Due to COVID-19 and other factors, all of the students wanting to obtain certification now take the exam online using ProctorFree. The department's faculty have noticed that less students are now taking the exam. In fact, after following up with the Soules College of Business Graduate Advising Office Director, it was noticed that only five students had taken the ATMAE certification exam over a five year period. Due to these very low numbers, the department is now offering the ATMAE CLSS exam as an alternative for the final exam in TECH 5366 Value Stream Management, since it is the last course offered in the Lean Six Sigma sequence. Student pass rates will be tracked in the summer of 2024.

o The programs will have state-of-the-art laboratories (srg).

From 2019-2023 the university and college have allowed the Department of Technology \$60,000-\$160,000 to purchase new state-of-the-art equipment to provide their students with the latest lab experiences similar to what is found in various industries throughout the area. A more detailed explanation is given in the reply to Standard 6.

## University Goal Two: RESEARCH

UT Tyler promotes excellence in scholarship, research, creative endeavor, and innovation.

☐ The programs will consist of faculty with excellent scholarly and research records (lrg).

o The programs will consist of faculty who publish as required by the Soules

College of Business Tenure and Promotion Policy (srg).

All of the tenure-track faculty have published at the level expected by the Soules College of Business. Records of publications are listed in each of the faculty's curriculum vitae (CV) listed in Appendix J.

- o The programs will have at least one research proposal submitted over a three year period (srg).

Drs. Fazarro and Ali have been working on research that has been funded over the past six years. Records of their research are listed in their CVs in the Appendix J.

- o The programs will consist of faculty who present at the national level annually (srg).

All of the full-time faculty, including lecturers, have presented at the annual ATMAE conferences the past six years. Many of them currently have or have had positions of leadership at the national level in ATMAE.

- o The programs will consist of faculty who are known for innovative endeavors (srg).

Dr. Fazarro is known for his expertise in nano safety and Dr. Ali has been recognized for his research in inhaler technology. Dr. Miller is known for his in-depth work with ATMAE certifications.

### Goal Three: SERVICE

Serve the community of East Texas and beyond.

- ☑ The programs will provide opportunities for students and faculty to build long term relations with the community of East Texas and beyond (lrg).

- o The programs will maintain and expand its Advisory Board to provide input to the programs so it can produce graduates that are adequately prepared for the workforce in the surrounding areas and beyond (srg).

The department's advisory board has been expanded and divided to include various representatives from industry who provide feedback for both programs. In other words, certain industry representatives were selected for the BS in Industrial Technology and others for the MS in Industrial Management depending upon which one they hired or worked with. Therefore, more accurate information can be obtained from the advisory board to better improve the two distinct programs.

- o The program will provide internship opportunities for majors in order to better prepare them for real life careers (srg).

Industrial Advisory board members have been instrumental in providing internship opportunities for majors of both programs along with a placement representative who works for the college. Students are also encouraged to seek internships that are then vetted by the department chair to ensure they are a good fit for majors of the programs.

- o The program will provide opportunities for students to participate in volunteer projects to help the community of East Texas and beyond (srg).

The department has three student organizations that faculty from the department advise who work with the students to volunteer their time to help the community in various activities. The UT Tyler ATMAE chapter has even won Outstanding Student Chapter at the national ATMAE conferences for all the work they do with the community.

#### University Goal Four: ARTS AND CULTURE

Promote the Arts and Culture on Campus and in the Community.

☑ N/A

#### University Goal Five: CAMPUS LIFE

Enhance Quality of Campus Life.

☑ The program will provide opportunities for students to build long term relations, and camaraderie with peers and faculty to enhance their college experience (lrg).

- o The program will create and/or offer a variety of student organizations and honor societies for students to participate in (srg).

The department currently offers four student organizations for its graduate and undergraduate students. The UT Tyler ATMAE Chapter that just recently won the Robotics Competition at the past ATMAE conference held in Atlanta, Georgia. The SME S358 student chapter offers students scholarships and placement opportunities. In addition, the chapter works with the local industry/professional chapter for East Texas. The department has the EPT Delta Gamma chapter that allows high achieving students to earn the recognition they deserve. High ranking industry professionals are also awarded honorary status through the chapter. Lastly, the first Women in Manufacturing student chapter was started this year to help retain female students by allowing them to have a voice and assist each other with some of the issues of a manufacturing field primarily comprised of men.

- o The program will provide opportunities for students to partake in external field trips to various local, regional, and national events related to the discipline (srg).

The SME student chapter arranges plant tours of various industries throughout the area. In addition, students who attend the ATMAE national conference are able to attend plant tours offered in the area in which the conference is held.

#### University Goal Six: STEWARDSHIP

Maintain outstanding stewardship of university resources. Seek Opportunities to be Entrepreneurial - Encourage and optimize research collaborations between faculty and community business leaders that will result in development of profit centers.

☑ The faculty of the program will develop a college wide center, institute, or collaboration with companies of the region to assist them with their training needs (lrg).

- o The faculty will provide training sessions to companies throughout the year that will generate revenue for the college and the university (srg).

The Texas Productivity Center was created by the Technology Department to offer training either at the university or at a company's facility. Over the years, the center has made over \$20,000 in profit to be used for special projects. A local trainer works with the center to provide his services to companies within the East Texas area.

## New 2022-2026 Department of Technology Goals

### PRIORITY: Enrich the student experience

#### GOALS

Increase student mentorship, experiential learning, and professional development opportunities for students

- Acquire more equipment and supplies to offer real-world laboratory experiences in more courses as well as enhancing existing courses (LTOG).
  - o Require faculty to develop laboratory experiences for courses that do not currently contain such experiences (STOG).
  - o Require faculty to increase the number of office hours that they are available so students will have a greater chance of seeking their guidance and assistance (STOG).

Promote student engagement.

- Offer more departmental student organizations so students become more connected with the university, make more friends, and want to continue with their studies (LTOG).
  - o Become the first university in the country to start a Women in Manufacturing student organization (STOG).
  - o Offer more meetings and events for current student organizations to get students involved with the department and university (STOG).

Increase research experiences to be broadly available to all graduate and undergraduate students.

- Foster a climate for faculty to seek research grants that will require the aid of research graduate and undergraduate assistants (LTOG).
  - o Secure release time for faculty writing grants (STOG).
  - o Provide more merit pay and promotion opportunities for faculty writing and obtaining research grants (STOG).

Support a growing student body by advancing a culture of equal opportunity and success.

- Seek a diverse student population from across the globe for all department programs (LTOG).
  - o Obtain more assistantships to attract more international students (STOG).

- o Recruit from all high schools in the region to secure a diverse student population (STOG).

PRIORITY: Elevate economic opportunity & social mobility for our students

GOALS

Increase educational impact to meet the demands of Texas learners through enrollment growth by 2027.

- Develop a marketing strategy for the BS in Industrial Technology program (LTOG).
  - o Meet with the university Marketing Department to brainstorm strategies for increasing enrollment in the Industrial Technology program (STOG).
  - o Increase the number of high school and community college visits to attract more students in the Industrial Technology program (STOG).
- Develop a marketing strategy for the MS in Industrial Management program (LTOG).
  - o Meet with the university Marketing Department to brainstorm strategies for increasing enrollment in the Industrial Management program (STOG).

Enhance the delivery of flexible programs and additional supports for students.

- Develop a connection with the college Academic Partners (AP) accelerated programs so the graduate program can offer courses in a condensed semester as well (LTOG).
  - o Offer certificate programs through the 7-week AP accelerated schedule (STOG).
  - o Offer the entire MS in Industrial Management program through the 7-week AP accelerated schedule (STOG).

Increase the number of quality academic programs.

- Offer a Supply Chain Management certification for students at the graduate level (LTOG).
  - o Develop a course sequence for a certificate in Supply Chain Management (STOG).
- Offer a Lean Six Sigma Green Belt certification for students at the graduate level (LTOG).
  - o Develop a course sequence for a LSSGB certificate for graduate students (STOG).
- Offer a doctoral program in Industrial Management (LTOG)
  - o Conduct a needs assessment for a doctoral program in Industrial Management (STOG)
  - o Develop curricula for a doctoral program in Industrial Management (STOG).

Ensure student success through achieving excellence in outcomes assessment.

- Increase the number of students who pass ATMAE certification exams at the graduate and

undergraduate levels (LTOG).

- o Require student to take the ATMAE CMS exam at the undergraduate level (STOG).

☑ Provide a review session for students to take prior to taking an ATMAE certification exam (STOG).

- o Require student to take the ATMAE LSS exam at the graduate level (STOG).

PRIORITY: Partner & collaborate in service to our community

GOALS

Establish a workforce pipeline that creates a positive impact on the community and all East Texas.

- Develop more relationships with industries who hire graduates (LTOG).
  - o Connect with recruiters at university sponsored career fairs to encourage internships, etc. (STOG).
  - o Reach out to local industries to ask for plant tours so students will be noticed when industries are hiring more employees (STOG).

Foster communication and an inclusive culture among all stakeholders.

- Expand the advisory board to include more members from the community that could have an impact on the departmental programs (LTOG).
  - o Seek city and other community organizations that are connected to enticing new industries to locate to the region to serve on the advisory board (STOG).
  - o Ask more industries in the area to find a representative to serve on the department's advisory board so they can provide input in developing better employees (STOG).

PRIORITY: Ensure sustainability and foster accountability

GOALS

Establish efficiencies to make college education more affordable.

- Ask faculty to review several textbooks and reviewing their cost so students are not burdened with overpriced textbooks (STOG).
- Ask faculty to find a textbook that may serve for multiple courses so students do not have to purchase as many textbooks (STOG).
- Ask faculty to provide as many free online learning activities as possible to reduce student debt (STOG).

Grow philanthropic giving necessary to support the institution's mission.

- Explore ways to obtain external funding to the department's programs (LTOG).
  - o Develop a departmental newsletter to send to local industries, graduates, and students of each program highlighting important events and achievements (STOG).
  - o Create a page on the department's website for people to make contributions to the department (STOG).

PRIORITY: Advance excellence in teaching and research

GOALS

Invest in current faculty and staff, creating a campus culture of belonging.

- Foster a team environment for faculty where all faculty work together to provide a experience for the students (LTOG).
  - o Encourage faculty to engage in the various university sponsored faculty development workshops held throughout the year (STOG).
  - o Provide lunch and other niceties for departmental meetings and events (STOG).

Double research expenditures by 2027.

- Nourish an environment for research (LTOG).
  - o Encourage faculty research by providing research assistants to help them (STOG).
  - o Encourage more faculty research by giving it more weight for tenure, promotion, and merit raises (STOG).

Leverage growth trajectory and reputational momentum to attract diverse talent.

- Make our institution a household name that members of the profession are aware of (LTOG).
  - o Encourage faculty to present at the annual ATMAE conference (STOG).
  - o Encourage faculty to seek officer positions in ATMAE (STOG).

LTOG = Long term operational goal  
STOG = Short term operational goal

## **STANDARD 2: PROGRAM LEARNING OUTCOMES**

Measurable program learning outcomes (PLOs) shall be identified and assessed and then validated by the industrial advisory committee (see Standard 10) and other external stakeholders. Each student learning outcome (SLOs) usually seen in the course syllabi shall be mapped to the program learning outcomes. Follow-up studies of direct and indirect measures for each PLO shall be conducted (see Standards 8 and 9).

### **INSTITUTION'S RESPONSE TO STANDARD 2:**

Both programs have the same initial response.

Completion of the Bachelor of Science in Industrial Technology or the Master of Science in Industrial Management degree implies the expected development of competencies and program learning outcomes in the major areas of technology and management. The Advisory Committee that serves the Department of Technology at The University of Texas at Tyler has affirmed these competencies and outcomes. These competencies and outcomes not only serve the Department of Technology but are also part of the core competencies identified by the College of Business. The department's Advisory Committee meets at least once a year. Members are separated into those reviewing the undergraduate Industrial Technology program and those reviewing the Industrial Management program. This differentiation depends upon several factors such as the committee members degree or if his/her company employees one of the program's majors.

After the general program learning outcomes are developed, the individual instructor establishes the student learning outcomes. Those course outcomes are measured through the course requirements established for the course, instructor observation of students during class, written exams, and the evaluation of completed written, oral, and laboratory performance assignments. Course student learning outcomes are then listed in order to effectively assess the broader program learning outcomes

The program's advisory committee meets annually as part of the outcomes/student competencies validation process. Minutes from the program's advisory committee meetings are available for inspection to verify such action. Related questions to program competencies are also included in the technology alumni survey that is conducted every 2-3 years. Exchanges of job skill information during on-campus recruiting and interviewing by technology companies also aids the technology program chair/coordinator in prioritizing competencies. The program's general program outcomes are further broken down into more detail and are specified as general core competencies. These are then mapped to each course to make sure they are being addressed by some type of assessment method. Mapping of specific program outcomes to course student learning outcomes are also listed in the tables that follow.

### **GENERAL CORE COMPETENCY GROUPINGS FOR THE INDUSTRIAL TECHNOLOGY CURRICULUM**

1. Computer-Based Skills
  - a. Word processing
  - b. Spreadsheet
  - c. Presentation software
  - d. Database manipulation
  - e. Internet search skills
2. Communication Skills
  - a. Written
    - i. Report organization

- ii. Referencing
  - b. Oral
- 3. Interpersonal Skills
  - a. Team-based abilities – intra-group & inter-group cooperation
  - b. Leadership
  - c. Conflict resolution
- 4. Problem Solving (Critical Thinking)
  - a. Conceptual thinking
  - b. Gathering & analyzing data
  - c. Quantitative/statistical skills
  - d. Creativity & innovation
- 5. Personal Accountability for Achievement
- 6. Competence in Basic Tech. Principles
  - a. Competence in major field & grounding in other major Tech. core areas
  - b. Exposure to & appreciation for industrial experiences such as, but not limited to, industrial tours, work-study options & cooperative Ed., senior seminars.

### **Competency Assessment Method Key**

#### **1. Journal Reviews**

An individual student required assignment as specified (measurement) by course syllabus for the purpose of exposure to current technical related subject literature (articles, case studies).

#### **2. Term Paper/Project**

An individual student required assignment as specified (measurement) by course syllabus for the purpose of an in depth problem solving activity related to course technical subject matter.

#### **3. In-Class Presentation**

An individual student or group required assignment as specified (measurement) by course syllabus for the purpose of the development of subject matter content for the delivery and communication experience to a peer group through the use of various media devices and/or techniques.

#### **4. Class Participation**

An individual student's verbal voluntary participation as specified (measurement) by course syllabus for the purpose showing interest, subject inquiry, and evidence of learning.

#### **5. Software Application**

An individual student's ability to demonstrate use of subject matter software applications as specified (measurement) by course syllabus for the purpose of solving subject matter problems, data acquisition, and conceptual applications.

#### **6. Student Work**

An individual student or group documents as specified (measurement and assignment specifications) by course syllabus for the purpose of the instructional validation for subject matter learning activities.

### 7. Class Test and/or International ATMAE Certification Exam

An instructional assessment of a student's capacity to learn subject matter content and make respective applications as specified (measurement) by course syllabus.

### 8. Field Trip, Internship, or Manufactured Project Activity

An individual student's exposure to real world experiences either through observation or hands-on experience.

### 9. Not Addressed in This Class

Technology core competency is not addressed, measured, evaluated nor assessed in this class.

**Table 6: Assessment Method for Core Competencies and Student Learning Outcomes**

Competency Assessment Method Legend	
1. Journal Article Reviews	6. Textbook Assignments
2. Term Papers	7. Quizzes and Exams
3. In-class Presentations	8. Laboratory Activities/Projects
4. Class Participation	9. Not Addressed in this Class
5. Software Applications	

**Table 7: Core Competencies Mapped with Courses**

Courses	Industrial Technology Program Core Competencies																
	1a	1b	1c	1d	1e	2a	2b	3a	3b	3c	4a	4b	4c	4d	5	6a	6b
TECH 1303: Engineering Graphics	9	9	5	9	9	9	9	9	9	9	2, 5, 6, 7	2, 5, 6, 7	2, 5, 6, 7	2, 5, 6, 7	2, 5, 6, 7	2, 5, 6, 7	3, 5, 6, 7
TECH 1320: Industrial Materials	2	9	3	9	1, 2, 3,	2, 6, 7	3, 4	3, 6	3, 6	9	6, 7	1, 2	2, 6, 7	3, 4, 6	2, 3, 7	1, 2, 5	8
TECH 2311: Electrical & Fluid Systems	2	2	3	2	2	1, 2	4	9	9	9	2	2, 4, 6	2, 6	2, 4, 6	2, 4, 7, 6	2, 4, 7, 6	4
TECH 2319: Programmable Logic Control.	2	2	9	9	2, 4	4	9	9	9	9	2, 6	2, 4	6	2, 4, 6	4, 5, 6	2	8

TECH 3311: Mfg. Tech.	2	9	9	9	2, 5	2, 6, 7	4	6	6	9	6, 7	1, 2	2, 6, 7	4, 6	2, 7	1, 2, 5	8
TECH 3312: Facilities Ops. & Main.	2, 3	9	3	9	1, 2, 3	1, 2	4	4	6	9	6, 7	2, 6	9	6	7	3, 7	8
TECH 3333 Polymer Processing	2	9	9	9	2	2	9	8	9	8	8	2, 8	6	2, 8	2, 6, 8	7	2, 7, 8
TECH 3344: Industrial Safety	1	9	3	9	1, 6	2	3, 5	9	9	9	9	9	9	9	2, 7	4, 5, 6, 7	8
TECH 3355 Supply Chain Management	2	2	2, 4, 7	2, 3, 5	2, 3	2	3	3	3	3	2, 4, 7	2, 4, 7	2, 4, 7	2, 3	4	2, 3, 7	2, 3
TECH 3317: Industrial Robotics	6	9	9	6	4, 6	4, 6	4	4, 6, 8	3, 4, 7	3, 4, 5, 8	3, 4, 5, 6, 7, 8	5, 6, 7, 8	9	4	1, 4, 6, 7	1, 4, 6, 8	9
TECH 3310: Total Quality Management	1	9	9	5, 6	1, 2	1, 6	9	3, 4, 6	3, 4, 6	3, 4, 6	6	6	5, 6	5, 6	7	4, 5, 6, 7	8
TECH 4317: Computer Integ. Mfg.	1, 2, 3	2	3, 4	2	1, 2, 3	2, 3	4, 5	2, 3, 5	6	6	2, 3, 7	1, 2, 3	1, 2, 5	6	4, 7	8	4
TECH 4323: Lean Production	1, 2, 3	2	3, 6	1, 2	1, 2, 3, 6	1, 2, 7	3, 6	3	4	4, 6	3, 7	2, 3	2, 7	3, 7	4, 7	8	4
TECH 4343 Adv. Mfg. Processes	2	9	9	9	9	9	9	9	9	9	9	7	7	4	7	7	4
TECH 3320: LSSGB Tech.	9	9	9	9	9	6	9	8	8	8	9	9	9	9	6	8	8
TECH 3331: Project Management	1, 4, 6	5, 6	9	5, 6	9	4, 6	9	8	8	8	6, 8	5, 8	5, 6	9	6, 8	5, 6, 8	9
TECH, 4372: Capstone Experience	2	2	3	2	2	2	3	4	4	4	2, 4	2, 4	2, 4	2, 4	6	4	8

**Table 8: Industrial Technology Program Learning Outcomes Mapped to Course Student Learning Outcomes with Assessment Measures from Table 6**

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, manufacturing processes, and methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
<b>TECH 1303 Engineering Graphics</b> 1. Demonstrate a comprehensive knowledge of engineering graphics by earning passing scores of 70% or higher on quizzes & exams.		9	9	9	5,6,7,8	9	9
2. Sketch 2D orthographic drawings and 3D isometric views.		9	4,5,7	9	9	9	9
3. Create and modify two-dimensional orthographic drawings using AutoCAD Software, complete with construction lines, dimensions, and layers, conforming to Industry standards.		9	9	9	5,6,7	9	9
4. Create 3D solid models using AutoCAD software.		9	4,5,7	9	9	9	9
5. Define drafting nomenclature by successfully passing quizzes and exams.		9	7	9	7	9	9
<b>TECH 1320 Industrial Materials</b> 1. Demonstrate how to use materials testing equipment by successfully completing tests to specified industry standards.		6,7,8	9	9	9	7,8	9
3. Demonstrate an understanding of metallurgy by successfully completing required laboratory assignments.		4,5,6	9	9	9	7,8	9
4. Demonstrate a fundamental knowledge of metallurgy by earning passing scores on exams and quizzes.		7	9	9	9	9	9

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
<b>TECH 2311 Electrical and Fluid Systems</b> 1. Successfully identify the basic components and operation of pneumatic and hydraulic systems on laboratory assignments		9	9	9	9	9	4,5
2. Identify and describe basic mechanical systems on exams and quizzes.		7	9	9	9	9	7
3. Successfully construct basic fluid and mechanical circuits during laboratory exercises.		9	9	9	9	9	6,8
4. Describe the systems approach to problem analysis and design on exam & quizzes		9	9	9	9	9	7
5. Describe the elements of basic control systems and logic on lab. assignments.		9	9	9	9	9	6,8
6. Identify and define the terms used in electricity and electronics as illustrated in laboratory assignments.		9	9	9	9	9	6,8
7. Perform specific mathematics circuit analysis by earning passing scores on quizzes and assignments.		9	9	9	9	9	7
8. Identify and describe the common electrical and electronic components by earning passing scores on quizzes and exams.		9	9	9	9	9	7
<b>TECH 2319 Prog Logic Controllers</b> 1. Describe the benefits of PLCs over electro-mechanical relay logic systems by successfully passing quizzes & exams with a 70% or better.		9	4,6,7	9	9	9	9
2. Distinguish between fixed and modular PLC devices, input or output modules for Festo LabVolt PLC Trainer by successfully passing quizzes & exams with a 70% or better.		9	6,7,8	9	9	9	9

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
3. Create PLC ladder logic programs for operation and monitoring relay logic, timer, counter, comparison, move, and sequencer instructions by successfully completing lab exercises and passing quizzes and exams with a 70% or better.	6,7,8	6,7,8	9	9	9	9	
<b>TECH 3311 Mfg. Processes</b> 1. Students will demonstrate a thorough understanding of the manufacturing field by successfully passing quizzes & exams related to that topic.	4,6,7,8	9	9	7	7,8	9	
2. Students will demonstrate safe working habits by passing a safety quiz with a grade of 80% or higher and by working in the lab. without incident.	9	9	9	9	7,8	9	
3. Students will demonstrate familiarity with processing equipment by safely making a project according to the required specifications.	6,8	9	9	8	8	8	
4. Students will become familiar with industrial materials used for making products by successfully completing a project to the required specs.	7,8	9	9	8	9	9	
<b>TECH 3312 Facilities Ops. &amp; Maintenance</b> 1. Identify and describe basic mechanical systems on exams and quizzes.	7	9	9	9	9	7	
2. Describe the systems approach to problem analysis & design on exam & quizzes.	6,7	9	9	9	9	6,7	
3. Describe the elements of basic control systems and logic on lab. assignments.	6,8	9	9	9	9	6,8	

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
4. Identify and define the terms as illustrated in laboratory assignments.	6,7	9	9	9	9	9	6,7
5. Perform specific mathematics operations analysis by earning passing scores on quizzes and assignments.	6,7	9	9	9	9	9	6,7
<b>TECH 3317 Industrial Robotics</b> 1. Demonstrate how to use industrial robots by successfully programming them with a teach pendant.	6,7,8	6,7,8	9	9	9	9	9
2. Demonstrate a comprehensive knowledge of offline robotics programming by writing programs that will successfully run ind. robots.	4,5	4,5	9	9	9	9	4,5
3. Demonstrate an understanding of maintaining industrial robots by earning passing grades on quizzes & exams.	9	9	9	9	9	9	6,7
4. Demonstrate a fundamental knowledge of industrial robotics by earning passing scores on exams & quizzes	6,7	6,7	9	9	9	9	9
<b>TECH 3320 Lean Six Sigma Green Belt Techniques</b> 1. Understand and discuss the utilization of the Define, Measure, Analyze, Improve and Control (DMAIC) and Lean methodologies in a professional setting.	4	9	4,6	9	7,8	9	2,5
2. Identify waste in processes and work to eliminate waste using lean methods, tools, and techniques.	4	9	4,6,7	9	4,7	9	4
3. Effectively manage change throughout the continuous improvement cycle.	4,6,7	9	1,4,6,7	9	9	9	4,6,7
4. Establish standard work practices, measurements and be able to explain their significance in quality mgmt.	4	9	4,6,7	9	4	9	4,5,

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough know-ledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Under-stand facility layout, maintenance, and the management of supply chains
5. Successfully pass the ATMAE Greenbelt Lean Six Sigma Certification Exam.	7	9	7	7	9	7	
<b>TECH 3331 Project Management</b> 1. Demonstrate a comprehensive knowledge of project management by earning passing scores of 70% or higher on quizzes and exams.	9	9	7	9	9	9	
2. Illustrate an understanding of project management design, development, and deployment by successfully using MS-Project software.	9	9	5	9	9	9	
3. Demonstrate how to use the project management tools, techniques, and skills by successfully completing assignments & homework.	9	9	4,6	9	9	9	
<b>TECH 3333 Polymer Processing</b> 1. Demonstrate how to use plastics processing equipment by successfully manufacturing a class project to specified dimensions.	9	9	9	9	4,6,7,8	2,5	
2. Demonstrate a comprehensive knowledge of polymer properties by earning passing scores on quizzes and exams.	7	9	9	9	9	9	
3. Demonstrate a fundamental knowledge of plastic manufacturing processes by earning passing scores on exams and quizzes.	7	9	9	9	9	9	
<b>TECH 3344 Industrial Safety</b> 1. Students will be able to appreciate the importance of OSHA (by assignments)	9	9	9	9	6	9	
2. Students will be able to appreciate the importance of being a Health/Safety Manager (by assignments)	9	9	6	9	6	9	

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
3.Students will be able to identify hazards along with hazardous work areas (by case study)	1	9	9	9	9	1	9
4.Students will be able to understand and use the different OSHA forms for recordkeeping (by assignment)	9	9	9	9	9	6	9
5.Students will be able to apply different fine amounts (in dollars) and the severity/level of each fine imposed on employer (by assignment and quizzes)	9	9	9	9	9	6,7	9
6.Students will be able to identify potential hazards and make changes training (by assignment & case study)	9	9	9	9	9	1,6	9
7.Students will be able to conduct safety audits by assignment, project, & exam	9	9	9	6,7,8	6,7,8	6,7,8	9
<b>TECH 3355 Supply Chain Management</b> 1. Identify the planning and sourcing methods by passing exams with a 70% or better	9	9	9	9	9	9	7
2. Identify the aspects of supply chain coordination by passing exams/asgnmts with a 70% or better	9	9	9	9	9	9	6,7
3. Identify the complexities involving movement of goods and how it impacts businesses thru participation and by passing exams with a 70% or better	9	9	9	9	9	9	4,7
4. Demonstrate the core processes of SCM practices thru asgnmts and by passing exams with a 70% or better.	9	9	9	9	9	9	6,7
5. Explain the different supply chain strategies by passing exams with a 70% or better.	9	9	9	9	9	9	7
6. Demonstrate and develop a SCM plan for a mock company with a 70% or better	9	9	9	9	9	9	2

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organ- ized and mechan- ically correct documents in order to plan pro- duction	5. Apply and follow recomme- nded safety stand- ards	6. Under-stand facility layout, main- tenance, and the manage- ment of supply chains
<b>TECH 4317 Computer Integrated Manufacturing</b> 1. Make a detailed drawing of an object using solid modeling 3D CAD software.	5	5	9	5	9	9	
2. Create a 3D print of an object drawn as a solid model.	9	8	9	9	9	9	
3. Identify the various types of 3D printers available for certain applications.	4,6,7	9	9	9	9	9	
4. Write a CNC program that will successfully run on a CNC milling machine.	4,8	5	9	9	9	9	
5. Write a CNC program that will successfully run on a CNC turning center.	4,8	5	9	9	9	9	
6. Design and draw objects using Vcarve software that can be successfully plasma or waterjet cut.	4,8	5	9	9	9	9	
7. Develop an understanding of CAM and automation by successfully passing quizzes and exams with a 70% or better score.	7	7	9	9	7	9	
<b>TECH 4323 Lean Production</b> 1. Demonstrate how to use machine tool technology by successfully manufacturing a class project to specified dimensions.	8	5	9	9	8	8	
2. Demonstrate a comprehensive knowledge of lean manufacturing principles by earning passing scores on quizzes and exams.	7	9	7	9	7	9	
3. Demonstrate an understanding of sheet metal fabrication by successfully completing a project to required specifications.	8	9	9	8	8	8	
4. Demo a fundamental knowledge of the metalworking production industry by earning passing scores on exams and quizzes.	7	9	9	9	7	9	

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
<b>TECH 4343 Advanced Mfg. Processes</b> 1. Identify appropriate welding processes for a variety of materials and uses by successfully passing quizzes and exams with a 70% or better.	7	9	9	9	9	7	7
2. Calculate material removal rates for milling machines, lathes and drills.	4,6,7	9	9	9	9	9	9
3. Identify appropriate casting processes for manufacturing various items by successfully passing quizzes and exams with a 70% or better.	4,6,7	9	9	9	9	9	9
4. Identify nontraditional machining processes by successfully passing quizzes and exams with a 70% or better.	4,6,7	9	9	9	9	9	9
5. Determine and evaluate the most economic cutting process for various industrial materials and applications by passing quizzes and exams with a 70% or better.	7	9	9	9	9	9	9
6. Understand the nomenclature, processes, and equipment associated with sheet metal by successfully passing quizzes and exams with a 70% or better.	7	7	9	9	9	9	9
<b>TECH 4372 Capstone Experience</b> 1. Develop a Professional Brand values statement to be competitive in the job market by earning a 70% or higher on the submitted assignments.	9	9	4,6	9	9	9	9
2. Prepare a well-written professional cover letter, resume and separate references by earning a 70% or higher on the submitted documents in Canvas.	9	9	4,6	9	9	9	9

INDUSTRIAL TECHNOLOGY COURSES with Student Learning Outcomes	INDUSTRIAL TECHNOLOGY PROGRAM LEARNING OUTCOMES	1. Identify the proper materials, mfg. processes, & methods used to fabricate and ensure quality in a specific part	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's, and robotics	3. Demonstrate a thorough knowledge of current management and supervisory practices	4. Prepare well-organized and mechanically correct documents in order to plan production	5. Apply and follow recommended safety standards	6. Understand facility layout, maintenance, and the management of supply chains
3. Develop a successful elevator pitch to be shared with peers, instructor and recorded using video technology by earning a 70% or higher on the video submission in Canvas.	9	9	3,4,5	9	9	9	
4. Demonstrate professional dress and practice interviews with peers and instructor in group interviews by earning a 70% or higher from instructor feedback.	9	9	3,4	9	9	9	
5. Successfully develop and answer behavioral based interview questions with peers, instructor and using video technology by earning a 70% or higher from the video submission in Canvas.	9	9	3,4,5	9	9	9	
6. Demonstrate knowledge learned in the course through a professionalism by earning a 70% or higher mastery from the quiz.	9	9	7	9	9	9	
7. Successfully use knowledge learned to successfully complete written assignments using real-world situations by earning a 70% or higher from submitting the answers in a Microsoft Word document.	9	9	2,4,5	9	9	9	
8. Successfully using Social Media to deliver their professional capabilities by earning a 70% or higher based on instructor evaluation of your LinkedIn profile.	9	9	2,3,4,5	9	9	9	
9. Create a professional digital portfolio and physical portfolio that demonstrates students' competencies and highlights their course of study by earning a 70% or higher from the submitted documents.	9	9	2,3,4,5	9	9	9	

**Table 9: Mapping of Industrial Management Course Student Learning Outcomes to Program Learning Outcomes Using Assessment Measures from Table 6**

<p style="text-align: center;">MASTER OF SCIENCE in INDUSTRIAL MANAGEMENT COURSE STUDENT LEARNING OUTCOMES</p>	<p style="text-align: center;">MS in INDUSTRIAL MANAGEMENT PROGRAM OUTCOMES</p>	<p style="text-align: center;">1. Lean Philosophies</p>	<p style="text-align: center;">2. Quality &amp; Continuous Improvement</p>	<p style="text-align: center;">3. Conducting Research</p>	<p style="text-align: center;">4. Project Management Theory and Practice</p>	<p style="text-align: center;">5. Knowledge of Supply Chains and Logistics</p>
<p><b>TECH 5303 Research Techniques in HRD/Technology</b> 1. Understand basic assumptions underlying scientific research, its characteristics, approaches and data collection methods by successfully reviewing journal articles, passing quizzes and exams with a 70% or better.</p>	9	9	1,7	9	9	
<p>2. Identify research problems, form hypothesis and implement ethics in scientific research by successfully passing quizzes and exams.</p>	9	9	7	9	9	
<p>3. Measure variables and sampling, validate research methodologies design and experiment procedure by successfully completing research paper and exams with a 70% or better.</p>	9	9	2,7	9	9	
<p>4. Analyze and interpret data using descriptive and inferential statistics by successfully reviewing journal articles and completing quizzes and exams with a 70% or better.</p>	9	9	1,7	9	9	
<p><b>TECH 5306 Logistics Management</b> 1. Students will be able to appreciate the relationship of supply chain management to logistics. (by case studies &amp; assignments)</p>	9	9	9	9	2,6	
<p>2. Students will be able to understand the concepts of demand planning. (by assignments)</p>	9	9	9	9	6	

3. Students will be able to apply the different types of inventory planning and control of goods. (by case studies, assignments, & final project)	9	9	9	9	1,2,6
4. Students will be able to appreciate the procurement process of acquiring goods. (by case studies, final project & assignments)	9	9	9	9	1,2,6
5. Students will be able to appreciate the different transportation systems used to deliver goods globally. (by assignments)	9	9	9	9	6
6. Students will be able to appreciate and apply the aspects warehouse management and layout of plan (by case studies, & final project)	9	9	9	9	1,3
7. Students will be able to apply different levels of customer service as it relates to relationship management. (by assignment & final project)	9	9	9	9	1,3
<b>TECH 5308 Strategic Sourcing</b>					
1. Explain how to use strategic sourcing	9	9	9	9	1,4,6,7
2. Describe an understanding of methods used to implement strategic sourcing	9	9	9	9	2,4
3. Demonstrate a comprehensive knowledge of strategic sourcing	9	9	9	9	4,6
4. Recognize the need for strategic sourcing and implementation in industry	9	9	9	9	3,6
<b>TECH 5310 Six Sigma Quality</b>					
1. Demonstrate how to use Excel, specifically Excel's statistical add-on tool, by completing several assignments.	9	5,6,7	9	9	9
2. Construct statistical graphs (Pareto, Mean and Range, etc...) using Excel.	9	5,6,7	9	9	9
3. Differentiate between a good mfg. process and a bad one by interpreting a Mean and Range graph.	9	4,5,6,7	9	9	9

4. Summarize Six Sigma concepts by completing one-page topic summaries in the course.	9	1,2	9	9	9
<b>TECH 5317 Computer Integrated Manufacturing</b>					
1. Make a detailed drawing of an object using solid modeling 3D CAD software (Autodesk Inventor).	5,6	9	9	5,6	9
2. Create a 3D print of an object drawn as a solid model.	5,6	9	9	5,6	9
3. Identify the various types of 3D printers available for certain applications.	6,7	9	9	9	9
4. Write a CNC program that will successfully run on a CNC milling machine.	5,6,7	9	9	9	9
5. Write a CNC program that will successfully run on a CNC turning center.	5,6	9	9	9	9
6. Design and draw objects using Vcarve software that can be successfully plasma or waterjet cut.	5,6	9	9	9	9
7. Develop an understanding of CAM and automation by successfully passing quizzes and exams with a 70% or better.	7	9	9	9	9
<b>TECH 5320 Total Quality Management</b>					
1. Understand concepts of total quality control by successfully passing quizzes and exams with a 70% or better.		1,7	9	9	9
2. Develop proficiency in using various types of sampling and process control charts by successfully passing quizzes and exams with a 70% or better.	9	5,7	9	9	9
3. Analyze statistical process control (SPC) tools for a specific manufacturing or service industry by completing term projects and passing quizzes and exams with a 70% or better.	9	2,7	9	9	9
4. Identify the types and levels of quality control management that	9	2,7	9	9	9

should be assigned to the various levels of administration, production, sales, and after-sale service in an organizational setting by completing term projects and passing quizzes and exams with a 70% or better.					
<b>TECH 5329 Research Trends in Industry</b>					
1. Interpret statistical results using Minitab.	9	5,6	5,6	9	9
2. Calculate statistical formulas using six sigma tools and Minitab.	9	5,6	5,6	9	9
3. Predict decisions based off the concepts of six sigma and Minitab.	9	5,6	5,6	9	9
4. Demonstrate how to use Minitab by successfully completing assignments and quizzes.	9	5,6,7	5,6,7	9	9
5. Manipulate statistical data sets to provide a given outcome.	9	5,6,7	5,6,7	9	9
<b>TECH 5331 Project Management</b>					
1. Demonstrate a comprehensive knowledge of project management by earning passing scores of 70% or higher on quizzes and exams.	9	9	9	7	9
2. Illustrate an understanding of project management design, development, and deployment by successfully using MS-Project software.	9	9	9	5,6	9
3. Demonstrate how to use the project management tools, techniques, and skills by successfully completing assignments and homework.	9	9	9	1,6	9
<b>TECH 5333 Agile Project Management and Scrum</b>					
1. Able to describe the economic shifts in business that necessitate the need for business agility.	9	9	9	4,6,7	9
2. Describe an understanding and apply Agile principles, values, thinking, and methods in an organizational setting.	9	9	9	4,6,7	9
3. Explain the phases of a Scrum cycle, Scrum team roles, Agile processes, and sprint artifacts.	9	9	9	4,6,7	9
4. Cultivate proficiency establishing and prioritizing a product development	9	9	9	4,6,7	9

backlog based on user stories, features, and customer requirements.					
5. Illustrate a fundamental knowledge of a Scrum Master facilitating of sprints with the development team to deliver ready to release ready work increments.	9	9	9	4,6,7	9
<b>TECH 5334 Project Management Certification</b>					
1. Demonstrate a comprehensive knowledge of project management by earning passing scores of 70% or higher on quizzes and exams.	9	9	9	4,7	9
2. Demonstrate how to use the project management tools, techniques, and skills by successfully completing assignments and homework.	9	9	9	6	9
3. Exhibit an overall understanding of project management by earning a 60% or higher on a previously released PMI PMP exam.	9	9	9	7	9
<b>TECH 5335 Lean Management</b>					
1. Identify and define the key concepts that create a lean environment by successfully passing quizzes and exams with a grade of 70% or better.	7	9	9	9	9
2. Prepare and successfully present an in depth report on a key component of lean and how it effects their current employment.	2	9	9	9	9
3. Thoroughly understand the lean tools used to eliminate waste in a company or organization by successfully passing a midterm and final exam with a grade of 70% or better.	7	9	9	9	9
4. Complete a lean project at home or work to the desired specifications of the required assignment.	2,6	9	9	9	9
<b>TECH 5336 Lean Healthcare</b>					
1. Understand and discuss the utilization of the Assess, Diagnose, Treat, and Prevent methodology in a healthcare setting.	1,2,4,6,7	9	9	9	9

2. Identify waste in processes and work to eliminate waste using lean methods, tools, and techniques.	1,2,4,6,7	9	9	9	9
3. Effectively manage change throughout the continuous improvement cycle.	1,2,4,6,7	1,2,4,6,7	9	9	9
4. Establish standard work practices, measurements and be able to explain their significance in quality management.	1,2,4,6,7	9	9	2	9
<b>TECH 5348 Warehousing</b>					
1. Apply warehouse layouts to maximize efficiency. (by case studies & assignments)	9	9	9	9	1,6
2. Describe the warehouse role under the supply chain umbrella by asgnmnts.	9	9	9	9	6
3. Identify safety and security measures to operate a warehouse. (by case studies, assignments, & final project)	9	9	9	9	1,2,6
4. Recommend and apply industrial packaging concepts. (by case studies, final project & assignments)	9	9	9	9	1,2,6
5. Recognize and select material handling equipment and information technology to optimize flow of material. (by case studies, & final project)	9	9	9	9	1,2
6. Determine strategic locations for warehouse location (by assignment)	9	9	9	9	6
7. Recognize and execute negotiations, agreements, and contracts of incoming and outgoing of material. (by assignment & final project)	9	9	9	9	2,6
<b>TECH 5366 Value Stream Mgmt.</b>					
1) Identify and define the key concepts used to develop a value stream map by successfully passing quizzes and exams with a 70% or better.	7	9	9	9	9
2) Calculate the inventory and other costs necessary to create a value	2,6	9	9	9	9

stream map by earning a 70% or higher on the current state map assignment.					
3) Successfully create a value stream map with proper icons in order to identify the current state of a value stream with a grade of 70% or higher.	1,6	9	9	9	9
4) Develop a future state value stream map of an organization that will substantially reduce costs.	1,6	9	9	9	9
5) Understand how to create action and implementation plans by earning a 70% on quizzes and exams.	7	9	9	9	9
6) Determine how to find the value from process flow through calculations on a value stream map.	4,6,7	9	9	9	9
7) Capture communication flow on a value stream map assignment.	4,6,7	9	9	9	9
8) Document travel distances on a value stream map assignment.	4,6,7	9	9	9	9
<b>TECH 5390 LSSBB Techniques</b>					
1. Demonstrate how to use Minitab by successfully completing assignments and quizzes.	9	5,6,7	9	9	9
2. Explain statistical results by discussing assignments in class.	9	3,4	9	9	9
3. Implement the fundamentals of lean six sigma by passing a national certification exam.	9	7	9	9	9
4. Identify the appropriate decision based off of a given statistical tool.	9	5,6,7	9	9	9

### Competency Validation Process

In order to ensure validated competencies would be identified for the program-specific courses a Program Advisory Committee was assembled. Validated competencies for computer-mediated and traditional course developers, instructors, managers, etc., were identified through a review of the literature.

The competencies were put into a survey instrument format and distributed to all Advisory Committee members. Each member rated the degree to which each competency related to the program. The results of the survey were compiled. Competencies that did not rate above a minimum level were discarded.

In a final phase, the competencies rated for an undergraduate program were mapped into existing courses. In many cases the competencies were currently addressed. Competencies not being taught were inserted into courses within the degree plan. Competencies are reviewed by instructors on an annual basis and by the advisory board every three years so courses can be revised and/or new courses are can be added and/or omitted to keep the program current to the needs of employers. In addition, competencies listed in the ATMAE Certified Manufacturing Exam are used as a guide for the Industrial Technology program since these competencies are derived from a list of competencies common to most of the ATMAE accredited institutions with Industrial Technology or similar programs. Competencies listed in the ATMAE Lean Six Sigma Certification Exam are used as a guide for the Industrial Management program since these competencies are derived from a list of competencies common to all of the ATMAE accredited institutions with similar programs or those covering similar program learning outcomes.

### **STANDARD 3: PROGRAM STRUCTURE & COURSE SEQUENCING**

Each program/option shall meet the minimum foundation semester hour requirements set forth by ATMAE. Programs/options may exceed the maximum foundation semester hour requirements specified in each area, as long as minimums are met. If the maximum is exceeded, justification shall be provided. The self-study report shall include a specific list of courses and course credit hours counted toward each category (use Table A). For institutions on the quarter system, the coursework shall be converted to the semester system (hours based on Federal Regulations.)

#### **3.1 PROGRAM MINIMUM CURRICULA FOUNDATION**

Syllabi for management and/or technical courses shall clearly describe appropriate Student Learning Outcomes.

Both programs have the same response

The syllabi for all the courses offered by the department have student learning outcomes clearly listed at the beginning for everyone to see.

A. N/A

B. Table A-2 in Appendix A lists all the courses making up the B.S. in Industrial Technology degree. The table illustrates that the coursework for the degree is in the guidelines established by the ATMAE accreditation standards.

C. Table A-3 in Appendix A lists all the courses making up the M.S. in Industrial Management degree. The table illustrates that the coursework for the degree is in the guidelines established by the ATMAE accreditation standards.

#### **3.2 COURSE SEQUENCING**

3.2.1 There shall be evidence of appropriate sequencing of courses in each program/option to ensure that applications of mathematics, science, and written and oral communications are covered in technical and management courses.

BS in Industrial Technology program response:

The University of Texas at Tyler courses are sequenced by 1000 level courses for freshmen, 2000-level courses for sophomores, 3000 level courses for juniors and 4000-level courses for seniors. Advisement and course prerequisites assure the students proper course sequencing for the program (refer to Table 6) which contributes to a higher success rate. In addition, the courses requiring prerequisites necessitate a student to be proficient in Microsoft Word, Excel, Access, and Project which is covered in the required course COSC 1307 Introduction to Information Systems Software.

Six semester credit hours (SCH) in mathematics and six SCH in the laboratory sciences are required by the university's core curriculum. Statistics is required for the program because it is a prerequisite for other courses, such as Total Quality Management, Lean Six Sigma Green Belt Techniques, and Operations Management. Written and oral communication skills are a core competency of the Department of Technology and the Soules College of Business. Oral presentations are required in many courses in the department and are evidenced in course syllabi. Written communications requirements are also satisfied through the required courses ENGL 1301 and ENGL 1302, although ENGL 2311 Technical and Business Writing is recommended in lieu of ENGL 1302 since it is a better fit, and SPCH 1315 or CMST 1311 is recommended for the Human Expression portion of the general education coursework to help address oral communication and critical thinking skills.

In addition, junior or senior level standing or both has also become a prerequisite for most of the senior courses since the faculty had noticed sophomores who had not taken all the basic general education (core curriculum) were enrolling in these courses and not doing as well as those students who had.

Table 10: Industrial Technology Program Course Prerequisites

<b>COURSE</b>	<b>PREREQUISITE</b>
TECH 3355 Supply Chain Management	COSC 1307 or equivalent
TECH 3310 Total Quality Management	COSC 1307 or equivalent and MATH 1342
TECH 3320 Lean Six Sigma Green Belt	COSC 1307 or equivalent and MATH 1342
TECH 4317 Comp. Integrated Mfg.	COSC 1307 or equivalent and senior standing
TECH 4323 Lean Production	Junior or senior level standing
TECH 4343 Adv. Mfg. Processes	TECH 3311 Manufacturing Processes and junior or senior level standing
TECH 4372 Capstone Experience	Senior level standing
MANA 3305 Operations Management	COSC 1307 or equivalent and MATH 1342

*NOTE: COSC 1307 Introduction to Information Systems Software or equivalent course covers the Microsoft Office applications.*

MS in Industrial Management program response:

Written and oral communication skills are a core competency of the Department of Technology and the College of Business. Oral presentations are required in many courses in the department and are evidenced in course syllabi. Moreover, all graduate level courses require one or more paper(s) or a major writing assignment. All the courses in the problem solving/communications course sequence require students to calculate math problems to eliminate waste and variation in processes. Statistics is used predominantly in the Six Sigma Quality course and the Advanced Lean Six Sigma Black Belt Techniques courses to solve quality problems commonly seen in business and industry.

3.2.2 Further, sequencing shall ensure that advanced-level courses build upon concepts covered in beginning-level courses.

BS in Industrial Technology program response:

The course TECH 4343 Advanced Manufacturing Processes assumes students have a fundamental knowledge of manufacturing which can be obtained in TECH 3311 Manufacturing Processes. Further, only graduating seniors are allowed to take the required course TECH 4372 Capstone Experience in which students list all the courses and assignments they completed to illustrate mastery of the student learning outcomes and competencies pertaining to the program.

MS in Industrial Management program response:

Students of graduate programs at the university are accepted and allowed to start taking course during any semester of the academic year. Due to the limited number of graduate students, courses are only offered once an academic year. Therefore, it is quite difficult to place prerequisites on courses because it may require students to wait at least an extra semester before a course is offered again and delay their graduation. However, there is a prerequisite for the course TECH 5390 Advanced Lean Six Sigma Black Belt Techniques which prepares students for taking the ATMAE Lean Six Sigma certification exam that will allow them to become a certified Lean Six Sigma Black Belt. The reason for this is that students need to take the Six Sigma Quality and Lean Management course first so they have a fundamental background in those concepts so the course will have more time to cover all the statistics that are involved in applying lean six sigma techniques. In addition, those wishing to earn the Project Management Certificate must take TECH 5331 Project Management before they take the advanced courses based on project management knowledge such as TECH 5333 Agile Project Management and Scrum or TECH 5334 Project Management Certification. TECH 5370 Internship in Technology also has a requirement that a student will need the consent of the department chair and a minimum 3.0 GPA.

### **3.3 LABORATORY ACTIVITIES**

Appropriate laboratory activities shall be included in the program/option and a reasonable balance shall be maintained between the practical application of “how” and the conceptual application of “why.” Master’s degree programs/options may not have formal laboratory activities but shall balance the practical application of “how” and the conceptual application of “why.”

BS in Industrial Technology program response:

As part of the Institutional Planning Process, the Department has set an objective of requiring at least 50% of all scheduled courses taught to require student use of information technology equipment and software. This objective has been achieved and the percentage is increasing annually. In addition, all faculty are now required to maintain an online Canvas LMS site for each of their courses in which they post grades, course documents, and assignments throughout the semester. Moreover, students are required to turn in assignments electronically through Canvas and myUTTyler. As a result, a proper balance between theory and practical applications has been achieved. One of the strengths of the Industrial Technology program is the infusion of laboratory activities and practical application along with cognitive knowledge. In most of the Technology courses, there are specific activities used to balance the application and theory portions of the class. The relative proportions of each differ as appropriate to the course objectives. A statement is included in each syllabi following the course description which specifies the Lecture/ Lab balance. The following format is used: (60% Lecture/40% Lab). The technical courses all require laboratory activities using industrial processes, equipment, and materials to develop a greater understanding of the concepts presented in class. In the professional courses, practical applications more often take the form of analyses, calculations, decision making, and simulation. All syllabi are also available electronically on the UT Tyler website at: <https://www.uttyler.edu/catalog/syllabi/> or are included in the binder for each program for review during the site visit. In all technical offerings, at least one-half of the contact time is spent utilizing "hands-on" teaching methods. This may include external resources such as industrial site visits, facility inspections, and/or the manufacture of student projects.

MS in Industrial Management program response:

As part of the Institutional Planning Process, the Department has set an objective of requiring at least 50% of all scheduled courses taught to require student use of information technology equipment and software. This objective has been achieved and the percentage is increasing annually. In addition, all faculty are now required to maintain an online Canvas LMS site for each of their courses in which they post grades, course documents, and assignments throughout the semester. Moreover, students are required to turn in assignments electronically through Canvas. As a result, a proper balance between theory and practical applications has been achieved.

Since the graduate program is more focused on preparing students for industrial management positions, the emphasis on laboratory activities is not the same as the undergraduate Industrial Technology program. However, there are a few courses available to students that allow laboratory activities for those who do not have an undergraduate degree in engineering or technology. TECH 5317 Computer Integrated Manufacturing allows students to use the same laboratory as the Industrial Technology majors where they will learn to program robots and CNC turning and machining centers. In addition, TECH 5309 Industrial Processes and Materials also incorporates laboratory activities exploring a wide variety of manufacturing equipment. Furthermore, TECH 5390 requires the use of Minitab for students to calculate the statistics involved with Six Sigma quality related problems. TECH 5331 Project Management requires students to use Microsoft Project software to complete assignments. Moreover, several courses also require the use of a computer or the computer lab for assignments.

#### **STANDARD 4: STUDENT ADMISSION, ENROLLMENT & RETENTION**

The admission, enrollment, and retention practices for students in technology, management, and applied engineering programs/options shall be comparable to other programs/options at the institution.

**INSTITUTION'S RESPONSE TO STANDARD 4:**

**4.1 ADMISSION**

Evidence shall be provided showing that the standards for admission and the quality of students are comparable to other programs/options at the institution. Evidence of admission information may include but need not be limited to test scores and grade rankings.

BS in Industrial Technology program response:

As illustrated in Table 11, admission scores for Industrial Technology students was equal to those in comparable fields of studies. For instance, the average total SAT scores submitted for Industrial Technology majors was 1062. Average total SAT scores for Construction Engineering majors was 1030, Marketing majors 1040, Computer Engineering majors was 1048, Pre-nursing majors was 1057, Finance majors was 1065, and accounting majors was 1084.

The University of Texas at Tyler

The University of Texas at Tyler						
Department of Technology - Admissions by Career & Major - All Undergraduate Majors Fall 2023						
Admit Term	Career	Applied	Admitted	Enrolled in Admit Term	Average Total SAT Score Submitted	Average Composite ACT Score Submitted
2238	All Undergraduate Majors	8541	6610	1795	1100.6	22.4
Admit Term	Major	Applied	Admitted	Enrolled in Admit Term	Average Total SAT Score Submitted	Average Composite ACT Score Submitted
2238	Accounting	204	153	41	1084.1	21.0
2238	Art BFA	112	85	23	1048.3	20.0
2238	BAAS-CNHS	1	1	1	.	.
2238	Bach of Applied Arts & Science	128	107	1	1065.7	24.0
2238	Biochemistry BS	163	132	30	1196.2	27.8
2238	Biology BS	625	512	143	1123.8	22.3
2238	Chemical Engineering BSCHE	55	47	14	1205.0	26.0

2238	Chemistry BS	52	43	11	1149.0	18.0
2238	Civil Engineering BSCE	173	122	35	1132.2	22.2
2238	Comm Sciences and Disorders BS	41	36	7	1101.4	27.5
2238	Communication Studies BA	42	28	3	1155.0	28.0
2238	Communication Studies BS	21	14	2	1100.0	.
2238	Computer Engineering BSCPE	59	39	10	1048.9	.
2238	Computer Information Systems	61	42	6	1165.0	.
2238	Computer Science BS	306	219	56	1152.6	25.0
2238	Construction Engineering	10	10	2	1030.0	.
2238	Construction Management	146	103	28	1002.5	19.0
2238	Criminal Justice BS	347	246	67	1003.8	14.3
2238	Economics BS	38	26	7	1144.0	.
2238	Electrical Engineering BSEE	149	109	31	1139.5	30.0
2238	English BA	63	53	18	1112.9	22.5
2238	Finance	182	146	49	1065.7	20.0
2238	Health Sciences	251	186	33	1103.7	21.3
2238	History BS	56	44	18	1114.2	.
2238	Human Resource Development BS	47	37	20	1134.0	.
2238	Information Technology BS	31	26	10	1120.0	.
2238	Kinesiology BS	411	314	91	1058.6	21.2
2238	Management	273	201	59	1070.7	22.0
2238	Marketing	246	183	47	1040.5	21.5
2238	Mass Communication BA	54	44	9	1107.5	.
2238	Mathematics BS	35	29	11	1303.3	25.5
2238	Mechanical Engineering	338	267	74	1166.7	24.1
2238	Music BM	113	96	34	1144.0	27.8
2238	Nursing BSN	102	84	32	1068.0	.
2238	Political Science BA	67	55	9	1065.6	19.0
2238	Pre-Education BSED	273	210	73	1077.5	17.3
2238	Pre-Nursing	2077	1616	470	1057.9	21.6
2238	Psychology BA	446	334	83	1095.6	21.3
2238	Social Sciences	23	17	4	.	.
2238	Social Work BS	63	44	14	976.7	.
2238	Spanish BA	9	5	2	1010.0	.
2238	Tech-Industrial Technology	48	42	13	1062.5	.
2238	Undecided	588	495	103	1137.8	23.5
2238	Wellness BA	12	8	1	1105.0	23.0

Source: Office of Information Analysis

MS in Industrial Management program response:

As noted in Table 12, the Industrial Management majors had the highest average GMAT scores of all majors applying to the university. In addition, their GRE scores were higher than the average scores for the university

and higher than most majors offered at the university. Industrial Management admission scores were higher than Mechanical Engineering, Electrical Engineering, Computer Science, and MBA majors. This illustrates that the program does not lower its standards to increase enrollment and follows the accepted standards for the college and the university as a whole.

TABLE 12: The University of Texas at Tyler Graduate Admission by Major for Fall 2023

**The University of Texas at Tyler**  
**Department of Technology - Admissions by Career & Major - All Graduate Majors Fall 2023**

Admit Term	Career	Applied	Admitted	Enrolled in Admit Term	Average GRE Quantitative Score Submitted	Average GRE Verbal Score Submitted	Average GRE Writing Score Submitted	Average GMAT Total Score Submitted
2238	All Graduate Majors	1306	787	481	151.6	148.4	3.4	434.8

Admit Term	Major	Applied	Admitted	Enrolled in Admit Term	Average GRE Quantitative Score Submitted	Average GRE Verbal Score Submitted	Average GRE Writing Score Submitted	Average GMAT Total Score Submitted
2238	Accountancy	11	7	4	.	.	.	468.0
2238	Art MA	11	4	3	131.5	149.0	2.0	.
2238	Biology MS	14	9	7	154.0	151.0	3.3	.
2238	Business Administration	175	156	65	149.5	154.0	4.3	408.0
2238	Business Administration	96	74	40	148.8	153.2	3.6	432.9
2238	Chemistry MS	3	2	2	145.0	149.0	4.0	.
2238	Civil Engineering MSCE	31	19	3	159.0	149.0	3.3	.
2238	Clin. Mental Health Counseling	91	23	19	144.0	148.7	4.0	.
2238	Communication	9	7	4	145.5	153.0	3.5	.
2238	Computer Science	66	25	10	159.8	149.3	3.3	380.0
2238	Criminal Justice	10	5	3	144.0	139.0	2.0	.
2238	Curriculum And Instruction	35	23	16	148.7	148.7	3.5	.
2238	Cyber Sec and Data Analytics	61	20	11	146.8	151.1	3.4	.
2238	Educational Administration	46	33	28	140.0	143.0	3.5	.
2238	Electrical Engineering MSEE	27	22	11	157.5	146.4	3.0	.
2238	Engineering Leadership	4	4	1	.	.	.	.
2238	English	17	10	6	.	.	.	.
2238	Family Nurse Practitioner	48	42	39	143.0	144.0	3.5	.
2238	Health Sciences MS	31	18	9	144.0	144.0	4.0	.
2238	History MA	8	6	5	146.0	153.0	4.0	.
2238	Human Resource Development MS	33	32	19	146.0	149.5	3.3	395.0
2238	Kinesiology	16	10	8	134.5	141.5	2.5	.
2238	Mathematics MS	9	5	2	154.3	158.3	3.5	.
2238	Mechanical Engineering	29	23	4	157.3	148.3	3.4	.
2238	Nurs Infrmtcs/Quality/Safety	57	41	34	.	.	.	.
2238	Nurs-Administration	49	32	23	144.0	134.0	3.0	.
2238	Nurs-Education	30	19	16	.	.	.	.
2238	Occupational Therapy	69	24	24	142.7	145.8	3.3	.
2238	Political Science	10	6	2	.	.	.	.
2238	Psyc-Clinical Psychology	96	20	12	145.7	148.7	3.7	.
2238	Psychiatric-Mental Health NP	70	30	26	147.0	143.0	5.0	.
2238	Public Administration	10	9	8	.	.	.	.
2238	Reading Education	3	2	1	.	.	.	.
2238	Special Education MED	1	1	1	.	.	.	.
2238	Tech-Industrial Management	30	24	15	160.3	152.7	3.3	550.0

Source: Office of Information Analysis 2/21/2024

## 4.2 ENROLLMENT

Program/option enrollment shall be tracked and verified. There shall be sufficient enrolled students to operate and sustain the program/option as defined by state or institutional standards. State or institutional standards shall be listed in the self-study report, along with information needed to access that data for validation.

BS in Industrial Technology program response:

The enrollment for the department has decreased almost every year since the last ATMAE accreditation site visit except for this past year. This coincides with when our former short lived university president who hired a new person to direct marketing. There had been new initiatives to increase the number of top achieving high school students from the area by increasing the number of full-ride scholarships. By doing this, the number of funds for transfer scholarships had diminished. Most of the Industrial Technology majors are transfer students so this had a major impact on the program. Furthermore, as the unemployment rate had decreased over the past several years after President Trump was elected, so many students with technical backgrounds had found employment without the need for a baccalaureate degree. At any rate, the number of Industrial Technology majors is just over 70 students. Typically, when the economy slows, more people are laid off and go back to school, thereby, increasing the enrollment. This may be having an effect as well as transfer scholarships being funded again under our new university president.

The Department of Technology currently has five full-time faculty with doctorates, a lecturer, and two adjunct professors with master’s degrees teaching the coursework. The state graduation requirements as noted by the Higher Education Coordinating Board (THECB) is 25 students in 5 years for undergraduate programs, 15 students in 5 years for master’s programs and 10 students every 5 years for doctoral programs. The number of students and graduates for the program for the past several years are listed in Tables 13 and 14.

Table 13: Number of Students Enrolled in the Industrial Technology Program from 2019-2023

Years	Number of Industrial Technology Majors Enrolled Each Fall Semester
FALL 2018	114
FALL 2019	95
FALL 2020	94
FALL 2021	87
FALL 2022	69
FALL 2023	72

As illustrated in Table 14 below, 172 Industrial Technology students have graduated in a five year period from 2019-2023 which in itself is almost 7 times the state requirement of 25 graduates over a five year period. Therefore, the program is still healthy and viable.

Table 14: Number of Industrial Technology & Industrial Management Degrees Conferred From 2019-23

College	Department	Major	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	Total
⊞ College of Arts and Sciences (CAS)			379	374	381	364	356	1,854
⊞ College of Education and Psychology (CEP)			516	501	481	448	499	2,445
⊞ College of Engineering (COE)			279	252	233	224	190	1,177
⊞ College of Nursing and Health Sciences (CNHS)			757	939	914			2,610
⊞ Fisch College of Pharmacy (FCOP)			64	94	79	68	57	362
⊞ Interdisciplinary (INTR)						196		196
⊞ School of Health Professions (SHP)							182	182
⊞ School of Nursing (SON)						805	751	1,556
⊞ Soules College of Business (SCOB)	⊞ Accounting, Finance, Business Law		111	104	103	92	98	508
	⊞ Computer Science		61	52	77	70	65	325
	⊞ Human Resource Development		121	108	96	75	65	465
	⊞ Management and Marketing		147	170	163	149	157	786
	⊞ Soules College of Business		467	351	365	312	290	1,785
	⊞ Technology	Tech-Industrial Management	26	23	27	20	23	119
		Tech-Industrial Technology	36	37	35	35	29	172
		Total	62	60	62	55	52	291
	Total		969	845	866	753	727	4,160
Total			2,964	3,005	2,954	2,858	2,762	14,542

Prepared by the Office of Information Analysis

[HTTPS://WWW.UTTYLER.EDU/INFORMATION-ANALYSIS/DASHBOARDS/DEGREES-CONFERRED](https://www.uttyler.edu/information-analysis/dashboards/degrees-conferred)

MS in Industrial Management program response:

The enrollment for the department has been decreasing since the last accreditation visit in 2019. There are several reasons for the decline in enrollment. First, the unemployment rate had decreased over the past few years under President Trump, thereby; many students with technical backgrounds had found employment without the need for an additional degree and companies even gave them promotions to retain them. The pandemic did not help enrollment either as most of the programs at the university incurred a decrease in enrollment. Another reason for the decline has been the enforcement of the immigration policies which have led to fewer international students seeking advanced degrees in the United States. In fact, at one time, over 50% of the enrollment in the Industrial Management program was from India. There are now about 10 students from India enrolled in the program. However, with the new immigration policies of the current President, more students from India and Nigeria are entering the program. This has caused a minor increase in enrollment from the previous year.

Table 15: Number of Students Enrolled in the Industrial Management Program from 2019-2023

Years	Number of Industrial Management Majors Enrolled Each Fall Semester
FALL 2018	58
FALL 2019	49
FALL 2020	57
FALL 2021	37
FALL 2022	45
FALL 2023	49

At any rate, the number of Industrial Management majors is just under 50 students. The Department of Technology currently has five full-time faculty with doctorates, one lecturer and two adjunct professors with master’s degrees teaching the coursework. The adjuncts can only teach undergraduate coursework as noted by SACSCOC regional accreditation standards. Some adjuncts have been able to teach graduate courses due to their certifications and industrial experience. However, all have been thoroughly vetted by the Vice Provost and Dean of the Graduate School.

The state requirement as noted by the Higher Education Coordinating Board (THECB) is to graduate 25 students in 5 years for undergraduate programs, 15 students in 5 years for master’s programs and 10 students every 5 years for doctoral programs. The number of students and graduates for the program for the past several years is listed in Tables 14 and 15. As illustrated in Table 14, 119 Industrial Management students have graduated in a five year period from 2019-2023 which in itself is 8 times the state requirement of 15 graduates over a five year period. Therefore, the program is still healthy and viable.

### 4.3 RETENTION

Evidence shall be provided showing that the standards for retention of students are comparable to other programs/options at the institution. Evidence of retention information shall include but need not be limited to general grade point averages and the criteria for good academic standing, academic warning, probation, and suspension.

All programs in the Soules College of Business must follow the same academic policies regarding admission and retention. The guidelines are as follows and listed at this link:

<https://www.uttyler.edu/soules-college-of-business/undergraduate-advising/academic-probation/>

BS in Industrial Technology program response:

As noted in Table 16, the retention rate for the Industrial Technology program has gradually improved over the years to almost 90%. The program has the third best retention rate at the university.

TABLE 16: The University of Texas at Tyler Undergraduate Retention Rates by Major

**The University of Texas at Tyler**  
**Department of Technology - Retention by Career & Major - All Undergraduate Majors Fall 2022**

Term	Career	Enrolled in Fall	Enrolled Following Fall	Degree During Year	Retained or Graduated
FALL 2022	All Undergraduate Majors	6574	2663	1646	65.5%

Term	Major	Enrolled in Fall	Enrolled Following Fall	Degree During Year	Retained or Graduated
FALL 2022	Accounting	195	113	34	75.4%
FALL 2022	Art BA	27	13	6	70.4%
FALL 2022	Art BFA	54	24	8	59.3%
FALL 2022	BAAS-CAS	73	21	38	80.8%
FALL 2022	BAAS-CEP	58	19	34	91.4%
FALL 2022	BAAS-CNHS	71	0	23	32.4%
FALL 2022	BAAS-SCOB	83	32	40	86.7%
FALL 2022	Bach of Applied Arts & Science	3	0	0	0.0%
FALL 2022	Biochemistry BS	96	49	17	68.8%
FALL 2022	Biology BS	337	171	59	68.2%
FALL 2022	Chemical Engineering BSCHE	31	0	0	0.0%
FALL 2022	Chemistry BS	37	14	5	51.4%
FALL 2022	Civil Engineering BSCE	158	91	41	83.5%
FALL 2022	Comm Sciences & Disorders BS	38	27	7	89.5%
FALL 2022	Communication Studies BA	7	0	0	0.0%
FALL 2022	Communication Studies BS	16	5	7	75.0%
FALL 2022	Computer Information Systems	44	27	9	81.8%
FALL 2022	Computer Science BS	174	106	24	74.7%
FALL 2022	Construction Management	104	0	0	0.0%
FALL 2022	Criminal Justice BS	182	92	41	73.1%
FALL 2022	Economics BA	4	2	0	50.0%
FALL 2022	Economics BS	22	7	9	72.7%
FALL 2022	Education	27	0	0	0.0%
FALL 2022	Education BSED	1	0	0	0.0%
FALL 2022	Electrical Engineering BSEE	150	88	31	79.3%
FALL 2022	English BA	67	35	23	86.6%
FALL 2022	Finance	144	58	41	68.8%
FALL 2022	General Business	67	27	32	88.1%
FALL 2022	Health Sciences	89	36	14	56.2%
FALL 2022	History BA	11	3	4	63.6%
FALL 2022	History BS	65	31	20	78.5%
FALL 2022	Human Resource Dev. BS	61	32	17	80.3%
FALL 2022	Information Technology BS	111	67	23	81.1%

FALL 2022	Interdisciplinary Studies	107	11	76	81.3%
FALL 2022	Kinesiology BS	283	138	62	70.7%
FALL 2022	Management	284	135	73	73.2%
FALL 2022	Marketing	175	95	39	76.6%
FALL 2022	Mass Communication BA	21	10	4	66.7%
FALL 2022	Mass Communication BS	47	26	14	85.1%
FALL 2022	Mathematics BS	27	10	4	51.9%
FALL 2022	Mechanical Engineering	281	177	54	82.2%
FALL 2022	Music BA	5	2	1	60.0%
FALL 2022	Music BM	48	29	8	77.1%
FALL 2022	Nursing BSN	955	284	542	86.5%
FALL 2022	Political Science BA	39	15	3	46.2%
FALL 2022	Political Science BS	30	14	11	83.3%
FALL 2022	Pre-Interdisciplinary Studies	178	0	0	0.0%
FALL 2022	Pre-Nursing	761	245	0	32.2%
FALL 2022	Psychology BA	342	163	91	74.3%
FALL 2022	Psychology BS	64	23	20	67.2%
FALL 2022	Social Sciences	5	3	0	60.0%
FALL 2022	Social Sciences	12	7	1	66.7%
FALL 2022	Social Work BS	38	27	0	71.1%
FALL 2022	Spanish BA	15	7	5	80.0%
FALL 2022	Tech-Industrial Technology	69	35	26	88.4%
FALL 2022	Undecided	136	4	0	2.9%
FALL 2022	Wellness BA	24	13	5	75.0%

Source: Office of Information Analysis 2/21/2024

In addition, the retention rate for the Industrial Technology has been increasing each year as shown in the Table 17.

TABLE 17: Retention Rate of Industrial Technology Majors from 2018-2022

The University of Texas at Tyler				
Retention Rate of Industrial Technology (TEITBS) Majors from 2018-2022				
TEITBS	Enrolled in Fall	Enrolled Following Fall	Degree During Year	Retained or Graduated
FALL 2018	114	54	35	78.1%
FALL 2019	95	47	35	82.3%
FALL 2020	94	46	32	83.0%
FALL 2021	87	41	33	85.1%
FALL 2022	69	35	26	88.4%

Source: Office of Information Analysis 2/21/2024

MS in Industrial Management program response:

The retention rate for the Industrial Management is at 84% which is also the average for all university graduate programs. This is a very good percentage rate as most institutions struggle to obtain retention rates over 60%. Measures of working with majors who are struggling have been implemented so the retention rate can be improved to yet a higher percentage. Recently, additional student teaching assistants have been hired to assist struggling students in more classes which should help to improve retention rates.

TABLE 18: Retention Rate of Graduate Students by Major at UT Tyler from 2018-2022

<b>The University of Texas at Tyler</b>					
<b>Department of Technology - Retention by Career and Major - All Graduate Majors Fall 2022</b>					
<b>Term</b>	<b>Major</b>	<b>Enrolled in Fall</b>	<b>Enrolled Following Fall</b>	<b>Degree During Year</b>	<b>Retained or Graduated</b>
FALL 2022	All Graduate Majors	1758	741	750	84.8%
<b>Term</b>	<b>DESCR</b>	<b>Enrolled in Fall</b>	<b>Enrolled Following Fall</b>	<b>Degree During Year</b>	<b>Retained or Graduated</b>
FALL 2022	Accountancy	20	4	12	80.0%
FALL 2022	Art MA	6	1	2	50.0%
FALL 2022	Biology MS	20	14	4	90.0%
FALL 2022	Business Administration	201	46	96	70.6%
FALL 2022	Business Administration	207	77	99	85.0%
FALL 2022	Chemistry MS	8	2	3	62.5%
FALL 2022	Civil Engineering MSCE	18	6	11	94.4%
FALL 2022	Clin. Mental Health Counseling	78	49	18	85.9%
FALL 2022	Communication	4	2	0	50.0%
FALL 2022	Computer Science	25	15	8	92.0%
FALL 2022	Criminal Justice	15	10	3	86.7%
FALL 2022	Curriculum And Instruction	90	27	55	91.1%
FALL 2022	Educational Administration	131	38	75	86.3%
FALL 2022	Electrical Engineering MSEE	25	11	13	96.0%
FALL 2022	English	29	16	10	89.7%
FALL 2022	Family Nurse Practitioner	83	42	25	80.7%
FALL 2022	Health Sciences MS	23	8	8	69.6%
FALL 2022	History MA	12	7	3	83.3%
FALL 2022	Human Resource Development MS	75	23	39	82.7%

FALL 2022	Kinesiology	19	6	8	73.7%
FALL 2022	Mathematics MS	4	2	2	100.0%
FALL 2022	Mechanical Engineering	30	18	9	90.0%
FALL 2022	Nurs Infrmtcs/Quality/Safety	64	34	21	85.9%
FALL 2022	Nurs-Administration	82	43	33	92.7%
FALL 2022	Nurs-Education	58	24	27	87.9%
FALL 2022	Occupational Therapy	72	48	24	100.0%
FALL 2022	Political Science	12	5	4	75.0%
FALL 2022	Psyc-Clinical Psychology	77	39	36	97.4%
FALL 2022	Psychiatric-Mental Health NP	85	55	20	88.2%
FALL 2022	Public Administration	39	16	8	61.5%
FALL 2022	Reading Education	28	10	15	89.3%
FALL 2022	School Counseling	37	15	18	89.2%
FALL 2022	Special Education MED	33	12	16	84.8%
FALL 2022	Studio Art MFA	3	0	3	100.0%
FALL 2022	Tech-Industrial Management	45	16	22	84.4%

Table 19: Retention Rates of Industrial Management students from 2018-2022

**The University of Texas at Tyler**

**Department of Technology - Retention by Major - TEIMMS**

TEIMMS	Enrolled in Fall	Enrolled Following Fall	Degree During Year	Retained or Graduated
FALL 2018	58	23	26	84.5%
FALL 2019	49	21	20	83.7%
FALL 2020	57	19	24	75.4%
FALL 2021	37	17	16	89.2%
FALL 2022	45	16	22	84.4%

Source: Office of Information Analysis 2/21/2024

As shown in Table 19, retention rates for the Industrial Management program have ranged from 75% to 89%. The goal of the department is to steadily increase it and try to maintain it to the 90% range. The 75% rate was during the height of COVID-19, so hopefully nothing like that will happen again.

## STANDARD 5: ADMINISTRATIVE SUPPORT & FACULTY QUALIFICATIONS

Evidence shall be provided showing that a sufficient number of personnel are assigned to support the program/option.

### INSTITUTION'S RESPONSE TO STANDARD 5:

**All programs have the same response**

#### 5.1 ADMINISTRATORS

5.1.1 Appropriately qualified administrators are assigned to administer the program/option.

The Department Technology is administered by a Department Chairperson. As described in the University Handbook of Operating Procedures, the Department Chairperson is responsible for the overall development, promotion, and operation of the department. In consultation with departmental faculty, chairpersons coordinate, supervise, and develop plans for hiring, instruction, curricula, research, office use, equipment, and budget. Chairpersons supervise, counsel, and evaluate their departmental faculty members and office staff, and make recommendations to the appropriate dean. Chairpersons serve at the discretion of the President.

The administrative functions of the Chairperson deal with the day-to-day management and coordination needs of the Department served. The administrative functions include:

- financial-management
- faculty load assignment
- schedule preparation/approval
- faculty/staff evaluation
- policy formulation
- committee and professional responsibility
- funding
- communications
- facility allocation
- staffing
- reporting/delegation

Planning/development/evaluation functions cover both College and program needs within the units.

In addition to the Department Chair, a coordinator is appointed to provide leadership for each program. This person directs recruiting and advising for their program in addition to recommending changes in curriculum, facilities and staffing.

The coordinator for the Industrial Technology and Industrial Management programs was Dr. Mark Miller until the academic year 2015-2016 when the Department of Technology split from the Department of HRD and Technology.

The new Department of Technology was allowed to have its own separate Department Head and budget. In this way, proper funding could be directed to purchase equipment and materials to enhance the quality of the degree for students. This decision was a great show of support by the administration and has allowed the department's enrollment, facilities, equipment, etc. to increase and improve in concert with the technology used by industry. Dr. Mark Miller, the

current chair of the department has all of his degrees in industrial education or technology and has been a department chair at two institutions for a total of 15 years and a coordinator at UT Tyler for another 18. He has taught industrial technology and engineering technology courses at various institutions since 1982.

#### 5.1.2 Placement services shall be available to graduates.

The Soules College of Business also partners with the Office of Career Success to provide students a direct link to an employer relations specialist who has an office within the Undergraduate Advising Center. The employer relations specialist is available to students to discuss career goals and planning. Internship and job opportunities are communicated to students on a regular basis through email with links to the Handshake website for direct application.

The Office of Career Success sponsors the annual Career Success Conference (CSC) as an event designed to allow business and industry leaders to share their experiences and wisdom with today's students. More specifically, the conference is designed to help students build the personal and professional capacities necessary for career success.

The Conference hosts speakers from a variety of industries, sharing their stories of career development and career success. With three interactive sessions, current students have the opportunity to engage with industry leaders and learn how to build and develop core traits of career success.

In addition, the Office of Career Success offers various career fairs each semester for all colleges. Students are encouraged to start a Handshake account to assist them with their job search: <https://uttyler.joinhandshake.com/login>

The Office of Career Success also offers workshops for students regarding, interviewing, writing resumes, networking and much more. They are also available to faculty where they can come to their classes and teach the students the critical skills in obtaining a job. More information on their services is listed on their website at <https://www.uttyler.edu/career-success>.

In addition to the university placement services, faculty send an announcement through their class Canvas site to all the students in their class regarding any job postings that they have received from industry contacts. Students are also encouraged to obtain internships which in most cases lead to employment or better job opportunities.

## 5.2 FACULTY

- 5.2.1 A sufficient number of qualified full-time faculty members are available and assigned to teach the technology, management, and applied engineering courses for the program/option.

### All programs have the same response

The Department of Technology has an excellent faculty. There are six full-time members. Four of the existing faculty are tenured, one is on tenure track, and one is a lecturer (annual contract). All faculty are active in the profession and strongly committed to the students and the university. The faculty positions are primarily for teaching undergraduate and graduate classes; however, responsibilities also include advising, administration, recruiting, and research. Table 22 illustrates a faculty member's highest degree, rank, teaching experience, industrial experience, and length of ATMAE membership. Other professional memberships and scholarly achievements are listed in curriculum vitae of the

faculty listed in Appendix J.

The full-time tenured track faculty who teach courses for the Industrial Technology program are as follows:

Dr. Mark R. Miller, Professor and Chair

Dr. Dominick E. Fazarro, Professor

Dr. Heshium R. Lawrence, Associate Professor

Dr. Mohammed Ali, Associate Professor

Dr. Dennis Jones, Assistant Professor

Ms. RaeJean Griffin, Lecturer

**Table 20: Academic Preparation of Full-Time Faculty Teaching TECH Courses**

Faculty	Degree	Rank	Teaching Exp. (yrs.)	Industrial Exp. (yrs.)	ATMAE member (yrs.)
Lawrence	Ph.D.	Assoc. Prof.	20	1	23
Fazarro	Ph.D.	Professor	21	13	25
Miller	Ph.D.	Professor	41	1	30
Ali	Ph.D.	Assoc. Prof.	30	5	26
Jones	Ph.D.	Asst. Prof.	10	30	4
Griffin	M.S.	Lecturer	4	6	9

The department has one adjunct faculty that assists with teaching one course each semester and his name is Mr. John Connolly II. He earned his MS in Industrial Management from the department and has worked for Caterpillar and is currently working for Northrup Grumman.

5.2.2 Full-time faculty qualifications shall include emphasis upon the extent, currency, and pertinence of:

a. academic preparation,

The six full-time faculty all have a doctorate except for Lecturer Griffin who has a Masters of Science in Industrial Management. The five tenured or tenure-track faculty all have doctorates in either industrial education, industrial engineering, manufacturing engineering or similar field. Each of these doctoral faculty receive one course release to do research and publish. Their normal course load is three courses a semester, while lecturers, who are not required to publish, teach four. Faculty without the appropriate qualifications are not allowed to be hired since they must be vetted by the university's SACSCOC regional accreditation representative as well as upper administration.

- b. professional business or industry experience using applied technology (such as technical supervision and management),

All six full time faculty have worked in industry for at least one year and have also taught courses at the college level for at least four years. New faculty are monitored and mentored by tenured faculty and the department chair.

- c. membership and participation in appropriate technology, management, and applied engineering professional organizations, and

All six full-time faculty are a member of ATMAE and EPT. Dr. Miller is also a member of SME and Lecturer Griffin is a member of the association entitled, *Women in Manufacturing*, and started the first student chapter in the country at UT Tyler.

- d. scholarly activities as required by the institution.

The Soules College of Business has clearly identified what the expectations are for new faculty and even conduct a three year review to make sure the faculty member is on the right track to be tenured. If not, then the faculty member may be terminated or in some cases granted a four year review if they are close to meeting the expectations. At any rate, faculty are well aware of what is expected of them so there is no misunderstanding if they do not earn tenure. Refer to the link for the criteria for tenure: <https://www.uttyler.edu/soules-college-of-business/policies-and-procedures/> and then under the heading of Faculty Appraisal and Promotion Policies.

- 5.2.3 The following minimum qualifications for full-time faculty are required (except in unusual circumstances which shall be individually justified):

- B. **Baccalaureate Degree:** The minimum academic qualification for a tenure track, or full-time faculty member shall be an earned graduate degree in a discipline closely related to the instructional assignment. A minimum of fifty percent of the tenure track or full-time faculty members assigned to teach in the program/option of study content area(s) shall have an earned doctorate or other appropriately earned terminal degrees as defined by the institution. Exceptions may be granted to this standard if the institution has a program/option in place that will bring the faculty demographics into compliance within a reasonable period of time.

All faculty teaching courses in the Department of Technology either have a doctorate or a masters in a related discipline. Please refer to the faculty curriculum vitae in Appendix J. Five of the six full time faculty have a PhD and the lone lecturer has a MS in Industrial Management.

- C. **Master's Degree:** Faculty members shall possess an earned doctorate degree in a discipline closely related to the faculty member's instructional assignment (exceptions may be granted for specialized technical management programs/options).

All the tenure and tenure track faculty have an earned PhD and the lone lecturer with a master's degree is also a Certified Lean Six Sigma Black Belt which allows her from time to time to teach the Lean Management graduate course. The sole adjunct has a MS in Industrial Management and also earned certifications in the courses he teaches at the graduate level. He is also one of the lead managers for quality for Northrup Grumman.

- 5.2.4 Faculty selection, appointment, reappointment, and tenure policies and procedures shall be clearly specified and conducive to maintaining high-quality instruction. This shall include policies and procedures for selecting and reappointing part-time/adjunct faculty.

The Chair of the Department initiates a proposed new appointment after consultation with the faculty. Requests to advertise and fill vacancies are approved by the Dean and the Vice-President of Academic Affairs. Criteria for the position and a position description are established by the Department of Technology faculty and submitted for approval by the Dean, Vice-President of Academic Affairs, and Equal Opportunity Officer. The Department Chair advertises the position in the Chronicle of Higher Education, professional journals, and other appropriate networks. Applicants are screened by the Department Chair and an ad hoc committee made up of Department of Technology faculty. Finalists are invited for on-campus interviews. New appointments are recommended on the basis of education; experience; competence in teaching, research and professional practice; recognition in the field; and, in some cases, prior experience at other institutions

Initial appointments may be made to any of the academic ranks to include, instructor, lecturer, assistant professor, associate professor, or professor depending on experience. Appointments to tenured positions are made only after consultation and special approval of the dean of the college and the provost.

An appointment is initiated by the College Dean who specifies the conditions of appointment in a letter of intent indicating the academic rank, salary for the first year, the ending date of the probationary period if one is established, and the date by which a notification of intent not to renew is to be given if the appointment is renewable. This is confirmed by the Provost and Vice President of Academic Affairs.

The qualifications for tenure track faculty members for the Department of Technology include a doctorate in technology, industrial education, or a closely related technical field. Also required is evidence of scholarly activity including research and publication. Evidence of superior teaching ability is required of all faculty. Experience in working with various student populations and securing external funding is desired. Industrial experience related to the curriculum content is strongly desired for all faculty of the Department of Technology.

Assurance of academic freedom is essential to a high level of academic excellence. Each faculty member is free to carry out teaching, extension, and research responsibilities in a setting of commitment to scholarship and intellectual objectivity. A sound tenure policy with strong administrative support for academic freedom affords an environment in which scholarship is given an opportunity to flourish.

The system of academic tenure at The University of Texas at Tyler emphasizes (1) recruitment of the most highly qualified candidates available, (2) creation of an opportunity for scholarly performance in teaching, research, and service, (3) continuing evaluation of performance on the

basis of areas of responsibility specified in the employment agreement, and (4) the awarding of tenure upon a satisfactory showing of scholarly performance in the appropriate functional areas.

Both affirmative action and tenure function as compatible concepts at The University of Texas at Tyler. Both seek to ensure the hiring and retention of those who are most qualified. In the appointment process, affirmative action operates to ensure that the most qualified available person is identified and is offered the opportunity to join the faculty. After the initial appointment, the affirmative action program ensures that irrelevant considerations, such as race, religion, and sex, play no role in tenure, promotion, and salary decisions.

Tenure policies and reappointment are governed in accordance with university procedures. Tenure is granted through demonstrated research and publication, outstanding teaching performance, and noteworthy professional service. After the awarding of tenure, the faculty appointment is continuous.

The UT Tyler Handbook of Operating Procedures (HOP) which contains tenure and promotion guidelines is available for review at: <https://uttyler.smartcatalogiq.com/en/uttyler/ut-tyler-hop/series-300-faculty-and-academic-policies/> .

Refer to Appendix D for the Soules College of Business Tenure and Promotion policies: [https://www.uttyler.edu/soules-college-of-business/policies-and-procedures/scob\\_tp\\_policy-2020.pdf](https://www.uttyler.edu/soules-college-of-business/policies-and-procedures/scob_tp_policy-2020.pdf)

Faculty are encouraged to attend appropriate technical seminars, workshops, and professional conferences. The department is able to assist faculty in updating their technical knowledge and skills by providing professional development funds. The department has acquired a number of grants over the past several years that has assisted in this endeavor. Some faculty take the opportunity to consult, and work in the private sector during the summer and off time. These activities are encouraged realizing that such experience is invaluable to the goals of the department.

The faculty members are encouraged to belong and be active participants in the various professional and technical societies and organizations.

Curriculum Vitae for all faculty are found in Appendix J.

- 5.2.5 Faculty teaching, advising, and service loads shall be reasonable and comparable to those in other professional program/option areas.

All the faculty in the Soules College of Business have the same teaching, advising, and service loads. Tenured faculty teach three courses each semester with ..one release time for research/publications. Lecturers are required to teach four courses with no or very limited research expectations. Adjunct professors are paid per each course that they teach. All or at least most advising is conducted by the Soules College of Business Undergraduate and Graduate advising departments.

- 5.2.6 Appropriate criteria shall be in place to assure part-time or non-tenure track faculty are highly qualified to deliver and evaluate student performance in courses assigned.

A form has been developed for SACSCOC regional accreditation in which each department has to list the credentials and justification for each faculty member to teach every course they are assigned. If there is not the proper justification, then the faculty member will not be allowed to teach the course and the course will not be offered unless a properly credentialed faculty member becomes available. In addition, there is a form from the college to receive approval to teach graduate courses. The link to the Soules College of Business form is: [https://www.uttyler.edu/soules-college-of-business/policies-and-procedures/faculty\\_qualifications\\_and\\_engagement/soules-graduate-faculty-policy.pdf](https://www.uttyler.edu/soules-college-of-business/policies-and-procedures/faculty_qualifications_and_engagement/soules-graduate-faculty-policy.pdf)

## **STANDARD 6: FACILITIES, EQUIPMENT, SUPPORT & SAFETY**

Facilities and equipment shall be sufficient to support the program learning outcomes.

### **INSTITUTION'S RESPONSE TO STANDARD 6:**

#### **All programs have the same response**

#### **6.1 FACILITIES & EQUIPMENT**

Modern, functional, and maintained facilities, classrooms, laboratories, equipment, tools, materials, computers, and software shall be available.

The Department of Technology finally moved into a new building with almost three times the lab space from the previous building in the Fall semester of 2018. Furthermore, these labs are designed for the equipment and have overhead garage doors, proper ventilation, and room to expand. The new building also has a special lab just for welding that the previous building did not. The department also shares a 60-seat computer lab that students have access to all day until the building closes late at night. Across from that lab is an open computer lab which has printing capabilities as well. Over the years, the Department has always been able to purchase at least \$30,000 or more of new equipment to enhance the students learning experience. However, in 2015, when the Department of HRD and Technology was split into two separate departments, the Department of Technology was able to spend anywhere from \$30,000 to \$80,000 in new equipment and supplies which equates to an increase in funding by tenfold. Funding for equipment and materials is done when instructors ask for funds and the department's faculty prioritize them and then purchase the equipment, etc. accordingly. All courses have some laboratory equipment available to simulate what they would expect when working in an industrial environment. The intent is to purchase smaller table top equipment so there are enough funds to furnish all the labs with some type of laboratory equipment. It should be noted that nineteen years ago, the program was only offered as an upper-level completion degree for technical transfer students and there was not a single piece of equipment. The program has come a long way over these years. The following is a table of all the equipment and material expenditures from the years 2019-2023. Essentially, everything that was purchased after the department's last reaccreditation site visit is listed in the following table.

TABLE 21: Equipment, Supplies, and Materials Purchases for the Department of Technology

Academic Year	Transaction Date	Vendor	Items Purchased	Amount
2019-2020	8/22/2019	Matheson gas	Supplies/gas for welding lab TECH 4343	\$ 188.64
	9/1/2019	Matheson gas	Miller tig torch (5) TECH 4343	\$ 470.00
	9/1/2019	Matheson gas	Miller Control Remote (10) TECH 4343	\$ 2,410.50
	9/1/2019	Matheson gas	Miller accessory kit (10) TECH 4343	\$ 540.60
	9/1/2019	Matheson gas	MS Flow Meter w/ Hose (10) TECH 4343	\$ 882.60
	9/1/2019	Omax	Protomax waterjet cutting machine TECH 4317/5317	\$ 23,950.00
	9/1/2019	Omax	protomax spares and accessories kit TECH 4317/5317	\$ 1,880.00
	9/1/2019	Omax	85 hpx garnet TECH 4317/5317	\$ 426.00
	9/23/2019	Matheson gas	Gas cylinder Lease TECH 4343	\$ 470.00
	9/27/2019	Fastenal	Bolts and screws for Student projects TECH 3311	\$ 13.25
	9/27/2019	Home Depot	Wood and Materials for Student projects TECH3311	\$ 235.54
			Holliday Sheet	
	10/7/2019	Metal	Sheet metal for student projects TECH 4323	\$ 150.00
	10/21/2019	Lowe's	Parts for plasma cutter TECH 4343	\$ 17.46
	10/23/2019	Home depot	paint for student projects TECH 3311	\$ 20.46
	11/11/2019	Home Depot	Wood for bat project TECH 3311	\$ 26.88
	11/13/2019	Lowe's	Wood paneling for Tech 3311	\$ 20.94
	11/14/2019	Lowe's	Cutting thread for tech 4323	\$ 139.46
	11/15/2019	Walmart	Tool tray for tech 4323	\$ 45.90
	1/4/2020	Home Depot	Router bits for TECH 3311	\$ 18.21
			Maddox Air	
	1/8/2020	Conditioning	Line for water jet TECH 4317/5317	\$ 4,914.00
	1/20/2020	Lowe's	Supplies for Tech Lab 1320	\$ 38.65
			Chaney	
	1/29/2020	Electronics	Supplies for TECH 2311	\$ 1,204.50
	2/13/2020	Amazon	Soldering kits (30) TECH 2311	\$ 330.39
	2/13/2020	Techn Labs	Elearn renewal TECH 3317	\$ 2,600.00
	2/29/2020	Amazon	Plastic engraver material TECH 3333	\$ 102.20
	3/5/2020	Home Depot	compressed air regulator to run CNC lathe TECH 5/4317	\$ 28.29
	4/8/2020	lab resources	Motoman MHJF Fundamentals H/W Package	\$ 34,039.00
	4/8/2020	lab resources	Motoman MHJF LearnMate Curriculum TECH 3317	\$ 2,995.00
	4/8/2020	lab resources	Advanced Robotics for MotoMan MHJF. TECH 3317	\$ 2,495.00
	4/8/2020	lab resources	Curriculum Upgrade to LearnMate and Hosting	\$ 4,995.00
	4/8/2020	lab resources	Recommended (3 yrs of Hosting) TECH 3317	\$ 2,500.00
	4/8/2020	eBay	Scorbot ER-4U Robot TECH 3317	\$ 450.00
	4/10/2020	eBay	Dobot Robot SS TECH 3317	\$ 1,448.80
	4/13/2020	Office Depo	Computer/software to run Dobot robot TECH 3317	\$ 408.45
	4/15/2020	eBay	Dobot Robot Conveyor SS TECH 3317	\$ 500.00
	5/22/2020	TS Enterprise	Universal 3E Robot TECH 3317	\$ 22,560.00
	5/22/2020	TS Enterprise	2f-85 gripper TECH 3317	\$ 4,800.00
	5/22/2020	TS Enterprise	training kit for robot TECH 3317	\$ 5,975.00

	5/22/2020	TS Enterprise	UR-INSTR-TRING Training TECH 3317	\$ 1,250.00
	6/28/2020	Instron	IZOD Plastic Configuration TECH 1320	\$ 5,120.00
	6/28/2020	Instron	Ceast 9050 Pendulum Impact Tester TECH 1320	\$ 19,392.00
	6/29/2020	Instron	Manual Notching Machine TECH 1320	\$ 5,224.00
	7/23/2020	Dollar General	Brooms TECH 3311	\$ 20.57
	8/21/2020	Matheson gas	Gas for welding lab TECH 4343	\$ 665.50
	9/7/2020	Harbor freight	Hydraulic table/lift for labs TECH 1320	\$ 279.00
	9/11/2020	Grizzly	materials for TECH 3311 (axis,knobs,clamping lever,etc.)	\$ 500.03
	9/18/2020	Grizzly	Mini Metal Lathe (5) TECH 4323	\$ 4,120.00
	9/18/2020	Grizzly	motor 2hp 11v TECH 3311	\$ 289.30
			<b>TOTAL SPENT FOR 2019-2020</b>	<b>\$161,151.12</b>
<b>2020-2021</b>	9/21/2020	Grizzly	mini metal lather(5)	\$ 4,120.00
	9/21/2020	Grizzly	motor 2hp 11v	\$ 289.30
	9/21/2020	eBay	Merlan scientific Buster bridge test stand TECH 1320	\$ 374.01
	9/21/2020	eBay	EsGED robotec, scorbot-er 4U TECH 3317	\$ 1,025.00
	9/21/2020	eBay	Rockwell harness test block TECH 1320	\$ 316.00
	9/22/2020	Home Depot	Supplies for Tech 3311	\$ 300.00
	9/23/2020	Mark Miller	Reimbursement for Hardware & Materials TECH 4323	\$ 37.00
	9/30/2020	Esteici Licea	Computer Equip Controller	\$ 813.75
	10/14/2020	Dell Marketing	OptiPlex Tower (3)	\$ 2,166.00
	10/15/2020	Grizzly	Drill Chuck Arbor (5) TECH 4323	\$ 59.75
	10/15/2020	Grizzly	Mini Turning Tool Set (5) TECH 4323	\$ 394.75
	10/15/2020	Grizzly	Micrometer (2) TECH 4323	\$ 25.90
	10/19/2020	Dell	Microsoft project tech 3331 and 5331	\$ 4,951.16
	11/10/2020	Grizzly	Outside Micrometer metal	\$ 56.95
	11/11/2020	eBay	Drill Chuck Arbor shank morse taper TECH 4323	\$ 44.25
	11/11/2020	eBay	Tool bit and holder mini lathe set TECH 4323	\$ 153.35
	11/12/2020	Dennis Jones	Welding Cart TECH 4343	\$ 47.99
	11/13/2020	Harbor freight	Mini Lathe drill chuck (5) TECH 4323	\$ 69.86
	11/18/2020	Home Depot	Port PCI Expansion Enclosure	\$ 434.95
	11/18/2020	Lowes	Supplies for Tech Lab TECH 4323	\$ 416.70
	11/20/2020	Amazon	3d printers	\$ 299.00
	12/1/2020	Amazon	3d printers materials	\$ 408.00
	12/17/2020	Amazon	3D Printer	\$ 299.00
	12/17/2020	Lowes	Supplies for Tech 4323	\$ 584.90
	1/13/2021	Amazon	3d Printers	\$ 299.00
	1/15/2021	Amazon	3d Printers (3)	\$ 897.00
	1/15/2021	Solving business	capstone Tech4372-learning materials	\$ 1,000.00
	1/19/2021	Tech labs	eLearn Renewal (35) TECH 4317	\$ 3,480.00
	1/22/2021	Lowes	Supplies for Lab TECH 3333	\$ 101.22
	1/24/2021	Delvie Plastics	plastic materials for tech 3333	\$ 193.30
	2/1/2021	Amazon	8x10 plastic uv sheets for student labs (10) TECH 3333	\$ 74.95
	2/4/2021	Flashforge	PLA Filmament for Finder (12) TECH 4317	\$ 408.00

	2/17/2021	Solving business	Online Taining Module (25)	\$ 1,000.00
	2/17/2021	Lowes	Material for Tech Lab 3333	\$ 195.26
	3/8/2021	Technical Labs	eLearn Renewal (35) TECH 4317	\$ 3,500.00
	3/18/2021	Lowes	Lab Equipment TECH 3311	\$ 310.99
	4/21/2021	Lowes	Supplies for Polymer Process Lab TECH 3333	\$ 19.26
	4/21/2021	Lowes	Refund to Dept.	\$ 4.05
	5/4/2021	Lews	metal for welding lab TECH 4343	\$ 132.00
	5/5/2021	lab resources	Base CNC BenchMill 6100 110V	\$ 14,934.00
	5/5/2021	lab resources	Table Mounted 4 Station Automatic Tool Changer	\$ 3,188.00
	5/5/2021	lab resources	Jog Pendant Handwheel Control (6100/8000)	\$ 795.00
	5/5/2021	lab resources	Dual Axis Pneumatic Vise 6100 / 8000	\$ 740.00
	5/11/2021	lab resources	Benchmill 6100 option	\$ 3,188.00
	5/11/2021	lab resources	jog pendant Handwheel Control (6100/8000)	\$ 795.00
	5/11/2021	lab resources	Dual Axis Pneumatic Vise 6100 / 8000	\$ 740.00
	5/13/2021	lab resources	Tool Changer, Handwheel Control, Pneumatic Vise	\$ 4,723.00
	5/13/2021	lab resources	BenchMill TECH 4317	\$ 14,934.00
	5/20/2021	Lowes	Axis Belt (X, Y, Z) TECH 4317	\$ 32.00
	6/30/2021	Mark Miller	Reimbursement for Lab Supplies TECH 4317	\$ 139.92
	7/5/2021	Harbor freight	Welding materials for tech 4343	\$ 474.78
	7/6/2021	Amazon	metal for welding lab TECH 4343	\$ 192.99
	7/6/2021	Mark Miller	Reimbursement for Lab Materials TECH 4343	\$ 111.88
	7/9/2021	Tractor Supply	Welding materials for tech 4343	\$ 102.97
	7/10/2021	Tractor Supply	Welding materials for tech 4343	\$ 275.91
	7/12/2021	Matheson gas	welding gas and nozzel for tech 4343	\$ 895.36
	7/12/2021	Matheson gas	Welding parts for tech 4343	\$ 482.37
	7/17/2021	Atwoods	Welding materials for tech 4343	\$ 58.38
	7/20/2021	Home Depot	Lights for Welding Lab TECH 4343	\$ 285.58
	7/20/2021	Amazon	Supplies for Welding Lab TECH 4343	\$ 462.08
	7/21/2021	Amazon	spooling gun TECH 4343	\$ 550.00
	7/21/2021	Tyler Steel	Welding materials for tech 4343	\$ 189.48
	7/30/2021	Harbor freight	Welding materials for tech 4343	\$ 388.45
	8/18/2021	Home Depot	Stickers for Tech Lab/Welding Aprons TECH 4343	\$ 114.62
	8/18/2021	Home Depot	Welding Materials for Tech 4343	\$ 1,813.91
	8/18/2021	Home Depot	Materials for Lab - Tech 4343	\$ 2,211.52
			<b>TOTAL SPENT FOR 2020-2021</b>	<b>\$ 82,121.80</b>
<b>2021-2022</b>	9/1/2021	TS Enterprise	Shipping for Sanding Kit TECH 3317	\$ 250.00
	9/1/2021	TS Enterprise	Sanding Kit for Universal Robot TECH 3317	\$ 4,500.00
	9/1/2021	Lowes	Dowels and Numbers for TECH 3311	\$ 11.46
	9/1/2021	Lowes	Dowels and Numbers for TECH 3311	\$ 19.68
	9/1/2021	Lowes	Dowels and Numbers for TECH 3311	\$ 76.42
	9/17/2021	eBay	Bandsaw blade for TECH 3311	\$ 40.84
	9/19/2021	eBay	Sensor for material tester TECH 1320	\$ 50.00
	10/3/2021	Lowes	Lab Supplies for Tech 1320 and Tech 4323	\$ 14.98
	10/3/2021	Matheson gas	Yearly Lease for Welding lab-TECH 4323	\$ 665.50

10/3/2021	Walmart	Lab Supplies for Tech 1320 and Tech 4323	\$ 49.44
10/3/2021	Lowes	Lab Supplies for Tech 1320 and Tech 4323	\$ 16.36
11/3/2021	Home Depot	Drill bit and Dowels for lab for TECH 3311	\$ 119.84
11/3/2021	Lowes	Lab supplies for LUC lab TECH 3311	\$ 39.86
11/3/2021	Harbor freight	2 Welder Spot 120V- Welding Lab TECH 4323	\$ 319.98
11/3/2021	Lowes	120V plug for Welders- TECH 4323	\$ 14.26
11/3/2021	Lowes	Lab supplies for LUC lab TECH 3311	\$ 8.68
11/3/2021	Lowes	Lab supplies for LUC lab TECH 3311	\$ 3.84
1/3/2022	Studica, INC	Vacuum Gripper Robot 9v, Punching machine w/conveyor belt TECH 4317	\$ 1,813.74
1/3/2022	LNSTechnologies	Toggle clamp-Tech 3333	\$ 220.00
1/3/2022	Lowes	Sanding belts- TECH 3311	\$ 49.44
1/3/2022	LNSTechnologies	Bench Injections Machine & Toggle clamp- TECH 3333	\$ 4,820.00
2/3/2022	Lowes	Lab Supplies for TECH 3333	\$ 175.48
2/3/2022	Walmart	Lab Supplies for TECH 3333	\$ 249.58
2/3/2022	Walmart	Lab Supplies for TECH 3333	\$ 45.18
2/3/2022	LNSTechnologies	2 Injection molding machies-TECH 3333	\$ 4,600.00
2/3/2022	Industrial Arts Supply	Materials for TECH 3333	\$ 746.66
2/3/2022	Wood supply	Pens for Lab Projects- Tech 3333	\$ 208.95
2/3/2022	LNS Technologies	Injection Molding clamps TECH 3333	\$ 427.00
2/3/2022	Walmart	Lab Supplies for TECH 3333	\$ 313.01
2/3/2022	Grizzly	Vent for injection molder-TECH 3333	\$ 82.64
3/3/2022	Fastenal	Drill Rod TECH 3333	\$ 3.28
3/3/2022	Tractor Supply	2 Rod plain steel TECH 4343	\$ 8.98
3/25/2022	TS Enterprise	PLC Trainer TECH 2319	\$ 7,014.00
4/3/2022	Flashforge	Materials for #D printers TECH 4317	\$ 301.89
4/3/2022	Lowes	Lab Materials for TECH 3333	\$ 71.92
4/3/2022	Fastenal	Screws for Student Projects - Tech 3333	\$ 5.00
4/14/2022	TS Enterprise	Mechanical Workstation- Workbench- Level 1&2	\$ 29,517.00
4/14/2022	TS Enterprise	Campus License TECH 4317/5317	\$ 613.00
6/3/2022	Tyler Steel	Metal sheets- TECH 4343	\$ 871.66
6/3/2022	Epilog Laser	Laser engraver replacement part & service TECH 3311	\$ 3,464.64
6/3/2022	Industrial Art Supply	Lab Materials TECH 3311	\$ 290.05
7/2/2022	D&D Welding Supply	Welding materials for tech 4343	\$ 791.60
7/2/2022	Tractor Supply	Welding materials for tech 4343	\$ 54.55
7/2/2022	Home Depot	Welding materials for tech 4343	\$ 258.00
7/24/2022	Lews Welding Service	Welding materials for tech 4343	\$ 165.00
8/3/2022	Welding Supply	Millermatic 211- TECH 4343	\$ 2,448.97
8/3/2022	Akon LLC	Tinted shade -TECH 4343	\$ 720.21



The Soules College of Business has a computer support technician available to install software as well as assistance from the university information technology support center. Technical support is accomplished by emailing them at [itsupport@uttyler.edu](mailto:itsupport@uttyler.edu) and a support ticket is automatically generated and someone notifies you within an hour or so regarding the urgency of the support ticket. Most problems are rectified with a day or so, however, if it is a larger issue, it may take several weeks.

As far as machine equipment, maintenance, and installation, the department chair has to commit a lot of his time to do this with the help of student workers that he has to train. There is currently no lab technician to maintain the labs as is the case in the College of Engineering. Student workers and graduate assistants also help with courses that require laboratory experiences.

### 6.3 SAFETY

Safety and health protocols shall align with OSHA standards and be documented, easily accessible at the point of use, and adhered to.

All courses that have a lab require students to pass a safety test before working in the lab. The PowerPoint slides are located in Appendix E. In addition, they must sign a release form (Figure 1) that reinforces what they should not do in the lab and that they are aware that they can be removed from the lab if they break any of the rules, and that their grade will be impacted in a negative way. In addition, the university requires students to pass an online safety course that is offered on Canvas before they can work in any of the labs. They must retake the safety course every year.

## TECHNOLOGY DEPARTMENT LABORATORY SAFETY POLICY

Due to the exposure to certain equipment and conditions that could cause severe injuries, students are required to follow these safety guidelines:

1. Wear safety glasses at all times.
2. Do **NOT** wear shorts, dresses, or cutoffs in the laboratory.
3. Wear only closed toed shoes (boots preferred) in the laboratory.
4. Do **NOT** wear sweaters or loose long sleeve shirts.
5. Ties should be tucked in or removed.
6. Long hair must be tied back or contained with a hair net.
7. Do **NOT** wear rings, watches, or loose fitting necklaces.
8. Keep hands off of rotating parts.
9. No running or horseplay allowed in the laboratory.
10. Make sure parts and tooling are secured before turning on the machine.
11. Be watchful of oils, spills, trip hazards, and other obstructions.
12. No food, drinks, or tobacco in the laboratory.
13. Never use a machine or tool that you are not familiar with.
14. Always ask an instructor for help if you do not understand how to properly operate a piece of equipment.
15. Clean your work area (floor, machine, table, etc.) at the end of every class period.
16. Do **NOT** leave class until the instructor has checked your area and tells you to leave.

### LABORATORY SAFETY CONTRACT

I fully understand the laboratory safety policy of the Technology Department at The University of Texas at Tyler. I also understand that failure to abide by these rules will endanger me and others, therefore, giving the instructor the right to dismiss me from class. The instructor also has the right to permanently dismiss me from the laboratory if inappropriate behavior continues which will substantially reduce my grade. Moreover, I understand that I will **NOT** hold anyone associated with The University of Texas at Tyler liable for any accident that may happen to me. I fully understand that when I am unsure of the proper operation of a machine or hand tool that I will ask an instructor for assistance. Furthermore, I also understand that I do not have to use any piece of equipment or hand tool unless it is made safe for my use.

\_\_\_\_\_  
Signature of student

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print first and last name

\_\_\_\_\_  
Student ID number

Figure 1: Technology Department Laboratory Safety Policy Form.

## STANDARD 7: PROGRAM OPERATION

Evidence shall be presented showing adequate instruction, resources, and budget for the program/option's operation.

## INSTITUTION'S RESPONSE TO STANDARD 7:

Both Programs have the same response.

### 7.1 INSTRUCTION

Instruction is core to program learning outcomes. The following shall be evident:

#### a. Scheduling of instruction and student advising

The scheduling procedure for classes permits input from both the student and faculty. This cooperative effort allows some ownership of their scheduled day and results in a high degree of cooperation. The procedure allows for a variety of scheduled course offerings which do not restrict accessibility for the student due to overlapping classes and provides course offerings. Also, this scheduling procedure enables ample time for the student to complete the general study requirements and to meet their educational goals.

The scheduling of courses is coordinated by the department chair with the aid of the faculty. Industrial Technology and Industrial Management courses are scheduled by the department chair. Courses are all placed on a master schedule. The times are coordinated with other course offerings within and outside the department to minimize conflict. Course frequency is determined by the student need. The master course schedule only shows the minimum course offerings, additional sections will be added at the discretion of the department chair. The master schedule (referred to as the rolling schedule) is posted on the departmental web page to assist students with the semester they should take certain courses and to plan accordingly so they will graduate in a timely manner.

All Technology courses are offered for three semester hours of credit. Outside related readings and assignments are expected to consume six-eight hours of student time per week per course. Advisement is used to balance student course loads. Graduate students are encouraged to take up to 9 credits. The University Policy is as follows: The normal load for a spring or fall semester is 9 semester hours. The normal load for a summer term is 6 semester hours. The student must contact his/her adviser to exceed the normal allowable credits and the adviser must notify the college dean's office for approval.

#### b. Quality of instruction

The quality of the instruction at The University of Texas at Tyler is monitored in several ways. First of all, new faculty are mentored by tenured faculty and the department chair to make sure they are developing appropriate learning outcomes and experiences for the students of the program. Complaints emailed, voiced by telephone or in person are discussed with the student by the department chair. The department chair then discusses these complaints with the instructor in question and provides the faculty member with alternatives and solutions so these problems do not occur in the future. End of course student evaluations of the instructor are also reviewed and if there are any serious issues, then the department chair will intercede and meet with the instructor to offer solutions. If the same complaints continue for tenure track faculty, then they will not pass their third review and their contract will not be reviewed. As for adjunct faculty, they will not be allowed to continue to teach courses for the

department. Tenured faculty will have to improve instruction as well because they must have a favorable post-tenure review or be put on probation. Student evaluations of faculty are posted on the university's website at: <https://apps2.uttyler.edu/course-evaluations/>.

The quality of instruction is also monitored by peer reviews of faculty. Faculty are required every several years to be reviewed by another faculty member who fills out a prescribed form. A meeting is conducted after the peer review to provide a faculty member with feedback on their teaching. Most faculty welcome the feedback and improve their instruction accordingly. The reviews are submitted to the dean's office and kept in the faculty member's personnel file. A copy of the peer review form is listed in Appendix F.

The university also has The Center for Excellence in Teaching and Learning which provides workshops, speakers, and other types of assistance throughout the year to assist faculty with their teaching. Faculty are recommended to attend these events as much as possible. They are typically held as a Lunch & Learn or offered on Zoom so faculty can watch them in their office. <https://www.uttyler.edu/cetl/>

c. Supervision of instruction

The University of Texas at Tyler has established guidelines for supervision and evaluation of each department. In the Department of Technology, a student evaluation of the faculty member's performance is assessed for each course taught. This practice is an integral part of the departmental operation. The student evaluation instrument permits discrete assessments of classroom and laboratory performance. Past faculty evaluations by students are allowed to be accessed from the main university home page at:

<https://apps2.uttyler.edu/course-evaluations/>

A second source of faculty assessment for improving instruction is the annual evaluation by the department chair. A prescribed set of criteria is used to measure the faculty members' teaching performance. Each faculty member then has an open dialogue regarding his/her performance and ways to improve instruction with the chair. A copy of the Faculty Evaluation Form can be found in Appendix G.

Faculty members are expected to provide the highest degree of quality instruction for their assigned courses. Faculty are responsible for all testing, teaching, lab supervision, project evaluation, and the like. Student assistants are used for both laboratory preparation and peer assistance and are expected to work toward the same standard as a permanent faculty member. Only student workers or graduate assistants who have previously taken the course or have been properly trained by a faculty member are allowed to assist students in the course.

In addition, all faculty, staff, and student workers must go through training set up by the university so they know the proper way to treat students, parents, colleagues, etc. Individuals are not allowed to work until they have completed this training.

## 7.2 RESOURCES

Resources are fundamental to the program/option's operation. The following shall be available and evident:

a. Resource materials

Adequate library resources are available for both programs and a budget is set for each program that can be used to purchase items for the library, such as books, data bases, online resources, etc.

b. Resources and training to design, deliver, and assess instruction

The university has training for new faculty and existing faculty on how to use the LMS Canvas system and other software packages used in conjunction with the LMS. In addition, the Center for Excellence in Teaching and Learning (CETL) offers online instruction and seminars related to improving teaching methods and instruction. Their website is: <https://www.uttyler.edu/cetl/>. In addition, the Office of Digital Learning has staff that assist instructors online with any questions that may arise. Their website is: <https://www.uttyler.edu/digital-learning/>

c. Appropriate computer resources/technological infrastructure

Computers on campus are periodically changed every five years or at least have new hard drives and/or RAM installed so they can keep up with new operating systems and software. Most students and faculty feel that the computer labs are sufficient for use.

d. Appropriate technologies, skills, resources, and media including protocols for proctoring, examination test security, candidate validation, and plagiarism detection

The Canvas LMS system that is currently being used has a plagiarism feature that works well and lets students know what the plagiarism percentage is when they turn in an assignment (<https://www.uttyler.edu/digital-learning/faculty-resources/>). In addition, the university uses Proctor U to monitor quizzes and exams so students cannot cheat when taking assessment tests online. Video of students doing suspicious behavior are sent to instructors so they can determine if the student was indeed cheating (<https://www.uttyler.edu/digital-learning/proctoru-resources/>).

e. Qualified instructional designers

The Office of Digital Learning has five staff members that will help instructors around the clock. All of them have experience and educational backgrounds in digital learning and have been very helpful to faculty when problems arise. The response time is anywhere from 5 minutes to one day. All the faculty of the Department of Technology have had good experiences with the instructional designers at UT Tyler. The staff from the Office of Digital Learning are: <https://www.uttyler.edu/digital-learning/meet-the-staff/>

f. Tools for students to track their progress and receive timely feedback

All courses have an online Canvas LMS site so students can see their grades and feedback from instructors at anytime of the day. In addition, the site allows the student to instantly email the instructor and chat with other students in regards to course content, assignments, issues, etc.

### 7.3 BUDGET

Program/option operation budgets shall be sufficient and comparable to other equivalent programs/options at the institution.

Because the Technology Department is in the School of Technology along with the Computer Science Department, it seemed fitting to compare those two departments from the Soules College of Business. It should be noted that the Computer Science Department has more than twice the

enrollment and faculty of the Technology Department. Therefore, when comparing the funding lines for each budget, the Computer Science Department should receive twice the funding of the Technology Department. If you look at the following budget tables for the last five years, you will see that the Computer Science on average does receive about twice the funding of the Technology Department. Some years they receive even more funding because they purchase all the new computers for each of the labs that everyone in Soules College of Business uses for their courses. The following are tables comparing the Technology Department's budget with the Computer Science's budget.

Table 22: 2024-2020 Budgets of the Technology and Computer Science Departments.

**2024 Technology Budget**

Account Description	Fund Code Description	Class Description	Account	Cost Center	ChartField1 Description	Budget	Available Budget*
Staff Salaries	E&G Special Items (i.e. SALSI)	Instruction	A1000	21001291	Technology General Funds	0	-17,679.59
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	0	-1,832.50
Faculty & TA Salaries	E&G Special Items (i.e. SALSI)	Instruction	A2000	21001291	Technology General Funds	0	-362,659.89
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	0	-82,320.35
Payroll Related Costs	E&G Special Items (i.e. SALSI)	Instruction	A3000	21001291	Technology General Funds	0	-50,248.82
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	0	-235.24
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	0	-13,208.10
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	60,000.00	44,548.01
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	0	-3,438.12
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	898.16	898.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	7,654.00	-3,913.59

**2024 Computer Science Budget**

Account Description	Fund Code Description	Class Description	Account	Cost Center	ChartField1 Description	Budget	Available Budget*
Staff Salaries	E&G General Funds	Instruction	A1000	21001082	Computer Science	0	-34,253.44
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001596	Computer Science ISF	0	-4,177.50
Faculty & TA Salaries	E&G General Funds	Instruction	A2000	21001082	Computer Science	0	-828,173.86
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001160	Chair Comp Science DT	0	-442,220.85
GTA Salaries	DES Organized Act Rel to Instr	Instruction	A2100	31001596	Computer Science ISF	0	-17,258.04
Payroll Related Costs	E&G General Funds	Instruction	A3000	21001082	Computer Science	0	-96,598.45
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001596	Computer Science ISF	0	-416.72
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001160	Chair Comp Science DT	0	-43,368.33
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001596	Computer Science ISF	60,000.00	57,168.81
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001165	Chair Comp Science IDC	2,382.72	2,382.72
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001731	Computer Science Fan IDC	268.33	208.38
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002305	Student Chapter ACM SF	92.4	92.4
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001160	Chair Comp Science DT	14,000.00	-10,550.74
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001212	ORS IDC	0	-11.67
Operating Expenses	RES Gifts and Other	Instruction	A4000	55001205	Comp Sci Discretionary Fund	465	465
Operating Expenses	RES Gifts and Other	Student Services	A4000	55001042	Tcea Internships	2,500.00	2,500.00
Operating Expenses	RES Gifts for Endowments	Institutional Support	A4000	56001015	Lecil&Barbara Chandler	3,831.99	1,707.33

<b>2023 Technology Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	19,312.50
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	5,003.00
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	394,508.98
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	118,497.85
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	142,791.85
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	338.67
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	32,972.29
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	86,634.38
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	12,000.00
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	623.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	12,440.61
<b>2023 Computer Science Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G General Funds	Instruction	A1000	21001082	Computer Science	36,279.00
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001880	Course Delivery Support ISF	3,948.76
Wages	DES Designated Tuition	Instruction	A1200	31001160	Chair Comp Science DT	9,600.00
Faculty & TA Salaries	E&G General Funds	Instruction	A2000	21001082	Computer Science	485,225.31
Faculty & TA Salaries	E&G General Funds	Instruction	A2000	21001083	Computer Science PT FAC	17,000.00
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001160	Chair Comp Science DT	874,611.52
Payroll Related Costs	E&G General Funds	Instruction	A3000	21001082	Computer Science	182,136.58
Payroll Related Costs	E&G General Funds	Instruction	A3000	21001083	Computer Science PT FAC	5,440.00
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001880	Course Delivery Support ISF	141.96
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001160	Chair Comp Science DT	244,188.14
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001596	Computer Science ISF	51,781.28
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001165	Chair Comp Science IDC	2,382.72
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001731	Computer Science Fan IDC	268.33
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002134	Computer Science SSUCF	1,734.45
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002305	Student Chapter ACM SF	92.4
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001160	Chair Comp Science DT	29,203.78
Operating Expenses	RES Gifts and Other	Instruction	A4000	55001205	Comp Sci Discretionary Fund	465
Operating Expenses	RES Gifts and Other	Student Services	A4000	55001042	Tcea Internships	2,500.00
Operating Expenses	RES Gifts for Endowments	Academic Support	A4000	56001361	EndAwd Chandler Cyber	0
Operating Expenses	RES Gifts for Endowments	Institutional Support	A4000	56001015	Lecil&Barbara Chandler	5,723.14
Expense Transfers	E&G General Funds	Instruction	A7000	21001082	Computer Science	118,467.36
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001596	Computer Science ISF	4,090.72
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002134	Computer Science SSUCF	10,265.55
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001160	Chair Comp Science DT	61,144.42

<b>2022 Technology Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G Special Items (i.e. SALSI)	Instruction	A1000	21001291	Technology General Funds	18,750.00
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	10,138.50
Faculty & TA Salaries	E&G Special Items (i.e. SALSI)	Instruction	A2000	21001291	Technology General Funds	380,056.53
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	115,046.09
Payroll Related Costs	E&G Special Items (i.e. SALSI)	Instruction	A3000	21001291	Technology General Funds	134,282.46
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	369.83
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	31,406.16
Operating Expenses	E&G Special Items (i.e. SALSI)	Instruction	A4000	21001291	Technology General Funds	-7,925.52
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	75,965.85
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	21,955.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	13,010.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	1,346.16
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	15,324.98
Expense Transfers	E&G Special Items (i.e. SALSI)	Instruction	A7000	21001291	Technology General Funds	7,925.52
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001726	Technology ISF	-1,254.18
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002159	Technology SSUCF	-10.75
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001727	Technology DT	-2,724.88

<b>2022 Computer Science Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G General Funds	Instruction	A1000	21001082	Computer Science	32,827.00
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001596	Computer Science ISF	18,855.00
Wages	DES Organized Act Rel to Instr	Student Services	A1200	31002134	Computer Science SSUCF	1,633.17
Wages	DES Designated Tuition	Instruction	A1200	31001160	Chair Comp Science DT	9,600.00
Faculty & TA Salaries	E&G General Funds	Instruction	A2000	21001082	Computer Science	713,848.17
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001160	Chair Comp Science DT	406,162.88
GTA Salaries	DES Organized Act Rel to Instr	Instruction	A2100	31001596	Computer Science ISF	10,490.46
Payroll Related Costs	E&G General Funds	Instruction	A3000	21001082	Computer Science	276,963.72
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001596	Computer Science ISF	1,025.35
Payroll Related Costs	DES Organized Act Rel to Instr	Student Services	A3000	31002134	Computer Science SSUCF	191.36
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001160	Chair Comp Science DT	112,255.98
Operating Expenses	E&G General Funds	Instruction	A4000	21001082	Computer Science	88,617.73
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001596	Computer Science ISF	10,396.58
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001880	Course Delivery Support ISF	1,032.40
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001165	Chair Comp Science IDC	1,879.33
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001731	Computer Science Fan IDC	268.33
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002134	Computer Science SSUCF	2,262.79
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002305	Student Chapter ACM SF	92.4
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001160	Chair Comp Science DT	-157,950.49
Operating Expenses	RES Gifts and Other	Instruction	A4000	55001205	Comp Sci Discretionary Fund	335
Operating Expenses	RES Gifts and Other	Student Services	A4000	55001042	Tcea Internships	2,500.00
Operating Expenses	RES Gifts for Endowments	Academic Support	A4000	56001361	EndAwd Chandler Cyber	28,133.20
Operating Expenses	RES Gifts for Endowments	Institutional Support	A4000	56001015	Lecil&Barbara Chandler	9,194.77
Expense Transfers	E&G General Funds	Instruction	A7000	21001082	Computer Science	589,228.59
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001596	Computer Science ISF	19,232.61
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001880	Course Delivery Support ISF	-784.87
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002134	Computer Science SSUCF	8,912.68
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001160	Chair Comp Science DT	897,538.87

<b>2021 Technology Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	16,681.35
Wages	DES Designated Tuition	Instruction	A1200	31001727	Technology DT	1,273.00
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	372,604.44
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	112,790.28
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	129,242.88
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	37,187.00
Operating Expenses	E&G Special Items (i.e. SALS)	Instruction	A4000	21001291	Technology General Funds	-6,786.70
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	65,613.74
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	28,234.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	13,996.33
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002296	Epsilon Pi Tau-Delta SF	1,366.81
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	734.14
Expense Transfers	E&G Special Items (i.e. SALS)	Instruction	A7000	21001291	Technology General Funds	6,786.70
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001726	Technology ISF	9,856.26
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002159	Technology SSUCF	3.67
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001727	Technology DT	5,646.87

<b>2021 Computer Science Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G General Funds	Instruction	A1000	21001082	Computer Science	32,827.00
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001596	Computer Science ISF	20,000.00
Wages	DES Designated Tuition	Instruction	A1200	31001160	Chair Comp Science DT	9,600.00
Faculty & TA Salaries	E&G General Funds	Instruction	A2000	21001082	Computer Science	1,069,908.75
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001160	Chair Comp Science DT	28,141.29
GTA Salaries	DES Organized Act Rel to Instr	Instruction	A2100	31001596	Computer Science ISF	30,000.00
Payroll Related Costs	E&G General Funds	Instruction	A3000	21001082	Computer Science	366,108.27
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001596	Computer Science ISF	5,000.00
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001160	Chair Comp Science DT	18,454.67
Operating Expenses	E&G General Funds	Instruction	A4000	21001082	Computer Science	-53,416.23
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001596	Computer Science ISF	-15,641.97
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001880	Course Delivery Support ISF	1,845.23
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001165	Chair Comp Science IDC	2,299.84
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001731	Computer Science Fan IDC	268.33
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002134	Computer Science SSUCF	2,655.82
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002305	Student Chapter ACM SF	92.4
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001160	Chair Comp Science DT	-11,045.29
Operating Expenses	RES Gifts and Other	Instruction	A4000	55001205	Comp Sci Discretionary Fund	135
Operating Expenses	RES Gifts and Other	Student Services	A4000	55001042	Tcea Internships	2,500.00
Operating Expenses	RES Gifts for Endowments	Academic Support	A4000	56001361	EndAwd Chandler Cyber	28,133.20
Operating Expenses	RES Gifts for Endowments	Institutional Support	A4000	56001015	Lecil&Barbara Chandler	7,268.81
Expense Transfers	E&G General Funds	Instruction	A7000	21001082	Computer Science	53,416.23
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001596	Computer Science ISF	20,641.97
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001880	Course Delivery Support ISF	-979.89
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002134	Computer Science SSUCF	11,344.18
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001160	Chair Comp Science DT	30,496.81

<b>2020 Technology Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G Special Items (i.e. SALS)	Instruction	A1000	21001291	Technology General Funds	16,681.35
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001726	Technology ISF	6,981.00
Faculty & TA Salaries	E&G Special Items (i.e. SALS)	Instruction	A2000	21001291	Technology General Funds	458,476.41
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001727	Technology DT	31,790.29
Payroll Related Costs	E&G Special Items (i.e. SALS)	Instruction	A3000	21001291	Technology General Funds	136,847.40
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001726	Technology ISF	250.08
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001727	Technology DT	7,455.11
Operating Expenses	E&G Special Items (i.e. SALS)	Instruction	A4000	21001291	Technology General Funds	-104,224.68
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001726	Technology ISF	162,885.33
Operating Expenses	DES Organized Act Rel to Instr	Public Service	A4000	31001728	Texas Productivity Center	19,264.75
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002159	Technology SSUCF	10,003.45
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001724	Technology Summer SF - DT	10.74
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001727	Technology DT	5,873.86
Expense Transfers	E&G Special Items (i.e. SALS)	Instruction	A7000	21001291	Technology General Funds	104,749.97
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001726	Technology ISF	-6,836.71
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002159	Technology SSUCF	-3.45
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001724	Technology Summer SF - DT	-10.74
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001727	Technology DT	4,195.27

<b>2020 Computer Science Budget</b>						
<b>Account Description</b>	<b>Fund Code Description</b>	<b>Class Description</b>	<b>Account</b>	<b>Cost Center</b>	<b>ChartField1 Description</b>	<b>Budget</b>
Staff Salaries	E&G General Funds	Instruction	A1000	21001082	Computer Science	32,827.00
Wages	DES Organized Act Rel to Instr	Instruction	A1200	31001596	Computer Science ISF	31,819.85
Wages	DES Organized Act Rel to Instr	Student Services	A1200	31002134	Computer Science SSUCF	2,675.00
Wages	DES Designated Tuition	Instruction	A1200	31001160	Chair Comp Science DT	9,600.00
Wages	RES Gifts for Endowments	Academic Support	A1200	56001361	EndAwd Chandler Cyber	1,802.25
Faculty & TA Salaries	E&G General Funds	Instruction	A2000	21001082	Computer Science	1,069,908.75
Faculty & TA Salaries	DES Designated Tuition	Instruction	A2000	31001160	Chair Comp Science DT	28,141.29
GTA Salaries	DES Organized Act Rel to Instr	Instruction	A2100	31001596	Computer Science ISF	13,012.07
Payroll Related Costs	E&G General Funds	Instruction	A3000	21001082	Computer Science	304,740.20
Payroll Related Costs	DES Organized Act Rel to Instr	Instruction	A3000	31001596	Computer Science ISF	1,631.09
Payroll Related Costs	DES Organized Act Rel to Instr	Student Services	A3000	31002134	Computer Science SSUCF	309.84
Payroll Related Costs	DES Designated Tuition	Instruction	A3000	31001160	Chair Comp Science DT	7,602.84
Payroll Related Costs	RES Gifts for Endowments	Academic Support	A3000	56001361	EndAwd Chandler Cyber	64.55
Operating Expenses	E&G General Funds	Instruction	A4000	21001082	Computer Science	-11,098.63
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001596	Computer Science ISF	9,068.04
Operating Expenses	DES Organized Act Rel to Instr	Instruction	A4000	31001880	Course Delivery Support ISF	764.5
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001165	Chair Comp Science IDC	2,299.84
Operating Expenses	DES Organized Act Rel to Instr	Research	A4000	31001731	Computer Science Fan IDC	268.33
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002134	Computer Science SSUCF	6,990.47
Operating Expenses	DES Organized Act Rel to Instr	Student Services	A4000	31002305	Student Chapter ACM SF	0
Operating Expenses	DES Designated Tuition	Instruction	A4000	31001160	Chair Comp Science DT	-2,945.66
Operating Expenses	RES Gifts and Other	Instruction	A4000	55001205	Comp Sci Discretionary Fund	135
Operating Expenses	RES Gifts and Other	Student Services	A4000	55001042	Tcea Internships	2,500.00
Operating Expenses	RES Gifts for Endowments	Academic Support	A4000	56001360	EndAwd Pirtle Analytics	0
Operating Expenses	RES Gifts for Endowments	Academic Support	A4000	56001361	EndAwd Chandler Cyber	28,133.20
Operating Expenses	RES Gifts for Endowments	Institutional Support	A4000	56001015	Lecil&Barbara Chandler	6,397.04
Operating Expenses	FID Custodial	Not Applicable	A4000	92001260	Student Chapter - ACM	0
Expense Transfers	E&G General Funds	Instruction	A7000	21001082	Computer Science	13,918.42
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001596	Computer Science ISF	24,968.95
Expense Transfers	DES Organized Act Rel to Instr	Instruction	A7000	31001880	Course Delivery Support ISF	-764.5
Expense Transfers	DES Organized Act Rel to Instr	Student Services	A7000	31002134	Computer Science SSUCF	24.69
Expense Transfers	DES Designated Tuition	Instruction	A7000	31001160	Chair Comp Science DT	29,813.22
Expense Transfers	RES Gifts for Endowments	Academic Support	A7000	56001360	EndAwd Pirtle Analytics	3,327.82

## STANDARD 8: GRADUATE SATISFACTION

Graduate input on their satisfaction and attitudes towards the program learning outcomes shall be collected and analyzed at least every two to five years.

### INSTITUTION'S RESPONSE TO STANDARD 8:

#### 8.1. GRADUATE SATISFACTION

Summary data on graduate satisfaction and attitudes related to the program learning outcomes shall be provided.

The **Graduation Exit Survey** is included in the graduation process. The survey is designed for students to reflect on their educational journey and share insights that contribute to the continual improvement of academic programs.

The tables below show the percentage of graduates who chose “Satisfied” or “Extremely Satisfied” for the below areas when completing the survey as well as “Very Effective” or “Extremely Effective.” The entire survey results for each academic year can be found in Appendix H.

BS in Industrial Technology response.

As noted in Table 23, Industrial Technology graduates were very satisfied with their overall educational experience, however, they were not pleased with the new changes in the library or their advising. Since that time, a new academic advisor has been assigned to the majors and responds to them within minutes of being queried. Faculty have only heard good things about the new advisor from current Industrial Technology majors. The library is also changing the way to access their online databases.

Table 23: Industrial Technology Graduates Satisfaction Rates for the Program and Other University Resources

<b>Industrial Technology BS</b>	2019-2020 AY	2020-2021 AY	2021-2022 AY	2022-2023 AY
Overall Satisfaction with Entire Experience	96%	100%	96%	100%
Satisfaction with Library Resources	63%	50%	45%	56%
Overall Satisfaction with Academic Advising	87%	93%	81%	84%

Table 24 below shows the percentage of Industrial Technology graduates who chose “Extremely Effective” or “Very Effective” to indicate how well UT Tyler prepared them in the below areas when completing the survey. It appears the graduates were pleased with the skills they were taught as all percentages were improving.

Table 24: Industrial Technology Graduates Perceived Effectiveness of Learning the Following Skills

<b>Industrial Technology BS</b>	2019-2020 AY*	2020-2021 AY	2021-2022 AY	2022-2023 AY
Critical Thinking Skills	47%	90%	90%	100%
Problem Solving Skills	57%	93%	90%	100%
Communication Skills	3%	86%	87%	---

Written Communication Skills	---	---	---	85%
Oral Communication Skills	---	---	---	90%
Teamwork Skills	40%	93%	83%	95%
Discipline Specific Skills	50%	---	---	---
Intercultural Knowledge	---	93%	75%	85%
Ethical Decision Making Skills	---	97%	91%	90%

*\*During the 2019-2020 AY students were allowed to choose the top three skills emphasized in their degree plan. The percentages shown are student who chose that skill in their top three.*

### MS in Industrial Management response

Table 25 listed below shows how satisfied graduates from the MS in Industrial Management program were with their entire experience with their education, the library resources that were available, and how well they were assisted with their academic advisors. The only issue that stood out was that the library was moving more towards online services versus maintaining copies of published materials. It appears the graduates were not in favor of this.

Table 25: Industrial Management Graduates Satisfaction with the Program and Other Resources

<b>Industrial Management MS</b>	2019-2020 AY	2020-2021 AY	2021-2022 AY	2022-2023 AY
Overall Satisfaction with Entire Experience	100%	100%	100%	94%
Satisfaction with Library Resources	84%	85%	60%	53%
Overall Satisfaction with Academic Advising	86%	100%	100%	91%

Table 26 illustrates how well the MS in Industrial Management graduates perceived the effectiveness of how well the program prepared them for the knowledge of the discipline, the professional and training experiences, the research opportunities, and the advanced academic content that they learned above their undergraduate experience. The ratings averaged from 87%-100% which was higher than most other programs offered at the university.

Table 26: Industrial Management Graduates Perceived Effectiveness of Learning & Research Opportunities

<b>Industrial Management MS</b>	2019-2020 AY	2020-2021 AY	2021-2022 AY	2022-2023 AY
Knowledge of the Discipline Literature	100%	100%	100%	100%
Appropriate Professional Practice/Training Experience	95%	90%	100%	100%
Research Opportunities	100%	85%	75%	87%
More Advance Academic Content than Undergraduate Program	91%	100%	75%	93%

**8.2. EMPLOYMENT OF GRADUATES**

Summary data on graduate employment, job placement with employers, job titles, and salaries shall be provided.

**BS in Industrial Technology response**

The Department of Technology would send a survey out to its graduates every three years to see if they obtained jobs related to their discipline, what was their job title as well as their salary. This data will be presented first. Approximately four years ago, the university took the lead and now queries graduates regarding this information so that information will then be presented. In addition, the UT System has a new data base (Seek UT) where they gather exit data of graduates for every program at each of its institutions. That information will also be presented. The department now relies on the information collected by the university and system since they noted that they did not want graduates to be queried too many times as it would reduce the response rate. In addition, higher response rates were noted due to tying the survey to student loan payments, scholarships, etc. Job titles of graduates are identified by reviewing the graduates LinkedIn account that was created as part of a course requirement in the Capstone Experience course. Students were encouraged during the course to maintain their accounts after graduation and most of them did.

Due to the COVID-19 pandemic, the three year department survey was sent out in the Spring of 2022 since many of the students’ lives were disrupted for a few years. Of the 18 students that replied to the survey, the

lowest paid was in the \$40,000-\$50,000 range and the highest was in the \$110,000-\$120,000 range. After averaging all of the salaries, the starting average salary was \$71,666. The survey data for this information is listed in Appendix H.

Table 27: Starting Salary Ranges for Industrial Technology Graduates from 2019-2022

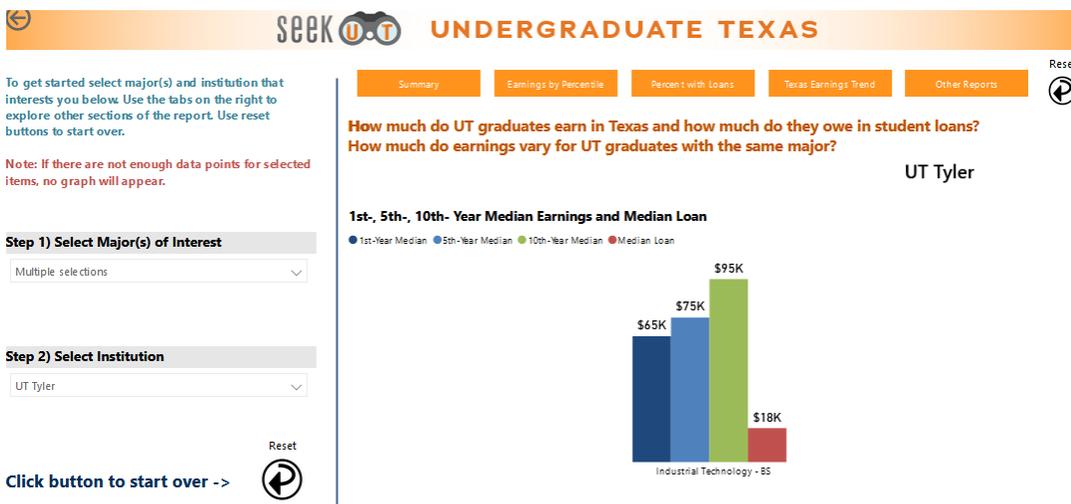
	Frequency N = 18
<b>Salary Ranges</b>	<b>Spring 2019-2022 Grads</b>
\$30,001-\$40,000	
\$40,001-\$50,000	1
\$50,001-\$60,000	3
\$60,001-\$70,000	6

\$70,001-\$80,000	3
\$80,001-\$90,000	3
\$90,001-\$100,000	1
\$100,001-\$110,000	
\$110,001-\$120,000	1
<b>AVERAGE STARTING SALARY</b>	<b>\$71,666</b>

Note: Information provided from a Department of Technology Qualtrics survey sent Spring 2022

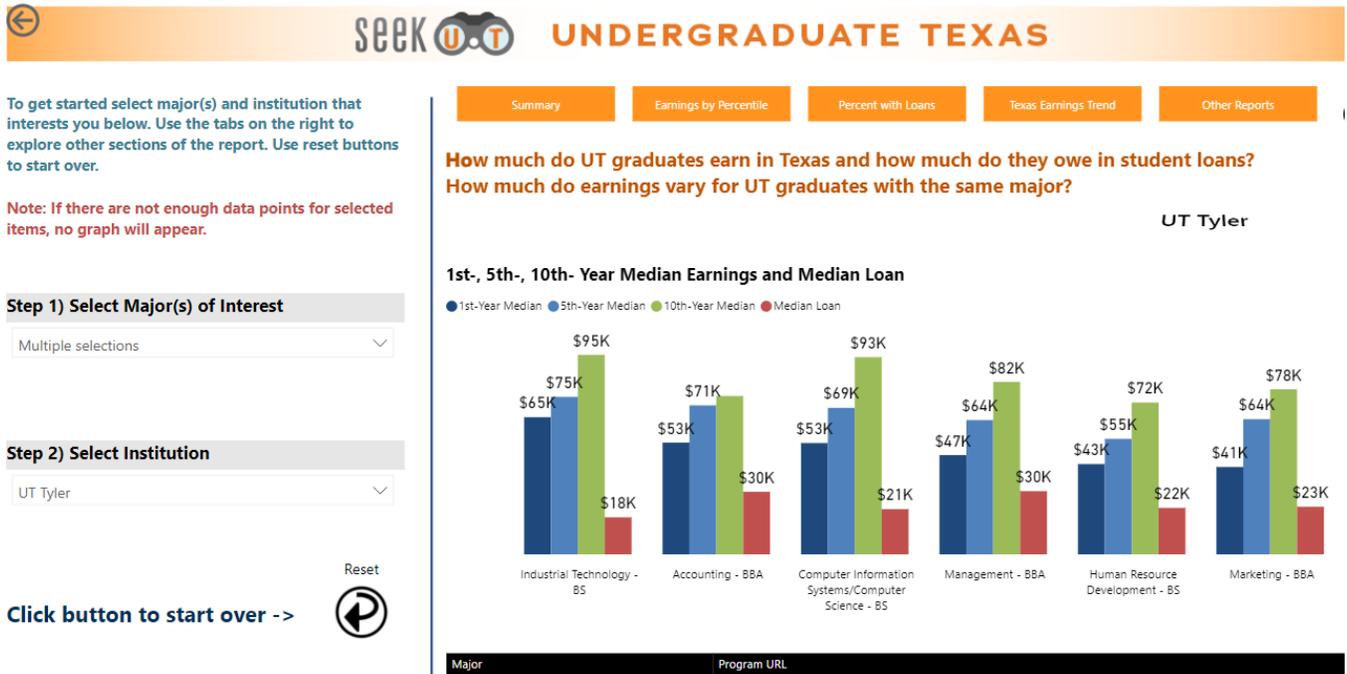
Schools within The University of Texas Systems have access to **seekUT**, a resource that offers users insights into the median earnings of graduates who are employed full-time one, five, and ten years after graduation. Below, you will find the information provided in **seekUT**, Table 28.

Table 28: UT Tyler Industrial Technology Graduates Average Salaries after 1, 5, and 10 Years



The results for the **seekUT** were conducted in 2024 and have similar average starting salaries as departmental surveys conducted in the past. An interesting feature of **seekUT** is that you can compare other programs in the college and university for that matter. As you can see below in Table 29, the BS in Industrial Technology graduates have higher average salaries than all of the other majors in the college.

Table 29: UT Tyler College of Business Graduates Average Salaries after 1, 5, and 10 Years



The link to **seek UT** is as follows, however, make sure you use the left side to click on the correct university and program: <https://seekut.utsystem.edu/UndergradTX>

The table below shows how many Industrial Technology majors are employed or seek an advanced degree within one year of graduation. As illustrated in Table 30, 90% or more of the graduates obtain employment related to their degree or continue with advanced studies.

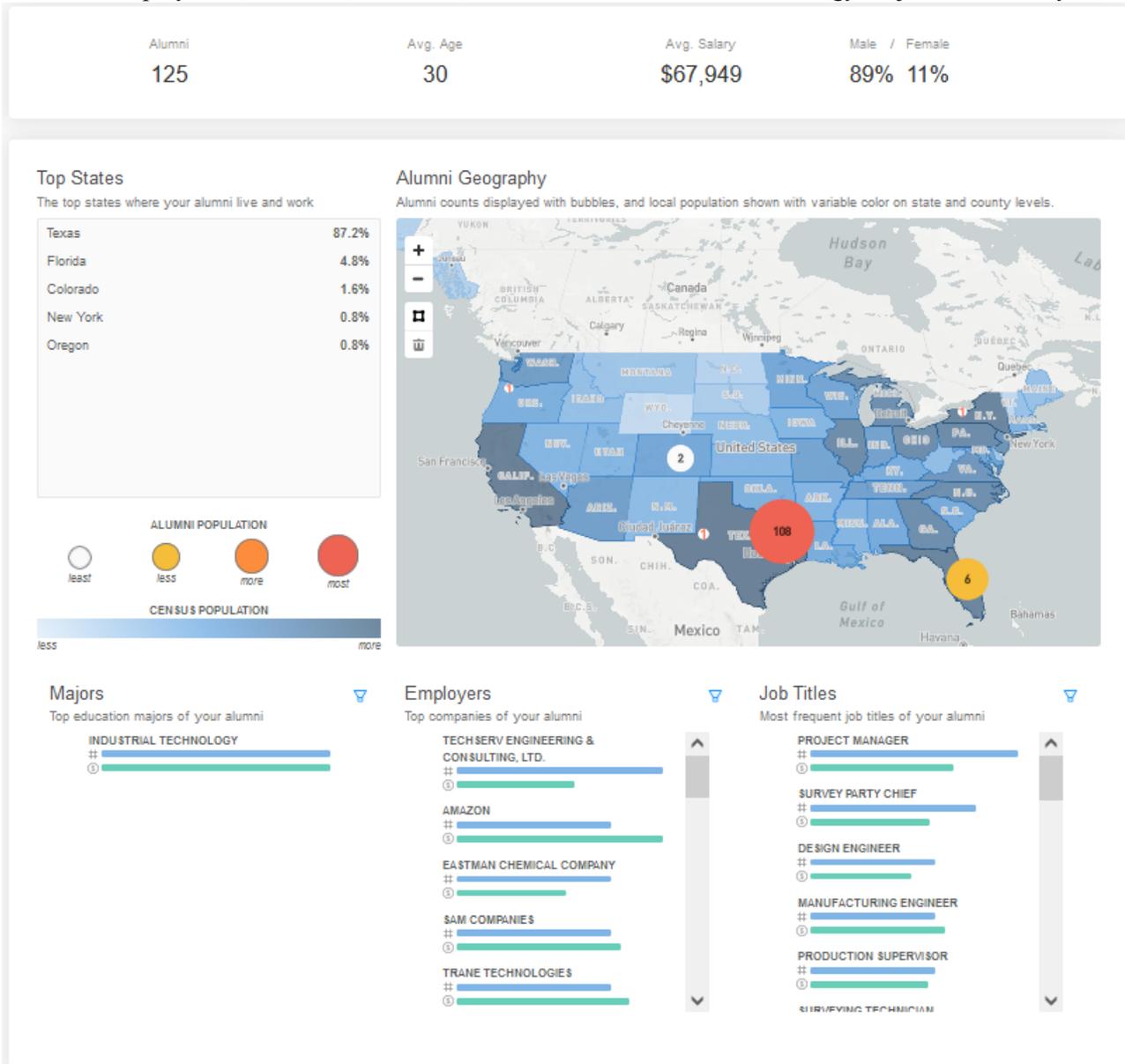
Table 30: Employment and Advanced Degree Information for 2021-2023 Industrial Technology Graduates

<b>Industrial Technology BS</b>	2020-2021	2021-22	2022-23
Principal Activity within the 1 <sup>st</sup> year of graduation	Academic Year	Academic Year	Academic Year
Graduate/Professional Program	18%	7%	13%
Employment in discipline	75%	83%	81%
Employment not in discipline	0%	3%	0%
Other	7%	7%	6%

The UT System has also recently initiated a three-year agreement, providing each academic institution access to the **Steppingblocks** Graduate Outcomes platform. This distinctive data and analytics tool curates and manages profiles for over 135 million college and university alumni, meticulously tracking their professional journeys at 5, 10, and 20 years post-graduation.

Equipped with interactive dashboards, we have the capability to thoroughly examine our alumni base, conducting both high-level and detailed analyses based on variables such as demographics, majors, geographic locations, employers, and earnings. This data empowers UT Tyler to assess the alignment of graduates' skills with employer needs, thereby facilitating the continuous enhancement of academic programs. By leveraging these insights, institutions can actively support learners in acquiring the essential skills for success in the ever-evolving job market. The following data in Table 31, sourced from **Steppingblocks**, provides insights into the employment, location, and job titles of UT Tyler Bachelor of Industrial Technology graduates from 2019-2023.

Table 31: Employment, Location, Job Titles, and Salaries of Industrial Technology Majors from UT Tyler.



The following are some of the job titles given to Industrial Technology graduates from the years 2019-2023. More specific data and response rates are given in Appendix H.

Production Supervisor  
 Quality Engineer  
 Production Manager  
 Industrial Sales Manager  
 Designer  
 Department Chair  
 Office Manager

Maintenance Manager  
 Fire Sales Specialist  
 Design Engineer  
 Operations Manager  
 Process Engineer  
 Automation Technician  
 Purchasing Agent

Field Construction Coordinator  
 Project Coordinator  
 Millwright  
 Production Supervisor  
 Operations Manager  
 Continuous Improvement Engineer  
 Product Implementation Specialist

The following is a list of some of the companies that hire Industrial Technology graduates:

Lockheed Marting	Trane Technologies	Oncor Electric
Skeeter Products	North American Mining	Bird Co., Ecofriendly Trans.
Tyler Pipe	Trinity Industries	Westlake Chemical
Cintas	Allied Stone	Flex
RHE Hatco	Komatsu Mining	Amazon
Baker Hughes	W-Industries	Industrial Wood Technologies

MS in Industrial Management response

The Department of Technology would send a survey out to its graduates every three years to see if they obtained jobs related to their discipline, what was their job title as well as their salary. This data will be presented first. Approximately four years ago, the university took the lead and now queries graduates regarding this information so that information will then be presented. In addition, the UT System has a new data base (Seek UT) where they gather exit data of graduates for every program at each of its institutions. That information will also be presented. The department now relies on the information collected by the university and system since they noted that they did not want graduates to be queried too many times as it would reduce the response rate. In addition, higher response rates were noted due to tying the survey to student loan payments, scholarships, etc. Job titles of graduates are identified by reviewing the graduates LinkedIn account that is suggested by faculty and the career success coach. Students are encouraged to maintain their accounts after graduation and most of them did.

Due to the COVID-19 pandemic, the three year department survey was sent out in the Spring of 2022 since many of the students' lives were disrupted for a few years. Of the 12 students that replied to the survey, the lowest paid was in the \$60,000-\$70,000 range and the highest was \$175,000. After averaging all of the salaries, the starting average salary was \$101,500. The survey data for this information is listed in Appendix H.

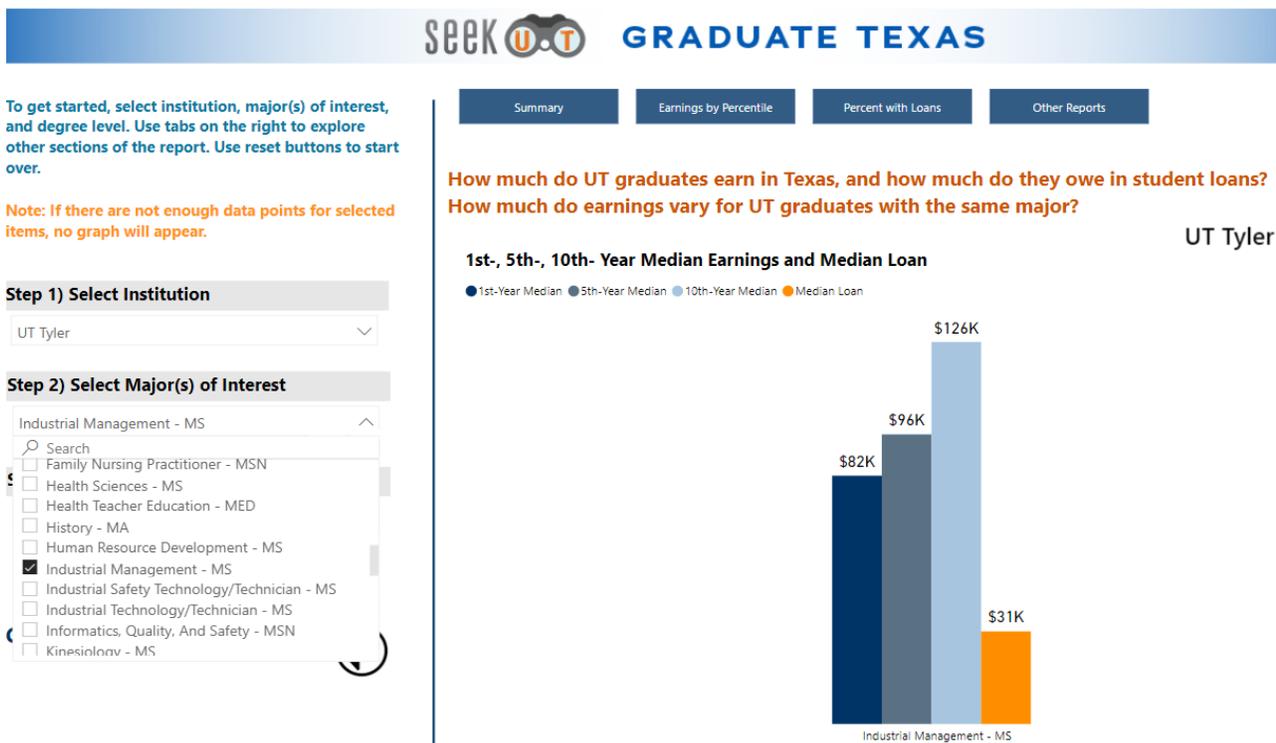
Table 32: Starting Salary Ranges for Industrial Management Graduates from 2019-2022

	Frequency N = 12
<b>Salary Ranges</b>	<b>Spring 2019-2022 Grads</b>
\$30,001-\$40,000	
\$40,001-\$50,000	
\$50,001-\$60,000	
\$60,001-\$70,000	1
\$70,001-\$80,000	1
\$80,001-\$90,000	4
\$90,001-\$100,000	
\$100,001-\$110,000	4
\$110,001-\$120,000	2
<b>AVERAGE STARTING SALARY</b>	<b>\$101,500</b>

Note: Information provided from a Department of Technology Qulatics survey sent Spring 2022

The results for the **seekUT** were conducted in 2024 and have similar, but lower average starting salaries as departmental surveys conducted in the past (refer to Table 33).

Table 33: UT Tyler Industrial Technology Graduates Average Salaries after 1, 5, and 10 Years



If you can compare other programs in the college and university, however, it can be seen that the MS in Industrial Management majors fair better than most majors. The MBA initially shows higher salaries, however, Industrial Technology and Engineering majors seek an MBA so the data maybe skewed in that respect. As one can see below in Table 34, the MS in Industrial Management graduates have higher average salaries than MS in Mechanical Engineering and Accounting majors.

Table 34: UT Tyler Masters Programs Graduates Average Salaries after 1, 5, and 10 Years

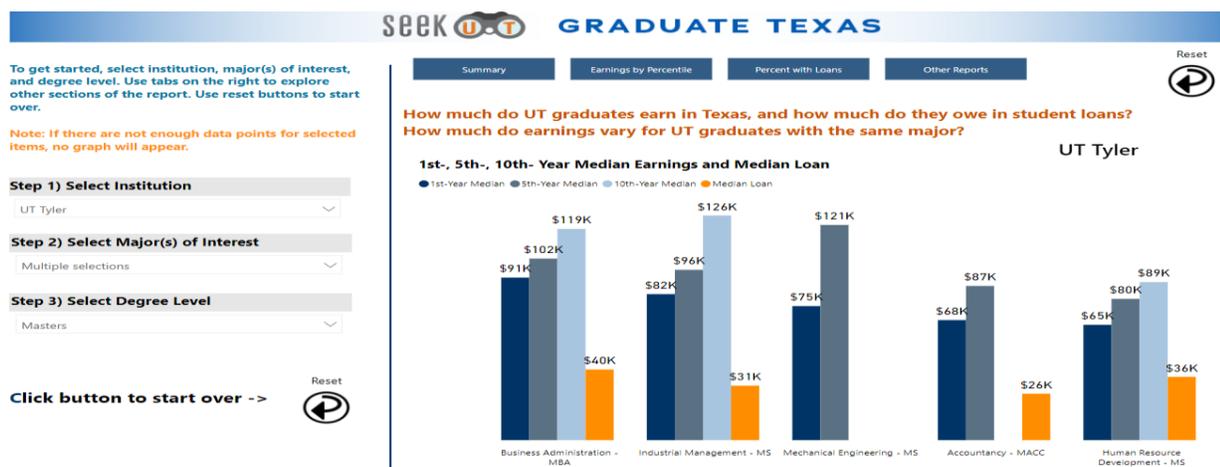


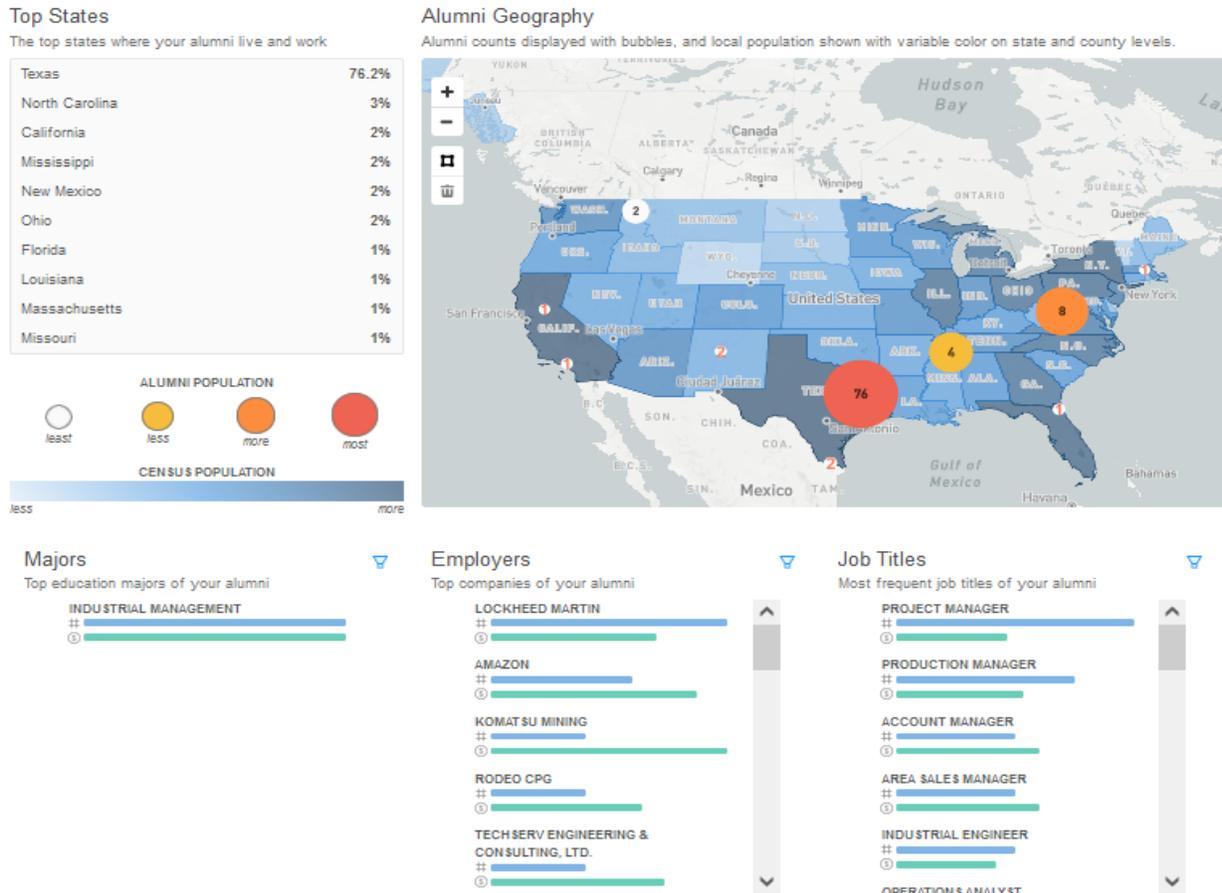
Table 35: Employment and Advanced Degree Information for 2021-2023 Industrial Management Graduates

<b>Industrial Management MS</b>	2020-2021	2021-22	2022-23
Principal Activity within the 1 <sup>st</sup> year of graduation	Academic Year	Academic Year	Academic Year
Doctoral/Professional Program	16%	16%	20%
Employment in discipline	74%	83%	73%
Employment not in discipline	0%	0%	7%
Other	11%	0%	0%

Table 35 shows that over 90% of Industrial Management students obtain a job related to their major or continue on with their studies.

The following data in Table 36, sourced from **Steppingblocks**, provides insights into the employment, location, and job titles of UT Tyler Bachelor of Industrial Management graduates from 2019-2023.

Table 36: Employment, Location, Job Titles, and Salaries of Industrial Management Majors from UT Tyler



The following are some of the job titles given to Industrial Management graduates from the years 2019-2023. More specific data and response rates are given in Appendix H.

Manufacturing Manager	Professor	Production Supervisor
Process Safety Engineer	Quality Manager	Quality & Continuous Improvement Mgr.
Logistics Operations Manager	Quality Engineer	Project Logistics Coordinator
Laboratory Service Supervisor	Scrum Master	Global Project Manager
Maintenance Manager	Systems Engineer	Operations Supervisor
Inside Sales Associate	Project Manager	Continuous Improvement & Engrg. Mgr.
Transportation Manager	Production Manager	Environmental Specialist

The following is a list of some of the companies that hire Industrial Management graduates:

Lockheed Marting	Trane Technologies	Luminant
Delek	Komatsu Mining	United States Steel Corporation
Katzkin Leather	Amazon	Premier Research Labs
Door Control USA	TJC	Neiman Marcus Group
Cummings Electrical	Axiom Space	ACS Commercial ServicesRegal
Rexnord	Valmet	Altek, Inc.

### 8.3. JOB ADVANCEMENT OF GRADUATES

Summary data shall be provided on job advancements in the workplace, including promotions to positions of increasing responsibility.

Response for both programs.

The Technology department has initiated a comprehensive effort to gather employment data from graduates across both the Master's and Bachelor's programs, spanning Fall 2019 to Spring 2023, utilizing LinkedIn. Out of the 81 Master of Industrial Management graduates and the 107 Bachelor of Industrial Technology graduates targeted, we successfully obtained employment information for 57 and 66 individuals, respectively. Notably, 95% of the Master's graduates and 98% of the Bachelor's graduates are employed in positions directly relevant to their respective majors. This impressive outcome highlights a commendable percentage of students entering the workforce in roles directly aligned with their academic pursuits. Additionally, the data reveals that fourteen Master's students and six Bachelor's students experienced career advancement through promotions within the 2-5 years following their initial contact. This dual achievement underscores the effectiveness of both programs in facilitating job placement in relevant fields and fostering ongoing professional growth and upward mobility for their graduates.

### STANDARD 9: EMPLOYER SATISFACTION

Employer input regarding their satisfaction with the student/graduate's preparedness for employment as related to program learning outcomes shall be collected and analyzed at least every two to five years. Summary data shall be provided.

The Department of Technology learns a lot about employer satisfaction of its graduates by having supervisors who hire graduates from the department's programs serve on its advisory committee. The advisory committee members are asked every year as to what the department could do to

better prepare its graduates to hit the ground running once hired by their respective company. Feedback is given at the annual advisory committee in which other companies are asked if those qualities are required at their companies. In the past, the department tried asking graduates who their immediate supervisors were once they were hired, and if the graduate listed the name of their supervisor on the survey, the supervisor never responded. Please review the annual minutes of advisory committee meetings in Appendix I where information is shared from employers. Program graduates also provide feedback either through emails or when they come back to visit the department. This information is retained and then presented to advisory committee members for discussion and possible implementation. Numerous program changes have occurred because of this information as documented in Table B.

## **STANDARD 10: INDUSTRIAL ADVISORY COMMITTEE**

An active industrial advisory committee shall exist for each program/option. If more than one program/option is offered, then appropriately qualified industrial representatives shall be added to the committee, or one committee for each program/option shall be maintained.

### **INSTITUTION'S RESPONSE TO STANDARD 10:**

Both Programs have the same response.

#### **10.1 BYLAWS**

Bylaws for the advisory committee shall exist that include but need not be limited to:

- a. criteria for member selection,

This is addressed in ARTICLE IV: ORGANIZATIONAL STRUCTURE Advisory Committee, of the bylaws listed below.

- b. procedures for selecting members,

This is addressed in ARTICLE IV: ORGANIZATIONAL STRUCTURE Election & Terms of Officers, of the bylaws listed below.

- c. length of member appointment,

This is addressed in ARTICLE IV: ORGANIZATIONAL STRUCTURE Procedural Rules, 5. Term and Attendance Requirements, of the bylaws listed below.

- d. frequency of meetings (at least one per year), and

- e. This is addressed in ARTICLE IV: ORGANIZATIONAL STRUCTURE Procedural Rules, 2. Meeting, of the bylaws listed below.

- f. methods of conducting business.

This is addressed in ARTICLE IV: ORGANIZATIONAL STRUCTURE Functions of the Advisory Committee, of the bylaws listed below.

The bylaws for the Department of Technology at The University of Texas at Tyler listed in Appendix I address the aforementioned items listed in Standard 10.1.

## Department of Technology Advisory Committee By-Laws

### ARTICLE I: UNIVERSITY MISSION STATEMENT

The University of Texas at Tyler is a general component of The University of Texas System. The University provides a setting for free inquiry, excellence in teaching; scholarships and research; and public service by faculty, staff and students. As a community of scholars, the university develops the individual's critical thinking skills, appreciation of the arts and humanities, foundation for participation in the global society, and commitment to lifelong learning.

### ARTICLE II: DEPARTMENT OF TECHNOLOGY MISSION STATEMENT

***Program Mission Statement:*** *The Industrial Technology program at The University of Texas at Tyler provides its students with a comprehensive educational experience comprised of a vast array of technical skills and business knowledge deemed necessary for successful professional careers. Our high quality, accredited program offers courses online and face-to-face, thereby enabling students the flexibility to earn a degree that fits their schedule. Students from the program will learn from faculty scholars who have nationally recognized expertise in various technologies and engage in research and creative activity.*

In accordance with the above statement, the Department of Technology continually strives to improve the array of managerial and technical knowledge and skills of individuals by offering programs and courses based on industry's need for applications oriented, technically competent, flexible, and internationally competitive employees.

In order to ensure that the program offerings are technically up-to-date, the Department of Technology employs laboratory instruction based on tabletop technology and computer-based simulation.

### ARTICLE III: PURPOSE

Section 1. The Committee will be called The Department of Technology Advisory Committee. It is authorized by The Department of Technology and will serve at the pleasure of the President of UT Tyler or his designee.

Section 2. The general purpose of the Advisory Committee to The Department of Technology shall be to provide advice, guidance, and support for the continuing development of high quality technology programs and competent, well-trained graduates at The University of Texas at Tyler. The Committee's role is advisory to the Chair and faculty of the department in promoting leadership and quality in technology programs and graduates.

Section 3. The Committee shall assist in promoting the professional image and good relations of The Department of Technology. The specific purposes of the Committee may include the following responsibilities:

- assure that The Department of Technology addresses the current and future needs of business and industry

- recommend and review curriculum and program changes which will enable the department to be responsive to business and industry
- assist in identifying resource needs to support the program mission
- encourage and develop positive relationships between business and industry and the department
- aid in identifying and securing needed resources

#### **ARTICLE IV: ORGANIZATIONAL STRUCTURE**

##### Advisory Committee

The Advisory Committee is responsible for providing advice, guidance and support of programs of The Department of Technology. The initial Advisory Committee will consist of nine (9) members. Committee members will constitute a cross-section of the employment community, with special emphasis on private sector employees and employers. Membership will contain the following composition:

- A minimum of 50% of the committee membership shall be employees in business and industry.
- The rest of the committee membership shall be employees who represent higher education, nonprofit organizations and student(s).

##### Functions of the Advisory Committee

- Elect a Chair and a Vice-chair of the Advisory Committee. The Chairperson or Vice-Chairperson of the Advisory Committee will conduct the meetings.
- A majority of the members of the Advisory Committee present will constitute a quorum for the transaction of business at any meeting. Each member will be entitled to one vote on each matter considered by the Committee.
- Advisory Committee members will not use a proxy system. Only those in attendance will vote on issues presented. Members may not appoint someone to take their place on the Committee in their absence for the purpose of voting.
- Agenda items may be proposed to the Chairperson of the Advisory Committee or by any member of the committee at least five (5) working days prior to the mailing of the agenda.
- Ensure Advisory Committee make-up as established by these by-laws
- Action items to be considered will be defined and sent to the Advisory Committee members prior to the meeting, whenever possible.
- Advisory committee meetings are open to all stakeholders; however, only the members and Chair will participate in the conducting of business, unless a stakeholder is recognized by the Committee Chair, for input into the discussion.
- Any member of the Committee will abstain from voting on an issue which directly benefits his organization in favor of another organization. Issues that benefit interested stakeholders equally do not require that a member abstain from voting on the issue.
- Advisory Committee meetings will follow Robert's Rules of Order unless otherwise noted

### Election & Terms of Officers

The Advisory Committee will have a Chairperson, a Vice-Chairperson, and a Recording Secretary. These officers will be elected by a majority of vote of the Advisory Committee and serve for one year, with a maximum of two consecutive terms in the same office, with the exception of the Secretary.

1. The Chairperson will:
  - a. Have been a member of the Advisory Committee for at least one year prior to his/her election.
  - b. Preside over all meetings of the Advisory Committee
  - c. Establish subcommittees when necessary
  - d. Represent, or appoint a designee to represent the Advisory Committee at official functions.
  - e. Be a member of all subcommittees.
2. The Vice-Chairperson will:
  - a. Be elected by a majority vote of the Advisory Committee.
  - b. Function in the absence of the Chairperson.
3. The Secretary will:
  - a. Be appointed by the Chair of The Department of Technology
  - b. Be a non-voting member of the Advisory Committee
  - c. Record and distribute the minutes of the meeting & prepare all other documents pertinent to the functioning of the Advisory Committee

### Procedural Rules

1. **By-laws**: The committee will adopt a set of written by-laws at the organizational meeting of the committee. The by-laws govern committee operation. By-laws require a two-thirds vote for adoption or change.
2. **Meetings**: The committee will meet at least one (1) time per year. Written notices of upcoming meetings will be mailed to members at least ten (10) working days before a meeting. The Chair of The Department of Technology will call The Department of Technology Advisory Committee meetings.
3. **Minutes**: Minutes of each meeting will be kept by the recording secretary. Copies will be sent to the Advisory Committee and the Chair of The Department of Technology within two weeks after a meeting.
4. **Recommendations and Reports**: Committee recommendations and reports will be submitted in writing to the Advisory Committee. Documents will include both suggested action and justification for suggestions. The Committee will respond/react to such recommendations/reports in the next scheduled meeting.
5. **Term and Attendance Requirements**: The Advisory Committee members shall serve a term of not more than three years. The Committee will draw for two-year or three-year terms in order to provide continuity of leadership for the program. Members can choose to serve another term if requested.
  - Members who are absent without reasonable cause from two successive meetings will be considered to have resigned their seat. The Department of Technology will move to fill the position.
  - A Nominating Committee of three members of the Advisory Committee and the Chair of The Department of Technology will be established to maintain adequate committee membership.
  - The composition for the Advisory Committee will always be maintained as presented in these by-Laws.
6. **Public Announcements**: While members are expected and encouraged to discuss the instructional program within the community, members shall not report opinions expressed in meetings, nor shall they report independently on committee action.

## 10.2 RESPONSIBILITIES

Committee responsibilities shall include but need not be limited to:

- a. participates in developing the program learning outcomes and goals,

Advisory Committee members are asked at each meeting as to what they think needs to be omitted or added to each program to improve it. Program learning outcomes were originally developed from reviewing currently accredited ATMAE programs and then massaged by the Advisory Committee. Suggestions are provided by members and then voted on to make changes.

- b. provides input to improve the overall program/option, and

Advisory Committee members are asked at each meeting what they think needs to be done to improve the curriculum or anything else that would make for better programs that would allow graduates to hit the ground running or suit their needs. Please review annual committee meetings for verification in Appendix I.

- c. validates the PLOs and overall program/option.

The program learning outcomes are reviewed at least once every three years where the advisory committee is queried and rates the student learning outcomes for each course from 1 to 5 and asked if the SLOs that are rated low should be eliminated. Curriculum is reviewed at each meeting as well as what changes were made.

## 10.3 ROSTER

A roster of advisory committee members with contact information shall be maintained.

### 2023-2024 Advisory Committee for the Department of Technology

Mr. Luis Ibarra, Sr. Generalist  
Human Resources  
Komatsu Mining Corp.  
Longview, TX 75606  
TEL: 903-237-7591  
[luis.ibarra@komatsu.com](mailto:luis.ibarra@komatsu.com)  
INDUSTRIAL TECHNOLOGY

Mr. John Connolly II  
Staff Supplier Quality Engineer  
Northrup Grumman  
Mission Systems  
TEL: 805-458-4987  
[john.connolly@ngc.com](mailto:john.connolly@ngc.com)  
INDUSTRIAL MANAGEMENT

Dr. Dennis Jones, Assistant Professor  
Department of Technology  
The University of Texas at Tyler  
3900 University Blvd  
Tyler, TX 75799  
TEL: 903-566-6433  
[dennisjones@uttyler.edu](mailto:dennisjones@uttyler.edu)

Dr. Mark R. Miller, Professor & Chair  
Department of Technology  
The University of Texas at Tyler  
3900 University Blvd  
Tyler, TX 75799  
TEL: 903-566-7186  
[mmiller@uttyler.edu](mailto:mmiller@uttyler.edu)

Mr. Randell Farley  
Global Parts Quality Leader  
Trane Technologies  
6200 Troup Highway  
Tyler, TX 75707  
TEL: 903-839-4947  
[randell.farley@tranetechnologies.com](mailto:randell.farley@tranetechnologies.com)  
INDUSTRIAL MANAGEMENT

Mr. Eric Ayanegui, CPMM, CRL  
Sr. Director  
Operations Engineering Solutions  
Cintas Corporation, 7355 Denny St.  
Houston, TX 77040  
TEL: 713-300-3088  
[AyaneguiE@cintas.com](mailto:AyaneguiE@cintas.com)  
INDUSTRIAL TECHNOLOGY

Dr. Dominick Fazarro, Professor  
Department of Technology  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
TEL: 903-565-5911  
[dfazarro@uttyler.edu](mailto:dfazarro@uttyler.edu)

Dr. Heshium Lawrence, Assoc. Dean  
Soules College of Business  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
TEL: 903-566-7331  
[hlawrence@uttyler.edu](mailto:hlawrence@uttyler.edu)

Mr. Joe Bumgarner  
Strategic Commodity Manager  
Eastman Chemical Company  
300 Kodak Blvd.  
Longview, TX 75602  
Tel: 903-237-5283  
Mob: 903-235-5298  
[jbumgarner@eastman.com](mailto:jbumgarner@eastman.com)  
INDUSTRIAL MANAGEMENT

Mr. Dane Clark  
Value Improvement Engineer-Manufacturing  
Cardinal Health  
200 McKnight Street  
Jacksonville, TX 75766  
Tel: (903) 541-2912  
[dane.clark@cardinalhealth.com](mailto:dane.clark@cardinalhealth.com)  
INDUSTRIAL TECHNOLOGY

Mr. Fred Gulley  
Operations Manager  
Walmart Distribution Center  
1001 E. Angelina St.  
Palestine, TX 75801  
[Fred.Gulley@walmart.com](mailto:Fred.Gulley@walmart.com)  
INDUSTRIAL TECHNOLOGY

Mr. Daniel Lee  
QMS Leader, Residential HVAC  
Trane Technologies  
6200 Troup Hwy.  
Tyler, TX 75707  
Tel: (903) 730-4000  
[danielclee@tranetechnologies.com](mailto:danielclee@tranetechnologies.com)  
INDUSTRIAL MANAGEMENT

Dr. Krist Swimberghe, Dean  
Soules College of Business  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
TEL: 903-566-7360  
[kswimberghe@uttyler.edu](mailto:kswimberghe@uttyler.edu)

Mr. Link Worthen, Coordinator  
Industrial Maintenance Technology  
Tyler Junior College  
P.O. Box 9020, EBC 210  
Tyler, TX 75711-9020  
TEL: 903-533-5441  
[lwor@tjc.edu](mailto:lwor@tjc.edu)  
INDUSTRIAL TECHNOLOGY

Mr. Wayne Dillon  
Division Director  
Design, Mfg., & Transportation  
TSTC Marshall  
Marshall, TX  
Tel: 903-923-3303  
[wayne.dillon@marshall.tstc.edu](mailto:wayne.dillon@marshall.tstc.edu)  
INDUSTRIAL TECHNOLOGY

Mr. Alan Buckland  
Program Financial Analyst/Accounting  
Columbia Scientific Balloon Facility  
NASA, Space & Intelligence  
1510 FM 3224, Palestine, TX 75803  
Phone: (903) 723-8029 Mobile: (903) 644-0002  
[alan.d.buckland@nasa.gov](mailto:alan.d.buckland@nasa.gov)  
INDUSTRIAL TECHNOLOGY

Mr. D'Wayne Shaw  
Executive Dean of Professional & Career Education  
Kilgore College Longview  
Hendrix Building  
Longview, TX 75702  
Tel: 903-236-2030  
[dshaw@kilgore.edu](mailto:dshaw@kilgore.edu)  
INDUSTRIAL TECHNOLOGY

Ms. Kenya Ray  
Instructor  
Corrosion Technology  
Kilgore College  
Kilgore, TX 75662  
Tel: 903-988-3721  
[kray@kilgore.edu](mailto:kray@kilgore.edu)  
INDUSTRIAL TECHNOLOGY

Mr. Ben Wainwright  
KPI Program Manager  
John Soules Food, Inc.  
10150 FM14  
Tyler, TX 75706  
Cell: 903-258-4148  
[bwainwright@jsfoods.com](mailto:bwainwright@jsfoods.com)  
INDUSTRIAL MANAGEMENT

Ms. RaeJean Griffin, Lecturer  
Department of Technology  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
Tel: (903) 566-7211  
[rgriffin@uttyler.edu](mailto:rgriffin@uttyler.edu)

Mr. Dwight Evans, CPA  
Vice President – Operations  
Klüber Lubrication NA LP  
9010 County Road 2120  
Tyler, TX 75707 USA  
Direct: (903) 579-9254  
Office: (903) 534-8021  
[Dwight.Evans@klueber.com](mailto:Dwight.Evans@klueber.com)  
INDUSTRIAL TECHNOLOGY

Ms. Casey Hale  
Sr. HR Manager  
Longview Distribution Center - Dollar General  
3300 E George Richey Rd.  
Longview, TX 75605  
Office: 903-653-0453  
Cell: 903-235-0654  
[chale@dollargeneral.com](mailto:chale@dollargeneral.com)  
INDUSTRIAL TECHNOLOGY

Mr. Victor Valle, MBA, CEcD  
Senior Vice President  
Tyler Economic Dev. Council, Inc.  
315 N. Broadway Avenue, Suite 300  
Tyler, Texas 75702  
Tel: 903-593-2004, ext. 254  
[vvalle@tedc.org](mailto:vvalle@tedc.org)  
INDUSTRIAL MANAGEMENT

Ms. Monica Davis  
Pipeline Supervisor  
Delek Logistics Companies  
309 N Washington Avenue  
El Dorado, Arkansas 71730  
Office: 870-864-1347 Cell:903-649-0500  
[monica.davis@delekus.com](mailto:monica.davis@delekus.com)  
INDUSTRIAL MANAGEMENT

Dr. Mohammed Ali, Associate Professor  
Department of Technology  
The University of Texas at Tyler  
300 South High Street, LH 230C  
Longview, TX 75601  
Tel: (903) 236-2040  
[mohammedali@uttyler.edu](mailto:mohammedali@uttyler.edu)

Mr. Zachary Farina, CLSSBB, CQE  
Continuous Improvement Program Manager  
Trinity Rail  
140 Shady Brook Lane  
Longview, TX 75602  
Office: 903-758-0767 ext. 27067  
Cell: 903-806-1928  
[Zachary.Farina@trin.net](mailto:Zachary.Farina@trin.net)  
INDUSTRIAL TECHNOLOGY

Mrs. Brandy Rose, Administrative Assistant II  
Department of Technology  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
Office: 903-566-7310  
[brandy.smith@uttyler.edu](mailto:brandy.smith@uttyler.edu)

Ms. Halley Graham  
Senior Assessment Coordinator  
Soules College of Business  
The University of Texas at Tyler  
3900 University Blvd.  
Tyler, TX 75799  
Tel: 903-565-5511  
[hgraham@uttyler.edu](mailto:hgraham@uttyler.edu)

## 10.4 MEETING AGENDAS & MINUTES

Meeting agendas and minutes of advisory committee meetings shall be kept.

The Advisory Committee meeting agendas and minutes are listed in Appendix I.

## STANDARD 11: OUTCOME MEASURES USED TO IMPROVE PROGRAM

Evidence shall show how direct and indirect outcome measures and the Industrial Advisory Committee's input and approval of the program/option are used to improve the overall program/option based on data collected and analyzed (Use Table A).

Outcome measures shall include but need not be limited to:

- a. graduate satisfaction with program/option,
- b. employment of graduates,
- c. employer satisfaction with the graduates' preparation for employment,
- d. course-based direct measures, and
- e. criteria established by the Institution's regional accreditation activities

Other possible measures could include but need not be limited to:

- f. job advancement of graduates,
- g. graduate success in advanced programs/options, and/or
- h. student success in passing certification exams.

### Same response for both programs

The faculty from the Industrial Technology and Industrial Management program employ a variety of techniques to obtain feedback on student progress and achievement as evidenced by the Program Continuous Improvement Model (see Appendix K). The model utilized includes learner outcome assessments, analysis and synthesis of assessment information, curriculum approval process and the program and/or course revision process.

Techniques may be formal or informal which provides useful information for program evaluation and development.

#### Input:

The Department of Technology Course/Program Continuous Improvement Model (see Appendix K) is based on the results of the four instruments listed below. These inputs are all used to formulate program revisions.

1. UT Tyler's Student Course Evaluation (<https://apps2.uttyler.edu/course-evaluations/>)
2. The University Graduation Survey (see Appendix H)
3. The Department Alumni Survey (see Appendix H)
4. ATMAE Certification Exam Information (see Appendix L)
5. Feedback from Industrial Advisory Committee members at annual meetings (refer to Appendix I).
6. Various outside sources (Journals, research, review of literature)

## **UT Tyler's Student Course Evaluation**

### Description:

The purpose of UT Tyler's Student Course Evaluation is to gather student perceptions of the attainment of course objectives, appropriateness of course content, and instructor effectiveness. Students rate a variety of items on a one-to-five scale. An open-ended section is available for comments and/or recommendations.

## **The University Graduation Survey**

### Description:

The purpose of the Graduation Survey is to:

1. Assess student perceptions of the how effectively the program prepared them for employment.
2. Assess the degree of relevance and effectiveness of general competencies.
3. Assess the degree of relevance and effectiveness of degree-specific competencies.

## **The Department Alumni Survey**

### Description:

The purpose of the Alumni Survey is to assess graduate placement rates, and determine the need for appropriate program revisions.

### Process:

Information is processed through the Department's Course/Program Assessment model. The process is tracked in the form of Advisory Committee minutes and other appropriate documents.

### Outputs:

Outputs from this process are validated changes in courses and programs based on student and Advisory Committee requirements.

## **Feedback from Advisory Committee**

### Description:

The Advisory Committee is comprised of representatives from industry and community colleges that are either hire the program's graduates or prepare them for the first two years of their education.

Process: Industrial Advisory Committee review the content of the program and provide input as to what content in the curriculum should be revised or any other suggestions to improve the program and place graduates.

### Outputs:

Outputs from this process are validated changes in courses and the program based on and Advisory Committee suggestions.

## **ATMAE Certified Lean Six Sigma Exam & ATMAE Certified Manufacturing Specialist Exam**

### Description:

The purpose of the ATMAE Lean Six Sigma and Certified Manufacturing Exams are to evaluate how well students have mastered the competencies of the curriculum. The ATMAE certification exam is a national exam that closely parallels the curriculum of the program and also provides feedback on how well the students' mastery of the curriculum compares with students from similar programs throughout the nation.

### Process:

Students take the ATMAE certification exam during their last year, once they have completed all of the required course work from the program. Although the exam is not required by all graduates of the program, an incentive is given to students to entice most of the program's majors to take the exam. Majors of the program are allowed to average a 100 for their final exam grade in at least one of their Industrial Technology courses if they pass the ATMAE certification exam. Faculty feel that if a student can pass a national exam then that supersedes a final exam grade from a faculty developed exam. In addition, because of this incentive, students adequately prepare for the exam and take the exam seriously. Better results have been obtained by the students now that they are required to pay for the exam and pass it to improve their grade in a course.

### Outputs:

Students will leave the program with a better understanding of the competencies for the curriculum since they have to review all of their course work in order to pass the national exam. After all the data from the exam results has been disseminated, evaluated, and reported to the Advisory Committee. The program coordinator will discuss any issues derived from data retrieved from the ATMAE certification exam results and consult with faculty to develop a plan to resolve these issues.

ATMAE certification exam results are listed in Appendix L.

NOTE: In addition to ATMAE accreditation guidelines, the Industrial Technology program maintains SACSCOC regional accreditation and follows guidelines used for AACSB accreditation. Documentation for SACSCOC accreditation is listed in Appendix H using TracDat software.

## **STANDARD 12: PROGRAM TRANSPARENCY TO THE PUBLIC**

The program/option shall publicize its student performance and achievement information on the program/option's page of the institution's website to help the public understand the success of the specific program/option.

The program's web page shall contain either a:

- 1) Section with the heading "Student Performance and Achievement Information" that includes the student performance and achievement content, or
- 2) Link to a web page entitled "Student Performance and Achievement Information" that contains the program's student performance and achievement content.

The "Student Performance and Achievement Information" content shared on the website shall comply with FERPA and other such laws and the institution's plan for public disclosure. The content shall include data from the results of the outcome measures collected and be used to improve the program (except in unusual

circumstances which shall be individually justified). This content shall include but need not be limited to the following:

- c. mean grade point averages of the graduating class,
- d. average years to complete the degree,
- A. program/option student graduation rates,

BS in Industrial Technology program response.

### Student Performance and Achievement Information

The average time for an undergraduate Industrial Technology major to finish the degree is 2 ¼ years. In 2019 and 2020, it took a little longer because of the COVID-19 issues with getting out and attending classes. However, as you can see in the table below, the average time to complete a degree has gone back to the normal 2 ¼ years. The majority of Industrial Technology students are transfers, so they have already completed the first two years of their degree at a community college.

**Table 37: Average Time it Takes Industrial Technology Majors to Graduate**

Academic Year	Academic Plan	Degrees Awarded	Average Time to Degree
AY 2018-19	TEITBS	22	2.21
AY 2019-20	TEITBS	19	2.96
AY 2020-21	TEITBS	28	2.64
AY 2021-22	TEITBS	27	2.30
AY 2022-23	TEITBS	23	2.26

Source: Office of Information Analysis 2/21/2024

MS in Industrial Management response.

### Student Performance and Achievement Information

**Table 38: Average Time it Takes Industrial Management Majors to Graduate**

Academic Year	Academic Plan	Degrees Awarded	Average Time to Degree
AY 2018-19	TEIMMS	22	2.36
AY 2019-20	TEIMMS	17	1.90
AY 2020-21	TEIMMS	19	1.90
AY 2021-22	TEIMMS	14	2.02
AY 2022-23	TEIMMS	16	1.91

Source: Office of Information Analysis 2/21/2024

e. availability of awards/scholarships,

BS in Industrial Technology program response

**Table 39: Scholarships Awarded to Industrial Technology Majors from 2019-2023**

Academic Plan	Academic Year	Scholarship or Award	Number of Recipients	Total Amount Awarded
TEITBS	AY 2019-20	Academic Excellence 1	1	281
TEITBS	AY 2019-20	Assoc TX Grant Initial	4	22750
TEITBS	AY 2019-20	Boys & Girls Club Staff Sch	1	7740
TEITBS	AY 2019-20	COVID FSEOG Summer	1	1501
TEITBS	AY 2019-20	DOE CARES ACT GRANT	3	4422
TEITBS	AY 2019-20	Ed Aff Grant UG	5	15000
TEITBS	AY 2019-20	Federal Pell Grant	10	55233
TEITBS	AY 2019-20	Federal Pell Spring	3	4994
TEITBS	AY 2019-20	Federal Pell Summer	2	1417
TEITBS	AY 2019-20	Federal SEOG	3	6000
TEITBS	AY 2019-20	GI Bill Post 9/11 Chap 33 Spr	1	4533
TEITBS	AY 2019-20	LUC Circle of Friends End	1	1000
TEITBS	AY 2019-20	Outside - Unrestricted	4	15568
TEITBS	AY 2019-20	TPEG Non-Resident	1	1500
TEITBS	AY 2019-20	TPEG Spring	1	750
TEITBS	AY 2019-20	Texas Public Ed. Grant	2	3000
TEITBS	AY 2019-20	Transfer Presidential 1	7	14000
TEITBS	AY 2019-20	Transfer Presidential Summer	1	1000
TEITBS	AY 2019-20	YRP Pell Summer	6	11196
TEITBS	AY 2020-21	Assoc TX Grant Initial	2	19000
TEITBS	AY 2020-21	Ed Aff-Ugrd-Summer	4	4000
TEITBS	AY 2020-21	Federal Pell Grant	8	29826
TEITBS	AY 2020-21	Federal Pell Spring	1	1587
TEITBS	AY 2020-21	HEERF II GRANT F/S INST	2	7750
TEITBS	AY 2020-21	HEERF II Grant F/S	1	2290
TEITBS	AY 2020-21	Mens Baseball Full Sch	1	3000
TEITBS	AY 2020-21	Outside - Unrestricted	2	1700
TEITBS	AY 2020-21	Staff Development	1	4292
TEITBS	AY 2020-21	Transfer Presidential 1	7	10000
TEITBS	AY 2020-21	YRP Pell Summer	4	6889
TEITBS	AY 2021-22	Ed Aff Grant UG Spring	1	1500
TEITBS	AY 2021-22	Ed Aff-Ugrd-Summer	1	1500
TEITBS	AY 2021-22	Federal Pell Grant	8	48910
TEITBS	AY 2021-22	Federal Pell Spring	2	3620
TEITBS	AY 2021-22	Federal Pell Summer	1	811
TEITBS	AY 2021-22	GI Bill Post 9/11 Chap 33 Spr	1	4835

TEITBS	AY 2021-22	GI Bill Post 9/11 Chap 33 Sum	1	2316
TEITBS	AY 2021-22	Greater Texas Fdn Scholarship	1	2000
TEITBS	AY 2021-22	HEERF III GRANT F/S INST	2	2250
TEITBS	AY 2021-22	HEERF III Grant F/S	4	12500
TEITBS	AY 2021-22	HEERF III Grant F/S Payout	1	4000
TEITBS	AY 2021-22	Outside - Unrestricted	1	1000
TEITBS	AY 2021-22	Priority TXG Initial	1	8000
TEITBS	AY 2021-22	Riter Family Teaching End Sch	1	1000
TEITBS	AY 2021-22	TASFA EdAff UG	1	3000
TEITBS	AY 2021-22	TASFA TPEG	1	1500
TEITBS	AY 2021-22	TASFA TX Grant Initial	1	8000
TEITBS	AY 2021-22	TPEG Spring	2	1500
TEITBS	AY 2021-22	TPEG Summer	6	4500
TEITBS	AY 2021-22	Technology Studen Sucess SSUCF	1	987
TEITBS	AY 2021-22	Transfer Presidential 1	7	13000
TEITBS	AY 2021-22	YRP Pell Summer	3	4498
TEITBS	AY 2022-23	Academic Excellence 1	2	4000
TEITBS	AY 2022-23	Assoc TX Grant Initial	2	16500
TEITBS	AY 2022-23	Ed Aff Grant UG	1	3000
TEITBS	AY 2022-23	Ed Aff-Ugrd-Summer	3	4500
TEITBS	AY 2022-23	Employee Dependents	1	10437
TEITBS	AY 2022-23	Federal Pell Grant	6	38470
TEITBS	AY 2022-23	Federal Pell Summer	1	1724
TEITBS	AY 2022-23	John Soules Foods Endowed UGRD	2	1500
TEITBS	AY 2022-23	Mens Baseball Full Sch	1	800
TEITBS	AY 2022-23	Outside - Unrestricted	1	1000
TEITBS	AY 2022-23	Patriot - 1st Year	1	1000
TEITBS	AY 2022-23	Reach Higher/Promise+	2	4178
TEITBS	AY 2022-23	THEC TX Trnsf Grnt Pilot Prog	2	10000
TEITBS	AY 2022-23	TJC Transfer Scholarship	3	5000
TEITBS	AY 2022-23	TPEG Summer	3	2250
TEITBS	AY 2022-23	Transfer Presidential 1	1	1000
TEITBS	AY 2022-23	UT Tyler End Gen Schol	1	500
TEITBS	AY 2022-23	YRP Pell Summer	3	6333
TEITBS	AY 2023-24	Academic Excellence 1	1	2000
TEITBS	AY 2023-24	Ed Aff Grant UG	2	6000
TEITBS	AY 2023-24	Elizabeth S Gugenheim Mem Pres	2	1000
TEITBS	AY 2023-24	Federal Pell Grant	5	29175
TEITBS	AY 2023-24	Federal SEOG	1	2000
TEITBS	AY 2023-24	GI Bill Post 9/11 Chap 33 Spr	1	4852
TEITBS	AY 2023-24	GI Bill Post 9/11 Chapter 33	1	5077
TEITBS	AY 2023-24	John Soules Foods Endowed UGRD	1	1000
TEITBS	AY 2023-24	Outside - Restricted	1	3439
TEITBS	AY 2023-24	Outside - Unrestricted	2	3000
TEITBS	AY 2023-24	Patriot - 1st Year	2	4000

TEITBS	AY 2023-24	TJC Transfer Scholarship	1	2000
TEITBS	AY 2023-24	TX Grant Initial	1	3375
TEITBS	AY 2023-24	Texas Public Ed. Grant	2	3000
TEITBS	AY 2023-24	Transfer Presidential 1	3	6000

**Table 40: Grand Total of Scholarship Money  
Awarded to Industrial Technology Majors from  
Academic Year 2019-2023**

<b>Academic Year</b>	<b># of Students</b>	<b>Total Received</b>
AY 2019-20	57	\$171,885.00
AY 2020-21	33	\$90,334.00
AY 2021-22	48	\$131,227.00
AY 2022-23	36	\$112,192.00
AY 2023-24	23	\$75,918.00
<b>Grand Total of Scholarship Money Awarded</b>	<b>197</b>	<b>\$581,556.00</b>

Source: Office of Information Analysis 2/21/2024

MS in Industrial Management program response.

**Table 41: Scholarships Awards to Industrial Management Majors from 2019-2023**

Academic Plan	Academic Year	Scholarship or Award	Number of Recipients	Total Amount Awarded
TEIMMS	AY 2019-20	DOE CARES ACT GRANT	1	2845.00
TEIMMS	AY 2019-20	Ed Aff grant GR Spring	3	4500.00
TEIMMS	AY 2019-20	Ed Aff-Grad-Summer	3	4500.00
TEIMMS	AY 2019-20	GI Bill Post 9/11 Chap 33 Spr	3	15795.00
TEIMMS	AY 2019-20	GI Bill Post 9/11 Chap 33 Sum	2	6832.00
TEIMMS	AY 2019-20	GI Bill Post 9/11 Chapter 33	3	9597.55
TEIMMS	AY 2019-20	International Ambassadors	1	500.00
TEIMMS	AY 2019-20	Mastin G White End Academic	2	2000.00
TEIMMS	AY 2019-20	Nan Shertzer Presidential	1	500.00
TEIMMS	AY 2019-20	Staff Development	1	1586.00
TEIMMS	AY 2019-20	TPEG Spring	4	3000.00
TEIMMS	AY 2019-20	TPEG Summer	4	3000.00
TEIMMS	AY 2020-21	Ed Aff Grant GR	1	1500.00
TEIMMS	AY 2020-21	HEERF II GRANT F/S INST	1	6000.00
TEIMMS	AY 2020-21	HEERF III Grant F/S	1	3000.00
TEIMMS	AY 2020-21	Mastin G White End Academic	1	1000.00
TEIMMS	AY 2020-21	New Graduate	3	3000.00
TEIMMS	AY 2020-21	Outside - Unrestricted	1	10550.00
TEIMMS	AY 2020-21	TPEG GRAD	1	1500.00
TEIMMS	AY 2021-22	Ed Aff grant GR Spring	1	1500.00
TEIMMS	AY 2021-22	Ed Aff-Grad-Summer	2	3000.00
TEIMMS	AY 2021-22	HEERF III GRANT F/S INST	5	8250.00
TEIMMS	AY 2021-22	HEERF III Grant F/S	1	500.00
TEIMMS	AY 2021-22	Marjorie P White End Dean's	1	500.00
TEIMMS	AY 2021-22	Mastin G White End Academic	1	1000.00
TEIMMS	AY 2021-22	New Graduate	6	6000.00
TEIMMS	AY 2021-22	Spence Morgan Endowed Scholars	1	1000.00
TEIMMS	AY 2021-22	Staff Development	1	6259.00
TEIMMS	AY 2021-22	Staff Development Summer	1	3108.00
TEIMMS	AY 2021-22	TEPG GRAD Spring	2	1500.00
TEIMMS	AY 2021-22	TPEG Summer	3	2250.00
TEIMMS	AY 2022-23	Ed Aff grant GR Spring	1	1500.00
TEIMMS	AY 2022-23	Ed Aff-Grad-Summer	3	4500.00
TEIMMS	AY 2022-23	GI Bill Post 9/11 Chap 33 Spr	1	4439.00
TEIMMS	AY 2022-23	GI Bill Post 9/11 Chap 33 Sum	1	4432.00
TEIMMS	AY 2022-23	GI Bill Post 9/11 Chapter 33	1	4239.00
TEIMMS	AY 2022-23	John Soules Foods Endow GRAD S	3	3000.00
TEIMMS	AY 2022-23	John Soules Foods Endowed GRAD	3	4000.00
TEIMMS	AY 2022-23	Mastin G White End Academic	2	2000.00
TEIMMS	AY 2022-23	New Graduate	2	2000.00
TEIMMS	AY 2022-23	OGS Incentive Award	3	600.00

TEIMMS	AY 2022-23	Staff Development	1	3152.00
TEIMMS	AY 2022-23	TPEG GRAD Spring	3	2250.00
TEIMMS	AY 2022-23	TPEG GRAD	1	1500.00
TEIMMS	AY 2022-23	TPEG Summer	4	3000.00
TEIMMS	AY 2022-23	UT Tyler End Gen Schol	2	2000.00
TEIMMS	AY 2023-24	Ed Aff Grant GR	1	3000.00
TEIMMS	AY 2023-24	John Soules Foods Endowed GRAD	2	2000.00
TEIMMS	AY 2023-24	New Graduate	3	3000.00
TEIMMS	AY 2023-24	PIA W Tennis	1	3438.00
TEIMMS	AY 2023-24	TPEG GRAD	1	1500.00
TEIMMS	AY 2023-24	Women's Tennis Full Scholarship	1	19698.56

Table 42: Grand Total of Scholarship Money Awarded to Industrial Management Majors

Academic Year	# of Students	Total Rec
AY 2019-20	28	\$54,655.55
AY 2020-21	9	\$26,550.00
AY 2021-22	25	\$34,867.00
AY 2022-23	31	\$42,612.00
AY 2023-24	9	\$32,636.56
<b>Grand Total of Scholarship Money Awarded</b>	<b>103</b>	<b>\$191,321.11</b>

Source: Office of Information Analysis 2/21/2024

f. tuition expenses to complete the entire program/option, and

<https://www.uttyler.edu/financialaid/costs/coa-even.php>

g. career placement rates.

Other data could include but need not be limited to:

- h. the program/option's outcome assessment process and results,
- i. time to secure the first position,
- j. average starting salaries; and/or
- k. promotions earned.

#### INSTITUTION'S RESPONSE TO STANDARD 12:

Both programs have the same response.

All pertinent data related to the graduates of the Department of Technology is listed on its home page:

<https://www.uttyler.edu/soules-college-of-business/technology/tech/>

b. retention rate,

**Table 43: Retention Rates for Industrial Technology Majors**

<b>TEITBS</b>	<b>Enrolled in Fall</b>	<b>Enrolled Following Fall</b>	<b>Degree During Year</b>	<b>Retained or Graduated</b>
FALL 2018	114	54	35	78.1%
FALL 2019	95	47	35	86.3%
FALL 2020	94	46	32	83.0%
FALL 2021	87	41	33	85.1%
FALL 2022	69	35	26	88.4%

Source: Office of Information Analysis 2/21/2024

- c. mean grade point averages of the graduating class,
- d. average years to complete the degree,
- e. availability of awards/scholarships,
- f. tuition expenses to complete the entire program/option, and
- g. career placement rates.

Other data could include but need not be limited to:

- h. the program/option's outcome assessment process and results,
- i. time to secure the first position,
- j. average starting salaries; and/or
- k. promotions earned.

# Appendix A:

## Degree Foundation Semester Hour Requirements Tables

## Appendix A: Table A

Table A-2: Bachelor Degree Foundation Semester Hour Requirements Table

TABLE A-2 (Bachelor) For Use with Standard 3.1B		
ATMAE Requirements	School/Program Degree Requirements Course prefix, number, and title	Semester Hours
<b>Program/Option</b>	BS in Industrial Technology	120
<b>General Education</b> (Humanities, English, History, Sociology, Psychology, Speech, etc.) 18-36 Semester Hours	ENGL 1301 College Composition I	3
	ENGL 1302 College Composition II	3
	SPCM 1315 Fund. of Speech Communication	3
	ENGL 2311 Technical & Business Writing (recommended), 2322, 2323, 2350, 2362, 2363 Lit.	3
	ECON 1301, or 2301, or 2302 Economics	3
	ART 1301, 1306, 2303, 2304, or MUSI 1301, 1306, 2301, 2308, or THTR 1301, 1356	3
	HIST 1301 United States History I	3
	HIST 1302 United States History II	3
	POLS 2305 Introductory American Government	3
	POLS 2306 Introductory Texas Politics	3
	Total	30
<b>Mathematics</b> 6-18 Semester Hours	MATH 1316 Trigonometry or higher-level MATH	3
	MATH 1342 Statistics or equivalent	3
	Total	6
<b>Physical Sciences</b> (Life Sciences may be appropriate for selected programs of study) 6-18 Semester Hours	CHEM 1305 Intro to Chemistry (Recommended)	3
	PHYS1301 College Physics I (Recommended)	3
	Total	6
<b>Management/ Technical/ Specialization</b> 42-60 Semester Hours	TECH 1303 Engineering Graphics	3
	TECH 1320 Industrial Materials	3
	TECH 2311 Electrical and Fluid Systems	3
	TECH 2319 Programmable Logic Controllers	3
	TECH 2323 Intro. to Computer Applications or COSM 1307 Intro. to Information Systems Software	3
	TECH 3310 Total Quality Management or TECH 3320 Lean Six Sigma Green Belt Techniques	3
	TECH 3311 Manufacturing Processes	3
	TECH 3312 Facilities Operations and Maintenance	3

	TECH 3317 Industrial Robotics	3	
	TECH 3331 Project Management	3	
	TECH 3333 Polymer Processing	3	
	TECH 3344 Industrial Safety	3	
	TECH 3355 Supply Chain Management	3	
	TECH 4317 Computer Integrated Manufacturing	3	
	TECH 4323 Lean Production	3	
	TECH 4343 Advanced Manufacturing Process	3	
	TECH 4372 Capstone Experience or	3	
	TECH 4370 Internship in Technology		
	FINA 3311 Principles of Finance	3	
	MANA 3305 Operations Management	3	
	MARK 3311 Principles of Marketing	3	
		<b>Total</b>	<b>60</b>
<b>General Electives</b> 0-18 Semester Hours	General lower or upper level electives and upper level business courses to complete the minor in Bus. Adm.	18	
		Total	18
<b>ATMAE Minimum Total</b> 120 Semester Hours		<b>Degree Total</b>	<b>120</b>

Table A-3: Master's Degree Foundation Semester Hour Requirements Table

TABLE A-3 (Master's) For Use with Standard 3.1C		
ATMAE Requirements	School/Program Degree Requirements Course prefix, number, and title	Semester Hours
<b>Program/option</b>	MS in Industrial Management	36
<b>Communications/Problem Solving</b> 6-12 Semester Hours	TECH 5310 Six Sigma Quality	3
	TECH 5335 Lean Management	3
	TECH 5366 Value Stream Management	3
	TECH 5390 Adv. Lean Six Sigma Tech.	3
	Total	12
<b>Research</b> 6-12 Semester Hours	TECH 5302 Applied Research Methods	3
	TECH 5303 Research Techniques in HRD/Technology	3
	TECH 5329 Research Trends in Industry	3
	TECH 5371 Research Internship in Technology	3
	Total (Select two courses from above)	6
<b>Management/ Technical/ Specialization</b> 12-18 Semester Hours	MANA 5350 Strategic Human Resources Mgmt. or TECH 5348 Warehousing	3
	TECH 5306 Logistics Management	3
	MANA 5305 Decision Making in Operations Management	3
	TECH 5331 Project Management	3
	Total	12
<b>Electives</b> 0-12 Semester Hours	TECH 5308 Strategic Sourcing	3
	TECH 5317 Computer Integrated Mfg.	3
	TECH 5320 Total Quality Management	3
	TECH 5336 Lean Healthcare	3
	TECH 5346 Environmental Management	3
	TECH 5380 Management of Nanomaterials	3
	(Select from above or any graduate course)	6
	Total (Select two courses from above)	6
<b>ATMAE Minimum Total</b> 30 Semester Hours	<b>Degree Total</b>	<b>36</b>

# Appendix B: Outcomes Measures Used to Improve Program

## Appendix B: Table B

**Table B: Outcomes Measures Used to Improve Program**  
(Complete a separate table for each program/option)

TABLE B: For Use with Standard 11	
<b>Program Name</b>	Bachelor of Science in Industrial Technology
<b>Program Learning Outcome</b>	All of them
<b>Means Of Assessment</b>	The ATMAE Certified Manufacturing Specialist (CMS) exam
<b>Criterion For Success</b>	Passing grade on the ATMAE CMS exam
<b>Actions Taken For Program Improvement</b>	Requiring students to study the ATMAE CMS Review Guide before taking the ATMAE CMS exam. The department will purchase the review guide for the students and let them review it on their Canvas LMS site.
<b>Results Of Actions Taken</b>	Both students who have since studied the CMS Review Guide before taking the CMS exam passed the exam with high scores.
<b>Analysis Of Results</b>	Most students before COVID would pass the ATMAE CMS exam. After COVID-19, only 40% of the students passed the exam. A review guide was created by ATMAE for the CMS exam and used by the next group of students who took it, both of whom passed with high scores. The faculty were not sure if the pandemic skewed the scores since many of the students sat out for a semester or more and took longer to graduate. This longer period of time to finish their degree may have made it harder to remember all the information from their classes. At any rate, it seemed like a good review would help students retain the information and be better prepared to interview for jobs.
<b>Actions Planned</b>	All students will be required to study the ATMAE CMS Review Guide before taking the CMS exam as it has shown that it has improved the pass rate on the exam and increased the student's overall knowledge of manufacturing.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Bachelor of Science in Industrial Technology
<b>Program Learning Outcome</b>	2. Understand and use technical software, data sources, and automation such as CAD, CAM, CNC, PLC's and robotics
<b>Means Of Assessment</b>	Improve the robotics laboratory so students can earn industrial robotics certifications
<b>Criterion For Success</b>	Students successfully earn robotics certifications.
<b>Actions Taken For Program Improvement</b>	Purchased new robotics equipment, instructor obtained certification training, and expanded the laboratory facility. (Refer to Table 21)
<b>Results Of Actions Taken</b>	Almost 100% of the students now earn robotics certifications for robots used in industry, such as, FANUC, Motoman, and Universal Robots.
<b>Analysis Of Results</b>	Because students are now earning more robot certifications, students have been successful obtaining jobs in high tech, higher paying industries as seen in the average starting salary data. They will also be better prepared for manufacturing jobs that are becoming more automated.
<b>Actions Planned</b>	The department will be purchasing more Industry 4.0 equipment as recommended by the Advisory Board. This should assist graduates with keeping abreast with more jobs available in industry.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Bachelor of Science in Industrial Technology
<b>Program Learning Outcome</b>	1. Identify the proper materials and manufacturing processes used to fabricate a specific part.
<b>Means Of Assessment</b>	ATMAE CMS exam as well as in course quizzes and exams.
<b>Criterion For Success</b>	A passing score on the ATMAE CMS welding portion of the exam.
<b>Actions Taken For Program Improvement</b>	Purchasing welding equipment so students will have hands-on experiences with various welding processes, thereby, reinforcing the material covered online.
<b>Results Of Actions Taken</b>	Most of the welding equipment has been purchased and an advanced laser welder is in the process of being bought. (Refer to Table 21)
<b>Analysis Of Results</b>	Student scores of the welding portion of the ATMAE CMS exam are higher than years past as well as in course quizzes and exams.
<b>Actions Planned</b>	Continue to support the welding laboratory as needed.

TABLE B: For Use with Standard 11

<b>Program Name</b>	Bachelor of Science in Industrial Technology
<b>Program Learning Outcome</b>	6. Understand facility layout, maintenance, and the management of supply chains.
<b>Means Of Assessment</b>	Grades on laboratory activities as well as in course quizzes and exams.
<b>Criterion For Success</b>	Equipment is purchased and student grades are higher regarding industrial maintenance activities and exams.
<b>Actions Taken For Program Improvement</b>	Purchase industrial maintenance trainers so students can apply hands-on activities to help them retain the content. (Refer to Table 21)
<b>Results Of Actions Taken</b>	Students are more cognizant of gears, pulleys, sprockets, etc. and how to assembly, disassemble and maintain industrial parts and systems.
<b>Analysis Of Results</b>	Student seem to learn the course content by actually working with the equipment, "learn by doing," and the scores on exams have increased.
<b>Actions Planned</b>	Add more industrial maintenance trainers to the labs since there are only two which requires a long waiting time and less content that can be covered for students.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Bachelor of Science in Industrial Technology
<b>Program Learning Outcome</b>	All of them
<b>Means Of Assessment</b>	Student evaluation of instructor
<b>Criterion For Success</b>	High scores from student evaluations of an instructor
<b>Actions Taken For Program Improvement</b>	Three new faculty for the department received lower scores than current faculty from the department. Faculty were encouraged to enroll in the university sponsored ACUE program and become "Certified in Effective College Instruction."
<b>Results Of Actions Taken</b>	The ACUE certification was taken over a year and all three faculty earned their certification in effective college instruction. (Refer to faculty CVs)
<b>Analysis Of Results</b>	The student evaluation scores have gone up as a whole for the three faculty and less complaints have been received from students regarding their teaching.
<b>Actions Planned</b>	Continue to encourage faculty to partake in teaching excellence seminars, workshops, etc. so they can continually improve their teaching which will in turn help retain students.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Bachelor of Science in Industrial Technology
<b>Program Learning Outcome</b>	All of them
<b>Means Of Assessment</b>	Student project grades on laboratory projects.
<b>Criterion For Success</b>	If student project grades are higher and there are less complaints on student evaluations of faculty.
<b>Actions Taken For Program Improvement</b>	Due to having multiple instructors teaching one course because of it being offered at another location and faculty members earning release time, the quality of instruction varied and students were not happy. Because some faculty were more experienced on equipment than others, students typically did better when the more experienced faculty member was teaching the course. To even the playing field, the most experienced faculty member for each course made videos that showed step-by-step how to use equipment and tools safely and correctly. The videos were shared with all the faculty to play in their section of the course.
<b>Results Of Actions Taken</b>	The videos could be played by less experienced faculty to their classes so all the students could see the correct way to make projects. In fact, the faculty member creating the videos used them as well because more students could watch the video than a few close to the machine being demoed in class. In addition, students who could not remember how to use the equipment could watch the videos on their phones after pulling them up from their course Canvas LMS account.
<b>Analysis Of Results</b>	It seemed like all the students were satisfied with the videos and there are no longer any more complaints by them regarding this matter.
<b>Actions Planned</b>	Faculty created videos will continue to be made as new equipment is added to the laboratories. It will also be good in the fact if a faculty member leaves or retires, the knowledge is not lost with that faculty member. New faculty can watch the videos and learn how to use the equipment.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Master of Science in Industrial Management
<b>Program Learning Outcome</b>	4. Demonstrate a thorough understanding of current project management theory and practice.
<b>Means Of Assessment</b>	Students pass project management certification exams.
<b>Criterion For Success</b>	Enrollment for the program increases due to the new courses and three course sequence certification.
<b>Actions Taken For Program Improvement</b>	Develop two new project management courses: TECH 5333 Agile and Scrum Principles, and TECH 5334 Project Management Certification
<b>Results Of Actions Taken</b>	The two courses were approved and when added to the current course, TECH 5333 Project Management, the three course sequence allows students to earn a certification in project management as well as be prepared to pass the PMP certification from the Project Management Institute.
<b>Analysis Of Results</b>	Students have been receptive to the new courses and certification and enrollment has doubled to where there are two sections of the courses. The Advisory Board had recommended added these courses and it seems as if it worked. (Refer to Advisory Board minutes)
<b>Actions Planned</b>	Continue to improve the certification and see if the college can offer a separate Scrum certification as well.

TABLE B: For Use with Standard 11

<b>Program Name</b>	Master of Science in Industrial Management
<b>Program Learning Outcome</b>	5. Describe and express an in depth knowledge of supply chain and logistics principles.
<b>Means Of Assessment</b>	Student pass exams related to obtaining supply chain management certification.
<b>Criterion For Success</b>	Enrollment in the supply chain management certificate program will increase.
<b>Actions Taken For Program Improvement</b>	The supply chain management certificate program had a relatively low number of students applying for certification. The department decided to work with Academic Partnerships (AP) to offer it to online MBA students as a four course sequence that fits in their degree plan. In order to do this, the courses had to be checked through the Quality Matters course rubric to ensure the course is high quality in nature. This is the industry standard for online programs and ensures success.
<b>Results Of Actions Taken</b>	The course has been approved by AP and students are now currently taking it for the first time.
<b>Analysis Of Results</b>	Enrollment in the courses for the supply chain management certification have gone up and should continue to do so as AP starts to market it world wide.
<b>Actions Planned</b>	Continue to offer and improve the course and develop more supply chain certifications if possible.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Master of Science in Industrial Management
<b>Program Learning Outcome</b>	<p>1. Demonstrate a thorough understanding of Lean Philosophies to eliminate waste in processes.</p> <p>2. Implement Six Sigma Quality methods for continuous improvement efforts.</p>
<b>Means Of Assessment</b>	Student pass rate on exams involved with Lean Six Sigma Green Belt certification.
<b>Criterion For Success</b>	The number of students earning the Lean Six Sigma Green Belt certification will increase.
<b>Actions Taken For Program Improvement</b>	The program was offering a Lean Six Sigma Black Belt (LSSBB) certification which required four courses. Most majors at the graduate level only allow for three electives. Therefore, only Industrial Management majors were earning the certification. Therefore, a Lean Six Sigma Green Belt (LSSGB) certification was developed using three of the four courses that make up the LSSBB certification. By reducing the number, MBA students can now earn the certification without taking any additional coursework.
<b>Results Of Actions Taken</b>	The university has approved the new three course sequence for the LSSGB certification and it is now available to all majors.
<b>Analysis Of Results</b>	Although more students are earning the certification, the increase has not been of any consequence.
<b>Actions Planned</b>	As the department moves forward working with AP, the new LSSGB has now been included as an optional certification with the MBA and will be marketed worldwide once the courses have been revised to meet the Quality Matters rubric. The department is hoping that the certification numbers will drastically increase and help the enrollment in the program.

**TABLE B: For Use with Standard 11**

<b>Program Name</b>	Master of Science in Industrial Management
<b>Program Learning Outcome</b>	4. Demonstrate a thorough understanding of current project management theory and practice.
<b>Means Of Assessment</b>	Student evaluation scores and comments.
<b>Criterion For Success</b>	Students will no longer complain about how difficult it was to learn Microsoft Project in the course.
<b>Actions Taken For Program Improvement</b>	Videos were developed by the instructor for each assignment showing student show to use the Microsoft Project software step-by-step.
<b>Results Of Actions Taken</b>	Students were no longer complaining about having to use Microsoft Project software in the course and in fact comment on how they are pleased that they learned it since many of them have to use it at work.
<b>Analysis Of Results</b>	It seems as though taking the time to develop videos for the students is well appreciated and reduces any bad comments on student evaluations of faculty. In addition, if students find the course more pleasing then they will inform their friends and hopefully increase the enrollment.
<b>Actions Planned</b>	Instructor videos seem to be effective with students and will be created on an as needed basis for any other issues in the course that may develop.

Appendix C:  
ATMAE Accreditation Site Team  
Visit Agenda

# Agenda for the Site Visit

## **Day 1 – Sunday, April 21, 2024 - Arrival**

- 3:00 pm Visiting Team members arrive in late afternoon, check into the hotel, and contact hosts
- 6:00 pm Dinner for visiting team members and with faculty/administrators to get acquainted
- 8:00 pm Visiting Team work session

## **Day 2 – Monday, April 22, 2024 - First Day on Campus**

- 7:00 am Team breakfast; optionally with the institution contact
- 8:00 am Departure to host institution
- 8:30 am Meetings with department head
- 9:30 am Meetings with dean/associate dean
- 10:30 am Meetings with full-time faculty individually or in groups
- 12:00 pm Lunch with faculty and/or staff and/or students, alumni, advisory board
- 1:30 pm Team begins reviewing documentation
- 4:00 pm Meetings with students, alumni, community partners, observe class
- 6:00 pm Working dinner for visiting team to set priorities for gathering and reviewing Info.

## **Day 3 – Tuesday, April 23, 2024 - Second Day on Campus and Wrap-up**

- 7:00 am Team breakfast
- 8:00 am Departure to host institution
- 8:30 am Meeting with the dean and/or program head to facilitate any further arrangements
- 9:00 am Additional interviews with faculty and administrators as needed
- 10:00 am Visits to labs, classrooms, placement & student services, library, budget director
- 11:00 am Finish reviewing documentation; identify any additional information requirements
- 12:00 pm Working lunch for visiting team only to arrive at consensus and begin a report outline
- 2:15 pm Final exit interview with the President and Provost
- 3:00 pm Site visit is complete and the team departs

Appendix D:  
Soules College of Business Tenure  
and Promotion Policy

# SOULES COLLEGE OF BUSINESS

## TENURE AND PROMOTION POLICY

This document is based on the requirements described in the UT Tyler HOP Sects 3.3.4 for tenure and 3.3.5 for promotion and articulates the tenure and promotion expectations for the Soules College of Business. It is believed that a clear statement of tenure expectations is valuable to both current and new faculty. Before articulating the expectations, guidance is offered about how this statement of expectations should be interpreted and applied.

1. The tenure and promotion guidelines set by the College and/or The University of Texas system may change during a faculty member's probationary period. The faculty member will be notified of such changes and will be expected to meet any new guidelines unless otherwise notified in writing by the Dean.
2. These expectations are not a statement of minimum standards. Failure to meet the expectations may result in a negative tenure recommendation. However, meeting or exceeding the expectations does not automatically guarantee a positive tenure recommendation. Instead, these expectations are intended to guide performance and decision making, considering all relevant factors.
3. These expectations are based on the assumption that untenured faculty will be on no more than a "3-3" teaching load in each of the years prior to the tenure decision.
4. These expectations are designed for faculty applying for tenure at the beginning of the sixth year following their date of hire. Other factors such as employment at other universities or previous employment at UT Tyler in a non-tenure track position may create exceptions to the presented guidelines. These exceptions must be specified in the initial contract/offer letter, and approved by the Dean and Provost.

### Rationale

Developing tenure expectations is important for a variety of reasons. Some of the more important reasons include:

- A clear statement of research expectations is important to the SCOB's effort to move to the next level of national recognition.
- Teaching excellence remains central to our mission. A clear statement of teaching expectations reaffirms our commitment to teaching excellence.
- Documentation of clear tenure expectations is an important factor in our AACSB review process and ongoing continuous improvement efforts.
- A clear statement of tenure expectations will guide the performance of untenured faculty.

Adopted September 2009

Revised August 2012

## Journal Lists

Following accreditation standards (e.g. AACSB, ATMAE, etc.), the impact of faculty research, a measure of the quality, will be determined using journal lists categorized by published impact factors. The journal lists should be used by faculty members to set their research agendas. There are significant differences across the various academic fields within the Soules College of Business. Therefore, each discipline within the College will develop a ranked journal list based on a readily available impact metric. The impact metric will be used to rank the journal list into the categories of A+, A, and B (replacing the exceptional, meritorious, and good categories previously used). The specific impact metric and the category cutoffs must be approved by the SCOB Leadership Council. The Dean will have final approval. The initial journal lists will be reevaluated after one year (Spring 2016) and revised as appropriate. Subsequently, the journal lists will be reevaluated every five years with changes becoming effective immediately.

## Research Expectations

The research expectations are that a faculty member at the beginning of his or her sixth year will have, *at the minimum*, one the following (see SCOB approved Journal Lists for A+, A, and B-level journals):

1. Four A publications and other scholarly activities, or
2. Three A publications plus two B-level publications and other scholarly activities, or
3. One A+ and one A publication plus two B-level publications and other scholarly activities,  
or
4. One A+ and two A publications and other scholarly activities, or
5. Two A+ and other scholarly activities.

A significant externally funded grant requiring basic research may substitute for one A-level journal. Other grants may be counted in other scholarly activities listed below.

Other Scholarly activities include:

- Editor or Associate Editor of a journal
- Journal Editorial Review Board membership
- Books (scholarly or textbook)
- Presentations at national conferences
- Book chapters
- Peer reviewed publications not on the journal list
- Edited volumes
- Grants

To receive promotion/tenure, the faculty member is expected to demonstrate, through published research, the ability to perform basic research in his or her discipline including conceptualization, building theory, and appropriate methodology. Published research is expected to conform to the following:

- Sole or lead author on some of the published research,
- Ideally, no more than four authors,
- Basic vs pedagogical research (although basic research about teaching is acceptable), teaching cases are considered pedagogical,
- Some cross disciplinary research within the College is acceptable if it clearly applies applicant's discipline to another field,
- Providing the methodology to research will not be sufficient.

Because promotion and tenure uses past performance as an indicator of future performance, evidence of a consistent pattern of ongoing research is required.

The evaluation of research will include an external review from peers outside the University. The process for selecting outside reviewers is discussed in the HOP sections 3.3.4 and 3.3.5.

The quality of research is valued over the quantity of publications. As a result, an increase in the number of A+ and/or A publications may decrease the expected number of B level publications. Increases in the number of B publications, however, does not necessarily reduce the number of expected A+ or A publications.

The standards for tenure exceed the standards for promotion to Associate Professor. Thus, someone may be hired as an Associate Professor or promoted to Associate Professor without tenure. Rarely would a faculty member be granted tenure without promotion to Associate Professor.

These expectations assume a faculty member with a six-year probationary period, and, thus, the research considered is work done while at UT Tyler. In the case of a faculty member hired with credit towards tenure, research published prior to joining the SCOB may be considered along with the work done at UT Tyler. Any such consideration must be approved by the department chair, Dean and the Provost and articulated in writing in the offer letter or a separate agreement at the time of hire.

## Guidelines for Teaching

All faculty members seeking tenure are expected to have demonstrated teaching competency in multiple levels of a department's course offerings. Untenured faculty members should regularly receive acceptable teaching evaluations from students. Untenured faculty members often develop as teachers gain experience. Thus, student evaluations received in later years may be weighed more heavily than those received in earlier years. Faculty members are also encouraged to engage in innovative teaching practices. Not all of these innovations will be successful. Thus, decisions will be based on an overall pattern of teaching evaluations rather than on the evaluations received from any single course or section. It is explicitly recognized that there are many ways to evaluate teaching effectiveness and that demonstrating teaching effectiveness may involve data from sources other than students. Thus, new faculty members are encouraged to develop a teaching dossier with multiple indicators of teaching success. Faculty may also submit observations of teaching from peers.

### Teaching Expectations

It is recognized that there is not a generally accepted definition of teaching excellence. Thus, we are open to alternative methods of demonstrating teaching effectiveness and encourage individual faculty members to develop a teaching dossier that is consistent with his or her beliefs about and approach to teaching. In addition, we will consider more traditional measures of teaching effectiveness including course coverage, rigor and content, assessment techniques, and student evaluations of teaching.

- Prior to the tenure decision, all faculty members are expected to demonstrate teaching effectiveness in multiple courses and at multiple levels. We realize that teaching loads are determined by departmental needs. Thus, deviations from this expectation are acceptable when dictated by resource constraints in the department.
- All faculty members are expected to view the design and delivery of multi-section courses as a collaborative effort and willingly contribute to coordination efforts for multi-section courses. Such coordination efforts might include covering jointly determined content, participating in common assessment techniques, and using jointly determined educational materials in multi-section courses. All faculty members are expected to fully embrace the SCOB Assurance of Learning (AOL) policies and procedures and support those that pertain directly or indirectly to their teaching assignments.
- All faculty members are expected to generate an acceptable pattern of student evaluations of teaching. Although it is impossible to specify completely what constitutes an acceptable pattern of student evaluation, it is expected that (1) teaching evaluations are consistent with the departmental mean, or above 4.0 (on a scale of 5), (2) very few poor teaching evaluations, defined as below 3.5, and (3) at least some very good teaching evaluations, defined as 4.25 or above. Untenured faculty members are expected to improve their teaching as they gain experience, and, thus, longitudinal trends will be considered as patterns of student evaluation of teaching are interpreted.

## Guidelines for Service

Service expectations are expected to vary in nature across departments and to vary across the probationary period of an untenured faculty member's career. Generally, new faculty members should expect to be protected from service commitments during their first year or two (depending on departmental needs) and to engage in limited service activities prior to tenure. External professional service activities that bring recognition to the SCOB, such as review activities for major journals or conferences and participation in professional organizations, are encouraged.

### Service Expectations

The most important activity for a new faculty member is to become engaged in the research and teaching agenda of the department. New untenured faculty members are encouraged to reduce their focus on service and increase their focus on research and teaching. As a faculty member moves toward review for tenure, his or her service contribution should increase. However, internal service commitments should not detract from teaching, research, or external service that enhances the reputation of the department or the Soules College of Business. Leadership service to relevant academic societies and ad hoc reviewing for major journals is valued.

- All faculty members are expected to participate regularly in department and College faculty meetings and other department and College activities.
- Prior to tenure review, untenured faculty members are expected to serve on at least one College committee or taskforce.
- All faculty members are expected to be available for regular informal interactions with other department members and graduate students (when appropriate).
- Participation as an ad hoc reviewer of journals on the SCOB journal list or for national conferences is highly desirable.

## Guidelines for Collegiality

The SCOB promotes strong collegiality. As defined in the HOP, “Collegiality addresses such issues as the candidate’s compatibility with department missions and goals, an ability and willingness to work cooperatively within the department and College, a willingness to engage in shared governance, and a high standard of professional integrity in dealing with colleagues and students” (HOP, 3.3.4).

All faculty are expected to demonstrate collegiality. An ongoing and systematic effort to engage in collegial behavior is a requirement for tenure and promotion.

## Guidelines for Promotion to Professor Rank

According to HOP 3.3.5, appointment or promotion to the rank of Professor is recognition of demonstrated achievement and distinction over the span of a faculty member's academic career in teaching and research. Therefore, to be qualified for promotion to Professor Rank, a faculty member must meet, at the minimum, the following research expectations since he or she was promoted to Associate Professor (see SCOB approved Journal Lists for A+, A, and B-level journals):

1. Three A publications plus two B-level publications and other scholarly activities, or
2. Four A publications and other scholarly activities, or
3. One A+ and one A publication plus two B-level publications and other scholarly activities, or
4. One A+ and two A publications and other scholarly activities, or
5. Two A+ and other scholarly activities.

A significant externally funded grant requiring basic research may substitute for one A-level journal. Other grants may be counted in other scholarly activities listed below.

Other Scholarly activities include:

- Presentations at national conferences
- Book chapters
- Books (scholarly or textbook)
- Peer reviewed publications not on the journal list
- Edited volumes
- Grants
- Editor or Associate Editor of a journal
- Journal Editorial Review Board membership

Beyond the research expectations, additional evidence demonstrating a level of service appropriate to the more senior rank should be presented. That is, the faculty member must have actively participated in professional service as well as active involvement in department, college and university service. The minimum time required as an Associate Professor is outlined in the HOP.

Evidence of strong research should be documented through journal publications and also through peer recognition of the candidate's reputation by independently-known scholars nationwide. Consequently, external letters of review from peers outside the University will be required for faculty members applying for Professor as per HOP guidelines.

## Process and Timetable for Tenure and Promotion Decisions

The tenure and promotion committees in each department shall consist of the following:

1. The tenure committee for each department shall be composed of all tenured faculty in the department and is responsible for making recommendations to the Department Chair regarding tenure for individual candidates and for reviewing the tenure-track faculty in their third year review.
2. The promotion committee shall consist of all members of the department who have academic rank at least one level above the candidate. When there are fewer than three eligible faculty in a department, the Dean in consultation with the candidate, will select eligible faculty from similar or related departments. Chairs of the departmental committees on tenure and promotion are elected by members of the committee.
3. The College Committee on Tenure and Promotion shall consist of one faculty member from each discipline area (accounting, finance, management, marketing, computer science, technology, and HRD) elected by all members of each respective department. To be eligible to serve on the College Tenure and Promotion Committee, the faculty member must be tenured and hold the rank of Associate Professor or higher. Members of the committee will serve a two-year staggered term with election being held before the end of September.
4. The Chair of the College Tenure and Promotion Committee will be determined annually by a vote among the elected members of the committee. Members of the College Promotion and Tenure Committee who hold the rank of Associate Professor may not vote on candidates for promotion to the rank of Professor.

The Department Chair and the Dean do not participate in the department or College Tenure and Promotion committee meetings. The Department Chair offers an independent recommendation regarding tenure and promotion after receiving input from the department committee. No individual shall serve as a voting member of any promotion committee during an academic year in which he or she is under consideration for promotion, nor shall any individual make a vote or recommendation on his or her promotion.

External letters of review from peers outside the University will be required for tenure-track faculty members applying for promotion to the rank of Associate Professor or Professor. The process for the selection of outside reviewers is discussed in the Handbook of Operating Procedures sects 3.3.4 and 3.3.5. At no time after the deadline for submission of the materials may candidates for promotion and tenure add additional materials or withdraw materials from the file without the permission of the Dean. All members of the committee involved in tenure and promotion decisions are expected to respect the confidentiality of the proceedings at all times. Candidates will be notified in writing of the decision at each stage of the process.

## Timetable for Tenure and Promotion Decisions

**September 1:** Each faculty member who will be a candidate for promotion and/or tenure will provide a list of potential external reviewers, a CV, and reprints of journal articles.

**October 15:** Candidates for tenure and/or promotion will submit materials to the Department Chair.

**October 15:** All letters from outside reviewers must be received by the Department Chair.

**November 1:** Department committees on Tenure and Promotion will submit their materials for each candidate to the Department Chair.

**November 15:** Department Chairs forward candidates' supporting materials and recommendations to the College committee.

**December 1:** The College Tenure and Promotion Committee will submit their recommendations to the Dean.

**January 7:** The Dean of the College submits candidates' supporting materials and recommendations to the Provost.

**February 1:** The Provost notifies President of tenure and promotion recommendations.

**March 1:** The President notifies faculty of decision on promotion and tenure.

## Third Year Review for Tenure Progress

**September 1:** Candidates are notified at the beginning of their third year of their pre-tenure review.

**February 1:** Candidates for the pre-tenure review must submit materials to the Departmental Committee.

**February 15:** Departmental Committee reports its recommendation to the Department Chair.

**March 1:** Department Chair forwards recommendation and materials to the College Tenure and Promotion Committee.

**March 15:** College committee forwards recommendations and materials to the Dean.

**April 1:** Dean of the College informs candidates of the decision.

## Periodic Performance Evaluation of Tenure Faculty

The purpose of this policy is to provide for the periodic evaluation of tenured faculty as set forth in the HOP. A discussion of the guidelines and procedures for post tenure review are identified in HOP Sect 3.3.6..

## Process and Timetable for Post-Tenure Decisions

### Process

1. The Provost's office will provide a list of all faculty scheduled for Post-Tenure review to the Dean of the college for dissemination to the Department Chairs.
2. The guidelines in section 3.3.6 of the Handbook of Operating Procedures will be followed.

### Timetable

1. September 1. Each Department Chair will notify their faculty members who are scheduled for post-tenure review and direct them to the guidelines.
2. September 1. Candidates for post-tenure will submit materials to the Chair of their department.
3. September 15. Department Chairs forward supporting materials and recommendations to college tenure and promotion committee.
4. October 15. The college tenure and promotion committee submits the supporting materials and their recommendations to the Dean.
5. November 1. The Dean forwards the recommendation to the Provost.

### Post-Tenure Dossier Format

Each post-tenure dossier will consist of one standard, three-ring black binder with a spine no thicker than one inch. The applicant's name and the action (Post-Tenure Review) must be clearly indicated on both the front cover and the spine of the binder.

The faculty member shall submit:

- curriculum vita
- all six Annual Evaluation reports (inclusive of the sixth year review)
- a summative report of student evaluations of teaching over the entire six year period
- a summary statement of accomplishments
- The faculty may provide:
- a summative report of any peer observation of teaching over the entire six year period
- any additional materials the faculty member wants considered, such as a statement of professional goals and/or a proposed professional development plan.

TENURE RECOMMENDATION FORM FOR CURRENT ACADEMIC YEAR

Faculty Member Name \_\_\_\_\_

College \_\_\_\_\_

Department \_\_\_\_\_

Present Rank \_\_\_\_\_

Highest Degree \_\_\_\_\_ Year Awarded \_\_\_\_\_

Institution \_\_\_\_\_

Initial Appointment at UT at Tyler: Date: \_\_\_\_\_ Rank: \_\_\_\_\_

Years in Tenure Track While Employed at UT Tyler Prior to current Academic Year \_\_\_\_\_

Total Years Applicable to Tenure Including current Academic Year \_\_\_\_\_

ACTION OF COLLEGE	RECOMMEND		NO. OF VOTES Yes-No-Abstain-Recuse	CANDIDATE NOTIFIED ON
	Yes	No		
DEPARTMENT/SCHOOL				
DEPARTMENT CHAIR/DIRECTOR				
COLLEGE ADVISORY COMMITTEE				
DEAN				

Signatures

\_\_\_\_\_  
Chair, Department Recommending Body      Date

\_\_\_\_\_  
Department Chair      Date

\_\_\_\_\_  
Chair, College Committee      Date

\_\_\_\_\_  
Dean      Date

PROMOTION RECOMMENDATION FORM FOR CURRENT ACADEMIC YEAR

Faculty Member Name \_\_\_\_\_

College \_\_\_\_\_

Department \_\_\_\_\_

Promotion Rank Sought \_\_\_\_\_

Have You Previously Applied for This Rank? (Y/N) \_\_\_\_\_ What year(s) \_\_\_\_\_

Highest Degree \_\_\_\_\_ Year Awarded \_\_\_\_\_

Institution \_\_\_\_\_

Initial Appointment at UT at Tyler: Date: \_\_\_\_\_ Rank: \_\_\_\_\_

Present Rank or Title \_\_\_\_\_

Have You Received Tenure (Y/N) \_\_\_\_\_ If So, Year Tenured \_\_\_\_\_

Total Years at Present Rank Applicable to Promotion Including the current Academic Year \_\_\_\_\_

ACTION OF COLLEGE	RECOMMEND		NO. OF VOTES Yes-No-Abstain-Recuse	CANDIDATE NOTIFIED ON
	Yes	No		
DEPARTMENT				
DEPARTMENT CHAIR				
COLLEGE ADVISORY COMMITTEE				
DEAN				

Signatures

_____	Date _____	_____	Date _____
Chair, Department Recommending Body		Chair, College Committee	
_____	Date _____	_____	Date _____
Department Chair		Dean	

## RECOMMENDATION FORM FOR THIRD-YEAR REVIEW

Faculty Member Name \_\_\_\_\_

College \_\_\_\_\_

Department \_\_\_\_\_

Present Rank or Title \_\_\_\_\_

Highest Degree \_\_\_\_\_ Year Awarded \_\_\_\_\_

Institution \_\_\_\_\_

Initial Appointment at UT at Tyler: Date: \_\_\_\_\_ Rank: \_\_\_\_\_

Full-Time Professional Experience: \_\_\_\_\_  
(Including current academic year)

Non-UT Tyler College/University: \_\_\_\_\_

ACTION OF COLLEGE	RENEWAL RECOMMENDED	RENEWAL NOT RECOMMENDED
DEPARTMENT TENURED FACULTY* (Assessment Attached)		
DEPARTMENT CHAIR (Assessment Attached)		
COLLEGE ADVISORY COMMITTEE		
DEAN		

\*Attach written assessment of faculty member's performance in each of the three areas-teaching-research/creative activity, and service.

Signatures

\_\_\_\_\_  
Chair, Department Recommending Body                      Date

\_\_\_\_\_  
Chair, College Committee    Date

\_\_\_\_\_  
Department Chair    Date

\_\_\_\_\_  
Dean    Date

Revised 10/24/2012  
Revised 10/28/2021

## RECOMMENDATION FORM FOR POST-TENURE REVIEW

Faculty Member Name \_\_\_\_\_

College \_\_\_\_\_

Department \_\_\_\_\_

Present Rank or Title \_\_\_\_\_

<b>ACTION OF COLLEGE</b>	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations	Unsatisfactory	<b>Signature &amp; Date</b>
	Check one box below				
<b>DEPARTMENT CHAIR</b>					
Comments:					
<b>SCOB P&amp;T COMMITTEE</b>					
Comments:					
<b>DEAN</b>					
Comments:					

## ADDENDUM

### TRANSITION TO NEW PROMOTION AND TENURE POLICY AND JOURNAL LIST

- The revised Promotion and Tenure Policy will be effective immediately with respect to promotion to full Professor following final approval of the policy by the SCOB Council and the Dean.
- The current Promotion and Tenure Policy will be in effect for those faculty members seeking Promotion and Tenure on September 2017. Those faculty members may use either the current journal list or the revised journal list or both. Following that date, all faculty members will come under the revised Promotion and Tenure Policy and Journal List.

# Appendix E: Laboratory Safety Information

# Machining Safety Rules

Department of Technology  
The University of Texas at Tyler

## General Safety Rules

- ▶ 19. Practice cleanliness and orderliness in the shop areas. Never leave a dirty piece of equipment.
- ▶ 20. Keep the floor around machines clean, dry and free from trip hazards. Do not allow chips to accumulate.
- ▶ 21. Don't horseplay or take chances. Don't say you know how to do something, when you don't. Obey all safety rules at ALL times.

## Milling Machine Safety

- ▶ 10. Don't take too heavy a cut or use too rapid a feed.
- ▶ 11. Remove the collet tightening wrench immediately after using it.
- ▶ 12. If at all feasible, add a shield to prevent chips from hitting other people.
- ▶ 13. Before cleaning the mill remove cutting tools from the spindle to avoid cutting yourself.
- ▶ 14. Push in the emergency stop button when setting up the machine.
- ▶ 15. Clean the machine after use with a brush and properly dispose of chips.

## General Safety Rules

- ▶ 1. Safety glasses, or appropriate goggles / face shields are required in the shop, when lab work has commenced.
- ▶ 2. Shoes must be worn in any shop area. No one wearing sandals will be allowed to enter any shop area. The minimum footwear must cover the entire foot.
- ▶ 3. Do not operate any item of equipment unless you are familiar with its operation and have been authorized to operate it. If you have any questions regarding the use of equipment ask the instructor.
- ▶ 4. Never use compressed air guns to clean clothing, hair, or aim at another person.
- ▶ 5. In case of injury, no matter how slight, you must report it to the instructor.

## General Safety Rules

- ▶ 22. Heavy sanding and painting should only be done in well ventilated areas.
- ▶ 23. Follow all appropriate precautions when working with solvents, paints, adhesives or other chemicals. Use appropriate personal protective equipment.
- ▶ 24. Check the power cords and plugs on portable tools for wear before using them.
- ▶ 25. Obey all posted signs, warnings, posters and special instructions.

## LATHE SAFETY

## General Safety Rules

- ▶ 6. Machines must be shut off when cleaning, repairing, or oiling.
- ▶ 7. Do not wear ties, loose clothing, long sleeves, jewelry, gloves, etc. around moving or rotating machinery.
- ▶ 8. Long hair must be tied back or covered to keep it away from moving machinery.
- ▶ 9. Hand protection in the form of suitable gloves should be used only for handling hot objects, glass or sharp-edged items.
- ▶ 10. Wear appropriate clothing for the job (i.e. do not wear short sleeve shirts or short pants when welding).

## MILLING MACHINE SAFETY

## Lathe Safety

- ▶ 1. Make sure that the chuck or faceplate is securely tightened onto the lathe spindle.
- ▶ 2. Remove chuck keys immediately after use.
- ▶ 3. When installing the chuck or faceplate do not use machine power.
- ▶ 4. Move the tool bit a safe distance from the collet or chuck when inserting or removing work.
- ▶ 5. Don't run the machine faster than the proper cutting speed.
- ▶ 6. Always clamp the cutter so it protrudes a short distance from the toolholder to prevent it from breaking or chattering.

## General Safety Rules

- ▶ 11. Never indulge in horseplay in the shop areas.
- ▶ 12. All machines must be operated with all required guards in place.
- ▶ 13. A brush should be used for removing chips, shavings, etc. from the work area. Never use your hands.
- ▶ 14. Keep all body parts clear of the point of operation of machines by using special tools or devices, such as, push sticks, hooks, pliers, etc. NEVER use a rag near moving machinery.
- ▶ 15. A hard hammer should not be used to strike a hardened tool or any machine part. Use a soft faced hammer.

## Milling Machine Safety

- ▶ 1. Work must be clamped securely in a vise and vise clamped tightly to the table, or, work must be clamped securely to the table.
- ▶ 2. Make sure cutter is rotating in the proper direction before cutting material.
- ▶ 3. Before running machine the spindle should be rotated by hand to make sure it is clear for cutting.
- ▶ 4. Make sure the power is off before changing cutters (use the emergency stop button).

## Lathe Safety

- ▶ 7. Always make sure that the tool (insert) is sharp and has the proper clearance. Ask for assistance when making adjustments.
- ▶ 8. If work is turned between centers, make sure that proper adjustment is made between centers and that the tailstock is locked in place.
- ▶ 9. Do not grasp or touch chips or turnings with your fingers, use the brush on the tool tray.
- ▶ 10. Turn off the lathe before clearing chips and use a brush. Do NOT vacuum the chips because they will clog the vacuum.

## General Safety Rules

- ▶ 16. Keep the floor around machines clean, dry and free from trip hazards. Do not allow chips to accumulate.
- ▶ 17. Think through the entire job before starting. Ask the instructor if you are ever unsure for any reason.
- ▶ 18. Before starting a machine, always check it for correct setup and always check to see if machine is clear by operating it manually, if possible.

## Milling Machine Safety

- ▶ 5. Never run the machine faster than the correct cutting speed.
- ▶ 6. Make sure that the machine is fully stopped before taking any measurements.
- ▶ 7. Always use cutters which are sharp and in good condition.
- ▶ 8. Don't place anything on the milling machine table such as wrenches, hammers, or tools.
- ▶ 9. Always stay at the machine while it is running.

## Lathe Safety

- ▶ 11. Turn chuck or faceplate through by hand before turning on the power to be sure there is no binding or clearance problems.
- ▶ 12. Always stop the machine before taking measurements.
- ▶ 13. Before cleaning the lathe, remove tools and place them in their proper position on the tool tray.
- ▶ 14. Keep tool tray drawer closed while machining so the chips don't fall in it.

## GENERAL LABORATORY SAFETY

TECH 3311  
MANUFACTURING PROCESSES

1

### GENERAL SAFETY

Permission: Always obtain permission from the instructor before using a machine.

Clothing: Avoid wearing loose clothing. Button or roll up sleeves. Remove or clasp ties securely.

Jewelry: Remove rings, bracelets, and necklaces.

Eye protection: Always wear safety glasses when in the laboratory or working and/or watching someone work with tools.

### GENERAL SAFETY

Hand protection: Keep your hands away from moving parts of the machine. Use a brush to clean off workbenches or machines. Only wear gloves when handling rough lumber.

Safety guards: Check and adjust all guards before using a machine.

Adjustments: Make sure a machine is properly adjusted for your application before turning it on.

3

### GENERAL SAFETY

Stopping: Do not leave or adjust a machine until it has come to a complete stop.

Hair: All long hair must be tied back, so it will not get caught in rotating devices.

Lumber handling: Never carry long pieces of wood vertically (over 6'). It may hit fluorescent lights which contain toxic materials. One person should be on each end of a board over 6' long.

Tool handling: Always carry tools with their sharp point down.

### GENERAL SAFETY

Vise: Never leave sharp tools or materials sticking out of a vise.

Tool use: Cut away from your body and towards the center of a workbench.

Cords: Make sure power cords to electric tools are pulled back away from the cutting edge. Do not let cords dangle.

### QUIZ TIME

- Take out a quiz sheet and write your name and the date on it.
- Close your books and notes and put them away.
- Move away from your neighbor and only look at your own paper.
- Good luck to you.

5

6

7

### GENERAL SAFETY

Stopping: Do not leave or adjust a machine until it has come to a complete stop.

Hair: All long hair must be tied back, so it will not get caught in rotating devices.

Lumber handling: Never carry long pieces of wood vertically (over 6'). It may hit fluorescent lights which contain toxic materials. One person should be on each end of a board over 6' long.

Tool handling: Always carry tools with their sharp point down.

### GENERAL SAFETY

Vise: Never leave sharp tools or materials sticking out of a vise.

Tool use: Cut away from your body and towards the center of a workbench.

Cords: Make sure power cords to electric tools are pulled back away from the cutting edge. Do not let cords dangle.

### QUIZ TIME

- Take out a quiz sheet and write your name and the date on it.
- Close your books and notes and put them away.
- Move away from your neighbor and only look at your own paper.
- Good luck to you.

5

6

7

### QUESTION 2

- What must you always check and adjust before using a machine?
  - A. Power rating
  - B. Motor speed
  - C. Hydraulic lines
  - D. Safety guards
  - E. None of these

### QUESTION 3

- What should you remember about hair regarding safety?
  - A. Wash it because it will catch on fire if it comes into contact with an open flame.
  - B. Always wear a hair net.
  - C. Keep it cut short so it doesn't get caught in binding parts.
  - D. Tie it back so it doesn't get caught in rotating devices.
  - E. None of these

### QUESTION 4

- What should you remember about vises?
  - A. Smoking and drinking are not good for you.
  - B. Tighten them when not in use.
  - C. Don't leave sharp objects sticking out of them.
  - D. Both B&C
  - E. None of these

9

10

11

# Appendix F: Peer Review Form

**Peer Observation  
Processes Soules College  
of Business**

**The University of Texas at Tyler**

**Statement of purpose of peer observation process:**

The purpose of this policy is to honor the importance of teaching by providing a system for formative feedback designed to strengthen teaching in the Soules College of Business at the University of Texas at Tyler. The university recognizes the essential contribution of its faculty members to the quality of students' education and learning experiences and supports faculty development in all aspects of instruction. An effective tool for faculty development is formative peer observation of teaching, which involves a constructive and open review of teaching for the sole purpose of fostering improvement.

The goal of the peer observation process is to improve teaching and student learning and should serve as a tool for mentoring. The peer observation process should foster a culture of teaching excellence through collegial dialogue. Thus, the outcome of the faculty peer observation process should be a reflective summary written by the observed faculty member describing any steps taken or changes made towards the enhancement of teaching and improvement of student learning.

**A. Frequency of Peer Observations:**

For tenure track Assistant Professors, peer observations will be conducted every other year unless an unfavorable review determines the need for additional observations.

Tenured faculty will have a peer observation every three years. If a post-tenure review determines that a tenured faculty member needs to improve in the area of teaching, more frequent peer observations can be scheduled.

Beginning fall 2015 full-time lecturers, senior lecturers, visiting faculty, and clinical faculty would be observed every three years.

The Associate Dean will develop and maintain a rotation schedule for observations.

**B. Timeline for peer observation process:**

Chairpersons should identify and notify each faculty member who will be observed by a peer at least two weeks prior to the beginning of that semester. The chairperson and faculty member should determine in which course the observation will occur and in which semester. A recommended timeline is provided below.

<i>Timeline</i>	<i>Action</i>	<i>Responsible Party</i>
At least two weeks* prior to first day of the semester.	Provide Faculty Member with department guidelines.	Department chair or unit head or equivalent
No later than the third week of the semester.	Provide the names of three acceptable Observers to chair.	Faculty Member
No later than fourth week of semester.	Assign Peer Observer	Department chair
No later than fifth week of semester.	Meet to discuss teaching materials and set date(s) for observation.	Faculty Member and Peer Observer.
No later than twelfth week of semester.	Peer observation(s)	Peer Observer
Within one week of observation.	Post-observation meeting	Faculty Member and Peer Observer
No later than last day of class.	Peer Observation Report provided to chair.	Faculty Member

\* In the event a faculty member is hired within one month of the beginning of a semester, their observation would be moved to the next semester to allow reasonable notification.

Section A of the Peer Observation Report will be provided to the department chair or unit head or equivalent (or to the dean in the event the faculty member being observed is the department chair) no later than the last day of classes for the semester in which the observation takes place. The department chair, unit head, or equivalent or dean will file the report with the Faculty Member's record.

By October 1 each year, the unit responsible for peer observation of teaching will submit to the Provost's office a list of faculty who were observed during the prior academic year.

### **C. Process for identifying peer observers**

All full-time faculty in the Soules College of Business may serve as Peer Observers. Faculty members will generally conduct no more than two peer observations in any academic year.

### **D. Description of how detailed guidance and opportunity for training will be provided to observers:**

Before peer observations are conducted peer observers shall be provided detailed guidance and opportunities for training on effective observation procedures using observation instruments, pre- and post- observation conferencing, and on the preparation of summary statements based on observations.

**E. Assurance that observed faculty members will have a say in the selection of peer observers**

Faculty members will submit three peer observers from a list of approved observers. The observer may come from any department within the Soules College of Business, but must be at least at the same rank as the instructor.

## **F. Number of visits per observation**

The number of observations is at the discretion of the faculty member and peer observer. A minimum of one visit is required.

## **G. Assurance that class visits will occur only after prior notification and discussion with the faculty member being observed:**

Observations will be conducted in accordance with the table in section B. of this document.

## **H. In classes consisting of lecture and lab will both lecture and lab be observed?**

In classes consisting of lecture and lab the number of observations is at the discretion of the faculty member and peer observer.

## **I. Description of content of peer observation report: (Refer to Appendix A for required content.)**

- i. Number and title of course observed
- ii. Date of report
- iii. Name and signature of observer
- iv. Date of pre-observation meeting between observer and instructor, at which the syllabus and assignments are reviewed, special instructor concerns are addressed, and a mutually agreed class and date are specified
- v. Date of classroom or online observation
- vi. An instrument that reflects methods by which instructor engages students

in active learning

vii. Date of post-observation meeting of observer with instructor, at which the observation was discussed

viii. Instructor's signature affirming that the discussions took place and Sections B and C.

**J. Attach observation instrument(s) that will be used by the unit.**

Peer observation instrument is in Appendix B below.

## Description of requirements for pre- and post-observation meetings.

The purpose of the pre-observation meeting between the peer observer and instructor is to help the observer understand the context of the classroom, receive and review a copy of the syllabus and selected instructional materials, address special instructor concerns, and mutually agree on a class and date for the observation. The observation instrument will be reviewed and discussed as part of the pre-observation conference. For online courses the aforementioned information can be shared electronically through the use of appropriate technologies.

A post observation conference must take place soon after the observation. During the post-observation session the instructor will receive a Peer Observation Report prepared by the peer observer. The report will include observed strengths and suggested areas for improvement (Section B). Feedback should be constructive, specific, focused, action oriented, clear, honest and positively phrased. The instructor will prepare a summary statement on how he/she will use suggestions from the observation (Section C).

### K. Statement regarding the confidential nature of the peer observation report and pre-and post-observation meetings.

The Peer Observation Report is considered “collegial communication” between observer and instructor. Section B of the Observation Report is considered to be confidential and will not be submitted to the department by the observer. It may be given to the department by the instructor.

**Approved by:**

**Dean:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Provost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Appendix A      Peer Observation Report Requirements**

Section A

(This section must be included in T&P package)

Faculty Member: \_\_\_\_\_ Date: \_\_\_\_\_

Course: \_\_\_\_\_

Observer: \_\_\_\_\_

Date of Pre-Observation Meeting: \_\_\_\_\_

Date of Observation: \_\_\_\_\_

Date of Post-Observation Meeting: \_\_\_\_\_

---

Peer Observer's Signature

---

Instructor's Signature Affirming the Discussions Occurred

Section B

(Written report of what was observed and given to faculty member by peer observer)

Section C

(Narrative prepared by observed faculty member describing what was learned from the observation)

## Appendix B Peer Observation instrument

### Peer Observation Checklist

Faculty member being observed \_\_\_\_\_ Course \_\_\_\_\_

Observer \_\_\_\_\_ Date \_\_\_\_\_

	Observed (check if yes)	Comments
Faculty colleague clearly communicates the purpose of class session and instructional activities.		
Faculty colleague uses concrete examples and illustrations that clarify the material.		
Faculty colleague uses a variety of activities to ensure all students are engaged.		
Faculty colleague challenges students to think analytically.		
Faculty colleague uses activities in class to determine whether students understand course material.		
Faculty colleague fosters student-to student interaction.		
Faculty colleague links new material to previously learned concepts.		
Faculty colleague uses visuals and handouts where appropriate to accompany verbal presentation.		
Faculty colleague requires students to be active (e.g., completing a task, applying concepts, or engaging in discussion instead of passively listening).		
Students are comfortable asking questions.		
Students actively participate in class activities and discussion.		

Include comments on next page

Additional comments/observations:

Major strengths demonstrated by faculty colleague in this peer observation:

Suggested areas for faculty colleague's improvement based upon this peer observation:

# Appendix G: Faculty Evaluation Form

**SOULES COLLEGE OF BUSINESS**  
**PERFORMANCE EVALUATION**

Faculty Member: \_\_\_\_\_

Evaluation Year: \_\_\_\_\_

Current Rank: \_\_\_\_\_

Rating Scale:

- 1 = Unsatisfactory
- 2 = Does not meet expectations
- 3 = Meets expectations
- 4 = Exceeds expectations

Rating x Weight\* = Score

Teaching	_____	_____	=	_____
Research	_____	_____	=	_____
Service	_____	_____	=	_____
Administration	_____	_____	=	_____
Average Score				_____

\*Distribution of effort percent

Meeting appropriate faculty qualification status?  
 Yes      Check Status:    SP       IP       SA       PA  
 No

If on tenure track, progress toward Tenure/Promotion? *Complete narrative on Page 2*  
 Yes       Some Degree       No

If Associate, progress toward promotion? *Complete narrative on Page 2*  
 Yes       Some Degree       No

Meeting expectations regarding collegiality (1-4 scale) \_\_\_\_\_

Distribution of effort for next academic year (complete goals for each area on reverse):

Teaching	_____%
Research	_____%
Service	_____%
Administration	_____%

Chair/Coordinator: \_\_\_\_\_

Date: \_\_\_\_\_

I have read and received a copy of this evaluation:

Faculty Member: \_\_\_\_\_

Date: \_\_\_\_\_

Dean: \_\_\_\_\_

Date: \_\_\_\_\_

**If not meeting appropriate faculty qualification status, why:**

**Progress toward Tenure/Promotion. Receiving a “meets or exceeds expectations” does not guarantee promotion/tenure:**

Areas of strength:

Areas requiring work:

**Progress toward Promotion:**

Areas of strength:

Areas requiring work:

**Summarize goals for next year in each area:**

Teaching:

Research:

Service:

# Appendix H:

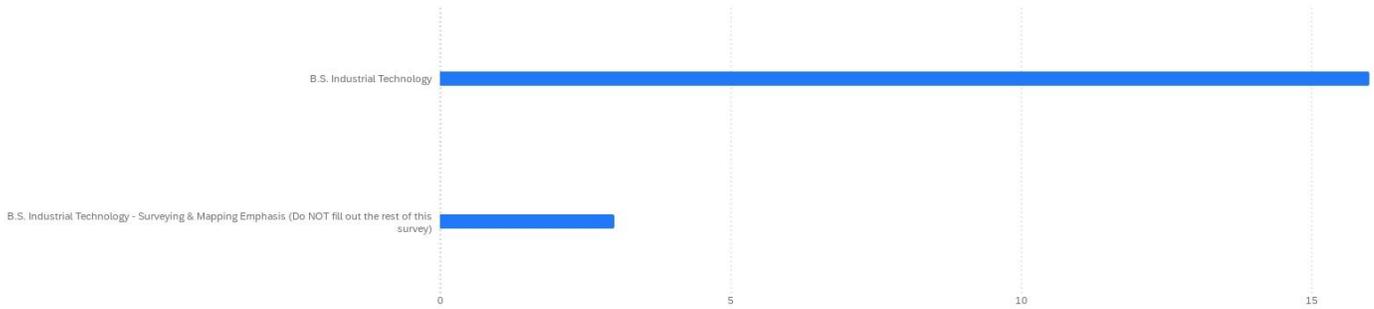
# Program Graduate Exit Information

# Page 1

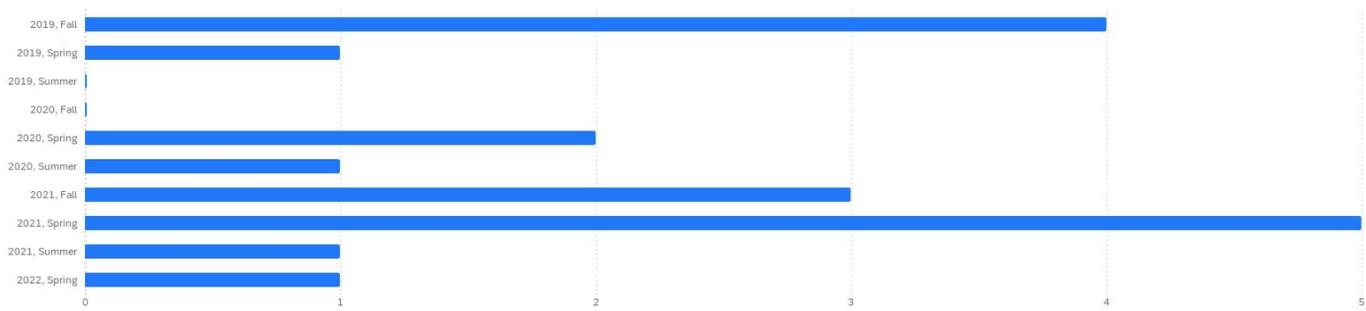
2022 IND TECH GRAD SURVEY

Mar 11, 2024 10:38 PM

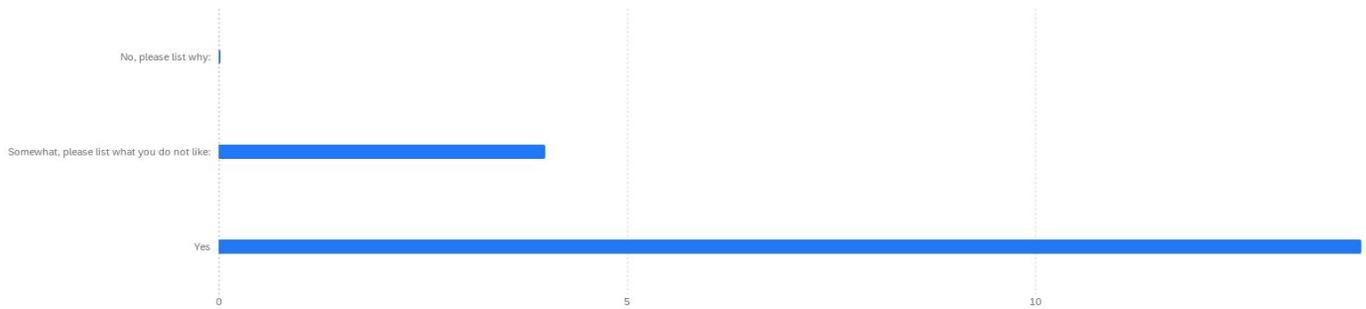
What was your degree option? ⓘ



Graduation date (semester and year, i.e. Spring 2022): ⓘ



I was satisfied with the overall academic instruction and course content offered in the Department of Technology. ⓘ



I was satisfied with the overall academic instruction and course content offered in the Department of Technology.: Somewhat, please list what you do not like: ①

Good people, not great teachers at Longview campus. Hard to learn. Fly through stuff. Didn't know everything in lab, some students taught lab skills.

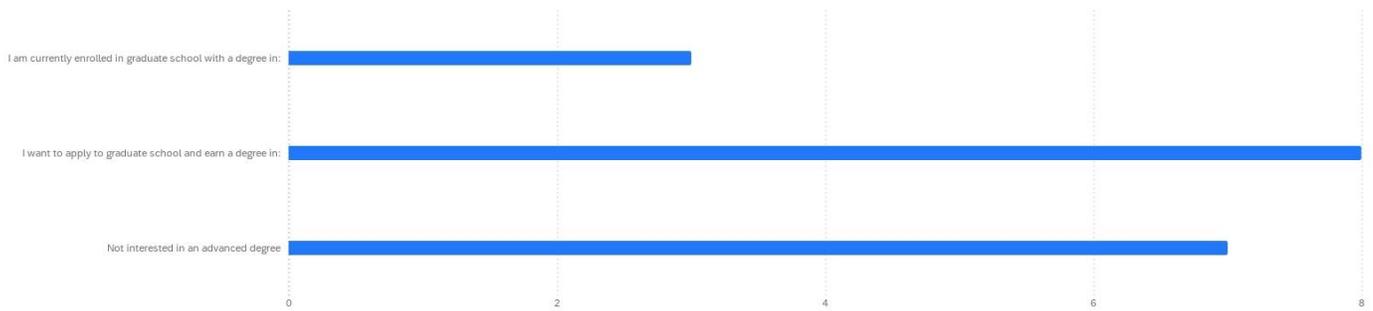
most courses had little to do with surveying field.

I would have liked to see more certifications and more advanced classes for things such as lean. Perhaps a more focused degree plan with an emphasis on robotics, safety, manufacturing etc would help other find a job. Similar to how there is a surveying and mapping emphasis.

I was satisfied with the overall academic instruction and course content offered in the Department of Technology.: No, please list why: ①

No data found - your filters may be too exclusive!

Advanced degree: ①



Advanced degree:: I want to apply to graduate school and earn a degree in: ①

Industrial Management

Undecided

Industrial Tech

Industrial Management

Business administration

Industrial Management

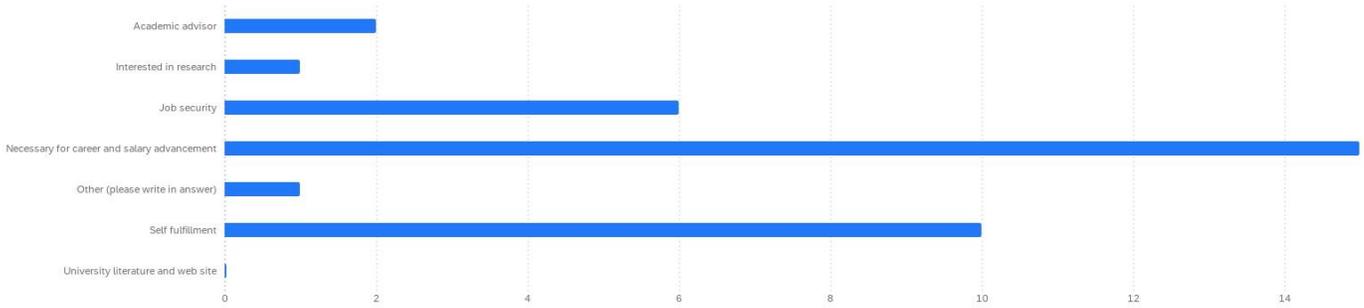
Advanced degree: I am currently enrolled in graduate school with a degree in:

industrial management

Industrial Management

Industrial Management

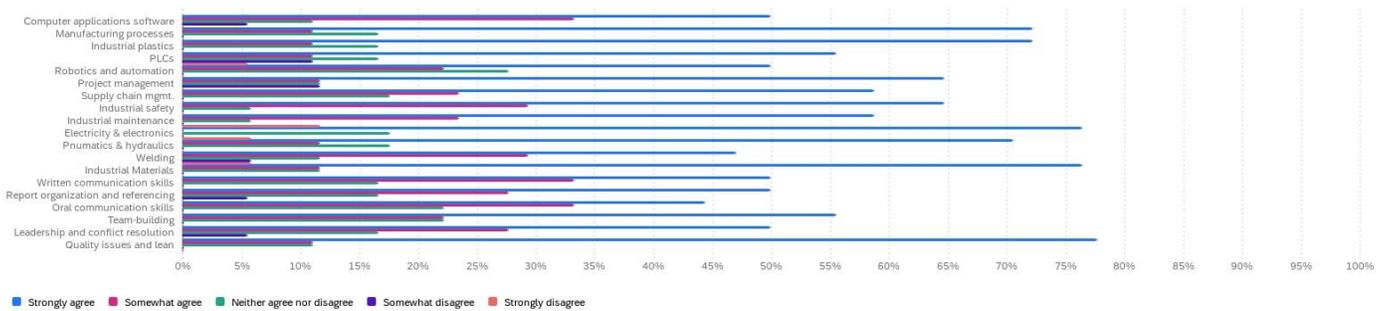
Please select the most important factors that would influence you to pursue an advanced degree in the Department of Technology at UT Tyler.



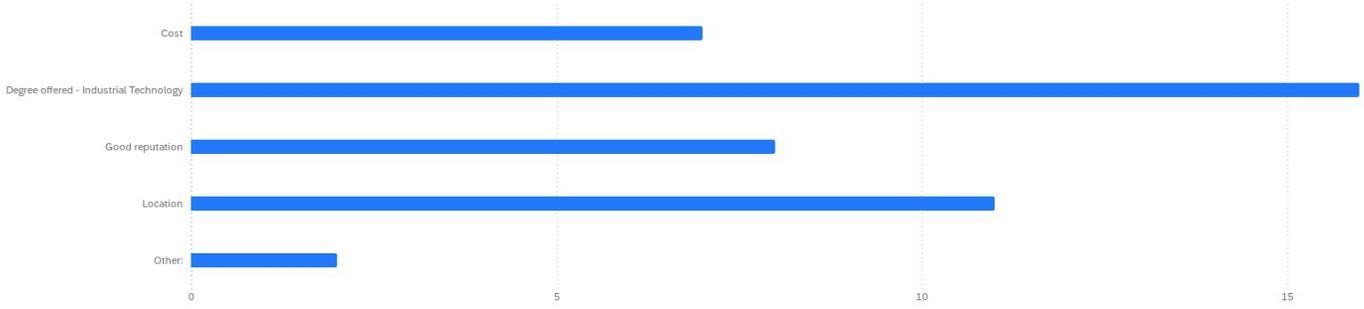
Please select the most important factors that would influence you to pursue an advanced degree in the Department of Technology at UT Tyler: Other (please write in answer)

Wouldn't do it. Happy where I'm at.

Please review the following basic skills and how well you feel they were covered in the Industrial Technology degree.



What was/were your primary reasons for attending UT Tyler? (Select all that apply) ⓘ

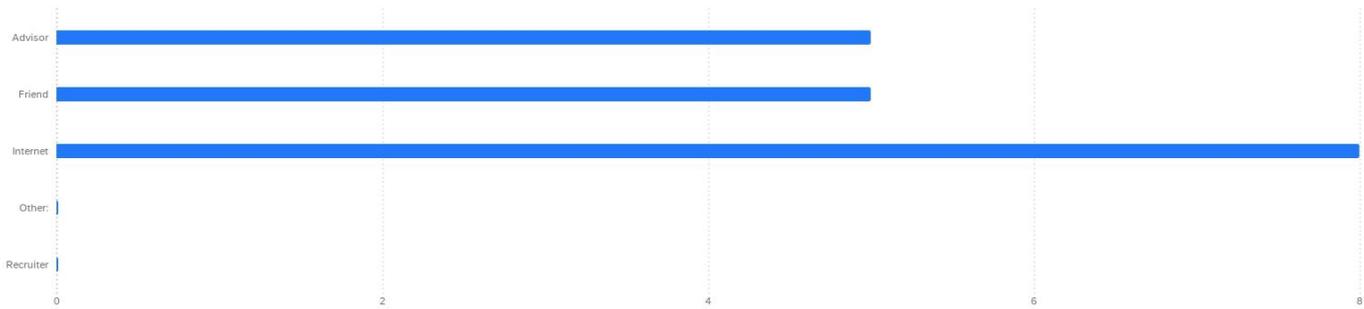


What was/were your primary reasons for attending UT Tyler? (Select all that apply): Other: ⓘ

State Board Licensing Requirement at the time

I knew I wanted to work in Manufacturing/Engineering

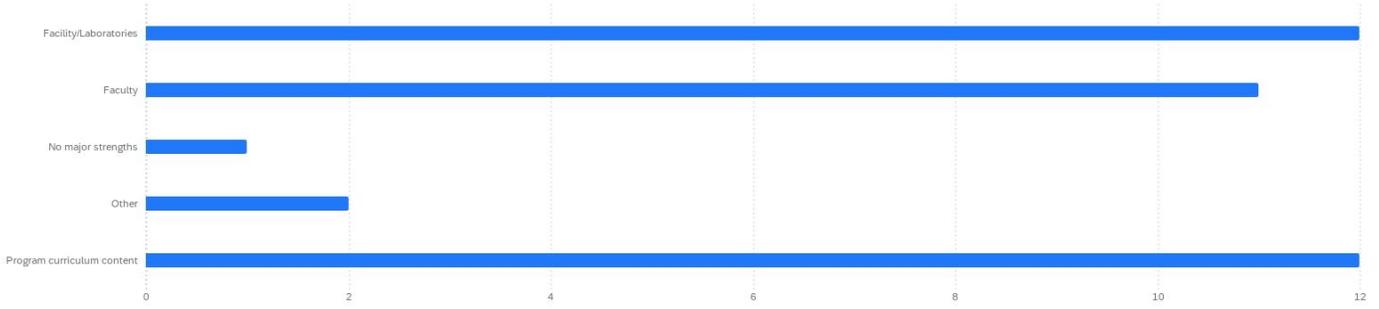
How did you find out about the Industrial Technology program at UT Tyler? ⓘ



How did you find out about the Industrial Technology program at UT Tyler?: Other: ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the strengths of the Industrial Technology program? ⓘ



What do you consider to be the strengths of the Industrial Technology program?: Program curriculum content ⓘ

Degree plan layout and course selection

CIM, Polymer Processing, Industrial Materials, Fluid Power Systems, and Project Management all provided incredible valuable information in an engaging format.

Very well rounded curriculum, important to pay attention and take it seriously

What do you consider to be the strengths of the Industrial Technology program?: Faculty ⓘ

Dr. Miller, Dr. Lawrence, and Professor Lee were exceptional instructors.

Wonderful Faculty with lots of experience relevant to being in the field.

What do you consider to be the strengths of the Industrial Technology program?: Facility/Laboratories ⓘ

Welding lab is cool. Longview campus is convenient

Facilities in the Soules building were state-of-the-art, and a massive improvement over those in HPR

Brand new, they're awesome

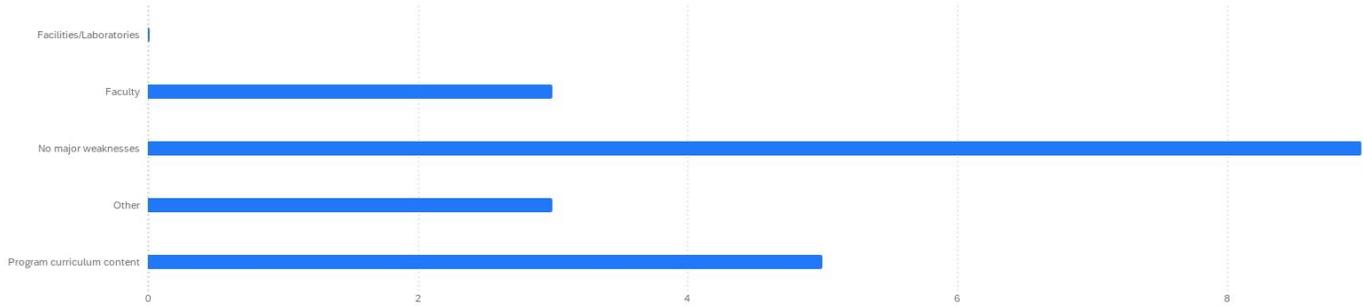
Lots of good quality equipment to learn on.

What do you consider to be the strengths of the Industrial Technology program?: Other

Many of the outside instructors brought in for specific courses brought invaluable first-hand knowledge and experience of the course material to the classroom. (Professor Lee especially)

The Hands on experience learning.

What do you consider to be the weaknesses of the Industrial Technology program?



What do you consider to be the weaknesses of the Industrial Technology program?: Program curriculum content

I think the CAD courses could use an overhaul. The facilities are up to snuff, but the instruction was lacking in my experience. I feel like it should be a higher priority, as CAD is only going to become a more desirable and hireable skill in the next several years.

What do you consider to be the weaknesses of the Industrial Technology program?: Faculty

Some faculty need to work on student communication skills.

Dr. Ali, while incredibly knowledgeable, is unable to effectively communicate with his students. He communicates well when presenting prepared material, but when questions are posed, the language barrier becomes more of a problem. I know significantly less about PLC's than I'd like to because I was unable to articulate my questions in a way that Dr. Ali could effectively answer, and I'm generally a very competent communicator. Dr. Fazzaro, while again very knowledgeable, did not seem to put much effort into his courses in my experience. I have no doubt that he understood the material being covered, but his lack of enthusiasm made it very difficult to engage. I felt like I put much more into his courses than he did, which is unfortunate as I paid for those courses and he got paid to teach them. That kind of transaction would leave a very sour taste in my mouth in a business setting.

What do you consider to be the weaknesses of the Industrial Technology program?: Facilities/Laboratories ⓘ

No data found - your filters may be too exclusive!

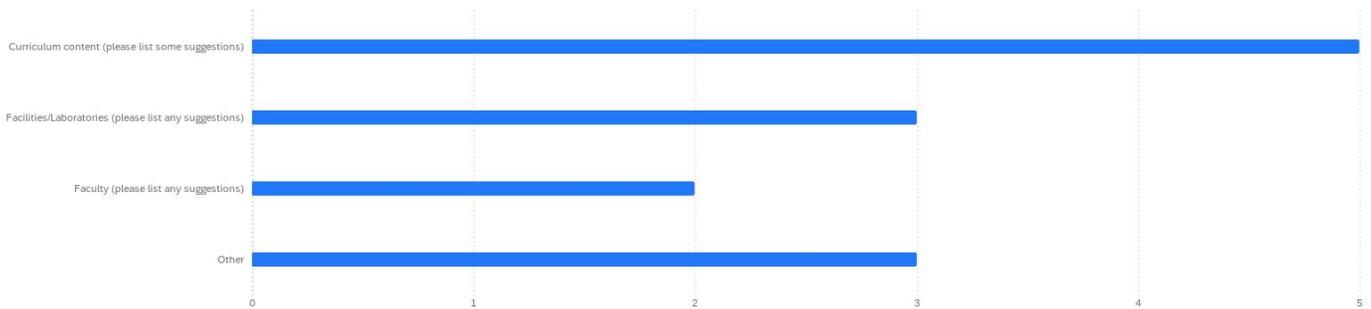
What do you consider to be the weaknesses of the Industrial Technology program?: Other ⓘ

Collaborating with others to find the correct solution to a given problem has been a huge part of my work experience thus far, and i was very seldom asked to do that during my time in the program. More group projects is not necessarily my suggestion, but rather a general encouragement to collaborate everyday in the classroom. learning to lean not only on your own knowledge and understanding, but that of those around you is incredibly important in the work place.

Online courses were poorly structured due to the early stages of Covid (completely understandable).

Teachers explained they needed more teachers to offer more classes.

What suggestions would you offer towards improving the Industrial Technology program? ⓘ



What suggestions would you offer towards improving the Industrial Technology program?: Curriculum content (please list some suggestions) ⓘ

Don't just read word for word on slides. Teach it. People are different learners.

For the S & M focus, gear the program more toward surveying and less toward HR. As surveyors we will not go into HR unless we either start our own company or choose to separate from the actual performance of surveying duties to become part of an HR department.

More advanced classes for those that wish to somewhat specialize. Industrial Technology was a very broad degree and I believe having more advanced classes in things like PLCs, supply chain management and lean would allow students to not only find their potential area of expertise but also help prepare them for careers better.

Lean certifications

What suggestions would you offer towards improving the Industrial Technology program?: Facilities/Laboratories (please list any suggestions) ⓘ

Larger lab areas people are packed in like cordwood.

A 3D MJF Printer, and an more welding equipment

Perhaps the fact that it's an aspect of the business college instead of Engineering. I feel the facilities/labs would work more appropriately alongside the industrial engineering program, so the engineering students could use it too.

What suggestions would you offer towards improving the Industrial Technology program?: Faculty (please list any suggestions) ⓘ

Find more teachers to help offer classes. I had three advisors during my time there which I found quite odd.

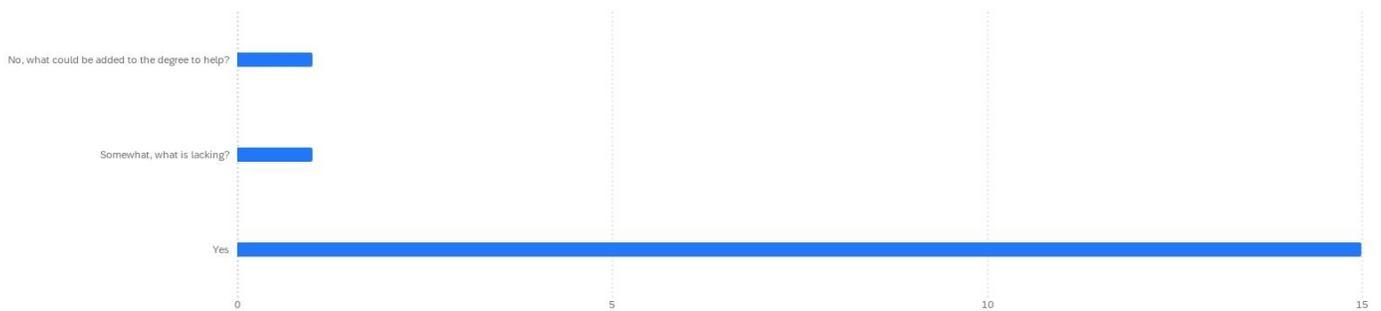
More Faculty is needed

What suggestions would you offer towards improving the Industrial Technology program?: Other ⓘ

see above sections for my suggestions

More students so there are more class time options.

My employer is satisfied with my degree preparation and ability to execute assigned job responsibilities and tasks. ⓘ



My employer is satisfied with my degree preparation and ability to execute assigned job responsibilities and tasks.: Somewhat, what is lacking? ⓘ

Most careers in my field require CATIA instead of AutoCAD

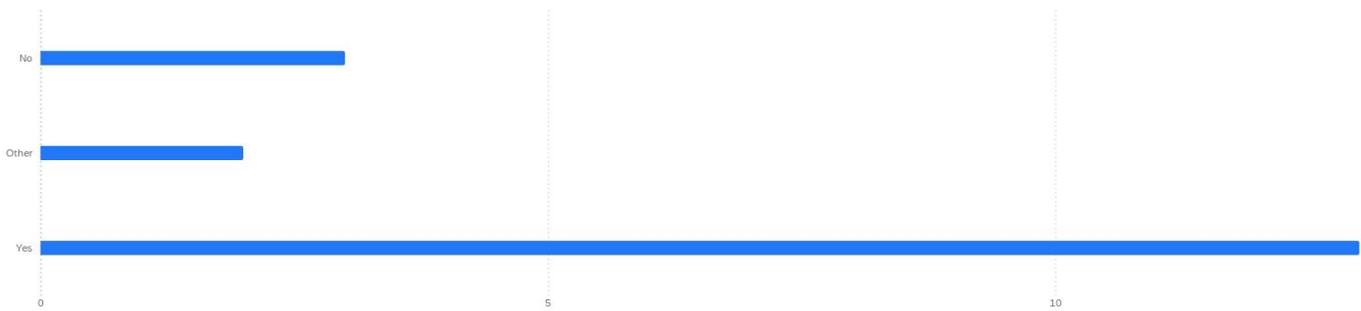
---

My employer is satisfied with my degree preparation and ability to execute assigned job responsibilities and tasks.: No, what could be added to the degree to help? ⓘ

So far I have not been successful in gaining a job because of my degree. I instead was able to secure a position with my previous work experience. The degree is explained as an extra for them. So far it has been difficult to break into a career in something such as quality or supply chain management because I am lacking certifications.

---

I was promoted or was able to obtain my current job position because I completed my degree in industrial technology. ⓘ



I was promoted or was able to obtain my current job position because I completed my degree in industrial technology.: Other ⓘ

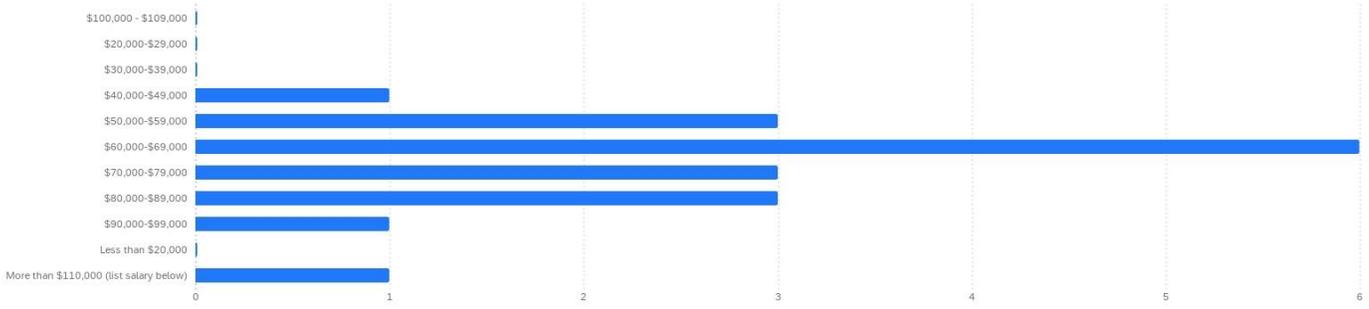
It was more due to the fact I was more qualified to acquire a survey license than the actual degree itself. I had more boxes checked toward gaining licensure.

---

My position was secured mainly because of previous experience. The degree showed dedication and an ability to learn.

---

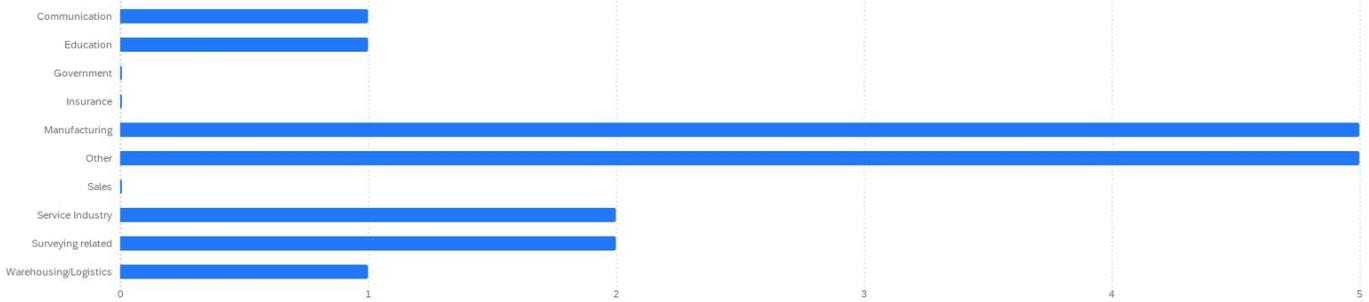
What is your current annual salary? NOTE: We will average this data and never specifically list your salary. ⓘ



What is your current annual salary? NOTE: We will average this data and never specifically list your salary.: More than \$110,000 (list salary below) ⓘ

113,000

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)? ⓘ



What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)? Manufacturing ⓘ

Engineer

Manufacturing Engineer at PPG Aerospace

Quality Engineer

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Surveying related ⓘ

Survey Technician/ SIT

---

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Service Industry ⓘ

Designer associate. Oncor electric delivery.

---

I'm an Electric Distribution Designer for Oncor

---

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Communication ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Sales ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Insurance ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Warehousing/Logistics ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Education ⓘ

Department Chair School of Energy Panola College

---

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Government ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your primary job and job title (please type job title in text box and company's name)?: Other ⓘ

Industrial maintenance supervisor

---

Project Manager, Morrow Construction Inc.

---

Merchandising

---

Sales Engineer, Adams Engineers and Equipment Inc.

---

Business Systems Analyst - Operations

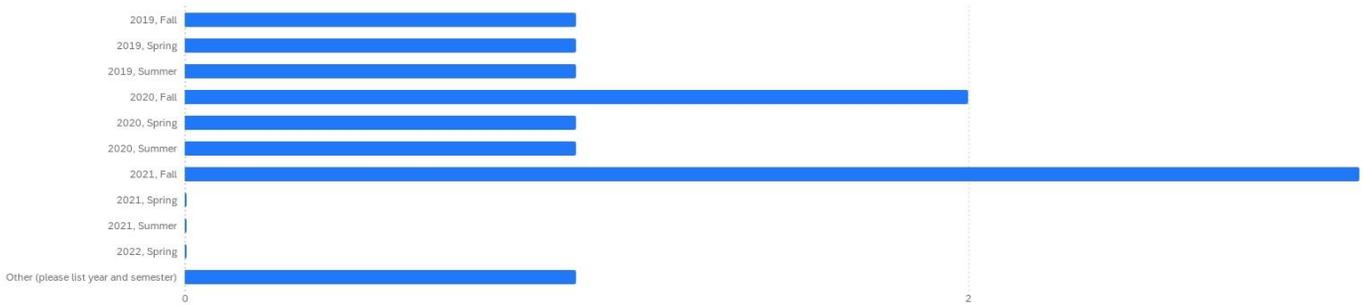
---

# Page 1

## 2022 INDUSTRIAL MANAGEMENT GRADUATE EXIT SURVEY

Mar 11, 2024 10:42 PM

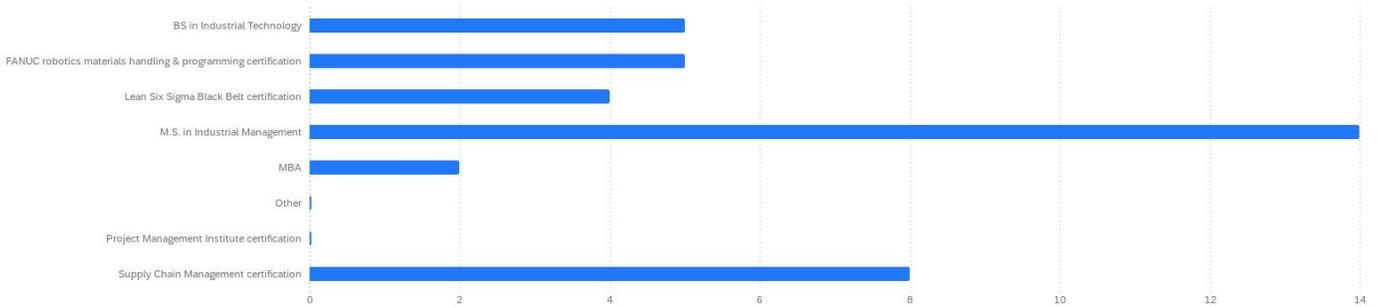
Your date of graduation was (example, Spring 2022): ⓘ



Your date of graduation was (example, Spring 2022):: Other (please list year and semester) ⓘ

2018

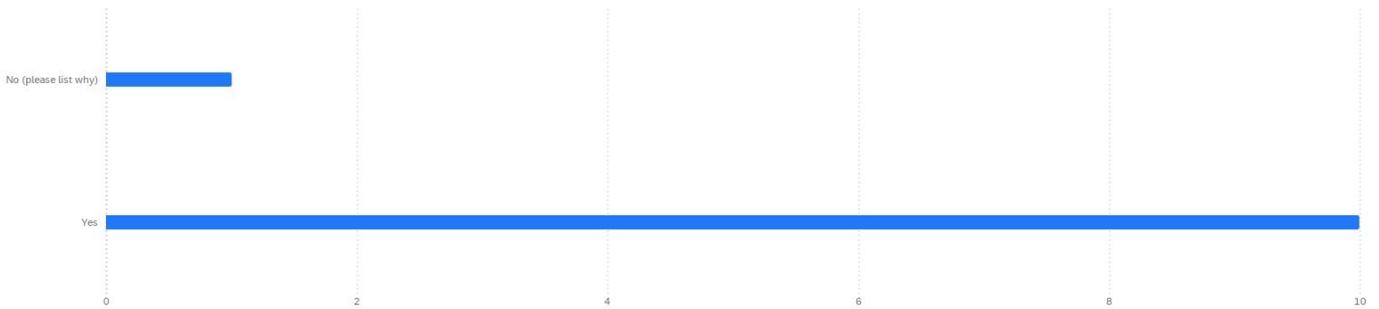
Please list all of the following that you earned at UT Tyler: ⓘ



Please list all of the following that you earned at UT Tyler: Other ⓘ

No data found - your filters may be too exclusive!

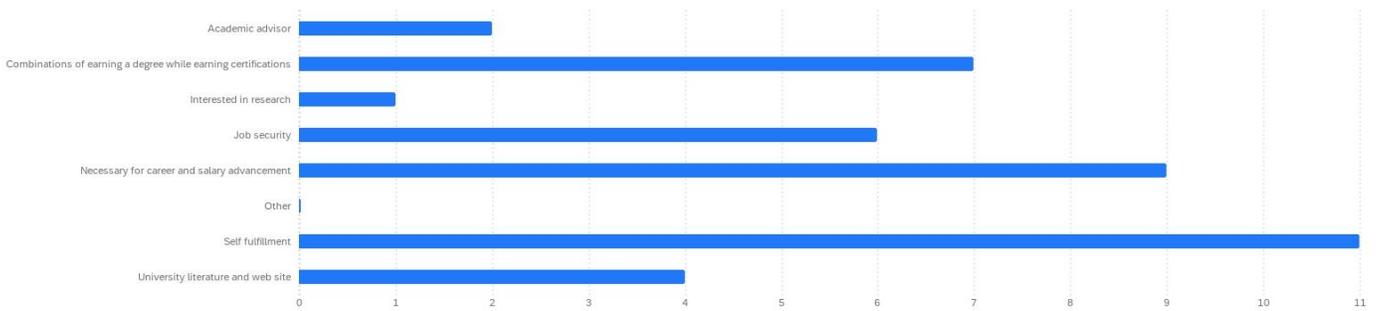
I am satisfied with the curriculum from the Department of Technology. ⓘ



I am satisfied with the curriculum from the Department of Technology.: No (please list why) ⓘ

With Covid I hoped I had more time to complete the certificates before graduation

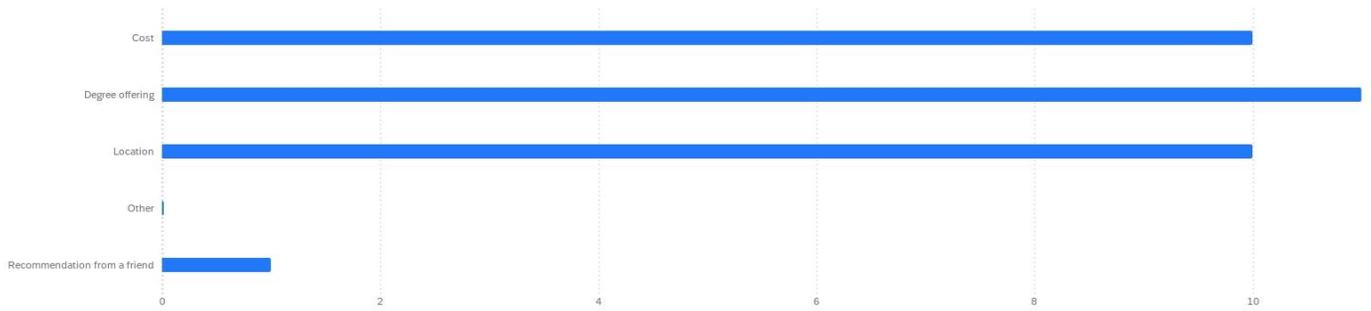
Please select any of the factors that influenced you to pursue an advanced degree in the Department of Technology at UT Tyler. ⓘ



Please select any of the factors that influenced you to pursue an advanced degree in the Department of Technology at UT Tyler.: Other ⓘ

No data found - your filters may be too exclusive!

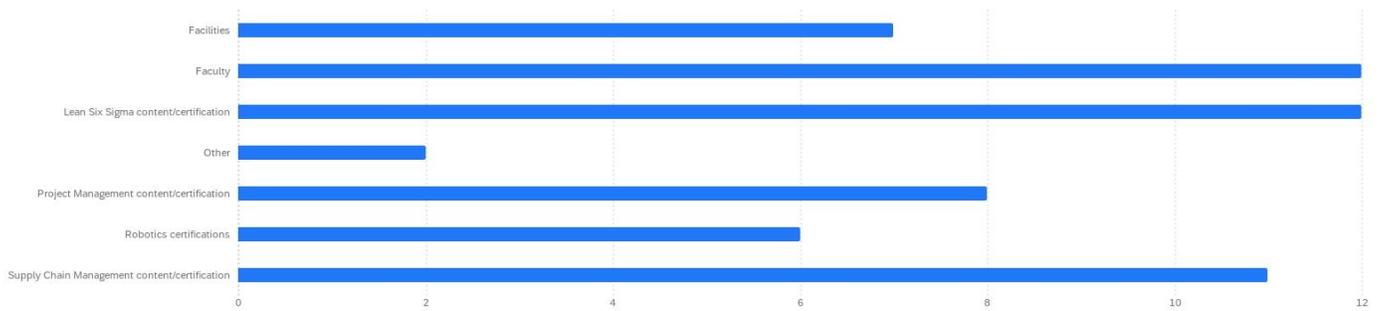
What was/were the main reason(s) for attending UT Tyler? ⓘ



What was/were the main reason(s) for attending UT Tyler?: Other ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the major strengths of the Department of Technology? Please select all that apply. ⓘ



What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Lean Six Sigma content/certification ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Supply Chain Management content/certification ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Project Management content/certification ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Robotics certifications ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Faculty ⓘ

No data found - your filters may be too exclusive!

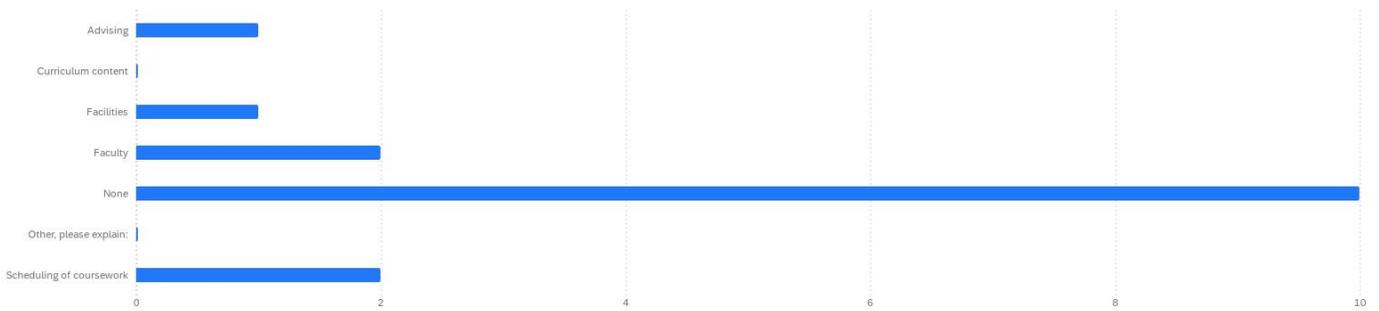
What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Facilities ⓘ

No data found - your filters may be too exclusive!

What do you consider to be the major strengths of the Department of Technology? Please select all that apply.: Other ⓘ

Dr. Miller is awesome.

Please list any weaknesses of the Department of Technology: ⓘ



Please list any weaknesses of the Department of Technology:: Faculty ⓘ

No data found - your filters may be too exclusive!

Please list any weaknesses of the Department of Technology:: Facilities ⓘ

The facilities are a joke, they cannot be legal, hopefully the new building will be better.

---

Please list any weaknesses of the Department of Technology:: Curriculum content ⓘ

No data found - your filters may be too exclusive!

Please list any weaknesses of the Department of Technology:: Scheduling of coursework ⓘ

No data found - your filters may be too exclusive!

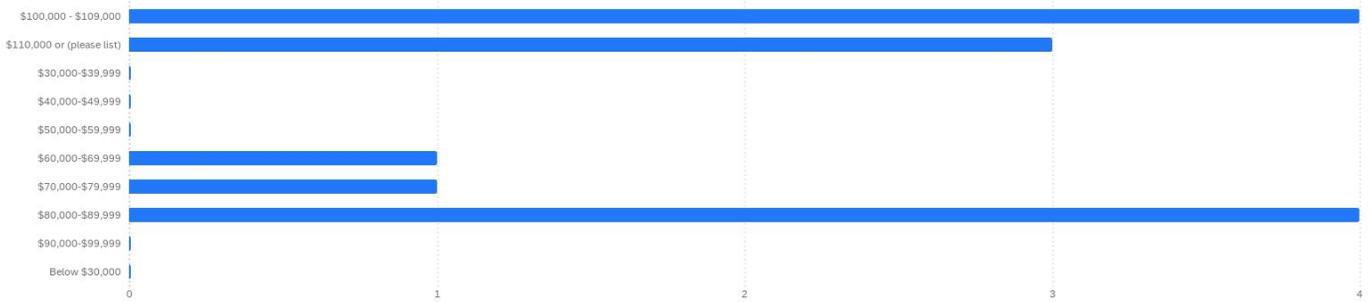
Please list any weaknesses of the Department of Technology:: Advising ⓘ

No data found - your filters may be too exclusive!

Please list any weaknesses of the Department of Technology:: Other, please explain: ⓘ

No data found - your filters may be too exclusive!

What is your current annual salary range? NOTE: This data will be compiled and your individual salaries will NEVER be revealed to anyone and this is a requirement for ATMAE accreditation. ⓘ



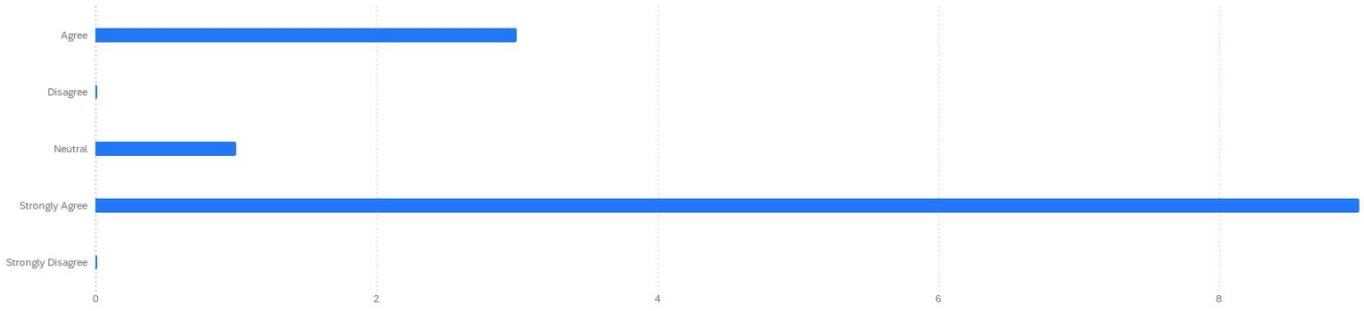
What is your current annual salary range? NOTE: This data will be compiled and your individual salaries will NEVER be revealed to anyone and this is a requirement for ATMAE accreditation.: \$110,000 or (please list) ⓘ

175000

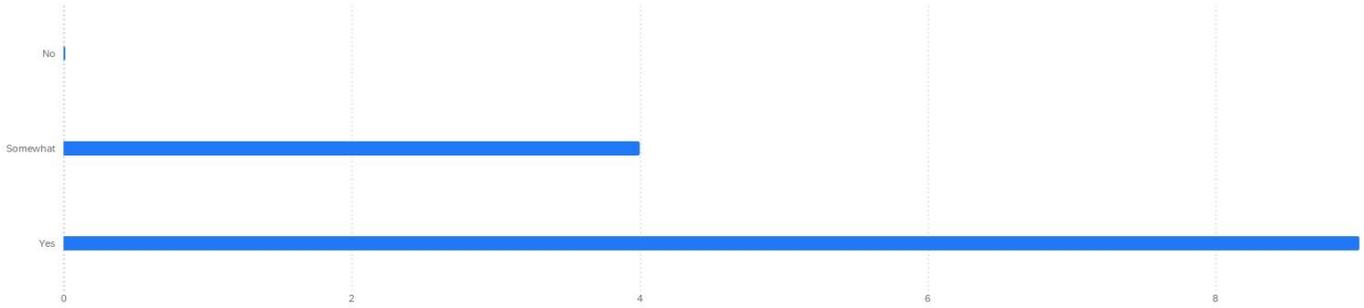
retired

143,000

Do you feel your employer is satisfied with your degree preparation and ability to execute assigned job responsibilities and tasks. ⓘ



Is your employment/occupation related to your degree? ⓘ



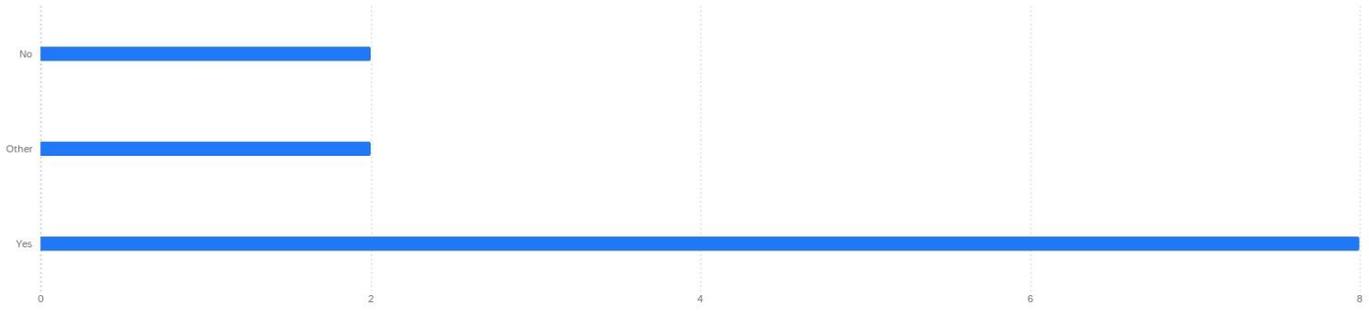
Is your employment/occupation related to your degree?: Somewhat ⓘ

No data found - your filters may be too exclusive!

Is your employment/occupation related to your degree?: No ⓘ

No data found - your filters may be too exclusive!

My employer has given me a raise, promoted me from my current job position, or I was able to obtain a better job after completing my degree. ①

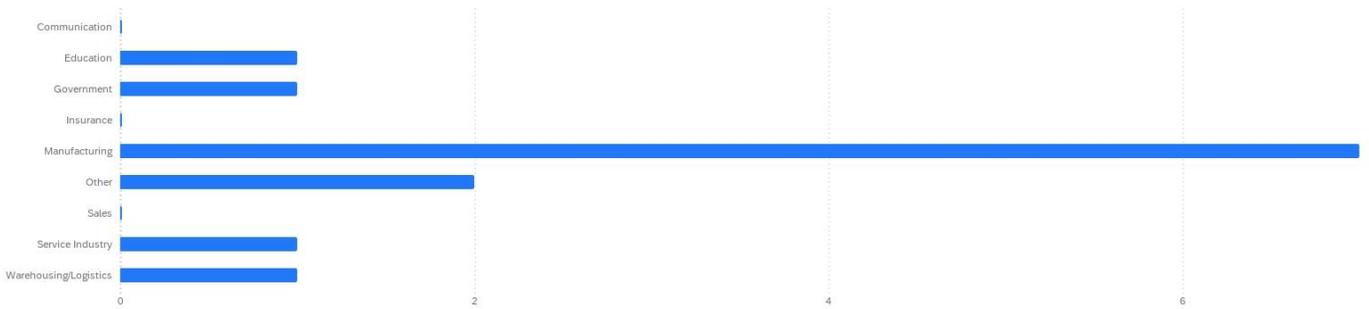


My employer has given me a raise, promoted me from my current job position, or I was able to obtain a better job after completing my degree.: Other ①

n/a

Was a factor in being converted from contractor to full time employee

What is the primary affiliation of your present job and job title (please type job title in box)? ①



What is the primary affiliation of your present job and job title (please type job title in box): Manufacturing ①

Manufacturing Engineer

Safety Engineer

Lockheed Martin / Project Manager and Operations Rep

What is the primary affiliation of your present job and job title (please type job title in box)?: Service Industry ⓘ

Director Continuous Improvement

---

What is the primary affiliation of your present job and job title (please type job title in box)?: Communication ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your present job and job title (please type job title in box)?: Sales ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your present job and job title (please type job title in box)?: Insurance ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your present job and job title (please type job title in box)? Warehousing/Logistics ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your present job and job title (please type job title in box)? Education ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your present job and job title (please type job title in box)? Government ⓘ

No data found - your filters may be too exclusive!

What is the primary affiliation of your present job and job title (please type job title in box)? Other ⓘ

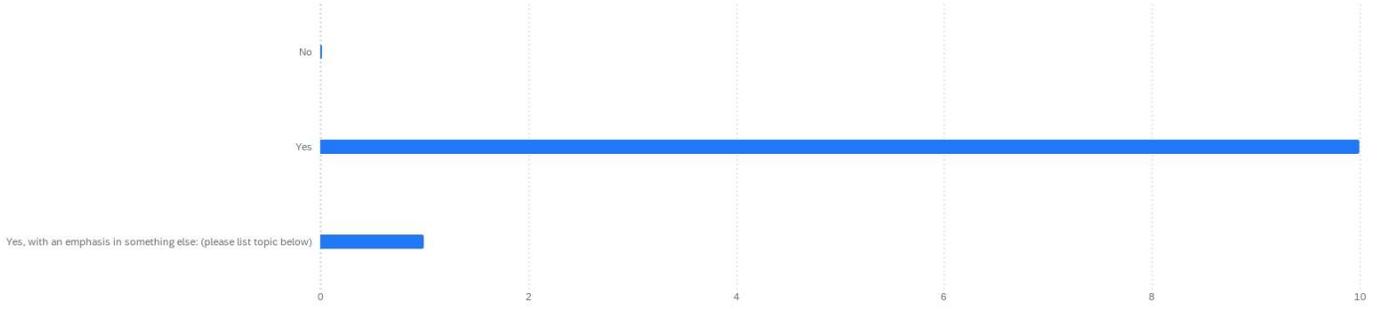
Oil and gas midstream

---

n/a

---

Would you be interested in UT Tyler offering a doctoral program in Technology Management with an emphasis in Industrial Management? ⓘ

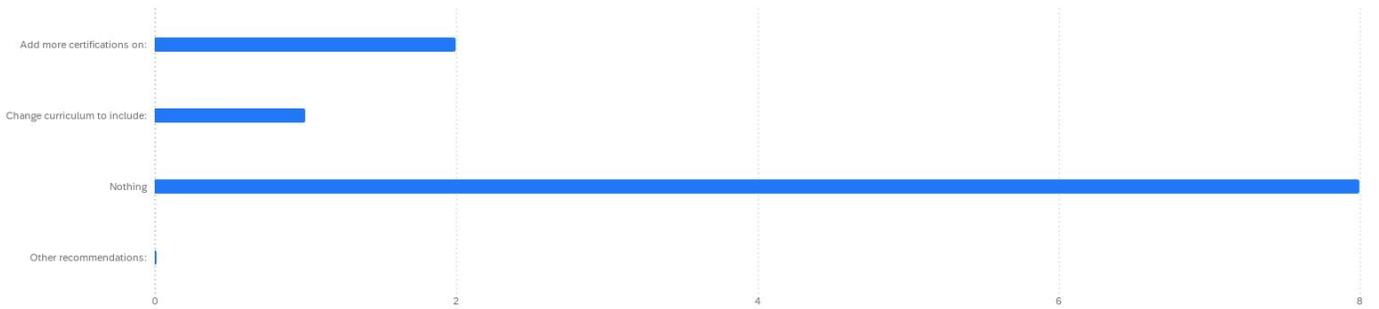


Would you be interested in UT Tyler offering a doctoral program in Technology Management with an emphasis in Industrial Management?: Yes, with an emphasis in something else: (please list topic below) ⓘ

Emphasis in network system planning

---

What could be done to improve the program? ⓘ



What could be done to improve the program?: Change curriculum to include: ⓘ

Industry 4.0, Smart Manufacturing, Mechatronics Certification

---

What could be done to improve the program?: Add more certifications on: ⓘ

No data found - your filters may be too exclusive!

What could be done to improve the program?: Other recommendations: ⓘ

No data found - your filters may be too exclusive!

Page 1

2022 IND TECH COURSE LEARNING OBJECTIVES RATING SURVEY

Mar 11, 2024 10:51 PM

Please list your name, position, and company so we can evaluate on how your answers reflect a certain type of industry. ⓘ

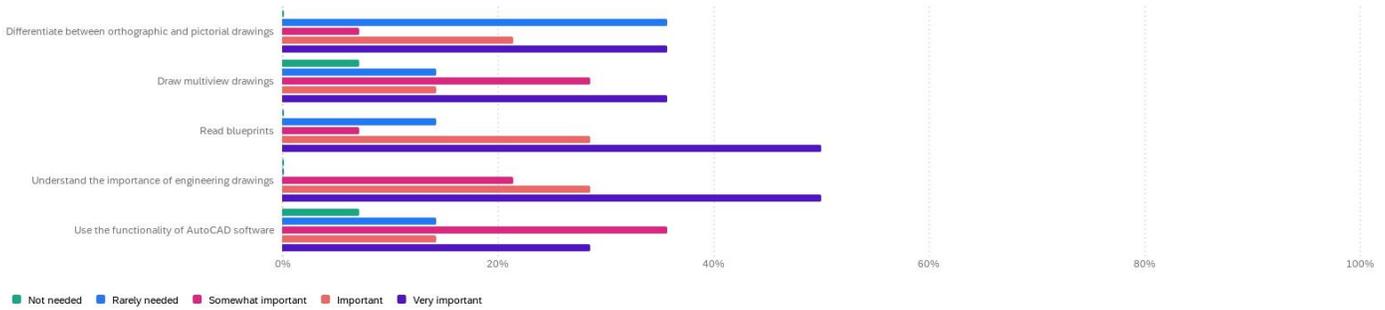
D'Wayne Shaw Kigore College

Link Worthen, Professor, TJC

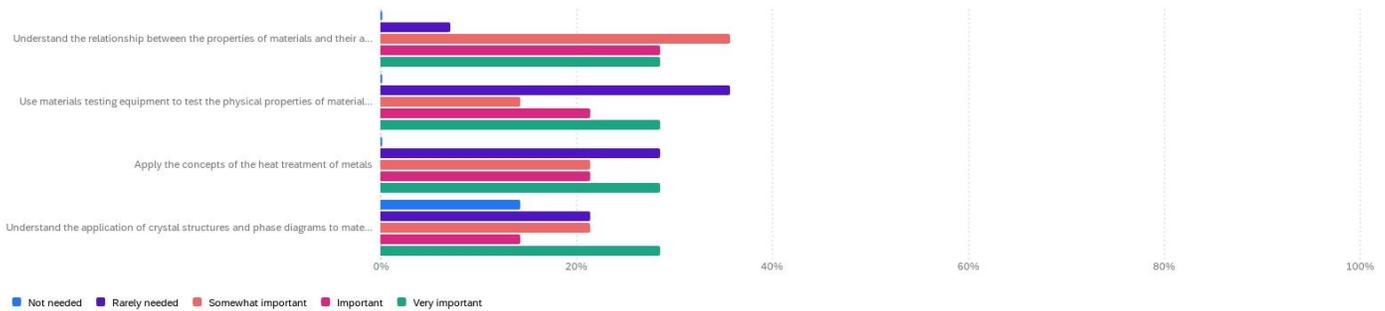
Dwight Evans, VP of Operations, Kluber North America

john connolly supplier quality engineer northrop grumman

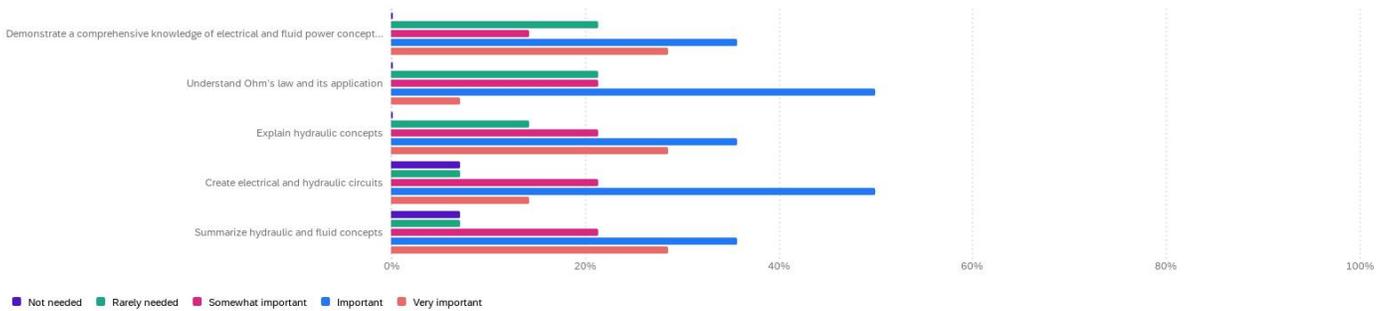
Rate the importance of each of the course objectives for TECH 1303 Engineering Graphics from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ



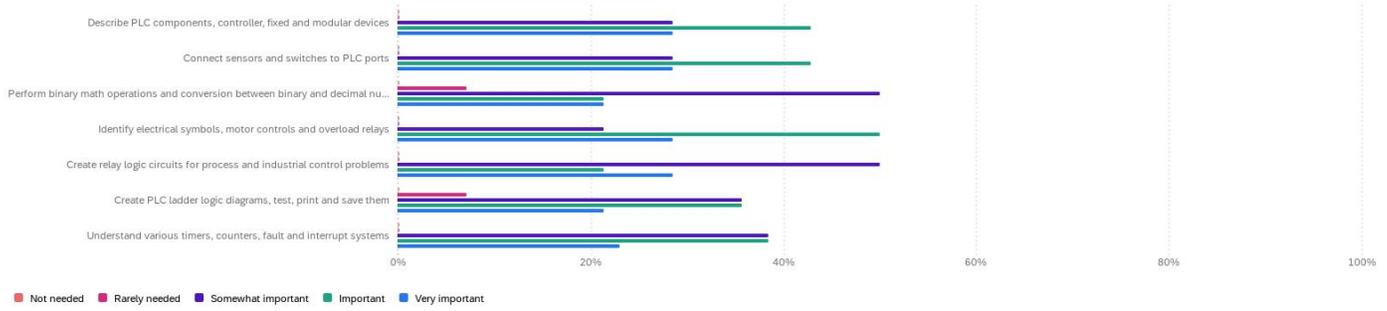
Rate the importance of each of the course objectives for TECH 1320 Industrial Materials from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ



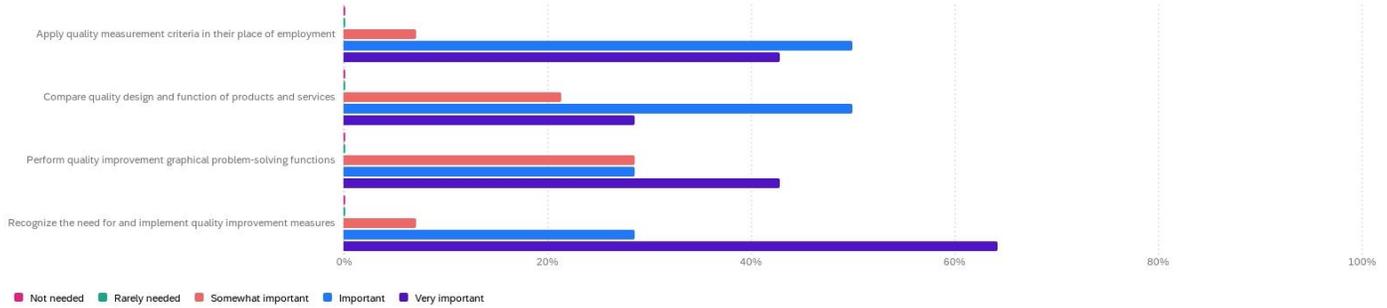
Rate the importance of each of the course objectives for TECH 2311 Electrical & Fluid Systems from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ



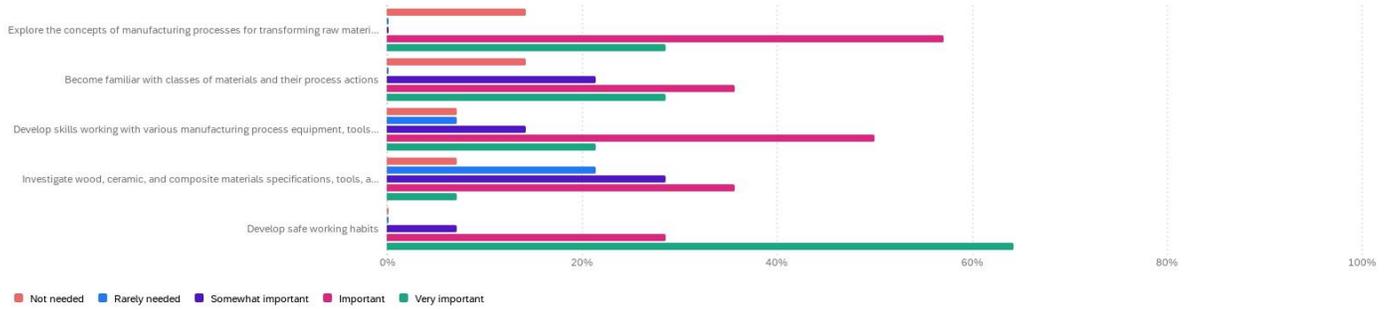
Rate the importance of each of the course objectives for TECH 2319 Programmable Logic Controllers from 1 to 5 (with 1 being not needed and 5 being very important). 14



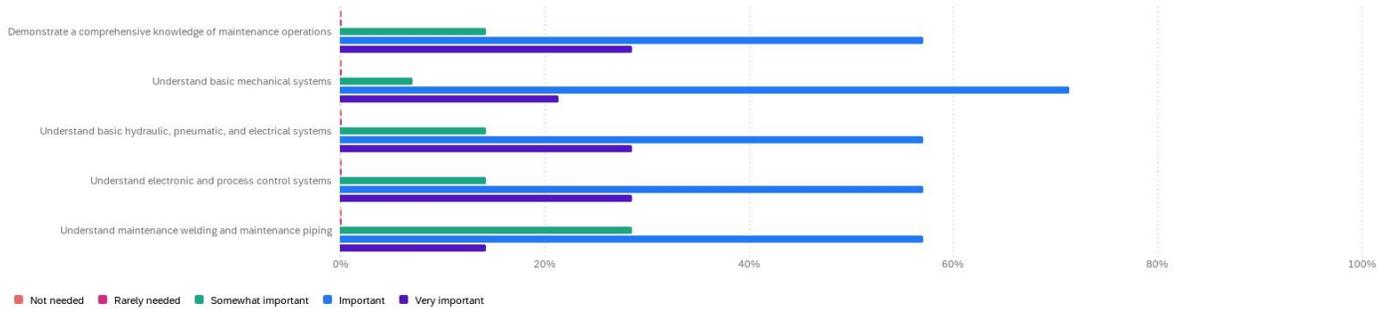
Rate the importance of each of the course objectives for TECH 3310 Total Quality Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



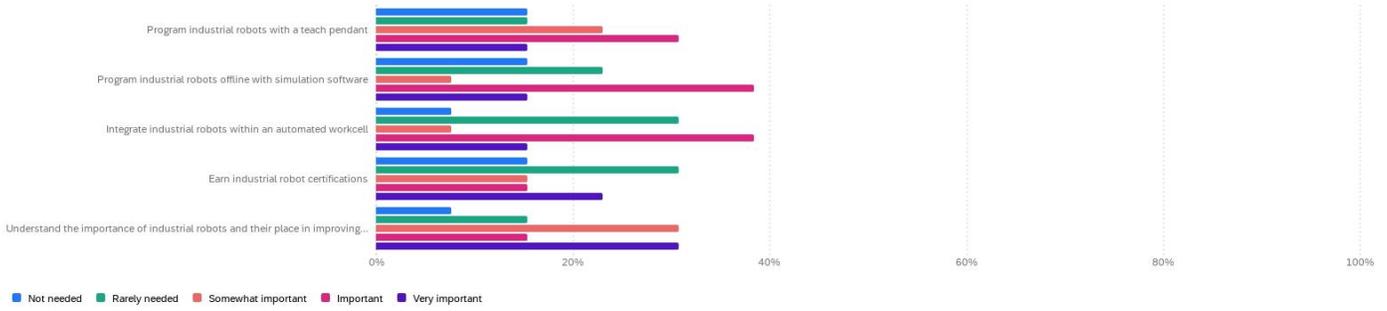
Rate the importance of each of the course objectives for TECH 3311 Manufacturing Processes from 1 to 5 (with 1 being not needed and 5 being very important). 14



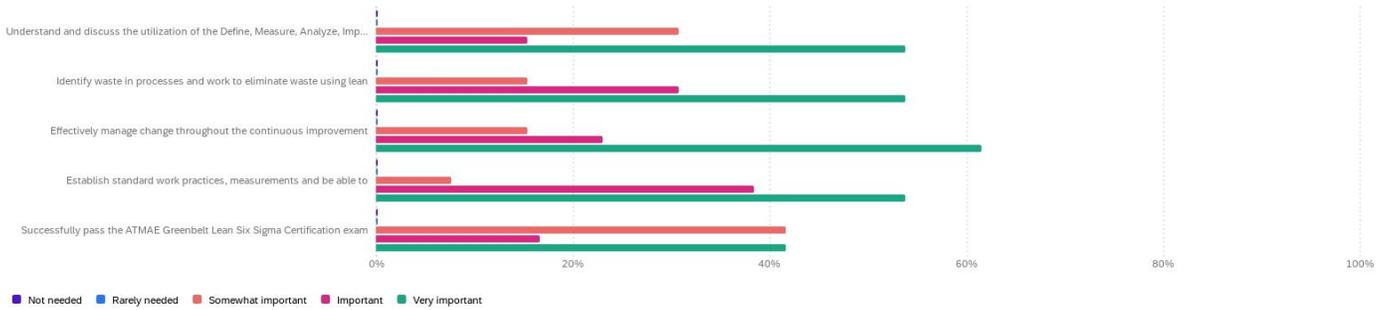
Rate the importance of each of the course objectives for TECH 3312 Facilities Operations & Maintenance from 1 to 5 (with 1 being not needed and 5 being very important). 14



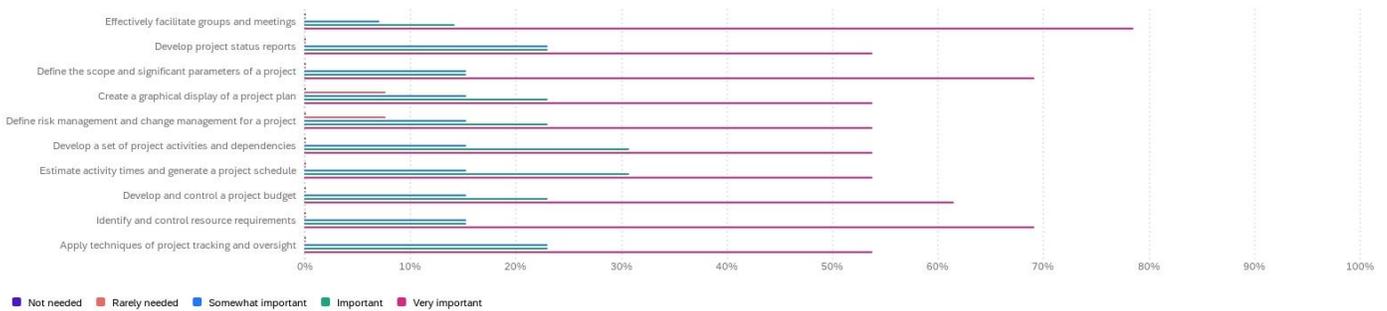
Rate the importance of each of the course objectives for TECH 3317 Industrial Robotics from 1 to 5 (with 1 being not needed and 5 being very important). 13



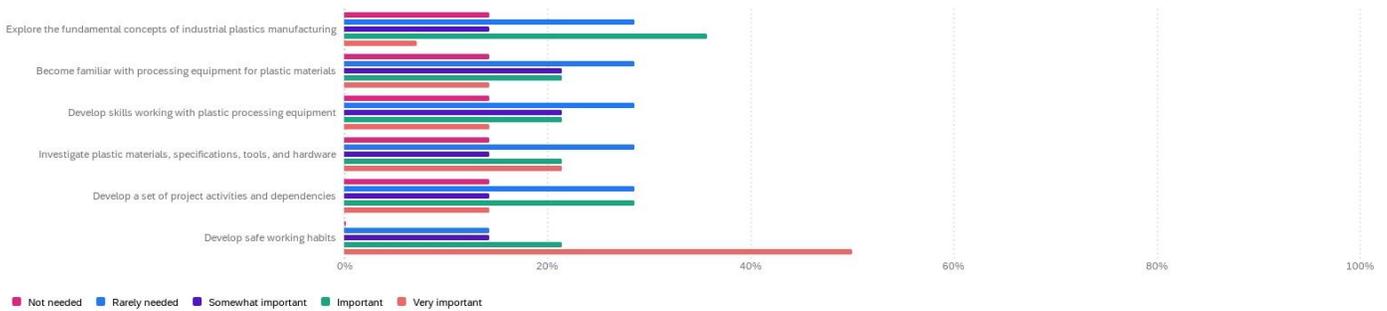
Rate the importance of each of the course objectives for TECH 3320 Lean Six Sigma Green Belt Techniques from 1 to 5 (with 1 being not needed and 5 being very important). 13



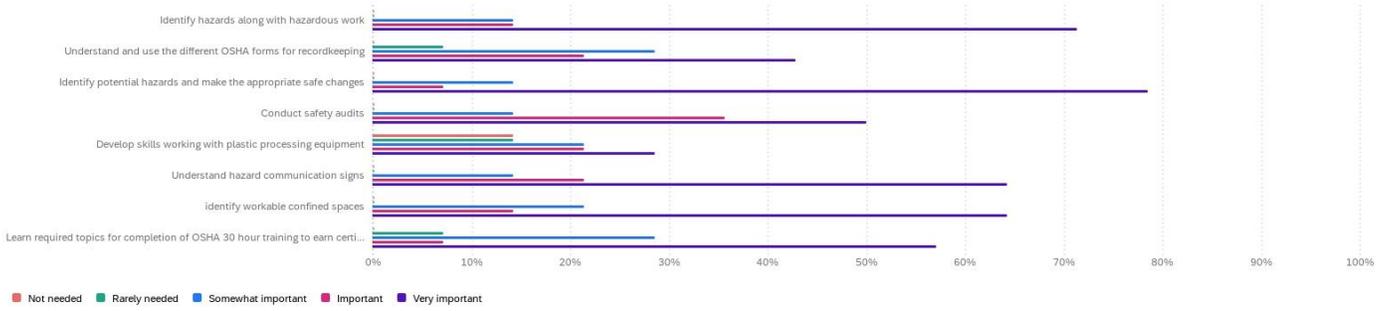
Rate the importance of each of the course objectives for TECH 3331 Project Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



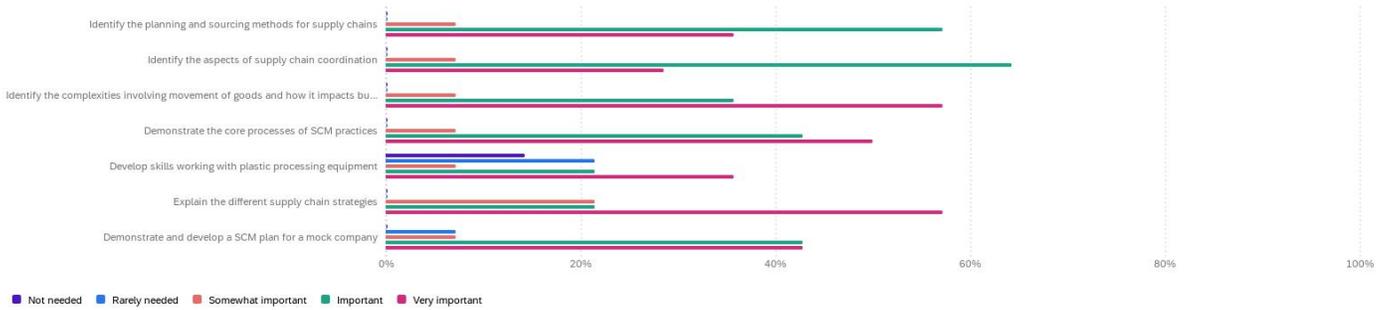
Rate the importance of each of the course objectives for TECH 3333 Polymer Processes from 1 to 5 (with 1 being not needed and 5 being very important). 14



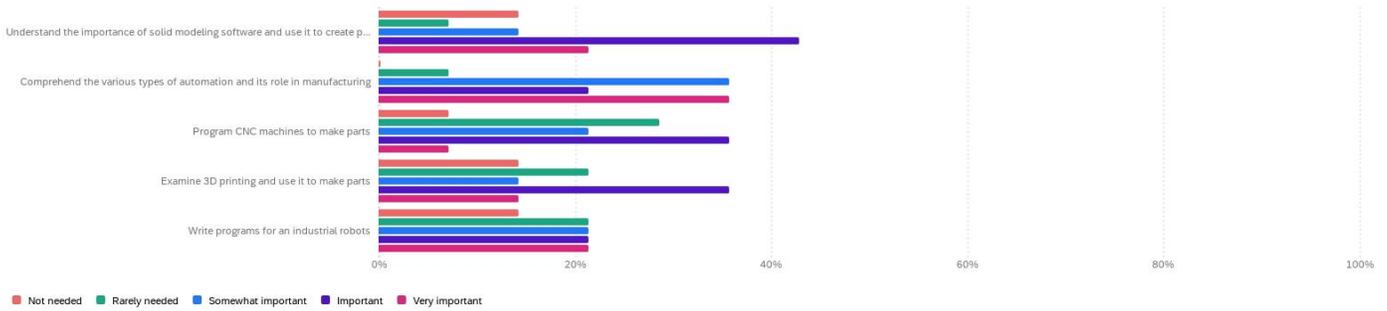
Rate the importance of each of the course objectives for TECH 3344 Industrial Safety from 1 to 5 (with 1 being not needed and 5 being very important). 14



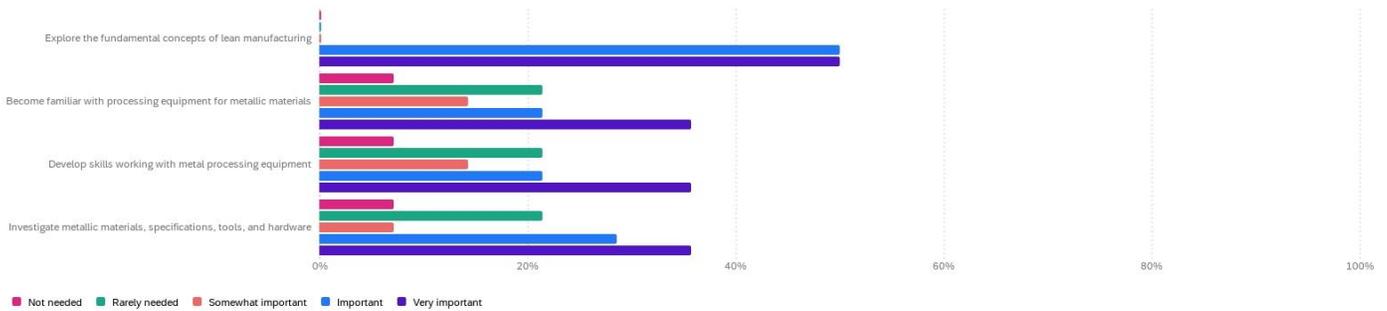
Rate the importance of each of the course objectives for TECH 3355 Supply Chain Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



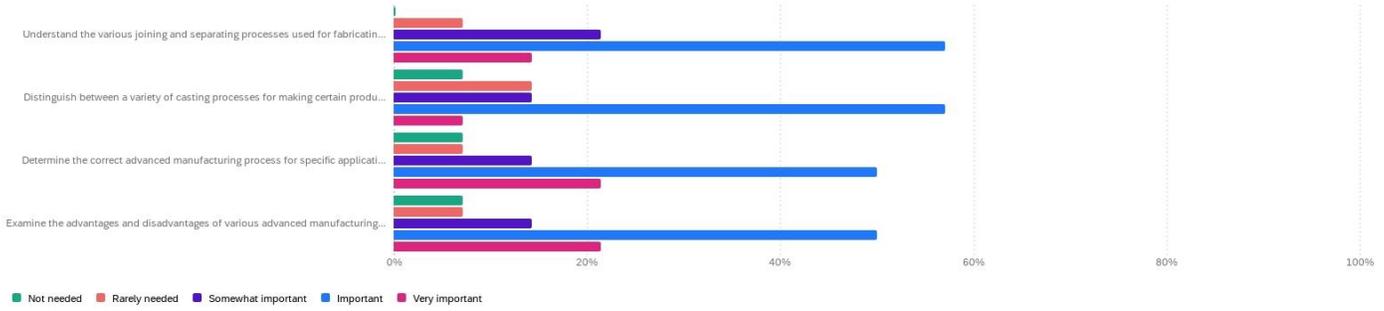
Rate the importance of each of the course objectives for TECH 4317 Computer Integrated Manufacturing from 1 to 5 (with 1 being not needed and 5 being very important). 14



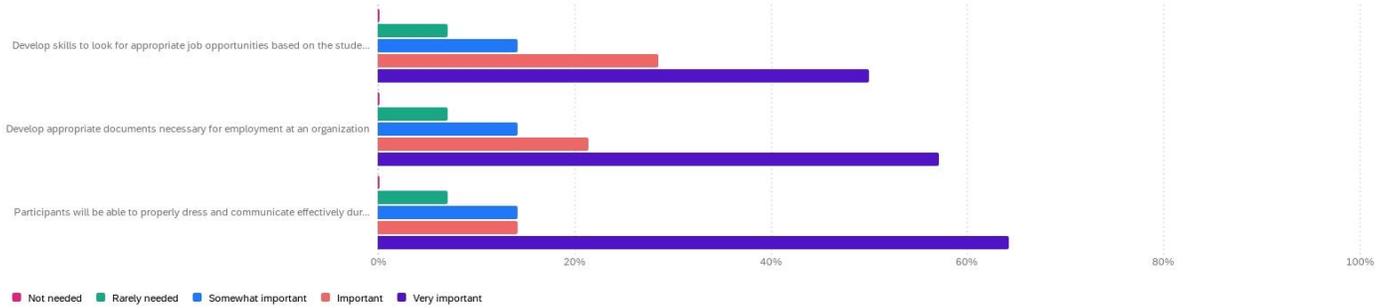
Rate the importance of each of the course objectives for TECH 4323 Lean Production from 1 to 5 (with 1 being not needed and 5 being very important). 14



Rate the importance of each of the course objectives for TECH 4343 Advanced Manufacturing Processes from 1 to 5 (with 1 being not needed and 5 being very important). 14



Rate the importance of each of the course objectives for TECH 4372 Capstone Experience from 1 to 5 (with 1 being not needed and 5 being very important). 14



Please list any new courses or course objectives that should be added to the Industrial Technology program:

People Leadership; Strong knowledge of Microsoft Office applications

Something involving conveyors, belts, sortation systems, and TPM. Application of WMS, enterprise asset management systems.

Industrial electricity safety and applications is extremely important in distribution maintenance, including Lockout Tagout procedures and how to determine proper PPE. Also, something involving general troubleshooting for different power systems and problem solving techniques. Understanding these concepts is critical not only to keep our operations running but to make decisions when an issue arises that could cause operational downtime.

I think there is an opportunity to get medical students to take a TECH class if it had some focus on Biomedical Statistics. With the School of Medicine, there is an opportunity for employment for those that have knowledge in this field.

Please list any courses or course objectives that should be omitted from the Industrial Technology program:

Survey questions for Tech 4323 Lean Production do not look right.

In my career field, we do some fabrication of parts but no need for advanced manufacturing.

We do not currently use robotics, but a fundamental understanding is good for future adoption. We also do not manufacture in my industry, but we have some fabrication opportunities, so a lot of the material manufacturing does not apply (to us, although would be important in a different setting I am sure).

# Page 1

## 2022 IND MGMT COURSE LEARNING OBJECTIVES RATING SURVEY

Mar 11, 2024 10:49 PM

Please list your name, position, and company so we can evaluate on how your answers reflect a certain type of industry. ⓘ

- sample

---

- Zachary Farina, CI Manager, Trinity Industries

---

- Dwight Evans, VP of Operations, Kluber North America

---

- Ben Wainwright, KPI Program Manager, John Soules Foods

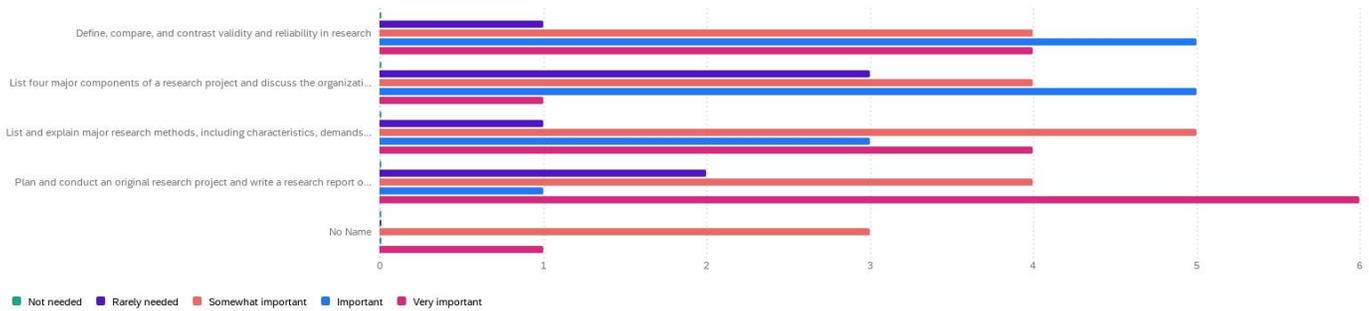
---

- Dane Clark, Value Improvement Engineer Medical Devices

---

- Daniel Lee, OMS Leader, Trane Technologies

Rate the importance of each of the course objectives for TECH 5303 Research Techniques in HRD/Technology from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ



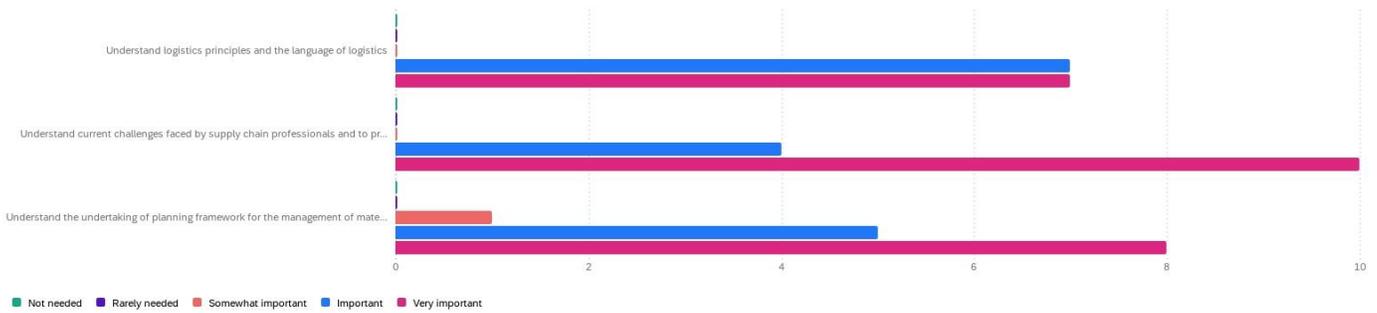
Rate the importance of each of the course objectives for TECH 5303 Research Techniques in HRD/Technology from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ

Rate the importance of each of the course objectives for TECH 5303 Research... ↑	Not needed	Rarely needed	Somewhat important	Important	Very important
Define, compare, and contrast validity and reliability in research	0	1	4	5	4
List four major components of a research project and discuss the organizati...	0	3	4	5	1
List and explain major research methods, including characteristics, demands...	0	1	5	3	4
Plan and conduct an original research project and write a research report o...	0	2	4	1	6
No Name	0	0	3	0	1

Rate the importance of each of the course objectives for TECH 5303 Research Techniques in HRD/Technology from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5303 Research...	Average	Minimum	Maximum	Count
Define, compare, and contrast validity and reliability in research	3.86	2.00	5.00	14
List four major components of a research project and discuss the organizati...	3.31	2.00	5.00	13
List and explain major research methods, including characteristics, demands...	3.77	2.00	5.00	13
Plan and conduct an original research project and write a research report o...	3.85	2.00	5.00	13
No Name	3.50	3.00	5.00	4

Rate the importance of each of the course objectives for TECH 5306 Logistics Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



Rate the importance of each of the course objectives for TECH 5306 Logistics Management from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5306 Logistic...	Not needed	Rarely needed	Somewhat important	Important	Very important
Understand logistics principles and the language of logistics	0	0	0	7	7
Understand current challenges faced by supply chain professionals and to pr...	0	0	0	4	10
Understand the undertaking of planning framework for the management of mate...	0	0	1	5	8

Rate the importance of each of the course objectives for TECH 5306 Logistics Management from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5306 Logistic...	Average	Minimum	Maximum	Count
Understand logistics principles and the language of logistics	4.50	4.00	5.00	14
Understand current challenges faced by supply chain professionals and to pr...	4.71	4.00	5.00	14
Understand the undertaking of planning framework for the management of mate...	4.50	3.00	5.00	14

Rate the importance of each of the course objectives for TECH 5310 Six Sigma Quality from 1 to 5 (with 1 being not needed and 5 being very important). 14



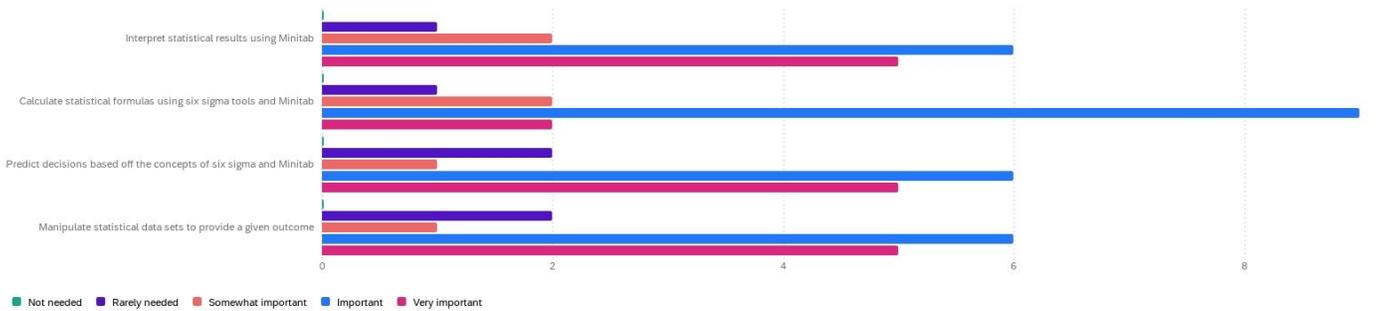
Rate the importance of each of the course objectives for TECH 5310 Six Sigma Quality from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5310 Six Sigma...	Not needed	Rarely needed	Somewhat important	Important	Very important
Perform problem solving, using statistical tools and techniques	0	0	1	1	12
Better understand the connection between quality assurance, manufacturing...	0	0	0	4	10
Gain knowledge in the areas of Just-In-Time and Lean Manufacturing techniqu...	0	0	0	3	11
Learn how to change those processes that contain unacceptable quality defic...	0	0	0	2	12

Rate the importance of each of the course objectives for TECH 5310 Six Sigma Quality from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5310 Six Sigma...	Average	Minimum	Maximum	Count
Perform problem solving, using statistical tools and techniques	4.79	3.00	5.00	14
Better understand the connection between quality assurance, manufacturing...	4.71	4.00	5.00	14
Gain knowledge in the areas of Just-In-Time and Lean Manufacturing techniqu...	4.79	4.00	5.00	14
Learn how to change those processes that contain unacceptable quality defic...	4.86	4.00	5.00	14

Rate the importance of each of the course objectives for TECH 5329 Research Trends in Industry from 1 to 5 (with 1 being not needed and 5 being very important). 14



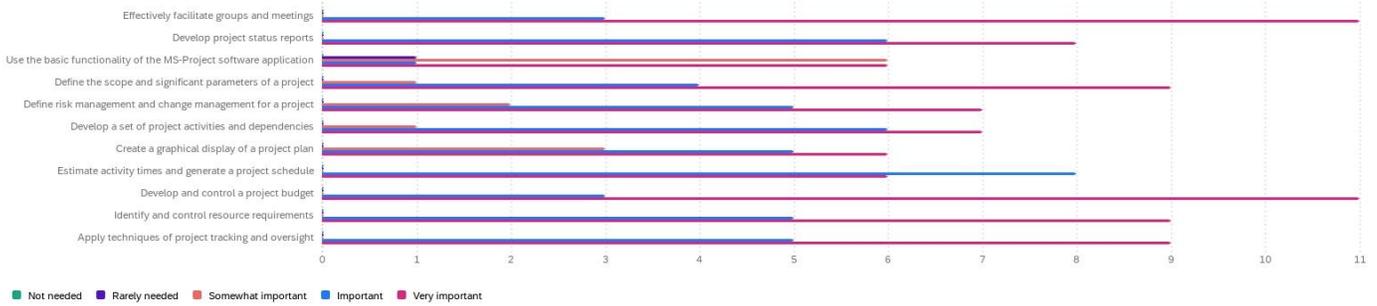
Rate the importance of each of the course objectives for TECH 5329 Research Trends in Industry from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5329 Research...	Not needed	Rarely needed	Somewhat important	Important	Very important
Interpret statistical results using Minitab	0	1	2	6	5
Calculate statistical formulas using six sigma tools and Minitab	0	1	2	9	2
Predict decisions based off the concepts of six sigma and Minitab	0	2	1	6	5
Manipulate statistical data sets to provide a given outcome	0	2	1	6	5

Rate the importance of each of the course objectives for TECH 5329 Research Trends in Industry from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5329 Research...	Average	Minimum	Maximum	Count
Interpret statistical results using Minitab	4.07	2.00	5.00	14
Calculate statistical formulas using six sigma tools and Minitab	3.86	2.00	5.00	14
Predict decisions based off the concepts of six sigma and Minitab	4.00	2.00	5.00	14
Manipulate statistical data sets to provide a given outcome	4.00	2.00	5.00	14

Rate the importance of each of the course objectives for TECH 5331 Project Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



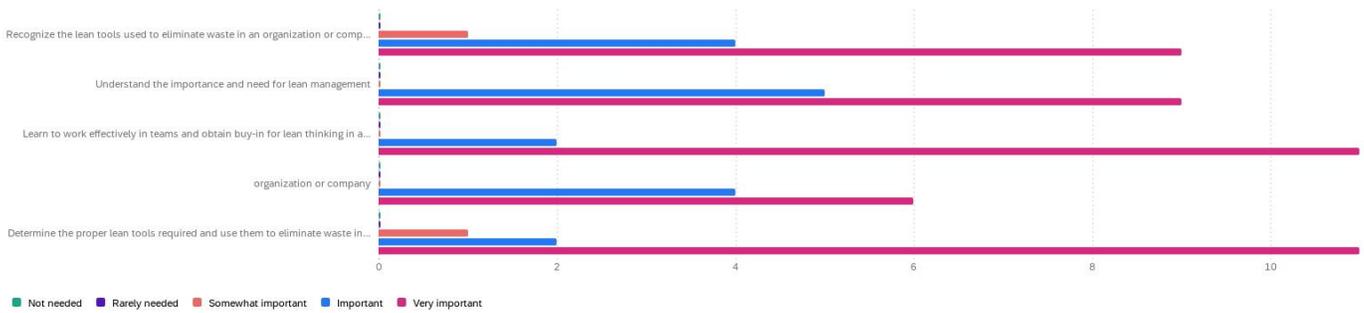
Rate the importance of each of the course objectives for TECH 5331 Project Management from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5331 Project...	Not needed	Rarely needed	Somewhat important	Important	Very important
Effectively facilitate groups and meetings	0	0	0	3	11
Develop project status reports	0	0	0	6	8
Use the basic functionality of the MS-Project software application	0	1	6	1	6
Define the scope and significant parameters of a project	0	0	1	4	9
Define risk management and change management for a project	0	0	2	5	7
Develop a set of project activities and dependencies	0	0	1	6	7
Create a graphical display of a project plan	0	0	3	5	6

Rate the importance of each of the course objectives for TECH 5331 Project Management from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5331 Project...	Average	Minimum	Maximum	Count
Effectively facilitate groups and meetings	4.79	4.00	5.00	14
Develop project status reports	4.57	4.00	5.00	14
Use the basic functionality of the MS-Project software application	3.86	2.00	5.00	14
Define the scope and significant parameters of a project	4.57	3.00	5.00	14
Define risk management and change management for a project	4.36	3.00	5.00	14
Develop a set of project activities and dependencies	4.43	3.00	5.00	14
Create a graphical display of a project plan	4.21	3.00	5.00	14

Rate the importance of each of the course objectives for TECH 5335 Lean Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



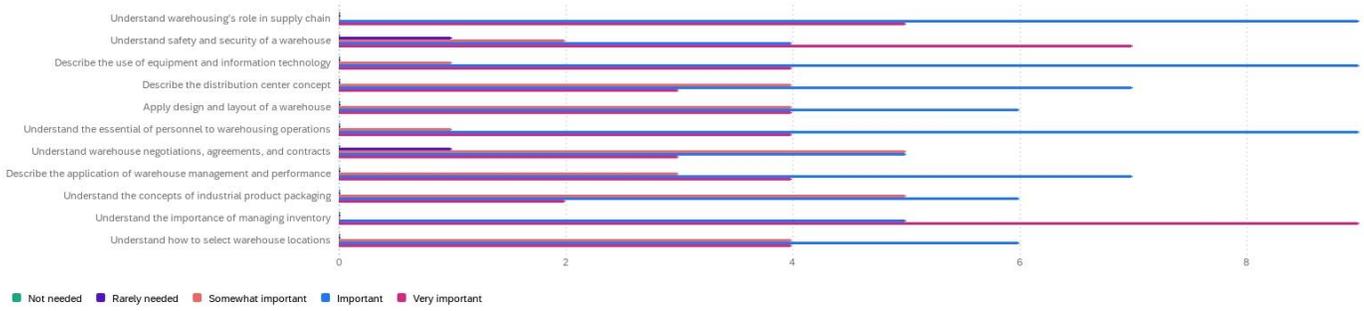
Rate the importance of each of the course objectives for TECH 5335 Lean Management from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5335 Lean Man... ↑	Not needed	Rarely needed	Somewhat important	Important	Very important
Recognize the lean tools used to eliminate waste in an organization or comp...	0	0	1	4	9
Understand the importance and need for lean management	0	0	0	5	9
Learn to work effectively in teams and obtain buy-in for lean thinking in a...	0	0	0	2	11
organization or company	0	0	0	4	6
Determine the proper lean tools required and use them to eliminate waste in...	0	0	1	2	11

Rate the importance of each of the course objectives for TECH 5335 Lean Management from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5335 Lean Man...	Average	Minimum	Maximum	Count
Recognize the lean tools used to eliminate waste in an organization or comp...	4.57	3.00	5.00	14
Understand the importance and need for lean management	4.64	4.00	5.00	14
Learn to work effectively in teams and obtain buy-in for lean thinking in a...	4.85	4.00	5.00	13
organization or company	4.60	4.00	5.00	10
Determine the proper lean tools required and use them to eliminate waste in...	4.71	3.00	5.00	14

Rate the importance of each of the course objectives for TECH 5345 Warehousing from 1 to 5 (with 1 being not needed and 5 being very important). 14



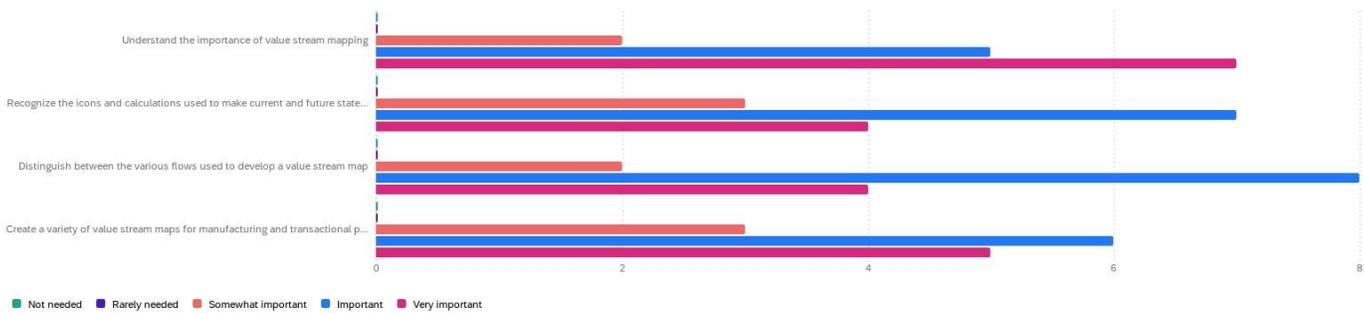
Rate the importance of each of the course objectives for TECH 5345 Warehousing from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5345 Warehousing...	Not needed	Rarely needed	Somewhat important	Important	Very important
Understand warehousing's role in supply chain	0	0	0	9	5
Understand safety and security of a warehouse	0	1	2	4	7
Describe the use of equipment and information technology	0	0	1	9	4
Describe the distribution center concept	0	0	4	7	3
Apply design and layout of a warehouse	0	0	4	6	4
Understand the essential of personnel to warehousing operations	0	0	1	9	4
Understand warehouse negotiations, agreements, and contracts	0	1	5	5	3

Rate the importance of each of the course objectives for TECH 5345 Warehousing from 1 to 5 (with 1 being not needed and 5 being very important). 14

Rate the importance of each of the course objectives for TECH 5345 Warehousing...	Average	Minimum	Maximum	Count
Understand warehousing's role in supply chain	4.36	4.00	5.00	14
Understand safety and security of a warehouse	4.21	2.00	5.00	14
Describe the use of equipment and information technology	4.21	3.00	5.00	14
Describe the distribution center concept	3.93	3.00	5.00	14
Apply design and layout of a warehouse	4.00	3.00	5.00	14
Understand the essential of personnel to warehousing operations	4.21	3.00	5.00	14
Understand warehouse negotiations, agreements, and contracts	3.71	2.00	5.00	14

Rate the importance of each of the course objectives for TECH 5366 Value Stream Management from 1 to 5 (with 1 being not needed and 5 being very important). 14



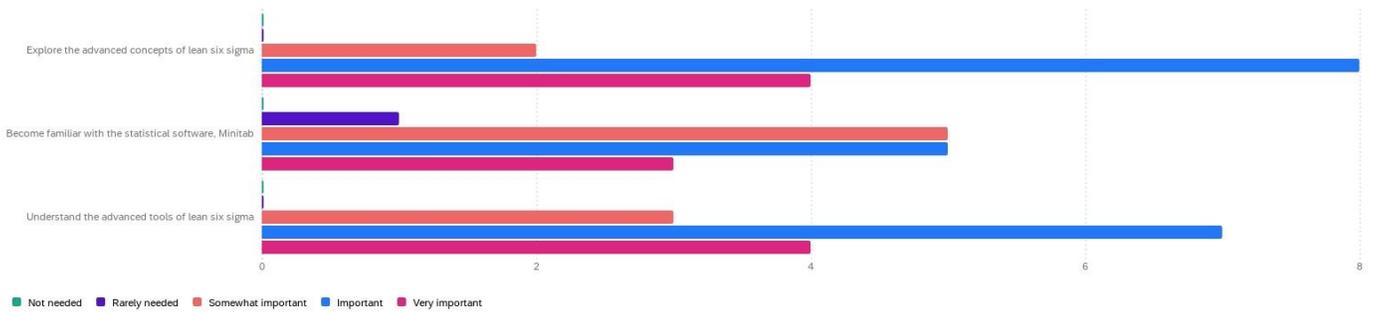
Rate the importance of each of the course objectives for TECH 5366 Value Stream Management from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ

Rate the importance of each of the course objectives for TECH 5366 Value St...	Not needed	Rarely needed	Somewhat important	Important	Very important
Understand the importance of value stream mapping	0	0	2	5	7
Recognize the icons and calculations used to make current and future state...	0	0	3	7	4
Distinguish between the various flows used to develop a value stream map	0	0	2	8	4
Create a variety of value stream maps for manufacturing and transactional p...	0	0	3	6	5

Rate the importance of each of the course objectives for TECH 5366 Value Stream Management from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ

Rate the importance of each of the course objectives for TECH 5366 Value St...	Average	Minimum	Maximum	Count
Understand the importance of value stream mapping	4.36	3.00	5.00	14
Recognize the icons and calculations used to make current and future state...	4.07	3.00	5.00	14
Distinguish between the various flows used to develop a value stream map	4.14	3.00	5.00	14
Create a variety of value stream maps for manufacturing and transactional p...	4.14	3.00	5.00	14

Rate the importance of each of the course objectives for TECH 5390 Advanced Lean Six Sigma Black Belt Techniques from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ



Rate the importance of each of the course objectives for TECH 5390 Advanced Lean Six Sigma Black Belt Techniques from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ

Rate the importance of each of the course objectives for TECH 5390 Advanced...	Not needed	Rarely needed	Somewhat important	Important	Very important
Explore the advanced concepts of lean six sigma	0	0	2	8	4
Become familiar with the statistical software, Minitab	0	1	5	5	3
Understand the advanced tools of lean six sigma	0	0	3	7	4

Rate the importance of each of the course objectives for TECH 5390 Advanced Lean Six Sigma Black Belt Techniques from 1 to 5 (with 1 being not needed and 5 being very important). 14 ⓘ

Rate the importance of each of the course objectives for TECH 5390 Advanced...	Average	Minimum	Maximum	Count
Explore the advanced concepts of lean six sigma	4.14	3.00	5.00	14
Become familiar with the statistical software, Minitab	3.71	2.00	5.00	14
Understand the advanced tools of lean six sigma	4.07	3.00	5.00	14

Please list any new courses or course objectives that should be added to the Industrial Management program: ⓘ

No new courses - I would add a focus on the Integrity of the learner and the learner understanding the importance of being detail oriented.

People Leadership; Strong knowledge of Microsoft Office applications

Machine learning and AI applications

Design for Manufacturing and Assembly - Focuses on design principles and methods to optimize manufacturability, quality, cost, serviceability, and protection during shipping. Topics include DFA analysis, tolerance allocation, mistake proofing, lean production, design for serviceability, packaging design, and structural support for shipment. Hands-on projects and factory site visits provide real-world experience.

I think there should be something covering industrial safety; not just the principles but how to manage safe behaviors and OSHA reporting requirements for businesses.

Please list any courses or course objectives that should be omitted from the Industrial Management program: ⓘ

No data found - your filters may be too exclusive!

# Page 1

## ATMAE Employer Satisfaction Survey

Mar 11, 2024 9:53 PM

Did you or do you employ University of Texas at Tyler Industrial Technology or Industrial Management students? 3 ①



Did you or do you employ University of Texas at Tyler Industrial Technology or Industrial Management students? 3 ①

Q2 - Did you or do you employ University of Texas at Tyler Industrial Technology or Industrial Management students?

Percentage

Count

Yes	100%	3
No	0%	0

Did you or do you employ University of Texas at Tyler Industrial Technology or Industrial Management students? 3 ①

Did you or do you employ University of Texas at Tyler Industrial Technology...

Average

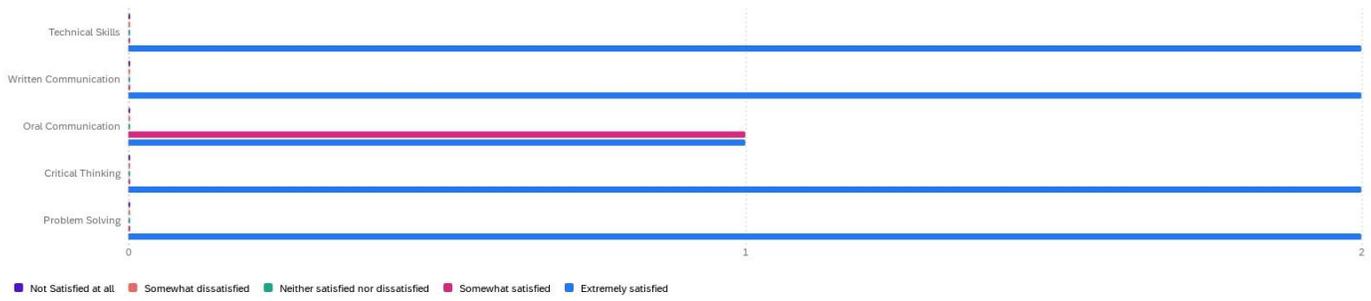
Minimum

Maximum

Count

Yes	1.00	1.00	1.00	3
No	-	-	-	0

How satisfied are you with the preparedness of Industrial Technology undergraduate students when they join your workforce in the following areas? Please rate on a scale from 1 to 5, where 1 is not satisfied at all, and 5 is extremely satisfied. 2 1



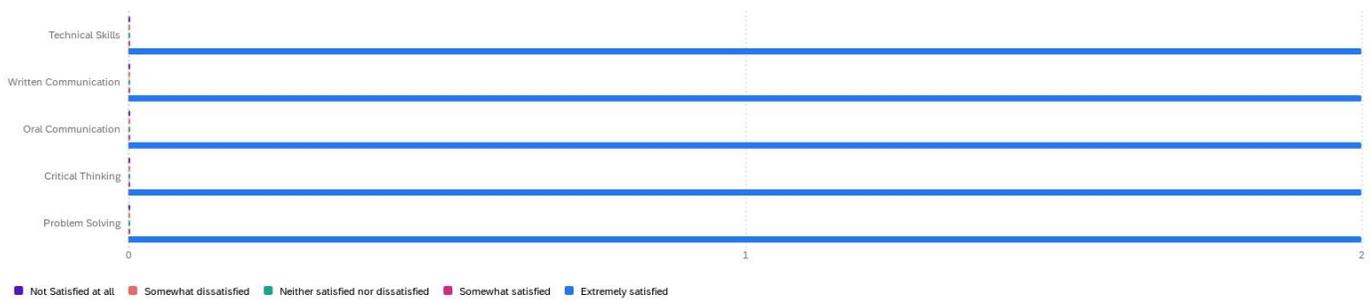
How satisfied are you with the preparedness of Industrial Technology undergraduate students when they join your workforce in the following areas? Please rate on a scale from 1 to 5, where 1 is not satisfied at all, and 5 is extremely satisfied. 2 1

How satisfied are you with the preparedness of Industrial Technology undergrad...	Not Satisfied at all	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Technical Skills	0	0	0	0	2
Written Communication	0	0	0	0	2
Oral Communication	0	0	0	1	1
Critical Thinking	0	0	0	0	2
Problem Solving	0	0	0	0	2

How satisfied are you with the preparedness of Industrial Technology undergraduate students when they join your workforce in the following areas? Please rate on a scale from 1 to 5, where 1 is not satisfied at all, and 5 is extremely satisfied. 2 1

How satisfied are you with the preparedness of Industrial Technology undergrad...	Average	Minimum	Maximum	Count
Technical Skills	5.00	5.00	5.00	2
Written Communication	5.00	5.00	5.00	2
Oral Communication	4.50	4.00	5.00	2
Critical Thinking	5.00	5.00	5.00	2
Problem Solving	5.00	5.00	5.00	2

How satisfied are you with the preparedness of Industrial Management graduate students when they join your workforce in the following areas? Please rate on a scale from 1 to 5, where 1 is not satisfied at all, and 5 is extremely satisfied. 2 1



How satisfied are you with the preparedness of Industrial Management graduate students when they join your workforce in the following areas? Please rate on a scale from 1 to 5, where 1 is not satisfied at all, and 5 is extremely satisfied. 2 ①

How satisfied are you with the preparedness of Industrial Management gradua... ↑	Not Satisfied at all	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
Technical Skills	0	0	0	0	2
Written Communication	0	0	0	0	2
Oral Communication	0	0	0	0	2
Critical Thinking	0	0	0	0	2
Problem Solving	0	0	0	0	2

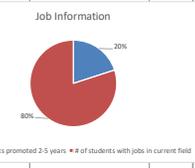
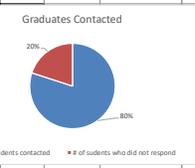
How satisfied are you with the preparedness of Industrial Management graduate students when they join your workforce in the following areas? Please rate on a scale from 1 to 5, where 1 is not satisfied at all, and 5 is extremely satisfied. 2 ①

How satisfied are you with the preparedness of Industrial Management gradua...	Average	Minimum	Maximum	Count
Technical Skills	5.00	5.00	5.00	2
Written Communication	5.00	5.00	5.00	2
Oral Communication	5.00	5.00	5.00	2
Critical Thinking	5.00	5.00	5.00	2
Problem Solving	5.00	5.00	5.00	2

Bachelor of Science- Industrial Technology  
Fall 2019

Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2019	Fall	600446699	Andrew	Shabam	Crowth	2127 Fivestone Cir, Tyler, TX, 75703-8871	2127 Fivestone Cir, Tyler, TX, 75703-8871							
2019	Fall	600442387	Walt	William	Hampton	2122 Maple Rd, Longview, TX, 75602-1824								
2019	Fall	600440629	Bryan	Keith	Stault	141 Lakewood St, Rank, TX, 75765-0513	141 Lakewood St, Rank, TX, 75765-0513							
2019	Fall	600209077	Michael	Samuel	Trucino	2818 McConwall Rd, Tyler, TX, 75702-6019								
2019	Fall	600209278	Carmon	Carson	Healthcote	3415 Cypressdale Ct, Spring, TX, 77388-6119	3415 Cypressdale Ct, Spring, TX, 77388-6119							
2019	Fall	600209883	Nevan		Binnsley	1891 Pickwick Ln, Tyler, TX, 75702-3535	1891 Pickwick Ln, Tyler, TX, 75702-3535							
2019	Fall	600130259	Quancato		Alphimgal	2806 Creekview Ct, Richmond, TX, 77469-6208								
2019	Fall	600130678	Christopher	Clayton	Tilwell	23750 County Road 372, Hill, TX, 75745-2409								
2019	Fall	600130954	Eric	Alex	Proser	214 Cherokee Tr, Terrell, TX, 75685-1785								
2019	Fall	600130976	Evan	Joshua	Duncan	208 Wilshire St, Newalls, TX, 75773-1546								
2019	Fall	600111149	Whitley	Zion	Vates	2242 County Road 4778, Winniford, TX, 75494-6410	2242 County Road 4778, Winniford, TX, 75494-6410							
2019	Fall	600114453	Jacob	Colin	Melroy	4930 Thistle Dr Apt 105, Tyler, TX, 75703-2918								
2019	Fall	600117069	Jacob	Andrew	Byler	200 West Oak St, Ranken, TX, 75734-9772								
2019	Fall	600117133	Taylor	Lee	Adams	1306 Cherokee Tr, Winnebago, TX, 75775-5104								
2019	Fall	600137736	Colby	Taylor	Essler	14408 Mountain Cliff Ln, Houston, TX, 77064-1247								
2019	Fall	600138044	Craig	Houston	Sisk	1208 Lincoln Ave Apt 306, North, TX, 75205-0693	1208 Lincoln Ave Apt 306, North, TX, 75205-0693							
2019	Fall	600139021	John	Tanner	Beart	2809 Ashwood Dr, Longview, TX, 75602-1213								
2019	Fall	600122545	Sabbah	Hayden	Reiser	17325 Farm Road 197, Arthur, TX, 75814-6100								

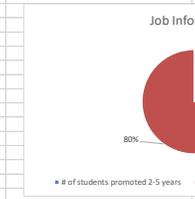
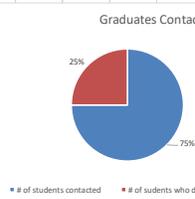
# of students contacted	98
# of students who did not respond	4
# of students promoted 2-5 years	8
# of students with jobs in current field	22



Bachelor of Science- Industrial Technology  
Spring 2020

Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Suffix Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2020		6000110305	Michael	Allen	Tanner		16405 Dr 178 #1506, Tyler, TX, 75703-6578								
2020	Spring	6000430094	Aaron		Stapp		102 Dorchester Dr, Tyler, TX, 75703-1107	102 Dorchester Dr, Tyler, TX, 75703-1107							
2020	Spring	6000436039	Caleb	Aaron	Kurtzman		215 West Roberts St, Van, TX, 75790-2567								
2020	Spring	6001091036	Brandon	Lee	Turner		4123 Southpark Dr Apt 224, Tyler, TX, 75703-1107								
2020	Spring	6001097918	Jacob	William	Forester		900 Sine St, Arg, TX, 75750-0034								
2020	Spring	6001098364	Stephen	William	Walker		850 c.a. 3371, Alba, TX, 75410	850 c.a. 3371, Alba, TX, 75410							
2020	Spring	6001104120	Chase	Michael	Butler		23422 Cannon Creek Tr, Tomball, TX, 77377								
2020	Spring	6001107883	Jax	Jeremiah	Tobias		224 Kennedy Ct, Crowley, TX, 76036-4009	137 Private Road 5318, Grand Saline, TX, 75460							
2020	Spring	6001111410	Zachary	Myles	McIntire		213 Preston Dr, Reno, TX, 75462-7267								
2020	Spring	6001113176	Riley	James	Fischback		3033 Belmont Ln, Terrell, TX, 75160-6818	3033 Belmont Ln, Terrell, TX, 75160-6818							
2020	Spring	6001179580	Daniel		Olalaye		3006 Dusty Oak Dr, Dallas, TX, 75227-5238								
2020	Spring	6001182390	Kolton	Wayne	Forsythe		402 Crossbow Dr, Spring, TX, 77386-1269								
2020	Spring	6001192477	Jared	Davis	Marshall		10062 County Road 1215, Hunt, TX, 75799-7526	10062 County Road 1215, Hunt, TX, 75799-7526							
2020	Spring	6001244293	John	Charles	Dunn		312 Watkins Pl, Kingsland, TX, 76659-8206	312 Watkins Pl, Kingsland, TX, 76659-8206							

# of students contacted	12
# of students who did not respond	4
# of students promoted 2-5 years	2
# of students with jobs in current field	8



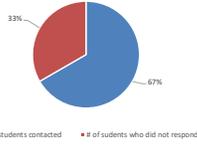
Bachelor of Science- Industrial Technology

Summer 2020

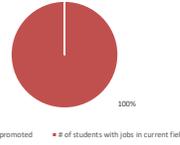
Completion Year	Completion Term	Student ID	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2020	2020 Summer	6001106053	Jackson		Woodcock	2415 Acadia Dr, Tyler, TX, 75707-2076								
2020	2020 Summer	6001106597	John	Blake	Heidrick	20550 County Road 482, Lonsdale, TX, 75771-3725								
2020	2020 Summer	6001109842	Chandler	Stephens	Hunt	2300 Wolf Ranch Pkwy, Apt 4411, Georgetown, TX, 78626-7296								
2020	2020 Summer	6001171795	Cullen	Ray	Ruymon	825 Ann. Way, Weatherford, TX, 76086-6844								
2020	2020 Summer	6001183109	Rehbeia	Shandee	Hodge	200 East Green St, Longview, TX, 75603-3437								

# of students contacted	4
# of students who did not respond	2
# of students promoted	0
# of students with jobs in current field	2

Graduates Contacted



Job Information



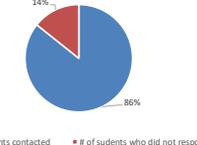
Bachelor of Science- Industrial Technology

Fall 2020

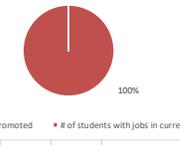
Completion Year	Completion Term	Student ID	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2021	2020 Fall	6001096821	Justin	Wray	North									
2021	2020 Fall	6001098904	Gannon	Reece	Kirkhart									
2021	2020 Fall	6001174289	Kyle	Alexander	Owens									
2021	2020 Fall	6001184890	Arturo		Acevedo									
2021	2020 Fall	6001185056	James	Joseph	Duncan									
2021	2020 Fall	6001195651	Paul		Kavul									
2021	2020 Fall	6001228441	Jason	William	Ryan									
2021	2020 Fall	6001234961	Logan	Jackson	Capers									
2021	2020 Fall	6001236495	Cody	Randall	Robinson									

# of students contacted	6
# of students who did not respond	1
# of students promoted	0
# of students with jobs in current field	5

Graduate Contacted



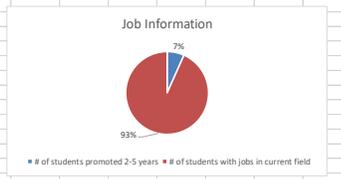
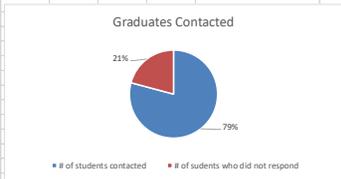
Job Informatin



**Bachelor of Science- Industrial Technology**

Spring 2021																
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Suffix Name	Home Address	Diploma Address	Cell Phone	Personal Email	Campus Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2021	2021 Spring	500026429	Jessica	Lee	James											
2021	2021 Spring	5000362881	Givvy		Chawapira											
2021	2021 Spring	5000417441	Reynaldo	Ramon	Gallegos											
2021	2021 Spring	6001092566	Pedro		Gonzalez											
2021	2021 Spring	6001100202	Luis	Miguel	Fyera											
2021	2021 Spring	6001103343	Ralph		Cunningham											
2021	2021 Spring	6001115306	Dahzaeb	Hashim	Anstani											
2021	2021 Spring	6001178558	Tyler	Christian	Hendricks											
2021	2021 Spring	6001183724	Oscar	Eduardo	Ramirez											
2021	2021 Spring	6001191338	Aaron	Dane	Well											
2021	2021 Spring	6001192865	Ethan	Shaw	Fite											
2021	2021 Spring	6001232502	Fyrek		Landy											
2021	2021 Spring	6001228048	Daniel	Lee	Hall											
2021	2021 Spring	6001228464	Aaron	James	Wheeler											
2021	2021 Spring	6001229284	Corey	McIntyre	Siman											
2021	2021 Spring	6001229351	Alberto	Emanuel	Cruz											
2021	2021 Spring	6001234354	James	Michael	Keith											
2021	2021 Spring	6001234522	Jason	James	Simmons											
2021	2021 Spring	6001235253	Mason	C	Coffee											
2021	2021 Spring	6001238862	Edward	Allen	Chaney											
2021	2021 Spring	6001240060	Michael	Allen	Puckett											
2021	2021 Spring	6001240933	Jacob	Wade	Pugh											

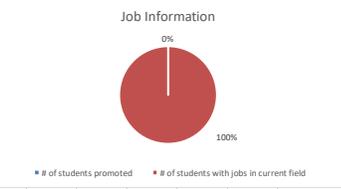
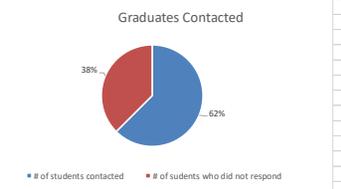
# of students contacted	19
# of students who did not respond	5
# of students promoted 2-5 years	1
# of students with jobs in current field	14



**Bachelor of Science- Industrial Technology**

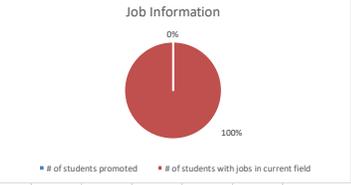
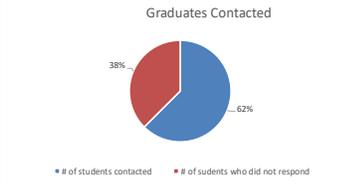
Summer 2021																
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Campus Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn	
2021	2021 Summer	5000363262	Mindy	Kayr	Gandy											
2021	2021 Summer	6001177139	Clay	Rylie	Alsbrook											
2021	2021 Summer	6001178951	Caleb	James	Pierce											
2021	2021 Summer	6001183739	Nelson	Edward	Manziel											
2021	2021 Summer	6001238740	Daniel		Martinez											

# of students contacted	5
# of students who did not respond	3
# of students promoted	0
# of students with jobs in current field	2



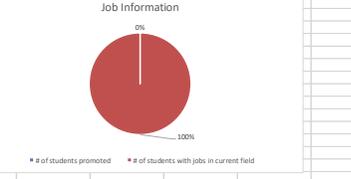
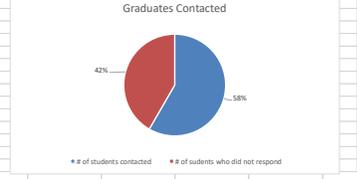
Bachelor of Science- Industrial Technology															
Summer 2021															
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Campus Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2021	2021 Summer	600036262	Mindy	Kayr	Gordy										
2021	2021 Summer	6001177139	Clay	Rylie	Alubrook										
2021	2021 Summer	6001178951	Caleb	James	Pierce										
2021	2021 Summer	6001183739	Nelson	Edward	Marcel										
2021	2021 Summer	6001138740	Daniel		Martinez										

# of students contacted	5
# of students who did not respond	3
# of students promoted	0
# of students with jobs in current field	2



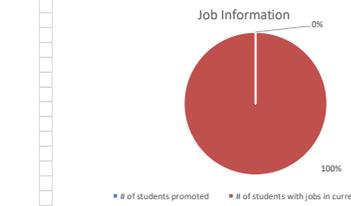
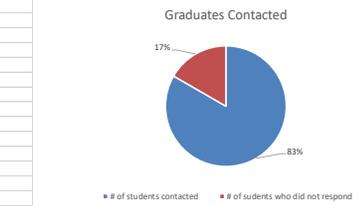
Bachelor of Science- Industrial Technology															
Spring 2022															
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Campus Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2022	2022 Spring	60049506	Michael	Edward	Inland										
2022	2022 Spring	6001176302	Muhammad	Nyler	Nix										
2022	2022 Spring	6001238960	Corey	Ryan	Hill										
2022	2022 Spring	6001243559	Jonathan		Brian										
2022	2022 Spring	6001475309	Colton	Joseph	Clark										
2022	2022 Spring	6001510510	Nolan	Heath	Cox										
2022	2022 Spring	6001510990	Austin	Cole	Jones										
2022	2022 Spring	6001511243	Jacob	Dan	Enry										
2022	2022 Spring	6001511896	Ekekar		Correa-Vazquez										
2022	2022 Spring	6001512855	Zachary	John	Zemlow										
2022	2022 Spring	6001512924	Caleb	Bryan	Hart										
2022	2022 Spring	6001513263	Brent	Adam	Malyhan										
2022	2022 Spring	6001513390	Connor	Ronny	Shuhner										

# of students contacted	7
# of students who did not respond	5
# of students promoted	0
# of students with jobs in current field	2



Bachelor of Science- Industrial Technology															
Summer 2022															
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Campus Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2022	2022 Summer	600117464	Mason	Hacker	Taylor										
2022	2022 Summer	6001188177	Jacob	T	Selman										
2022	2022 Summer	6001194685	Baylor	Andrew	Augustus										
2022	2022 Summer	6001226857	Logan	Alton	Casey										
2022	2022 Summer	6001243676	Coleton	Gregory	Oldham										
2022	2022 Summer	6001475123	Jacob	Ryan	Cebell										
2022	2022 Summer	6001530989	Garrett	Alan	Lie										

# of students contacted	5
# of students who did not respond	1
# of students promoted	0
# of students with jobs in current field	4

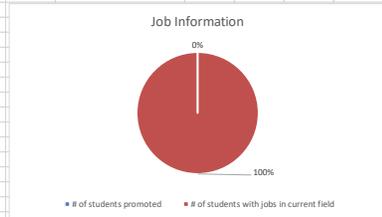
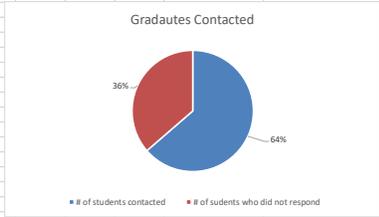


Bachelor of Science- Industrial Technology

Spring 2023

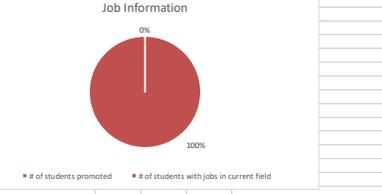
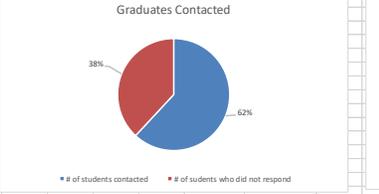
Completion Year	Completion Term	Student ID	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2023	2023 Spring	6000437819	Tanner	Christopher	King									
2023	2023 Spring	6001179873	Edward		Benauidex									
2023	2023 Spring	6001182663	Zachariah	G	Dare									
2023	2023 Spring	6001225483	Parker	Daniel	Cifton									
2023	2023 Spring	6001228815	Hector		Ramirez									
2023	2023 Spring	6001242034	Keundrea	Reshay	Brandley									
2023	2023 Spring	6001512634	Pedro	Luis	Barco									
2023	2023 Spring	6001531553	Logan	Fallon	Jameson-Hatch									
2023	2023 Spring	6001553230	Raleb	A	Iverding									

# of students contacted	7
# of students who did not respond	4
# of students promoted	0
# of students with jobs in current field	3



2022	2022 Fall	6001510450	Colton	Jade	Freeman									
2022	2022 Fall	6001510686	Cora		Peffers									
2022	2022 Fall	6001511276	Parker	Corley	Parbun									
2022	2022 Fall	6001512108	Robby	Lee	Cox									
2022	2022 Fall	6001533646	Michelle	Shrin	Kollar									
2022	2022 Fall	6001538156	Keaton	Andrew	Seale									
2022	2022 Fall	6001538238	Nicholas	Cesar	Garnett									
2022	2022 Fall	6001532070	Tristan	Daniel	Rhodes									
2022	2022 Fall	6001554043	Brandley	Cy	Allen									

# of students contacted	13
# of students who did not respond	8
# of students promoted	0
# of students with jobs in current field	4





# Graduation Exit Survey Undergraduate 2019-2020

## Overview Dashboard

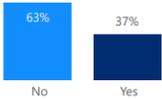
College: Soules College of Business

Program: Industrial Technology BS

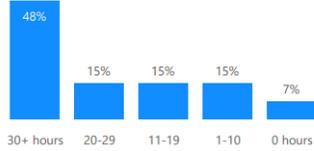
Location: Tyler

Clear Filters

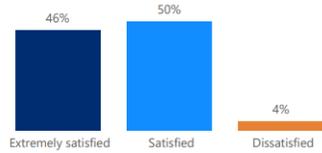
### First Generation Status



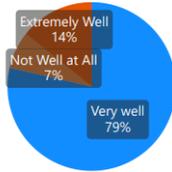
### Average Number of Hours Working Per Week



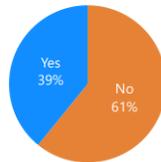
### Overall Satisfaction with Entire Experience



### Program Emphasized Marketable Skills



### Employer Known Following Graduation



### One Thing UT Tyler Should Not Change

"I love the professors that I have had over the years here. The small classroom environment has also helped me to meet new people and learn more than I could hope for." -College of Arts and Sciences student

"I would not change the experience of being at UT Tyler. The students and staff at UT Tyler are all so friendly and helpful throughout your academic journey." -College of Education and Psychology

"The reason I decided to come to UT Tyler is because it is a beautiful campus and the classes were typically small so I was able to receive plenty of one on one time with professors, especially when I started the engineering classes..." -College of Engineering

"The professors are the absolute BEST! Hands down. They are so knowledgeable and always willing to help their students be successful in their skills and education." -College of Nursing and Health Sciences

"I have had so many great experiences here at UT Tyler but my favorite would have to be how personable the professors are and how willing to help you they are. With our student ratio being smaller than most schools it has allowed us to have a more personal relationship with our classmates and our professors." -Soules College of Business



# Graduation Exit Survey Undergraduate 2019-2020

## Institutional Learning Outcomes and Core

College: Soules College of Business

Program: Industrial Technology BS

Location: Tyler

Clear Filters

### Top Skills Emphasized in Degree Plan (choose top three):

Critical Thinking: Inquiry, analysis, and synthesis of information



EQS: Analyzing data to make judgments and draw appropriate conclusions



Social Responsibility: Applying intercultural knowledge and global understanding



Communication: Development and expression of ideas to foster effective communication



Personal Responsibility: Making personal decisions in the context of moral reasoning and professional



Team Work: Working effectively as a team member



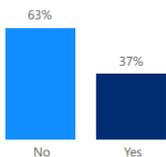
Discipline Specific Skills



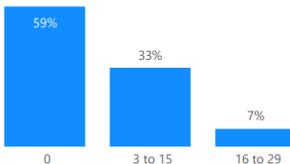
Critical Thinking: Real World Problem-Solving



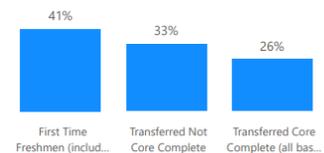
### First Generation Status



### Dual Credit Hours



### Core Completion Status at Admissions





### Graduation Exit Survey Graduate 2019-2020

#### Overview Dashboard

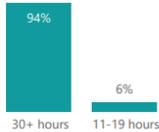
College: Soules College of Business

Program: Industrial Management MS

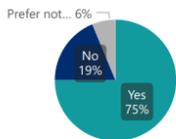
Location: Online only

Clear Filters

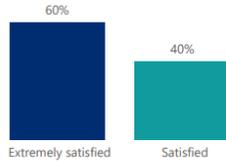
#### Average Number of Hours Working per Week



#### Employer Known Following Graduation



#### Overall Satisfaction with Entire Experience



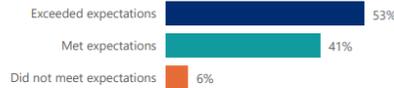
#### Includes Knowledge of the Discipline Literature



#### Appropriate Professional Practice and/or Training Experience



#### Progressively More Advanced in Academic Content to Undergraduate Program



#### One Thing UT Tyler Should Not Change

"The overall experience of the Graduate School at UT Tyler has been phenomenal, there is nothing that I would change." -College of Arts and Sciences student

"The quality of all the professors. Everyone throughout the program was understanding, easy to contact, and genuinely wants their students to succeed." -College of Nursing and Health Sciences student

"The reliance on and reference to current research was great. It helped me to become more conversant and comfortable searching through original studies and articles." -College of Education and Psychology student

"The research opportunities and encouragement provided by professors in small classes and independent research." -College of Engineering student

"The people! Everyone I called to ask for help has been nothing but supportive and receptive. Very prompt with answering questions and responding to emails, from the very beginning of the program until this day." -Soules College of Business student

How kind and supportive the faculty/staff were throughout my education experience. -Fisch College of Pharmacy student



### Graduation Exit Survey Graduate 2019-2020

#### Research and Library

College: Soules College of Business

Program: Industrial Management MS

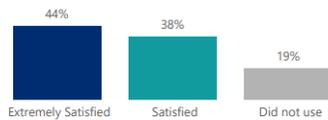
Location: Online only

Clear Filters

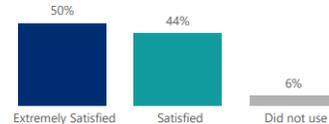
See Charts Adjusted without Did Not Use Responses

#### Student Satisfaction with the Following Library Services:

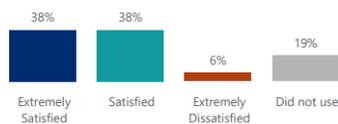
##### Library Study Space



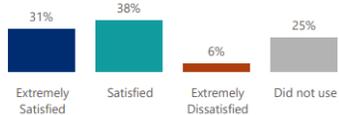
##### Online Library Resources



##### Physical Library Resources

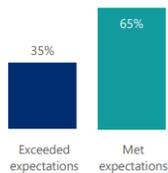


##### Education/Assistance Provided by Library Staff

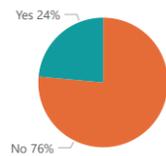


#### Research:

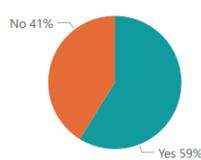
##### Research Opportunities (including scholarly, creative or technical)



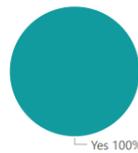
##### Worked One-on-One with a Professor on a Research Project



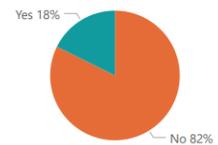
##### Conducted Independent Research while Attending UT Tyler



##### Conducted Research as Part of Paper/Project for a Course

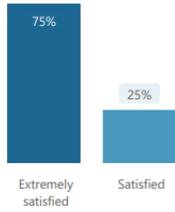


##### Conducted Research as Part of a Laboratory Class



College	Program	Location/Modality
Soules College of Business	Industrial Technology BS	Longview
Clear Filters		
Transfer Status	First Generation	
All	All	

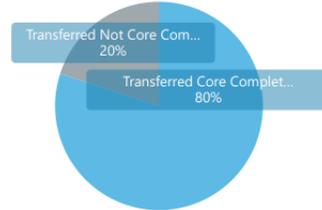
Overall Satisfaction with Entire Experience



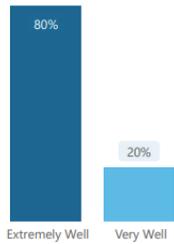
Average Hours Working Per Week



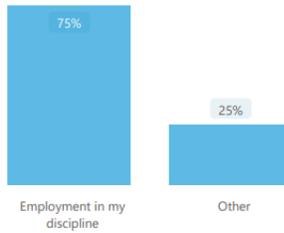
Transfer Status



Program Emphasized Marketable Skills



Primary Plan Following Graduation



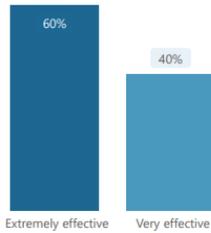
First Generation Status



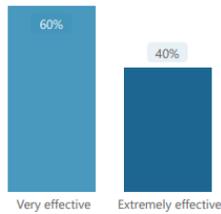
College	Program	Location/Modality
Soules College of Business	Industrial Technology BS	Longview
Clear Filters		
Transfer Status	First Generation	
All	All	

Indicate How Well UT Tyler Prepared You for the Following:

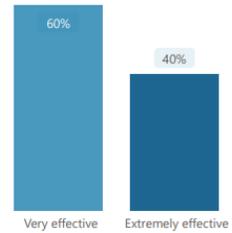
Critical Thinking to Solve Problems



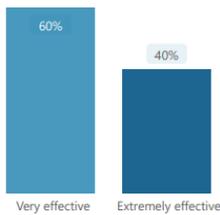
Develop and Express Ideas to Foster Effective Communication



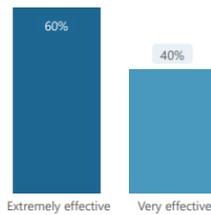
Work Effectively as a Team Member



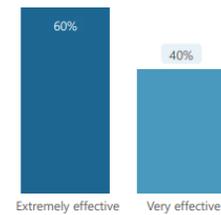
Apply Intercultural Knowledge and Global Understanding



Analyze Data to Make Judgments and Draw Appropriate Conclusions



Make Personal Decisions in the Context of Moral Reasoning/Professional Ethics





2022 Graduation Exit Survey Graduate

Overview Dashboard

College/School Soules College of Business

Program Industrial Management MS

Location/Modality Online only

Clear Filters

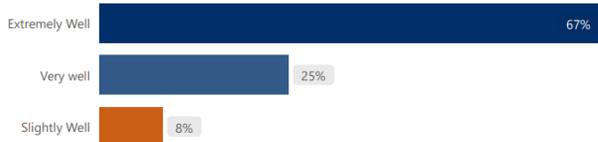
Overall Satisfaction with UT Tyler



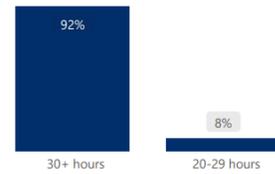
Primary Plan Following Graduation



Program Emphasized Marketable Skills



Average Hours Working Per Week



2022 Graduation Exit Survey Graduate

Overview Dashboard

College/School Soules College of Business

Program Industrial Management MS

Location/Modality Tyler

Clear Filters

Overall Satisfaction with UT Tyler



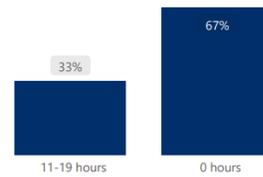
Primary Plan Following Graduation



Program Emphasized Marketable Skills



Average Hours Working Per Week



College/School  
Soules College of B... ▾

Program  
Industrial Technology ... ▾

Location  
All ▾

Race/Ethnicity  
All ▾

Sex  
All ▾

First Generation Sta...  
All ▾

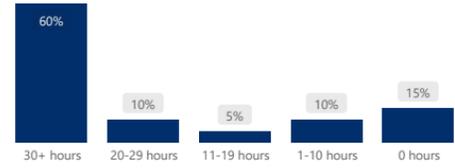
Transfer Status  
All ▾

**Clear Filters**

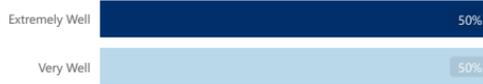
**Overall Satisfaction with UT Tyler**



**Average Hours Working Per Week**



**Program Emphasized Marketable Skills**



**Primary Plan Following Graduation**



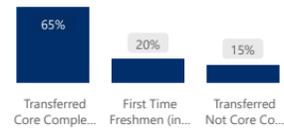
**Dual Credit Hours**



**First Generation Status**



**Transfer Status (Core)**



College/School  
Soules College of B... ▾

Program  
Industrial Manageme... ▾

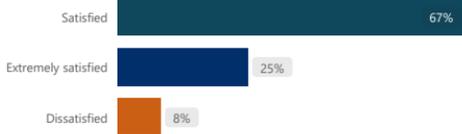
Location  
Online only ▾

Race/Ethnicity  
All ▾

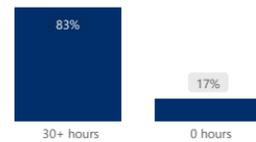
Sex  
All ▾

**Clear Filters**

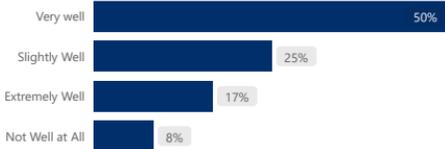
**Overall Satisfaction with UT Tyler**



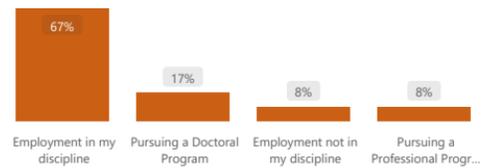
**Average Hours Working Per Week**



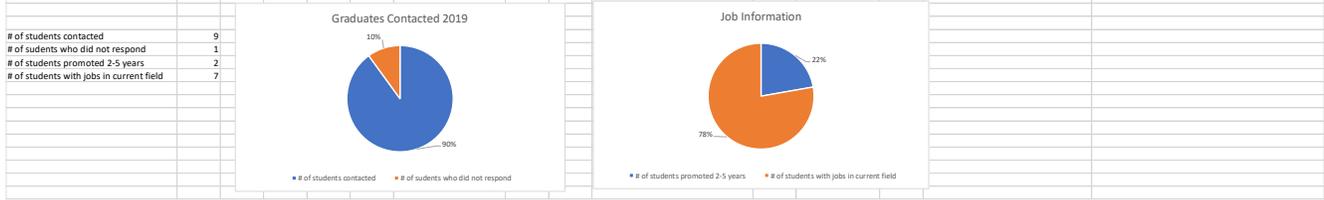
**Program Emphasized Marketable Skills**



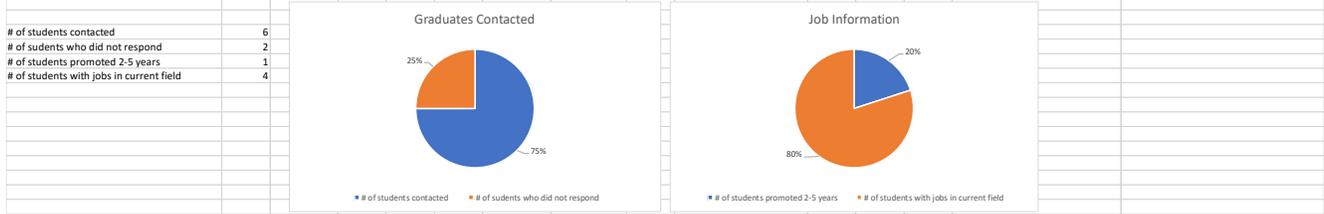
**Primary Plan Following Graduation**



Master of Science- Industrial Management														
Fall 2019														
Completion Year	Completion Term	Student id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2020	2019 Fall	500075264	Chris	Wally	Watts									
2020	2019 Fall	5000407532	Gabriel		Correa									
2020	2019 Fall	6001096693	Timothy	J	Harris									
2020	2019 Fall	6001170448	Timothy	Alan	Collins									
2020	2019 Fall	6001182417	John	Todd	Jennings									
2020	2019 Fall	6001194101	Jason	Matthew	Peretz									
2020	2019 Fall	6001195540	Matthew	Aaron	Ribunsky									
2020	2019 Fall	6001225163	Bonnie	Bell	Shattuck									
2020	2019 Fall	6001252344	Stephanie	Marill	Lawson									



Master of Science- Industrial Management														
Spring 2020														
Completion Year	Completion Term	Student id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2020	2020 Spring	5000360402	Kristin	Alyce	Plucinski									
2020	2020 Spring	5000427979	George	Yao	Chen									
2020	2020 Spring	6001098059	Jackson	Christopher	Itagendi									
2020	2020 Spring	6001179451	Shannon	Ray	Lewis									
2020	2020 Spring	6001186154	Allison	Renee	Barger									
2020	2020 Spring	6001194790	Udara	Jayaganee	Dharmasena									



Master of Science- Industrial Management														
Summer 2020														
Completion Year	Completion Term	Student id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2020	2020 Summer	5000062423	Tyler	Daniel	Johner									
2020	2020 Summer	5000078985	David	Mark	Scott									
2020	2020 Summer	6001087754	Shannen	Michelle	Smith									
2020	2020 Summer	6001090594	Abdulhalid	S	Suhni									
2020	2020 Summer	6001098222	Joshua	Dwain	Smith									
2020	2020 Summer	6001177163	Kevin	Ray	Wakefield									
2020	2020 Summer	6001226484	Ashley	Marie	Johnson									
2020	2020 Summer	6001230415	Juatin	Cott	Davis									



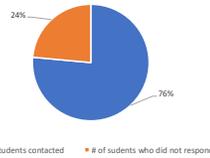
Master of Science- Industrial Management

Fall 2020

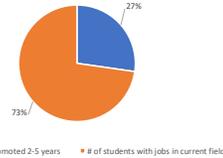
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2021	2020 Fall	500005468	Steven	Allen	Cook								
2021	2020 Fall	500010894	Zachery	Keith	Paster								
2021	2020 Fall	500030205	Jose	Gamaliel	Garza								
2021	2020 Fall	5000402954	Brody	Scott	Snyder								
2021	2020 Fall	5000430629	Bryan	Keith	Gault								
2021	2020 Fall	6001091073	Cameron	Carson	Heathcote								
2021	2020 Fall	6001093994	Jeddy	James	Alvarado Mora								
2021	2020 Fall	6001113820	Nicole	Marie	Alanis								
2021	2020 Fall	6001177185	Rene	Fernando	Ramirez								
2021	2020 Fall	6001192384	Justin	Duane	Boudreau								
2021	2020 Fall	6001217642	Ryan	Thomas	Lanchester								
2021	2020 Fall	6001223945	Farah		Suarez								
2021	2020 Fall	6001235798	Patrick	D	Warren								

# of students contacted	13
# of students who did not respond	4
# of students promoted 2-5 years	3
# of students with jobs in current field	8

Graduates Contacted



Job Information



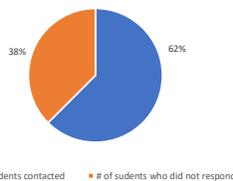
Master of Science- Industrial Management

Spring 2021

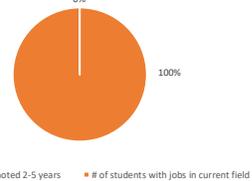
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2021	2021 Spring	500007233	Jonathon	Blake	Foughty								
2021	2021 Spring	6001090177	Mitchell	Samuel	Trocino								
2021	2021 Spring	6001098085	Maxwell		Korley								
2021	2021 Spring	6001234512	Shanmugam		Kuvakkuli								
2021	2021 Spring	6001475170	James	Leonard	Burton								

# of students contacted	5
# of students who did not respond	3
# of students promoted 2-5 years	0
# of students with jobs in current field	2

Graduates Contacted



Job Information

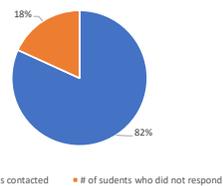


Summer 2021

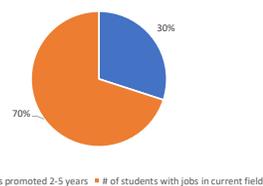
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2021	2021 Summer	6001085963	Bianca	Zorayda	Bermudez								
2021	2021 Summer	6001097701	Ebele		Anazia								
2021	2021 Summer	6001172194	Jeffrey	Paul	McKinney								
2021	2021 Summer	6001187533	Muhammad		Sher								
2021	2021 Summer	6001240216	Taigoro	Tadeo	Hernandez								
2021	2021 Summer	6001242343	Eberechi	Chiamaka	Ekena								
2021	2021 Summer	6001242349	Felix		Flores								
2021	2021 Summer	6001242832	Leilani	Tai Lynn	Wade								
2021	2021 Summer	6001475986	Christelle	Paule	Nabolle								

# of students contacted	9
# of students who did not respond	2
# of students promoted 2-5 years	3
# of students with jobs in current field	7

Graduates Contacted



Job Information

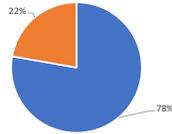


Master of Science- Industrial Management

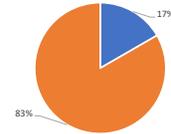
Fall 2021													
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2022	2021 Fall	6000402283	Rudolph	James	Bourgeois								
2022	2021 Fall	6000430094	Aaron		Stapp								
2022	2021 Fall	6001106413	Scott	Thomas	Folke								
2022	2021 Fall	6001192477	Jared	Davis	Marshall								
2022	2021 Fall	6001233712	Ariel	Marshay	Johnson								
2022	2021 Fall	6001234518	Gagandeep Singh		Salluja								
2022	2021 Fall	6001511940	Kristofor	Ryan	Muery								

# of students contacted	7
# of students who did not respond	2
# of students promoted 2-5 years	1
# of students with jobs in current field	5

Graduates Contacted



Job Information

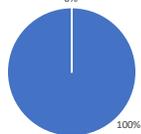


Master of Science- Industrial Management

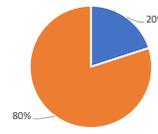
Spring 2022														
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2022	2022 Spring	600112255	David		Garcia									
2022	2022 Spring	6001186595	Chamele	Michele Christiana	Phillip									
2022	2022 Spring	6001225142	Olaekan	John	Olatunde									
2022	2022 Spring	6001240327	Chelsea	Marie	Hudson									

# of students contacted	4
# of students who did not respond	0
# of students promoted	1
# of students with jobs in current field	4

Graduates Contacted



Job Information



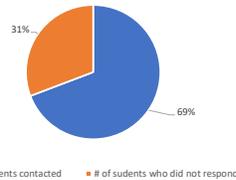
Master of Science- Industrial Management

Summer 2022

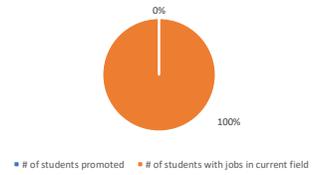
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2022	2022 Summer	5000435062	Kerrigan		Keefe								
2022	2022 Summer	5000440185	Natasha		Drail								
2022	2022 Summer	6001096518	Claudius	Anesu	Chakutra								
2022	2022 Summer	6001113176	Riley	James	Fischbeck								
2022	2022 Summer	6001171680	Kelechi		Mnuobuikwe								
2022	2022 Summer	6001173863	Marko		Majstorovic								
2022	2022 Summer	6001177585	Glenn	Daniel	Ford								
2022	2022 Summer	6001195651	Paul		Kavul								
2022	2022 Summer	6001474482	Ihalisa		Holloway								

# of students contacted	9
# of students who did not respond	4
# of students promoted	0
# of students with jobs in current field	5

Graduates Contacted



Job Information



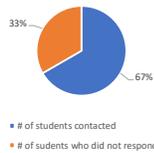
Master of Science- Industrial Management

Fall 2022

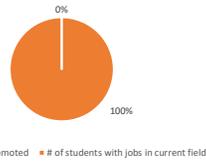
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Diploma Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2023	2022 Fall	6001228441	Jason	William	Ryan								
2023	2022 Fall	6001240050	Cameron	James	Boutreaux								
2023	2022 Fall	6001475588	Alvin		Johnson								
2023	2022 Fall	6001477023	Manuel	Jose	Gonzalez								
2023	2022 Fall	6001554891	Tejkalyan		Depani								
2023	2022 Fall	6001555354	Sravya		Korru								

# of students contacted	6
# of students who did not respond	3
# of students promoted	0
# of students with jobs in current field	3

Graduates Contacted



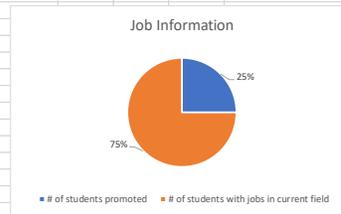
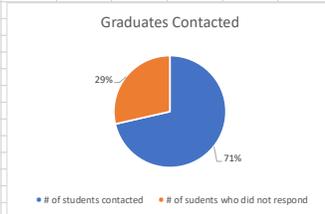
Job Information



Master of Science- Industrial Management

Spring 2023													
Completion Year	Completion Term	Student Id	First Name	Middle Name	Last Name	Home Address	Cell Phone	Personal Email	Degree	Academic Plan	Degree GPA	Employment	LinkedIn
2023	2023 Spring	600430423	Caroline	Elizabeth	Willard								
2023	2023 Spring	6001154836	Amanda	K	Midgett								
2023	2023 Spring	6001193121	Arthur	Fredrick	Barber								
2023	2023 Spring	6001555301	Gary	Joe	Rhea								
2023	2023 Spring	6001571366	Resham		Adhikari Thapa								

# of students contacted	5
# of students who did not respond	2
# of students promoted	1
# of students with jobs in current field	3





**UT Tyler**<sup>TM</sup>

THE UNIVERSITY OF TEXAS AT TYLER

# Program Assessment Report

All-Years

Program (Soules CoB) - Industrial Technology -  
BS

## Program General Information

### Program Mission Statement

Students in the bachelor of science in industrial technology program learn to apply basic engineering principles and technical skills to support industrial engineers and managers. Graduates are prepared for technical positions such as: plant manager, quality assurance manager, industrial engineer and manufacturing engineer.

### Information Systems

#### Outcome

Students understand the use of technical software, data sources and tools such as CAD, CAM, and CNC programming.

#### Outcome Status

Currently Being Assessed

#### Outcome Types

Student Learning

#### Assessment Schedule

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

#### Start Date

01/15/2013

#### Curriculum Mapping

TECH1303 (), TECH4317 (), TECH4343 (), TECH1320 (), TECH2311 (), TECH3311 (), TECH3310 (), TECH4370 (), TECH3324 (), TECH4372 (), TECH3320 (), TECH2319 ()

#### Mapping

Soules College of Business : (X - Aligned)

- Core Value: Technological Competence: X

### Course Embedded Assessment

#### Assessment Method Status

Active

#### Assessment Method

Students will make a detailed drawing of an object using solid modeling 3D CAD software (Autodesk Inventor).

#### Criterion

70% of students will score a 70% or higher on their Autodesk Inventor assignment.

#### Schedule

Will be assessed every Spring semester in Tech 4317.

#### Related Documents

[BIG RIG TRUCK PLANS.pdf](#)

[2020 SPRING TECH 4317 SYLLABUS.pdf](#)

#### Results/Action Plan

##### Result Date

07/05/2023

##### Result

Tyler:

15 out of 15 students, or 100%, scored a 70% or higher on their Autodesk Inventor assignment.

##### Assessment Method Status

In-Progress

## Program General Information

### Assessment Cycle

2021 - 2022

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### # of Tyler (main) students assessed

15

#### # of Tyler (main) students who met criteria

15

### Related Documents

[Sp 2022 Student 1 Truck Solid Model.pdf](#)

[Sp 2022 Student 2 Truck Solid Model.pdf](#)

[Sp 2022 Student 3 Truck Solid Model.pdf](#)

[TECH 4317 Spring 2022 Autodesk Assignment Results.csv](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

In response to the observed performance decline in the assignment, a proactive approach was taken to enhance student understanding and engagement. By introducing instructional videos for each assignment and associated quizzes, coupled with continuous accessibility throughout the semester, we aimed to provide students with comprehensive support and reinforcement of course concepts. Regular monitoring of student participation and performance metrics will enable ongoing evaluation and refinement of these measures to optimize learning outcomes.

### Analysis and Planning

#### Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?

Acknowledging the decline in assignment performance, we are proactively enhancing student comprehension and engagement. The introduction of instructional videos for each assignment, along with accompanying quizzes, ensures comprehensive support and reinforcement of course material throughout the semester. We are committed to the sustained use of these resources, recognizing their vital role in fostering student success. Ongoing monitoring of participation and performance metrics will enable continual evaluation and refinement, optimizing learning outcomes

### Results/Action Plan

---

#### Result Date

10/28/2021

#### Result

Tyler:

26 out of 30 students, or 87%, scored a 70% or higher on their Autodesk Investor assignment.

#### Assessment Method Status

In-Progress

### Assessment Cycle

2020 - 2021

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Related Documents

[TECH 4317 Spring 2021 Autodesk Assignment Results.csv](#)

[Sp 2021 Student 1 Truck Solid Model.pdf](#)

[Sp 2021 Student 2 Truck Solid Model.pdf](#)

[Sp 2021 Student 3 Truck Solid Model.pdf](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

## Program General Information

Although video instructions and a virtual desktop were implemented to provide convenient access to Autodesk software, the observed lack of improvement in student scores suggests that these resources may not have been effectively utilized. Further investigation is necessary to understand the factors contributing to underutilization and to develop strategies to encourage student engagement with these valuable resources.

### **Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Develop instructional videos covering the completion of every assignment for the course, ensuring comprehensive coverage of necessary concepts and techniques.

Implement quizzes associated with each instructional video to verify students' engagement and comprehension of the content.

Ensure continuous accessibility of all instructional videos throughout the semester, allowing students to review content as needed during assignment completion.

### **Results/Action Plan**

---

#### **Result Date**

11/03/2020

#### **Result**

Tyler:

18 out of 19 students, or 95%, scored a 70% or higher on their Autodesk Investor assignment.

Longview:

10 out of 11 students, or 91%, scored a 70% or higher on their Autodesk Investor assignment.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2019 - 2020

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[TECH 4317 Spring 2020 Autodesk Assignment Results.csv](#)

[Student 1 Truck Solid Model.docx](#)

[Student 2 Truck Solid Model.pdf](#)

[Student 3 Truck Solid Model.docx](#)

[Longview - TECH 4317 Fall 2019 Autodesk Assignment Results.csv](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

N/A

### **Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

The program will incorporate video instructions into the curriculum to enhance learning resources as well as establish a virtual desktop environment, granting students round-the-clock access to software for practice and assignment completion.

## Licensing Exams

---

#### **Assessment Method Status**

Active

#### **Assessment Method**

ATMAE Certified Manufacturing Specialist (CMS) exam.

#### **Criterion**

## Program General Information

UT Tyler Industrial Technology students taking the ATMAE CMS exam will meet or exceed the national exam average for the CIM (computer integrated manufacturing) and Technical Drafting/CAD sections. TECH 4317

### Schedule

Students will take the exam every Spring semester and results are analyzed.

### Related Documents

[ATMAE Certification Overview](#)

#### Results/Action Plan

---

##### Result Date

05/14/2019

##### Result

The students performed worse in the CIM category, where they use a lot of technical programming software, of the ATMAE CMS certification exam than the current year average and historical average.

UT Students Session Average: 6

Current Year Average: 6.44

Historical Average: 6.46

##### Assessment Method Status

In-Progress

##### Assessment Cycle

2018 - 2019

##### Result Type

Criterion Not Met

##### Disaggregation by Location/Modality (Optional)

##### Related Documents

[2019 CMS - CIM Results.xlsx](#)

##### Closing the Loop

##### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: More emphasis will be placed on CIM in the course TECH 4317 Computer Integrated Manufacturing by placing some of the assignments and quizzes online freeing up space for covering more content.

- Closing The Loop Date: 10/14/2020

- Closing The Loop: CIM online assignments and quizzes were added to the course. Videos and instructions on programming robots were created and added to the course for students to use outside of class.

In the past, this exam has been optional for students to take as they have to pay to take the exam.

Starting in the 2021-22 academic year it will be mandatory for Industrial Tech students to take as the program will have its own Capstone course now.

Due to COVID-19, the ATMAE Certified Specialist Exam was not offered in the Spring 2020 semester. We will assess using in-class assignments starting in the Fall 2019 semester.

##### Analysis and Planning

#### Results/Action Plan

---

##### Result Date

11/27/2018

##### Result

The students did better on the ATMAE CMS certification exam in the category of CIM (7.57 vs 6.81) where they use a lot of technical programming software.

##### Assessment Method Status

In-Progress

##### Assessment Cycle

2017 - 2018

##### Result Type

## Program General Information

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2018 APRIL 25 ATMAE CMS EXAM RESULTS CIM.docx](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: Nothing was done during this cycle due to the high scores the students received on the ATMAE CMS certification exam.

- Closing The Loop Date: 06/20/2019

- Closing The Loop: Curriculum content for TECH 4317 Computer Integrated Manufacturing will be revised if the program's average student score on the ATMAE Certified Manufacturing Specialist exam drop.

#### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

09/05/2016

#### **Result**

The students did slightly worse on the ATMAE CMS certification exam in the category of CIM (7 vs. 7.63) where they use a lot of technical programming software.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2015 - 2016

#### **Result Type**

Criterion Not Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2016 APRIL 27 CMS RESULTS FOR CIM TracDat.docx](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 09/05/2016

Analysis & Planning: Faculty have planned that more emphasis will be placed on technical software in the course TECH 4317 Computer Integrated Manufacturing (CIM).

- Closing The Loop Date: 01/17/2018

- Closing The Loop: Graduate assistants are now available and can help TECH 4317 CIM, students obtain assistance faster which provides opportunity for faculty to cover more content in the course. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

#### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

11/29/2015

#### **Result**

The Industrial Technology students who took the ATMAE CMS exam on April 15, 2015 averaged approximately two points higher than the national average on the CIM category (8.33 vs. 6.72).

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

## Program General Information

### Notes

The CIM section is highlighted in orange and the Technical Drawing section is highlighted in blue on the Excel spreadsheet.

### Related Documents

[2015 CMS EXAM RESULTS APRIL 2015.pdf](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/29/2015

Analysis & Planning: The Industrial Technology students who took the ATMAE CMS exam on April 15, 2015 averaged approximately two points higher than the national average on the CIM category (8.33 vs. 6.72). STEMCO and several other industries in the Longview area have noted that they need students who are very competent in CIM (automation) so they can update their plants with the latest forms of automation to be globally competitive. Therefore, the department is trying to purchase PLC equipment to incorporate in their technical course work.

- Closing The Loop Date: 01/17/2016

- Closing The Loop: A faculty member who teaches at the Longview University Center, which is just a few miles away from STEMCO, was sent to Detroit, MI for FANUC robots training and certification.

### Analysis and Planning

### Results/Action Plan

---

#### **Result Date**

05/09/2013

#### **Result**

UT Tyler Industrial Technology seniors scored higher than the national average of students taking the ATMAE CMS exam on the CIM and Technical Drafting/CAD sections.

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

Students faired much better this time. However, there are some areas that need improvement.

#### **Related Documents**

[2013 MAY 9 CMS TEST RESULTS.docx](#)

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/29/2012

Analysis & Planning: Students will be encouraged to take the ATMAE CMS national certification exam each Spring and results from the exam will be reviewed annually.

- Closing The Loop Date: 06/29/2012

- Closing The Loop: Students took the ATMAE CMS exam in the Spring semester of 2012 and exceeded the national average in the CIM and Technical Drafting/CAD sections.

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, although the students performed better than the national average, they did not do well on some of the Technical Drafting (CAD) section of the exam. More CAD content has been planned to be covered in TECH 4317 CIM to address this issue.

- Closing The Loop Date: 06/17/2014

- Closing The Loop: Students in TECH 4317 CIM are now required to make a mechanical drawing of their 3D solid model drawn using Inventor software.

### Analysis and Planning

## Program General Information

### Management/Supervision

---

#### Outcome

Students demonstrate that they are knowledgeable about current Industrial Technology management and supervisory practices.

#### Outcome Status

Currently Being Assessed

#### Outcome Types

Student Learning

#### Assessment Schedule

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

#### Start Date

08/26/2013

#### Curriculum Mapping

TECH4317 (), TECH3331 (), TECH3355 (), TECH4370 (), TECH3324 (), TECH3320 ()

#### Mapping

Soules College of Business : (X - Aligned)

- Core Value: Professional Proficiency: X

### Short Research/Term Paper

---

#### Assessment Method Status

Active

#### Assessment Method

Students will write a term paper applying/incorporating management theory into the paper.

#### Criterion

New: 75% of students will score a 75% or higher on their paper.

Old: 70% of students will score a 70% or higher on their paper.

#### Schedule

Will be assessed every year in TECH 3331 Project Management

#### Related Documents

[HRD-4301 Supervisor Paper.png](#)

#### Results/Action Plan

---

##### Result Date

11/14/2022

##### Result

40 out of 40 students, or 100%, scored a 75% or higher on their supervisor paper

##### Assessment Method Status

In-Progress

##### Assessment Cycle

2021 - 2022

##### Result Type

Criterion Met

##### Disaggregation by Location/Modality (Optional)

# of Tyler (main) students assessed

40

# of Tyler (main) students who met criteria

40

##### Related Documents

[HRD 4301 Spring 2022 Supervision Paper Results .csv](#)

[Student 1 HRD 4301 Spring 22 Supervisor Paper.pdf](#)

## Program General Information

[Student 2 HRD 4301 Spring 22 Supervisor Paper.pdf](#)

[Student 3 HRD 4301 Spring 22 Supervisor Paper.pdf](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

During the 2021-22 academic year, Management/Supervision skills were assessed through the HRD 4301 course. However, beginning in the 2022-2023 academic year, assessment of these skills will transition to the TECH 3331 course

### **Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

In response to evolving academic needs, the Department of Technology will provide a distinct version of the Capstone course tailored specifically for Industrial Technology students, beginning in the Fall of 2022. This initiative aims to optimize the educational experience for students in this field, aligning course content more closely with their academic and professional objectives

### **Results/Action Plan**

---

#### **Result Date**

10/28/2021

#### **Result**

37 out of 39 students, or 100%, scored a 75% or higher on their supervisor paper.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2020 - 2021

#### **Result Type**

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[HRD 4301 Spring 2021 Supervision Paper Results .csv](#)

[Spring 2021 Student 1 Case Study HRD 4301.pdf](#)

[Spring 2021 Student 2 Case Study HRD 4301.pdf](#)

[Spring 2021 Student 3 Case Study HRD 4301.pdf](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Following the adjustment of the success criterion for the 2020-21 academic year, students demonstrated continued strong performance.

### **Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Effective from the 2021-22 academic year, HRD 4301 Supervision will no longer be mandatory for students pursuing their degree. Instead, management skills will be assessed through the course TECH 3331 Project Management

### **Results/Action Plan**

---

#### **Result Date**

10/28/2020

#### **Result**

13 out of 13 students, or 100%, scored a 70% or higher on their supervisor paper.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2019 - 2020

## Program General Information

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Notes

The students did well at earning 70% or better and we would like to advance the criteria to 75% for 2020-21.

### Related Documents

[Grades-2020-LONG\\_SUMMER-HRD.-4301.csv](#)

[Student 1 Supervision Paper.docx](#)

[Student 2 Supervision Paper.docx](#)

[Student 3 Supervision Paper.docx](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

N/A

### Analysis and Planning

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Considering the commendable performance of students in achieving scores of 70% or higher, we aim to further elevate academic standards by raising the threshold to 75% for the academic year 2020-21.

## Licensing Exams

---

### Assessment Method Status

Active

### Assessment Method

ATMAE/NAIT Manufacturing Specialist Certification Exam. TECH 4301/HRD 4301.

### Criterion

Students meet or exceed the national average on the Supervision/Management section of the ATMAE Manufacturing Specialist Certification Exam.

### Schedule

Every fall and spring semester.

### Related Documents

#### Results/Action Plan

---

### Result Date

05/14/2019

### Result

The Industrial Technology students from UT Tyler scored higher than the Current Year Average and Historical Average on the ATMAE Certified Manufacturing Specialist (CMS) exam in the area of Supervision/Management. The UT Tyler students average was 11.5 while the Current Average and Historical Average of everyone who has ever taken the exam was 10.27 and 10.46 respectively.

### Assessment Method Status

In-Progress

### Assessment Cycle

2018 - 2019

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Related Documents

[2019 CMS - Supervision-Management Results.xlsx](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

## Program General Information

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: Adjuncts have been following the syllabus previously created by the full time faculty member who taught the course and according to the excellent certification exam results, the content is being covered as it had been in the past.

- Closing The Loop Date: 10/15/2020

- Closing The Loop: We have a permanent professor assigned to the course now. There also videos demonstrations available on how to use all the equipment and quizzes to assess students' knowledge. Due to COVID-19, the ATMAE Certified Specialist Exam was not offered in the Spring 2020 semester. We will assess using in-class assignments starting in the Fall 2019 semester.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

05/13/2018

##### **Result**

The Industrial Technology students from UT Tyler scored higher than the Current Year Average and Historical Average on the ATMAE Certified Manufacturing Specialist (CMS) exam in the area of Supervision/Management. The UT Tyler students average was 12 while the Current Average and Historical Average of everyone who has ever taken the exam was 11.62 and 10.53 respectively.

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2017 - 2018

##### **Result Type**

Criterion Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Notes**

Dr. Judy Sun who currently teaches the Supervision course is now covering the supervision material that is on the CMS exam. It looks as though it helped because this was the first year the Industrial Technology students at UT Tyler faired better than the national and historical average.

##### **Related Documents**

[2018 APRIL 25 ATMAE CMS EXAM RESULTS SUPERVISION.docx](#)

##### **Closing the Loop**

##### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 05/14/2018

Analysis & Planning: Although students are UT Tyler are now scoring higher than the national average on the CMS in the Supervision/Management section, more related content will also be covered in HRD 4301 Supervision to improve their comprehension and scores. Faculty who teach HRD 4301 analyzed the results of ATMAE CMS exam and have planned to include additional material as needed. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

- Closing The Loop Date: 06/20/2019

- Closing The Loop: Nothing was done this year because it has been difficult working with a variety of adjuncts who took over the course due to the loss of two full time tenured faculty members in the Department of HRD.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

09/05/2016

##### **Result**

The students scored lower on the Supervision/Mgmt. section of the ATMAE CMS certification exam this year (11 vs. 12.43).

##### **Assessment Method Status**

In-Progress

## Program General Information

### Assessment Cycle

2015 - 2016

### Result Type

Criterion Not Met

### Disaggregation by Location/Modality (Optional)

#### Notes

Please look at the numbers circled in red on the related document.

### Related Documents

[2016 APRIL 27 CMS RESULTS FOR Supervision TracDat.docx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 09/05/2016

Analysis & Planning: Although this was not a major decline, faculty have planned to still address. Faculty analyzed the results and plan to add supervision/management material to the course to address this issue.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: Faculty who taught the Supervision course added new material to the course to address this issue.

### Analysis and Planning

#### Results/Action Plan

---

### Result Date

07/25/2014

### Result

UT Tyler Industrial Technology students taking the ATMAE CMS exam scored higher for the Supervisory/Mgmt. section of the exam (12.29 out of 20 vs. 10.33 out of 20) than the national average.

### Assessment Method Status

In-Progress

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Notes

This section is highlighted in red on the related documents Excel spreadsheet.

### Related Documents

[2014 May 1 ATMAE certification exam results for UT Tyler.xlsx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 07/25/2014

Analysis & Planning: Since everyone did so well, no further action will be taken at this time regarding this result.

- Closing The Loop Date: 07/25/2014

- Closing The Loop: Student grades on future exams will be monitored and action taken if needed.

### Analysis and Planning

#### Results/Action Plan

---

### Result Date

05/09/2013

### Result

15 out of 15 Industrial Technology students (100%) met the national grade average for the Supervision/Management section. However, students did not exceed the national average for this section.

### Assessment Method Status

## Program General Information

In-Progress

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Notes

Results of the exam were given to the instructor of TECH 4301 Supervision so more content of the ATMAE exam can be covered in class. Please review the red highlighted section of the Related Documents.

#### Related Documents

[2013 MAY 9 CMS TEST RESULTS.docx](#)

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

#### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, although the students did better than the national average, they did not do well on leadership style and discrimination section of the Supervision/Management section of the ATMAE CMS certification exam. More material has been planned to be covered in the course TECH 4301 Supervision to rectify this problem and content covering topics on the ATMAE certification exam will be added to the course TECH 4301 Supervision

- Closing The Loop Date: 05/18/2014

- Closing The Loop: More content covering topics on the ATMAE certification exam was included in TECH 4301 Supervision

#### Analysis and Planning

## Production Planning

---

### Outcome

New: Students demonstrate their understanding of plan production.

Old: Students can prepare a document that is focused, well-organized and mechanically correct in order to plan production.

### Outcome Status

Currently Being Assessed

### Outcome Types

Student Learning

### Assessment Schedule

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

### Start Date

09/01/2010

### Curriculum Mapping

TECH4317 (), TECH4323 (), TECH1320 (), TECH3331 (), TECH3311 (), TECH3355 (), TECH4370 (), TECH3324 (), TECH3320 ()

### Mapping

Soules College of Business : (X - Aligned)

- Core Value: Professional Proficiency: X

## Course Embedded Assessment

---

### Assessment Method Status

Active

### Assessment Method

Students will successfully build their cannon from the provided plans.

### Criterion

70% of students will score a 70% or higher on their Cannon project.

## Program General Information

### Schedule

Will be assessed every Fall semester in TECH 4323

### Related Documents

[CANNON 2 PLANS.pdf](#)

[PLAN OF PROCEDURE FOR THE NAVAL CANNON CARRIAGE.doc](#)

### Results/Action Plan

---

#### Result Date

11/08/2022

#### Result

9 out of 9 students, or 100%, scored a 80% or higher on their Cannon project.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2021 - 2022

#### Result Type

Criterion Met

#### Disaggregation by Location/Modality (Optional)

##### # of Tyler (main) students assessed

9

##### # of Tyler (main) students who met criteria

9

### Related Documents

[TECH 4323 Fall 2021 Cannon Assignment Results.csv](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

After adjusting the success criterion for the 2021-22 academic year, students continued to demonstrate strong performance.

### Analysis and Planning

#### Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?

For the 2022-23 academic year, we will maintain the trajectory of raising the threshold to 85%

### Results/Action Plan

---

#### Result Date

10/28/2021

#### Result

25 out of 26 students, or 96%, scored a 75% or higher on their Cannon project.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2020 - 2021

#### Result Type

Criterion Met

#### Disaggregation by Location/Modality (Optional)

### Related Documents

[TECH 4323 Fall 2020 Cannon Assignment Results.csv](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Following the adjustment of the success criterion for the 2020-21 academic year, students demonstrated continued strong performance.

### Analysis and Planning

## Program General Information

### **Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Given the commendable performance of students in achieving scores of 75% or higher, we aimed to further elevate academic standards by raising the threshold to 80% for the academic year 2021-22

### **Results/Action Plan**

---

#### **Result Date**

11/03/2020

#### **Result**

23 out of 23 students, or 100%, scored a 70% or higher on their Cannon project.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2019 - 2020

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[TECH 4323 Fall 2019 Cannon Assignment Results.csv](#)

#### **Closing the Loop**

### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

N/A

#### **Analysis and Planning**

### **Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Considering the commendable performance of students in achieving scores of 70% or higher, we aim to further elevate academic standards by raising the threshold to 75% for the academic year 2020-21

## Licensing Exams

---

### **Assessment Method Status**

Active

### **Assessment Method**

UT Tyler Industrial Technology students taking the ATMAE Certified Manufacturing Specialist exam will meet or exceed the national exam average for the Production Planning section. TECH 4323.

### **Criterion**

At least 70% of students will meet or exceed expectations.

### **Schedule**

Every fall semester.

### **Related Documents**

[ATMAE Certification Overview](#)

### **Results/Action Plan**

---

#### **Result Date**

05/14/2019

#### **Result**

Students of the program earned a 4.13 out of 10 in the planning for production section of the ATMAE Certified Manufacturing Specialist exam vs. a 4.11, which was the national average, and a 4.07, which is the historical average, for ATMAE schools that year.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2018 - 2019

#### **Result Type**

## Program General Information

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2019 CMS - Production Planning Results.xlsx](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: Scores have progressively been decreasing in this area of the ATMAE certification exam, so additional content will be added in this area in the course TECH 4323 Lean Production.

- Closing The Loop Date: 10/14/2020

- Closing The Loop: Production Planning online assignments and quizzes were added to the course.

Videos and instructions were also created and added to the course for students to use outside of class.

Due to COVID-19, the ATMAE Certified Specialist Exam was not offered in the Spring 2020 semester. We will assess using in-class assignments starting in the Fall 2019 semester.

#### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

11/27/2018

#### **Result**

Students of the program earned a 5 out of 10 in the planning for production section of the ATMAE Certified Manufacturing Specialist exam vs. a 4.02 which was the national average for ATMAE schools that year.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2017 - 2018

#### **Result Type**

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2018 APRIL 25 ATMAE CMS EXAM RESULTS PRODUCTION PLANNING.docx](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: Majors of the program fared better on this area than the national average so nothing was done with this outcome at this time.

- Closing The Loop Date: 06/20/2019

- Closing The Loop: No revisions were made during this curriculum cycle due to the high scores the students earned on the ATMAE Certified Manufacturing Specialist exam in this area.

#### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

08/04/2016

#### **Result**

Students of the program earned a 6 out of 10 in the planning for production section of the ATMAE Certified Manufacturing Specialist exam vs. a 4.88 which was the national average for ATMAE schools that year.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2015 - 2016

## Program General Information

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Notes

Please refer to the attached document where the point totals are highlighted with a red circle in the Production Planning section.

### Related Documents

[2016 APRIL 27 CMS RESULTS FOR PRODUCTION PLANNING.xlsx.docx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 08/04/2016

Analysis & Planning: The UT Tyler students only faired a point higher than the ATMAE national average instead of the usual two points so more emphasis will be given to production planning in the course Lean Production. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: The instructor for TECH 4323 Lean Production reviewed the content for the ATMAE CMS certification exam and added more content to the course to address the content.

### Analysis and Planning

#### Results/Action Plan

---

### Result Date

11/29/2015

### Result

The Industrial Technology majors who took the ATMAE CMS exam scored higher than the national average by three points (7.67 vs. 4.79) on the Production Planning section of the exam.

### Assessment Method Status

In-Progress

### Assessment Cycle

2015 - 2016

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2015 CMS EXAM RESULTS APRIL 2015.pdf](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 11/29/2015

Analysis & Planning: Although the results were above the national average for this category, supplemental production planning software is being purchased to acclimate students with real world projects they would work on in industry.

- Closing The Loop Date: 09/05/2016

- Closing The Loop: The production software was purchased for work project simulations.

### Analysis and Planning

#### Results/Action Plan

---

### Result Date

07/25/2014

### Result

The students from UT Tyler's Industrial Technology program scored higher than the national average in Production Planning (4.86 out of 10 vs. 3.88 out of 10) on the ATMAE CMS certification exam.

### Assessment Method Status

In-Progress

## Program General Information

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Related Documents

[2014 May 1 ATMAE certification exam results for UT Tyler.xlsx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 07/25/2014

Analysis & Planning: Although the students from UT Tyler's Industrial Technology program scored higher than the national average on the ATMAE CMS certification exam, their average score was a 4.86 out of 10. This area will be covered in more detail in the various classes to improve the students retention of this content area.

- Closing The Loop Date: 05/18/2015

- Closing The Loop: More content relevant to production planning was added to TECH 4323 Lean Production.

### Analysis and Planning

### Results/Action Plan

---

### Result Date

05/09/2013

### Result

The Industrial Technology students at UT Tyler scored above the national average for the exam 5.5 vs. 4.19. Only one student failed the exam, however, he was a BAAS major.

### Assessment Method Status

In-Progress

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Notes

Senior Industrial Technology majors take the exam in November/December and in April/May.

### Related Documents

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, although students scored higher than the national norm, they only earned a 4.79 out of 10. More material has been planned to be covered on production planning in various TECH courses.

- Closing The Loop Date: 08/17/2014

- Closing The Loop: The instructor showed student who were taking the ATMAE CMS certification exam where the online study guide was for the exam.

### Analysis and Planning

### Results/Action Plan

---

### Result Date

05/09/2013

### Result

16 out 18 Industrial Technology students (89%) met or exceeded expectations in each criteria embedded in the rubric.

### Assessment Method Status

In-Progress

### Result Type

Criterion Met

## Program General Information

### Disaggregation by Location/Modality (Optional)

#### Notes

The UT Tyler Industrial Technology majors scored above the national average in the Production Planning section of the Certified Manufacturing Specialist national exam. Moreover, the students earned a 5.5 question correct avg. when the national norm was 4.19. NOTE: The third student taking the exam on the spreadsheet was not an Industrial Technology major (he was a BAAS major and did not pass the exam). His results were excluded from the new averages.

#### Related Documents

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

#### Closing the Loop

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 05/31/2011

Analysis & Planning: An APA style guide and other written communication guidelines will be incorporated into the capstone course TECH 4372 beginning spring 2012.

- Closing The Loop Date: 05/31/2012

- Closing The Loop: The style guide and guidelines were incorporated into the capstone course TECH 4372 in spring 2012.

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, more material over production planning has to be covered in TECH 4323 Lean Production.

- Closing The Loop Date: 08/17/2014

- Closing The Loop: The instructor for TECH 4323 Lean Production took the ATMAE CMS certification exam to see what information needed to be added to the course to address the low scores the students earned on the exam.

#### Analysis and Planning

## Robotics Programming

---

### Outcome

Students will be knowledgeable of robotics operations and programming.

### Outcome Status

Currently Being Assessed

### Outcome Types

Student Learning

### Assessment Schedule

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

### Start Date

01/15/2013

### Curriculum Mapping

TECH4317 (), TECH3320 (), TECH2319 ()

## Standardized Exams - External

---

### Assessment Method Status

Active

### Assessment Method

Students take an online certification exam from FANUC robotics in Rochester Hills, Michigan. TECH 4317.

### Criterion

At least 70% of the students must earn an 80% or higher on the robotics certification exam.

### Schedule

Every spring semester.

## Program General Information

### Related Documents

[FANUC Robotics Certification Exam Overview](#)

#### Results/Action Plan

---

##### Result Date

11/08/2022

##### Result

Tyler:

15 out of 15 students, or 100%, scored an 85% or higher on their FANUC exam.

##### Assessment Method Status

In-Progress

##### Assessment Cycle

2021 - 2022

##### Result Type

Criterion Met

##### Disaggregation by Location/Modality (Optional)

##### # of Tyler (main) students assessed

15

##### # of Tyler (main) students who met criteria

15

### Related Documents

[2022-SPRING-TECH-4317 FANUC Robotics Grades highlighted in yellow.xlsx](#)

#### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

We increased the success criterion to 85% as students continued to perform well.

#### Analysis and Planning

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

We have decided to close this Learning Outcome after the 2022-2023 academic year due to the consistently high performance of students and redundancy with the Information Systems outcome

#### Results/Action Plan

---

##### Result Date

10/28/2021

##### Result

Tyler:

30 out of 30 students, or 100%, scored an 80% or higher on their FANUC exam.

##### Assessment Method Status

In-Progress

##### Assessment Cycle

2020 - 2021

##### Result Type

Criterion Met

##### Disaggregation by Location/Modality (Optional)

### Related Documents

[2021-SPRING-TECH-4317 FANUC Robotics Grades highlighted in yellow.xlsx](#)

#### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Video instructions and a virtual desktop were developed to provide students with access to the FANUC software for home practice. Despite this change, student exam scores remained consistently high

#### Analysis and Planning

## Program General Information

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Due to the ongoing strong performance of students, we will raise the success criterion to 85%

### Results/Action Plan

---

#### Result Date

11/03/2020

#### Result

Tyler:

19 out of 19 students, or 100%, scored an 80% or higher on their FANUC exam.

Longview:

2 out of 11 students, or 18%, scored an 80% or higher on their FANUC exam.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2019 - 2020

#### Result Type

Criterion Partially Met

#### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2020 Spring FANUC Robotics Results.csv](#)

[Longview - 2019 Fall FANUC Robotics Results.csv](#)

#### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

All previously encountered issues have been successfully resolved, and to facilitate programming, additional time has been allocated by moving certain assignments and quizzes online

#### Analysis and Planning

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

We are implementing a virtual desktop system that grants students access to all necessary course software, enabling them to practice from home at their convenience.

### Results/Action Plan

---

#### Result Date

05/31/2019

#### Result

12 of 17 students or 71%, earned an 80% or higher on the FANUC robotics certification practical exam.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2018 - 2019

#### Result Type

Criterion Not Met

#### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2019 Spring FANUC Robotics Results.csv](#)

#### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

The FANUC robot simulation station was established in December 2017 to provide students with ample opportunities to practice robotics programming.

## Program General Information

### **Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Due to the transition to a new building, the frequent reinstallation of software in the new computer labs significantly disrupted students' programming time. To address this, we are resolving all related issues and providing additional programming time by transitioning some assignments and quizzes online

### **Results/Action Plan**

---

#### **Result Date**

01/17/2018

#### **Result**

25 of 30 students or 83%, earned an 80% or higher on the FANUC robotics certification practical exam. This outcome was met, but will continually be monitored.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2016 - 2017

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

Several of the students who could not pass the practical exam had health issues and other personal problems and could not attend the exam session.

#### **Related Documents**

[2017 SPRING TECH 4317 CIM GRADES.xlsx](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 01/17/2018

Analysis & Planning: A robot practice station needs to be added so students would have more time to become familiar with programming the FANUC robot. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

- Closing The Loop Date: 06/29/2018

- Closing The Loop: The FANUC robot simulation station was set up in December 2017 to allow students more time to practice robotics programming.

### **Analysis and Planning**

### **Results/Action Plan**

---

#### **Result Date**

08/04/2016

#### **Result**

All but two students (29 of 31) or 94% of the students earned an 80% or higher on the robotics certification exam. Certification exam results are highlighted in yellow on the attachment.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2015 - 2016

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

The two students who did not pass the exam earned an incomplete in the class due to illness and missed the exam.

#### **Related Documents**

## Program General Information

[2016 SPRING FANUC ONLINE EXAM RESULTS.xlsx](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 08/04/2016

Analysis & Planning: Although the students did well on the online FANUC robotics certification exam, not all passed the in course practical programming exam. More emphasis will be given to this when the CIM course is offered again in the Spring.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: The criterion was met so this assessment will only be monitored for any changes in the future.

### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

07/25/2014

#### **Result**

There were 28 of 30 students (93%) from the course TECH 4317 Computer Integrated Manufacturing who were able to successfully earn an 80% or higher on the FANUC online robotics programming certification exam.

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

The grades on this online assignment from FANUC are highlighted in yellow on the related documents Excel spreadsheet.

#### **Related Documents**

[Copy of 2014 SPRING TECH 4317.xlsx](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 07/26/2014

Analysis & Planning: Since everyone did so well on this assessment method, the criterion will be increased to 80% the next time the course is taught.

- Closing The Loop Date: 01/17/2015

- Closing The Loop: Criterion score was increased to 80%.

### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

10/27/2013

#### **Result**

13 out of 15 students passed the FANUC robotics programming exam and became certified. This was a 86.6% passage rate which was higher than the 70% specified.

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

Although over 70% of the students passed the FANUC certification exam, not many earned scores in the 90% range. More material on the programming of FANUC robots will be covered the next time the course is taught (TECH 4317 CIM).

## Program General Information

### Related Documents

[TECH 4317 CIM SPRING 2013 for TracDat.xls](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, although the student passage rate was higher than listed, most of the students did not score a 90% or higher on the FANUC certification exam. More material has been planned to be covered to address this issue the next time the course is taught.

- Closing The Loop Date: 08/17/2014

- Closing The Loop: The instructor spent more time explaining how to program the FANUC robot and allowed additional hours of open lab time by having trained student workers supervise the lab.

### Analysis and Planning

## Polymers

### Outcome

Students will have a comprehensive knowledge of polymer processes and plastics manufacturing processes.

### Outcome Status

Currently Being Assessed

### Start Date

01/21/2013

### Curriculum Mapping

TECH4343 (), TECH3333 (), TECH4323 (), TECH1320 (), TECH3311 (), TECH3312 (), TECH3320 ()

## Standardized Exams - Internal

### Assessment Method Status

Active

### Assessment Method

Students will demonstrate a thorough understanding of the polymer processes and plastics manufacturing processes by successfully completing their final exam.

### Criterion

70% of students will score a 70% or higher on their final exam.

### Schedule

Assessed every Spring semester in TECH 3333.

### Related Documents

[TECH 3333 SYLLABUS- Spring 2020.pdf](#)

### Results/Action Plan

#### Result Date

11/15/2022

#### Result

Tyler:

18 out of 18 students, or 100%, scored a 70% or higher on their final exam.

Longview:

5 out of 6 students, or 83%, scored a 70% or higher on their final exam.

### Assessment Method Status

In-Progress

### Assessment Cycle

2021 - 2022

### Result Type

Criterion Met

## Program General Information

### Disaggregation by Location/Modality (Optional)

# of Tyler (main) students assessed

18

# of Tyler (main) students who met criteria

18

# of Longview students assessed

6

# of Longview students who met criteria

5

### Related Documents

[TECH 3333 Spring 2022 Final Exam Results.csv](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

We increased the success criterion to 75% as students continued to perform well.

### Analysis and Planning

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

We will close this Learning Outcome after the 2021-2022 academic year due to the high performance of students and redundancy with the Manufacturing Systems outcome.

### Results/Action Plan

---

#### Result Date

10/28/2021

#### Result

18 out of 18 students, or 100%, scored a 70% or higher on their final exam.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2020 - 2021

#### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Related Documents

[TECH 3333 Spring 2021 Final Exam Results.csv](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

We have created videos for all the equipment in the labs, along with accompanying worksheets and quizzes to assess students' knowledge. Thanks to the introduction of these resources, students' scores have greatly improved

### Analysis and Planning

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Due to the ongoing strong performance of students, we will raise the success criterion to 75%

### Results/Action Plan

---

#### Result Date

11/03/2020

#### Result

19 out of 30 students, or 63%, scored a 70% or higher on their final exam.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

## Program General Information

2019 - 2020

### Result Type

Criterion Not Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[TECH 3333 Spring 2020 Final Exam Results.csv](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

N/A

### Analysis and Planning

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

We will create videos for all equipment in the labs, along with accompanying worksheets and quizzes to evaluate students' knowledge. This initiative will aim to enhance students' practical knowledge, aiding them in their finals and lab work.

## Licensing Exams

---

### Assessment Method Status

Active

### Assessment Method

Students will take the ATMAE national certification exam by which a section covers industrial plastics/polymers processing. TECH 3333.

### Criterion

The Industrial Technology students at UT Tyler will average higher scores on the Polymers section of the ATMAE Certified Manufacturing Specialist (CMS) exam than the Current Year Average, which is composed of the average of all individuals from across the country who took the exam for that year.

### Schedule

Every spring semester.

### Related Documents

[ATMAE Certification Overview](#)

## Results/Action Plan

---

### Result Date

05/14/2019

### Result

The Industrial Technology students from UT Tyler averaged a score of 7.38 out of 10 on the Polymers section of the ATMAE Certified Manufacturing Specialist (CMS) exam. This is significantly higher than the current year average (5.64) and the historical average (5.9).

### Assessment Method Status

In-Progress

### Assessment Cycle

2018 - 2019

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2019 CMS - Polymers Results.xlsx](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

## Program General Information

Continuing Quality Assurance: 11/19/2019

Analysis & Planning: An adjunct has taught this course in the past and a new faculty search is underway. Once the new faculty comes aboard, changes will be made accordingly.

- Closing The Loop Date: 10/15/2020

- Closing The Loop: We have a permanent professor assigned to the course now. There also videos demonstrations available on how to use all the equipment and quizzes to assess students' knowledge. Due to COVID-19, the ATMAE Certified Specialist Exam was not offered in the Spring 2020 semester. We will assess using in-class assignments starting in the Fall 2019 semester.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

11/27/2018

##### **Result**

The Industrial Technology students from UT Tyler averaged a score of 7.43 out of 10 on the Polymers section of the ATMAE Certified Manufacturing Specialist (CMS) exam. This is significantly higher than the current year average (5.9) and the historical average (5.99).

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2017 - 2018

##### **Result Type**

Criterion Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: This program was not addressed since the students earned significantly higher scores on the ATMAE Certified Manufacturing Specialist exam than students from the rest of the country.

- Closing The Loop Date: 06/20/2019

- Closing The Loop: No changes were made this academic cycle, but will be if scores decline.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

01/17/2018

##### **Result**

The Industrial Technology students from UT Tyler averaged a perfect score (10 out of 10) on the Polymers section of the ATMAE Certified Manufacturing Specialist (CMS) exam. This was almost twice as good as the national yearly and historical average.

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2016 - 2017

##### **Result Type**

Criterion Partially Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Notes**

Although the students did very well on the CMS, the department will try and make more students take the exam.

##### **Related Documents**

[2017 MAY CMS EXAM RESULTS polymers.docx](#)

## Program General Information

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 01/17/2018

Analysis & Planning: Students will be encouraged to take the CMS as part of an exit exam requirement. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

- Closing The Loop Date: 06/29/2018

- Closing The Loop: Students were awarded extra credit if they took the ATMAE CMS exam in order to encourage them to take the exam. Students were only be allowed to take the exam if they finished all their Technology course work.

### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

09/05/2016

#### **Result**

Industrial Technology majors at UT Tyler earned almost two points higher than the current national average on the ATMAE CMS certification exam in the content area of polymers.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2015 - 2016

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

Please refer to the red circled numbers on the related document.

#### **Related Documents**

[2016 APRIL 27 CMS RESULTS FOR Polymers TracDat.docx](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 01/17/2018

Analysis & Planning: The instructor will review the content on the ATMAE CMS exam regarding polymers.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: After reviewing the content on the ATMAE CMS Polymers section of the exam, the instructor incorporated additional material in the course to address it.

### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

11/29/2015

#### **Result**

The Industrial Technology students who took the ATMAE CMS exam on April 15, 2015 scored two points higher than the national norm on the Polymers section of the exam (8.33 vs. 6.28).

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2015 CMS EXAM RESULTS APRIL 2015.pdf](#)

## Program General Information

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/29/2015

Analysis & Planning: Although the students did quite well on the exam and above the national average, more content is being reviewed to add to the course.

- Closing The Loop Date: 01/11/2017

- Closing The Loop: The instructor of TECH 3333 Polymer Processing reviewed the content on the ATMAE CMS Polymer section to his students and informed them on where the study guide is for the exam. Exam scores increased.

### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

05/09/2013

#### **Result**

The students scored an average of 8.92 out of 10 vs. the national norm which was 6.28.

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

Although the students did better than the national average, they did have problems with the molecular composition of polymers. More attention will be given to this area in the course TECH 3333 Polymer Processing.

#### **Related Documents**

[2013 MAY 9 CMS TEST RESULTS.docx](#)

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, additional content on the molecular composition and properties of polymers have been planned to be added to the course TECH 3333 Polymer Processing to help improve the students understanding of the material.

- Closing The Loop Date: 08/18/2014

- Closing The Loop: A new PowerPoint presentation with a quiz has been added to the course TECH 3333 Polymer Processing to cover the molecular composition of polymers.

### **Analysis and Planning**

## Manufacturing Systems

---

### **Outcome**

Students will be able to identify various industrial manufacturing processes used to fabricate products (ATMAE Accreditation standard 7.5).

### **Outcome Status**

Currently Being Assessed

### **Outcome Types**

Student Learning

### **Assessment Schedule**

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

### **Start Date**

01/15/2013

## Program General Information

### Curriculum Mapping

TECH1303 (), TECH4317 (), TECH4343 (), TECH3333 (), TECH4323 (), TECH1320 (), TECH2311 (), TECH3311 (), TECH3312 (), TECH3310 (), TECH3324 (), TECH4372 (), TECH3344 (), TECH3320 (), TECH2319 ()

### Mapping

Soules College of Business : (X - Aligned)

- Core Value: Technological Competence: X

### Course Embedded Assessment

---

#### Assessment Method Status

Active

#### Assessment Method

Students will demonstrate a thorough understanding of the manufacturing field by successfully completing their final exam.

#### Criterion

70% of students will score a 70% or higher on their final exam in TECH 3311.

#### Schedule

Will be assessed every Fall semester

#### Related Documents

[TECH 3311 MANUFACTURING PROCESSES Fall 2019 SYLLABUS.pdf](#)

### Results/Action Plan

---

#### Result Date

07/05/2023

#### Result

Tyler:

14 out of 14 students, or 100%, scored a 70% or higher on their final exam in TECH 3311

Longview:

2 out of 2 students, or 100%, scored a 70% or higher on their final exam in TECH 3311

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2021 - 2022

#### Result Type

Criterion Met

#### Disaggregation by Location/Modality (Optional)

##### # of Tyler (main) students assessed

14

##### # of Tyler (main) students who met criteria

14

##### # of Longview students assessed

2

##### # of Longview students who met criteria

2

#### Related Documents

[TECH 3311 Fall 2021 Final Exam Results.xlsx](#)

#### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

We utilized industry-standard project management software, such as MS-Project, in our curriculum. This approach provided students with practical, real-life knowledge of project management, effectively preparing them for industry demands.

#### Analysis and Planning

## Program General Information

### **Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

For academic year 2022-23, the Office of Assessment & Institutional Effectiveness plans to update to the latest version of Nuventive to improve the systematic process for data collection and report. The assessment coordinator will dedicate the spring 2023 and summer 2023 semesters to training of new platform.

#### **Results/Action Plan**

---

##### **Result Date**

10/28/2021

##### **Result**

Tyler:

18 out of 19 students, or 95%, scored a 70% or higher on their final exam in TECH 3311

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2020 - 2021

##### **Result Type**

Criterion Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Related Documents**

[TECH 3311 Fall 2020 Final Exam Results.xlsx](#)

##### **Closing the Loop**

### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Additional lab videos were produced to demonstrate equipment usage to students. As a result, students showed significant improvement on their exams, benefiting from the ability to review equipment operation conveniently from their cell phones at any time, including during lab sessions.

##### **Analysis and Planning**

### **Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

We will incorporate industry-standard project management software, such as MS-Project, into our curriculum. By doing so, students will gain practical, real-life knowledge of project management, better preparing them for the demands of the industry

#### **Results/Action Plan**

---

##### **Result Date**

11/03/2020

##### **Result**

Tyler:

19 out of 22 students, or 86%, scored a 70% or higher on their final exam in TECH 3311

Longview:

8 out of 9 students, or 89%, scored a 70% or higher on their final exam in TECH 3311

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2019 - 2020

##### **Result Type**

Criterion Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Related Documents**

[TECH 3311 Fall 2019 Final Exam Results.xlsx](#)

[Longview TECH 3311 Spring 2020 Final Exam Results.xlsx](#)

## Program General Information

### Closing the Loop

What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

N/A

### Analysis and Planning

Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?

We will produce additional lab videos demonstrating equipment usage. Given the convenience of online access amidst Covid, students will have the flexibility to watch these instructional materials remotely, eliminating the need for in-person attendance.

## Licensing Exams

---

### **Assessment Method Status**

Active

### **Assessment Method**

ATMAE Certified Manufacturing Specialist exam.

### **Criterion**

All students will earn a higher grade under the various manufacturing processes sections of the ATMAE Certified Manufacturing Specialist exam than the national average (2011-2013 Association of Technology, Management, and Applied Engineering (ATMAE) Accreditation Handbook standard 7.5). TECH 3311

### **Schedule**

Graduating seniors will be encouraged to take the exam each Spring semester.

### **Related Documents**

[ATMAE Certification Overview](#)

### **Results/Action Plan**

---

#### **Result Date**

05/14/2019

#### **Result**

The Industrial Technology students at UT Tyler averaged a lower score than the Current Year Average or the Historical Average of everyone in the country who took the Certified Manufacturing Specialist (CMS) exam this year and since its inception in the Manufacturing Philosophies categories, Manufacturing Casting Processes category, and Manufacturing Forming Process categories. Students performed higher than the Current Year and Historical Average in the Manufacturing Joining Processes categories.

Category: UT Tyler Average vs Current Year Average vs Historical Average

Manufacturing Casting Processes: 4.13 vs 4.28 vs 4.41

Manufacturing Forming Processes: 4.5 vs 4.62 vs 4.83

Manufacturing Joining Processes: 5.75 vs 4.89 vs 5.0

Manufacturing Philosophies: 2.63 vs 2.74 vs 2.99

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2018 - 2019

#### **Result Type**

Criterion Partially Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2019 CMS - Manufacturing Results.xlsx](#)

### Closing the Loop

What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

## Program General Information

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: More emphasis will be placed upon casting processes in TECH 4343 Advanced Manufacturing Processes now that the course is hybrid and also meets face-to-face. An in-class casting process will be added to the course.

- Closing The Loop Date: 10/13/2020

- Closing The Loop: Five pages were added to the lecture notes on casting processes in the TECH 4343 course. Additional casting questions were added to the final as well and an additional quiz was added to the course as well.

Due to COVID-19, the ATMAE Certified Specialist Exam was not offered in the Spring 2020 semester. We will assess using in-class assignments starting in the Fall 2019 semester.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

11/27/2018

##### **Result**

The Industrial Technology students at UT Tyler averaged much higher than the Current Year Average or the Historical Average of everyone in the country who took the Certified Manufacturing Specialist (CMS) exam this year and since its inception in the Manufacturing Joining Processes and Manufacturing Philosophies categories. UT Tyler students averaged lower in the Manufacturing Casting Processes category and higher historically in the Manufacturing Forming Process category but lower than the current year average. Refer to the Related Document for 2018.

Category: UT Tyler Average vs Current Year Average vs Historical Average

Manufacturing Casting Processes: 4.43 vs 4.61 vs 4.45

Manufacturing Forming Processes: 5.29 vs 5.56 vs 4.89

Manufacturing Joining Processes: 6.43 vs 5.13 vs 5.03

Manufacturing Philosophies: 3.71 vs 2.87 vs 3.02

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2017 - 2018

##### **Result Type**

Criterion Partially Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Related Documents**

[2018 APRIL 25 ATMAE CMS EXAM RESULTS MANUFACTURING AREAS.docx](#)

##### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/20/2019

Analysis & Planning: Because the students in the Industrial Technology program at UT Tyler fared better than any other program in the country, nothing will be done with this outcome at this time.

- Closing The Loop Date: 06/20/2019

- Closing The Loop: If students from the program do not do as well on the ATMAE Certified Manufacturing Specialist exam the next time it is administered, then changes will be made to the curriculum as needed.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

01/17/2018

##### **Result**

## Program General Information

The Industrial Technology students at UT Tyler averaged much higher than the Current Year Average or the Historical Average of everyone in the country who took the Certified Manufacturing Specialist (CMS) exam this year and since its inception. Refer to the Related Document for 2017.

### Assessment Method Status

In-Progress

### Assessment Cycle

2016 - 2017

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Notes

Students did better than the national average, however, the department would like to find a way for all the students to take it as an exit exam.

### Related Documents

[2017 MAY CMS EXAM RESULTS manufacturing areas.docx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 01/17/2018

Analysis & Planning: Students will be encouraged to take the ATMAE CMS certification exam once they finish their technology coursework. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

- Closing The Loop Date: 06/29/2018

- Closing The Loop: Students were encouraged to take the ATMAE CMS certification exam by being offered extra credit. Student were required to show their unofficial transcript to the proctor of the exam to make sure they had taken all the required course work covered on the exam.

### Analysis and Planning

#### Results/Action Plan

---

### Result Date

09/05/2016

### Result

Students improved their scores and earned higher than the national current average on the ATMAE CMS certification exam in the areas of Dimensional Metrology (7 vs. 6.43), Quality (9 vs. 8.05), and Technical Drafting (8.5 vs. 8.26). These were the three areas where the students earned lower than the current national average last year.

### Assessment Method Status

In-Progress

### Assessment Cycle

2015 - 2016

### Result Type

Criterion Partially Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2016 APRIL 27 CMS RESULTS FOR TracDat.pdf](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

## Program General Information

Continuing Quality Assurance: 09/05/2016

Analysis & Planning: Although the students did better on the three categories of the national ATMAE certification exam than they did last year and exceeded the national average, they fell a few tenths on three other categories. Therefore, more emphasis will be placed on that content in the relevant courses being offered by the program.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: All students will now be required to take a mechanical drafting course as part of the degree plan requirements.

### **Analysis and Planning** **Results/Action Plan**

---

#### **Result Date**

07/01/2015

#### **Result**

2015 - UT Tyler students earned higher scores on each ATMAE Specialist Exam except in the areas of Metrology, Quality, and Technical Drafting.

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Partially Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2015 CMS EXAM RESULTS APRIL 2015.pdf](#)

#### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 08/04/2016

Analysis & Planning: Because UT Tyler students did not do as well as the national average for the areas of Metrology, Quality and Technical Drafting changes are being initiated. More emphasis will be given to metrology when students are having to measure their projects in the Lean Production course. The quality scores dipped because an adjunct teacher was teaching the course, however, a new full time faculty member has been hired to teach the course and revise it. Technical Drafting will be offered so all students can take it now that more faculty have been hired.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: An adjunct faculty member who has a job as a quality engineer has now been hired to teach the quality course.

Continuing Quality Assurance: 09/05/2016

Analysis & Planning: The course TECH 1303 Engineering Graphics will be offered in the Spring 2016 semester so students can learn more about technical drafting, hopefully increasing their knowledge and scores on the ATMAE CMS certification exam. More content will be added to TECH 3310 Total Quality Management and more time will be spent in the course TECH 4323 Lean Production on dimensional metrology.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: The course TECH 1303 is now offered every Fall semester since drafting is the language of industry and its understanding is beneficial to student success in the other technology courses.

### **Analysis and Planning** **Results/Action Plan**

---

#### **Result Date**

06/12/2014

#### **Result**

Students who took the ATMAE CMS exam in the Spring of 2014 all earned higher grades than the national average and did better than those who took it in the Spring of 2013 from UT Tyler.

## Program General Information

### Assessment Method Status

In-Progress

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2014 May 1 ATMAE certification exam results for UT Tyler.xlsx](#)

[2014 MAY 2 REVIEW OF ATMAE CMS EXAM RESULTS - ALL ABOVE NATIONAL AVG.doc](#)

[2014 May 1 ATMAE certification exam results for UT Tyler.xlsx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 06/12/2014

Analysis & Planning: Although the students did much better than the national average on the ATMAE CMS certification exam, they did have some issues with the bending and sheet metal classification areas. More time has been planned to be committed to these areas in the course TECH 4323 where they work with sheet metal

- Closing The Loop Date: 07/12/2016

- Closing The Loop: Students were required to manufacture a project out of sheet metal in the Fall 2013 section of the course TECH 4323 Lean Production and consequently did much better on the ATMAE CMS certification exam outperforming the national average.

### Analysis and Planning

#### Results/Action Plan

---

#### Result Date

05/12/2013

#### Result

Students who took the ATMAE CMS exam in the Spring of 2013 all earned higher grades than the national average on all three manufacturing processes sections.

### Assessment Method Status

In-Progress

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2013 MAY 9 CMS TEST RESULTS.docx](#)

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

[2013 MAY 9 CMS TEST RESULTS.docx](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

Continuing Quality Assurance: 05/12/2013

Analysis & Planning: Based on results, additional content (new PowerPoint slides and YouTube videos on casting, bending, and arc/gas cutting) was added to TECH 4343 Advanced Manufacturing Processes to address material that was covered on the ATMAE CMS certification exam. Students fared considerably better due to this course revision.

- Closing The Loop Date: 05/16/2014

- Closing The Loop: Students were required to manufacture a project out of sheet metal in the Fall 2013 section of the course TECH 4323 Lean Production and consequently did much better on the ATMAE CMS certification exam outperforming the national average.

### Analysis and Planning

## Program General Information

### Results/Action Plan

---

**Result Date**

05/22/2012

**Result**

2012: Students scored higher on the sections of metal casting, bending, and arc/gas cutting during the course TECH 4343 Advanced Manufacturing Processes as well on the national ATMAE CMS certification exam.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 05/12/2012

Analysis & Planning: Based on results, additional content (new PowerPoint slides and YouTube videos on casting, bending, and arc/gas cutting) is planned for TECH 4343 Advanced Manufacturing Processes to address material that was covered on the ATMAE CMS certification exam.

- Closing The Loop Date: 01/17/2013

- Closing The Loop: The material mentioned in the Action Plan, i.e., casting, bending, and arc/gas cutting has been added to TECH 4343 Advanced Manufacturing Processes.

**Analysis and Planning****Results/Action Plan**

---

**Result Date**

05/07/2011

**Result**

2011: The average ATMAE CMS exam session results for the Industrial Technology program seniors at UT Tyler were higher than the national norm for all but one of the manufacturing processes categories highlighted in purple on the related document (May 7, 2011). Student scores from the ATMAE certification exam show that the students' average for the test session was higher in all three sections of the manufacturing processes categories.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents****Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

## Program General Information

Continuing Quality Assurance: 06/28/2011

Analysis & Planning: Although all the students passed the exam, more content on manufacturing processes will be covered in TECH 4343 Advanced Manufacturing Processes to ensure that all the program's graduates understand all the manufacturing processes covered on the ATMAE certification exam.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: The ATMAE CMS certification exam was reviewed by the instructor of TECH 4343 and additional content was added to the course to address this content.

Continuing Quality Assurance: 10/27/2013

Analysis & Planning: Based on results, although the students did much better than the national average on the ATMAE CMS certification exam, they did have some issues with the bending and sheet metal classification areas. More time has been planned to be committed to these areas in the course TECH 4323 where they work with sheet metal.

- Closing The Loop Date: 06/14/2014

- Closing The Loop: Sheet metal is now covered in TECH 4323 Lean Production.

Continuing Quality Assurance: 01/11/2016

Analysis & Planning: Because students did not do as well as expected in the technical drafting portion of the ATMAE CMS exam, the course was offered by the department for the first time in 10 years for the Spring 2016 semester so the content and quality of the course could be easily monitored and changed as needed.

- Closing The Loop Date: 11/29/2015

- Closing The Loop: The course TECH 4323 Lean Production that covers metrology was revised to incorporate more material on metrology. TECH 3310 Total Quality Management is currently being covered by an adjunct due to accelerated growth in the program and no permanent faculty available to teach the course. A request has been submitted to hire a new faculty member to cover all the courses adjuncts have been teaching. It has been found that many of the current students had not had a technical drafting course and were allowed to substitute any lower division technical course in its place. This policy has since halted and a technical drafting course will be offered to students once a new faculty member is hired.

### Analysis and Planning

## Program Outcome

### Outcome

The Industrial Technology B.S. program evaluates viability, impact and effectiveness with regard to currency of the curriculum and student achievement.

### Outcome Status

Currently Being Assessed

### Outcome Types

Program Evaluation Outcome

### Assessment Schedule

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

### Start Date

09/01/2013

## External Program Review

### Assessment Method Status

Active

### Assessment Method

## Program General Information

An External Program Review is conducted by The Association of Technology, Management, and Applied Engineering (ATMAE) on a regular cycle for the Human Resource Development & Technology programs within the College of Business and Technology. The program faculty complete a comprehensive self-study using the metrics outlined by the ATMAE program reviewers. A summary executive report is provided at the end of the comprehensive review by ATMAE. Priority recommendations are implemented for ongoing program improvement in the subsequent academic year(s).

### Criterion

Implement all priority recommendations within an agreed upon time-frame.

### Schedule

ATMAE grants re-accreditation tenures of six years.

### Related Documents

[UT System & UT Tyler External Program Review](#)  
[External Program Review](#)

### Results/Action Plan

---

#### Result Date

06/03/2019

#### Result

2018-2019: The Industrial Technology faculty and administration completed a comprehensive self-study as part of the ATMAE accreditation requirements. Three ATMAE visiting team members from outside the institution conducted a campus site visit April 14-16, 2019.

The Industrial Tech program received a glowing review from visiting ATMAE accreditation team. The program was in compliance on all standards with the exception of Standard 10: Administrative Support & Faculty Qualification. The team recommended that due to the growth of the program and the new building expansion, the team believes that an additional faculty is needed to support the department. A lab technician is also needed to help with the upkeep of all the equipment.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2018 - 2019

#### Result Type

Criterion Partially Met

#### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2019 ATMAE Accreditation Final Letter to UT Tyler.doc](#)  
[2019 ATMAE External Review\\_Written Response.docx](#)  
[2019 UT Tyler ATMAE Report.doc](#)

#### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 08/06/2019

Analysis & Planning: The University of Texas at Tyler will explore hiring additional faculty members to support both the Bachelor of Science (B.S.) in Industrial Technology and the Master of Science (M.S.) in Technology Management degree programs. The University plans to hire students to serve as laboratory technicians for the upcoming academic year.

#### Analysis and Planning

#### Results/Action Plan

---

#### Result Date

06/19/2012

#### Result

2011-2012: The Industrial Technology faculty and administration completed a comprehensive self-study as part of the ATMAE accreditation requirements. Two ATMAE visiting team members from outside the state of Texas conducted a campus site visit April 1-3, 2012.

## Program General Information

### Assessment Cycle

2013 - 2014

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

### Notes

The Industrial Technology program was reaccredited with no non or partial compliances in November 2012.

### Related Documents

[2012 ATMAE Self-study FEB 24 2012.pdf](#)

[2013 MAY 9 CMS TEST RESULTS.docx](#)

[2013 MAY 9 CMS TEST RESULTS.xlsx](#)

[2013 MAY 9 CMS TEST RESULTS.docx](#)

[Letter Hearing Action Reaccreditation.doc](#)

[REQUEST FOR REACCREDITATION FORM FOR UT TYLER.pdf](#)

[RE ATMAE DRAFT REPORTmsg miller.rtf](#)

[Team Report2009BaccUT Tyler 2012.doc](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 07/25/2014

Analysis & Planning: The Industrial Technology program received a glowing review from the ATMAE accreditation team and had no partial or non-compliances on the 62 standards that were reviewed during the visit.

- Closing The Loop Date: 06/29/2018

- Closing The Loop: Industrial Technology program faculty participated in planning the new program facilities and new equipment purchases in the new Soules College of Business Building and move to the new facilities.

### Analysis and Planning

### Surveys

---

#### Assessment Method Status

Active

#### Assessment Method

The UT Tyler Graduation Exit Survey is offered to all graduating students when they apply for graduation. Selected items on the undergraduate version of the Graduation Exit Survey are used as part of the Industrial Technology Program assessment.

#### Criterion

90% Agreement or satisfaction is reached on all chosen questions

#### Schedule

Results are collected and analyzed annually

#### Related Documents

##### Results/Action Plan

---

#### Result Date

03/18/2024

#### Result

## Program General Information

2021-2022

Tyler (N=26)

Degree emphasized marketable skills: 35% Extremely well, 45% very well

Satisfaction with entire education experience: 42% Extremely satisfied, 54% Satisfied

Conducted Research as Part of a Paper or Project: 87% Yes

Response Rate for program: 26/35(74%)

### Assessment Method Status

In-Progress

### Assessment Cycle

2022 - 2023

### Result Type

Criterion Met

### Disaggregation by Location/Modality (Optional)

#### # of Tyler (main) students assessed

26

#### # of Tyler (main) students who met criteria

25

### Related Documents

[2021-22 IndTech BS \(Tyler\) Grad Exit Survey Dashboard.pdf](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

For 2021-22, The program emphasized the campus resources available to students and underscored their degree requirements in advising meetings. The AIE Office also added questions about the QEP to the survey.

### Analysis and Planning

#### Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?

For the academic year 2022-23, the AIE will create a committee to review the graduation exit survey to meet the needs of all departments. Questions regarding student belongingness are planned to be added.

### Results/Action Plan

---

#### Result Date

03/02/2022

#### Result

2020-2021

Tyler (N=23)

Degree emphasized marketable skills: 42% Extremely well, 42% very well

Satisfaction with entire education experience: 39% Extremely satisfied, 61% Satisfied

Conducted Research as Part of a Paper or Project: 83% Yes

Longview (N=4)

Degree emphasized marketable skills: 80% Extremely well, 20% very well

Satisfaction with entire education experience: 75% Extremely satisfied, 25% Satisfied

Conducted Research as Part of a Paper or Project: 100% Yes

Response Rate for college: 332/393 (84%)

### Assessment Method Status

In-Progress

## Program General Information

### Assessment Cycle

2020 - 2021

### Result Type

Criterion Partially Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2020-21 IndTech BS \(Longview\) Grad Exit Survey Dashboard.pdf](#)

[2020-21 IndTech BS \(Tyler\) Grad Exit Survey Dashboard.pdf](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

The AIE Office reformatted the entire survey, strategically grouping topics for improved organization. Optional open comments were added to facilitate the collection of more qualitative feedback from students.

### Analysis and Planning

#### Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?

The program will emphasize the campus resources available to students and underscore their degree requirements in advising meetings. Additionally, the AIE Office plans to include questions about the QEP in the survey.

### Results/Action Plan

---

#### Result Date

11/12/2020

#### Result

2019-2020

Tyler (N=27)

Degree emphasized marketable skills: 14% Extremely well, 79% very well

Satisfaction with entire education experience: 46% Extremely satisfied, 50% Satisfied

Conducted Research: 70% Yes

Longview (N=3)

Degree emphasized marketable skills: 50% Extremely well, 50% very well

Satisfaction with entire education experience: 33% Extremely satisfied, 67% Satisfied

Conducted Research: 67% Yes

Response Rate for college: 306/378(81%)

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2019 - 2020

#### Result Type

Criterion Partially Met

### Disaggregation by Location/Modality (Optional)

#### Related Documents

[2019-20 Grad Exit Survey - Ind Tech Longview.pdf](#)

[2019-20 Grad Exit Survey - Ind Tech Tyler.pdf](#)

### Closing the Loop

#### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

The AIE Office restructured the survey items on the graduation exit survey and revised the criteria set for each program.

### Analysis and Planning

## Program General Information

### **Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

The AIE Office is planning to overhaul the entire survey, strategically grouping topics for better organization. Additionally, there are plans to incorporate optional open comments to gather more qualitative feedback from students.

### **Results/Action Plan**

---

#### **Result Date**

11/01/2019

#### **Result**

2018-2019

Tyler

Degree emphasized marketable skills: 22% Extremely well, 72% very well

Satisfaction with entire education experience: 96% agree

Emphasized Research Opportunities: 67% Yes

Longview

Degree emphasized marketable skills: 29% Extremely well, 71% very well

Satisfaction with entire education experience: 86% agree

Emphasized Research Opportunities: 43% Yes

Online

Degree emphasized marketable skills: 50% very well

Satisfaction with entire education experience: 100% agree

Emphasized Research Opportunities: 100% Yes

Response Rate for college: 395/419 (94%)

### **Assessment Method Status**

In-Progress

### **Assessment Cycle**

2018 - 2019

### **Result Type**

Criterion Partially Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[Grad Exit Survey\\_Undergraduate 2018-19 Soules COB overall.pdf](#)

[Grad Exit Survey\\_Undergraduate 2018-19 Soules COB\\_IndTech\\_Longview.pdf](#)

[Grad Exit Survey\\_Undergraduate 2018-19 Soules COB\\_IndTech\\_Online.pdf](#)

[Grad Exit Survey\\_Undergraduate 2018-19 Soules COB\\_IndTech\\_Tyler.pdf](#)

### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/01/2019

Analysis & Planning: With guidance from faculty and staff, the AIE Office plans to reformat the survey items on the graduation exit survey, and group survey items more strategically. Qualitative questions will be added to better gauge student perceptions and to help guide future survey development. Research questions were rewritten to better capture the various types of research across the university.

- Closing The Loop Date: 02/13/2020

- Closing The Loop: AIE Office reformatted the survey items on the graduation exit survey and updated the criterion set for each program.

### **Analysis and Planning**

## Program General Information

### Results/Action Plan

---

**Result Date**

07/19/2018

**Result**

2017-2018 Department/faculty advisor was easy to contact: 57 of 60 (95%) Agree, achieve graduation timeline: 57 of 60 (95%) Agree, accurate degree plan information: 55 of 60 (92%) Agree; degree emphasized marketable skills: 56 of 59 (95%) Agree; Entire Education Experience: 55 of 56 students (98%) Satisfied

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2017 - 2018

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[UG 17-18 Results SCoB Industrial Technology.docx](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 04/16/2019

Analysis & Planning: Starting in 18-19, Exit Survey Advising Assessment will be in the college advisors plan. The Technology faculty will identify additional survey items to assess for next year.

- Closing The Loop Date: 11/01/2019

- Closing The Loop: Advising survey items were added to advising assessment plan. New survey items were added to program outcome.

**Analysis and Planning****Results/Action Plan**

---

**Result Date**

08/01/2017

**Result**

2016-2017 Department or faculty advisor was easy to contact: 36 of 39 (92%) Agree, helped complete degree in a timely manner: 37 of 39 (95%) Agree, helped create accurate degree plan: 37 of 39 (95%) Agree; Prepared for Career Field: 25 of 25 students (100%) Excellent/Adequate; Prepared for Grad/Professional School: 3 of 3 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 27 of 28 students (96%) Satisfied

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2016 - 2017

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[16-17 CBT B Industrial Technology.pdf](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

## Program General Information

Continuing Quality Assurance: 09/10/2017

Analysis & Planning: We plan to close the survey items on student's perception of career field and grad/professional school preparation based on feedback that students are unable to respond accurately.

Faculty reviewed the student exit survey results and since the outcome was over 90%, for all academic advising items, the faculty plan to continue collaborating with college advisors to continue providing quality advising for our students. 2017-18 results will be reported separately for both the UT Tyler campus and the Longview instructional site.

- Closing The Loop Date: 06/29/2018

- Closing The Loop: The Soules College of Business Academic Advisors reviewed and updated the college academic advising Point of Service Survey that was provided to every student for face-to-face or online advising session. The Point of Service Survey items triangulate with the exit survey advising items and the first reports including results from both surveys were generated in June 2018.

- Closing The Loop Date: 07/19/2018

- Closing The Loop: Closed the survey items: Prepared for grad/professional school and Prepared for career field. Added survey item: Degree emphasized marketable skills for future career plans.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

09/13/2016

##### **Result**

2015-16: Prepared for Career Field: 6 of 8 students (75%) Excellent/Adequate; 2 of 8 students (25%) Inadequate; Prepared for Graduate/Professional School: 2 of 3 students (66%) Excellent/Adequate, 1 of 3 students (33%) Inadequate; Overall Satisfaction with Entire Educational Experience: 5 of 10 students (50%) Satisfied, 3 of 10 students (30%) Neutral, 2 of 10 students (20%) Dissatisfied; Department Faculty Advisor 1) Was easy to contact: 4 of 5 students (80%) Agree, 1 of 5 students (20%) Neutral, 2) Helped me complete my degree in a timely manner: 2 of 5 students (40%) Agree, 3 of 5 students (60%) Neutral, 3) Helped me create an accurate degree plan: 3 of 5 students (60%) Agree, 1 of 5 students (20%) Neutral, 1 of 5 students (20%) Disagree; Overall Satisfaction with Academic Advising: 10 of 11 students (91%) Satisfied, 1 of 11 students (9%) Neutral.

##### **Assessment Method Status**

In-Progress

##### **Result Type**

Criterion Not Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Related Documents**

##### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 09/09/2016

Analysis & Planning: Refine 2018 survey items on student perception of career and grad school or professional school preparation for accuracy. (2017 Survey already launched).

- Closing The Loop Date: 07/24/2017

- Closing The Loop: Changed the verbiage to "My degree emphasized marketable skill for my future career plans."

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

09/15/2015

##### **Result**

## Program General Information

2013-14: Prepared for Career Field: 6 of 6 students (100%) Excellent/Adequate; Prepared for Grad/Professional School: 6 of 6 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 6 of 6 students (100%) Very Satisfied/Satisfied.

2014-15: Prepared for Career Field: 9 of 9 students (100%) Excellent/Adequate; Prepared for Grad/Professional School: 1 of 1 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 9 of 10 students (90%) Very Satisfied/Satisfied.

TOTAL: Prepared for Career Field: 15 of 15 students (100%) Excellent/Adequate; Prepared for Grad/Professional School: 7 of 7 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 15 of 16 students (94%) Very Satisfied/Satisfied.

### **Assessment Method Status**

In-Progress

### **Result Type**

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[13-14 Industrial Technology](#)

[14-15 Industrial Technology](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 09/15/2015

Analysis & Planning: Add items on level of satisfaction with department academic advising. Items will include was easy to contact, helped me complete my degree in a timely manner, and helped me create an accurate degree plan.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: The Office of Institutional Research will now monitor this survey which should increase the response rate for better feedback.

### **Analysis and Planning**



**UT Tyler**<sup>TM</sup>

THE UNIVERSITY OF TEXAS AT TYLER

# Program Assessment Report

All-Years

Program (Soules CoB) - Industrial Management -  
MS

## Program General Information

### Program Mission Statement

The master of science in industrial management degree program prepares students for leadership roles in industrial, processing and construction industries as well as in business, government and education.

### Six Sigma Quality Skills

#### Outcome

Students will demonstrate an understanding of the concepts of modern manufacturing process management systems with regards to Six Sigma quality skills.

#### Outcome Status

Currently Being Assessed

#### Outcome Types

Student Learning

#### Assessment Schedule

2020 - 2021, 2022 - 2023, 2024 - 2025

#### Start Date

04/30/2015

#### Curriculum Mapping

TECH5310 (), MANA5305 (), TECH5390 (), TECH5335 ()

#### Mapping

Soules College of Business: (X - Aligned)

- Core Value: Technological Competence: X

### Licensing Exams

#### Assessment Method Status

Active

#### Assessment Method

UT Tyler Industrial Management students wanting to obtain Lean Six Sigma Black Belt certification will take and complete the ATMAE Lean Six Sigma Certification exam. All examinees earning a score of 80% or higher on the exam are classified as a Lean Six Sigma Black Belt by ATMAE. TECH 5310.

#### Criterion

UT Tyler Industrial Management students will meet or exceed the national average score for each of the six sigma sections of the ATMAE Lean Six Sigma Certification Exam.

#### Schedule

Every other Spring semester.

#### Related Documents

[Study Guide LSS Exam](#)

#### Results/Action Plan

##### Result Date

11/02/2021

##### Result

Six UT Tyler Industrial Management students participated in the Lean Six Sigma Black Belt Certification exam by ATMAE. Students scored higher than the national average on 4 of the 7 six sigma categories: Analyze Phase Statistics, Design Phase Statistics, Measure Phase Statistics, and Project Management . On three of the six sigma categories, students scored below the national average: Control Phase Statistics, Improve Phase Statistics, and Team Management.

Of the six students, one earned their Lean Six Sigma Black Belt certification, two earned their Lean Six Sigma Green Belt certification, and three earned their Lean Six Sigma Yellow Belt certification.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2020 - 2021

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[Black Belt complete 2020-21.xlsx](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 02/23/2022

Analysis & Planning: Some examples of curricular changes include adding more emphasis on the three categories that students underperformed on via homework assignments as well as constructing a study guide that addresses those three categories.

**Analysis and Planning**

**Results/Action Plan**

---

**Result Date**

11/19/2019

**Result**

Six UT Tyler Industrial Management students participated in the Lean Six Sigma Black Belt Certification exam by ATMAE. Students scored higher than the national average on 4 of the 7 six sigma categories. On one of the six sigma categories, students scored below the national average.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2018 - 2019

**Result Type**

Criterion Not Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[Black Belt complete\\_11225\\_1226.xlsx](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/19/2019

Analysis & Planning: The PowerPoints used in class will be edited to more accurately reflect what students are being tested on in the Lean Six Sigma Black Belt Certification. Assignments will be added into the PowerPoints for students to practice and apply their knowledge.

- Closing The Loop Date: 11/09/2021

- Closing The Loop: The in-class PowerPoints were edited to reflect the changing nature of the Lean Six Sigma Black Belt Certification. Additionally, assignments were added to the PowerPoint for students to practice the material being taught. Based on the changes that were implemented, the students scored higher in that category.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

08/06/2016

##### **Result**

UT Tyler Industrial Management students scored higher on 5 of the 7 six sigma categories on the ATMAE Lean Six Sigma certification exam. On the two other categories, UT Tyler student scores were close to the ATMAE national average; 10.67 vs. 10.96 and 2 vs. 2.48.

##### **Assessment Method Status**

In-Progress

##### **Assessment Cycle**

2016 - 2017

##### **Result Type**

Criterion Partially Met

##### **Disaggregation by Location/Modality (Optional)**

##### **Notes**

UT Tyler Industrial Management student scores are highlighted in yellow and the ATMAE national average is highlighted in green. The two categories the UT Tyler students scored lower are circled in red. Please refer to the related document: 2016 APRIL 29 LSS EXAM RESULTS - 1 GREEN, 2 YELLOW for SACS.docx.

##### **Related Documents**

[2016 APRIL 29 LSS EXAM RESULTS - 1 GREEN, 2 YELLOW for SACS.docx](#)

##### **Closing the Loop**

##### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 09/05/2016

Analysis & Planning: More emphasis will be placed on the categories students scored below the national average in the course TECH 5310 Six Sigma Quality. Students will be provided with a study guide to address some of the more problematic questions that they are having issues with.

- Closing The Loop Date: 11/27/2016

- Closing The Loop: A new review session is now available and will be tested in December of 2016.

A study guide was made to address some of the more problematic questions that the students were having issues with .

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

11/29/2015

##### **Result**

2014-15: The UT Tyler students scored higher than the national norm on all but one (Project Management) of the seven quality sections on the ATMAE Lean Six Sigma Certification exam. The students in the Industrial Management scored higher than the national norm on all but one (Project Management) of the seven quality sections on the ATMAE Lean Six Sigma Certification exam.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)**

**Notes**

NOTE: UT Tyler Industrial Mgmt. majors are highlighted in orange and the national norm is in yellow.

**Related Documents**

[2015 APRIL 30 ATMAE LSS CERTIFICATION EXAM RESULTS.docx](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/29/2015

Analysis & Planning: The students did not fair as well on the Project Management section of the Six Sigma Quality part of the exam. A new faculty member was hired whose expertise is in Project Management and holds a PMP certification through the Project Management Institute (PMI).

- Closing The Loop Date: 11/29/2015

- Closing The Loop: A new faculty member is now teaching the Six Sigma Quality and Project Management courses for the department and she is a PMP (Project Management Professional certified through the Project Management Institute).

**Analysis and Planning**

**Lean Knowledge**

---

**Outcome**

The student will be able to successfully demonstrate a thorough understanding of Lean Philosophies (Association of Technology, Management, and Applied Engineering [ATMAE] 2009 Accreditation Handbook standard 6.3.5).

**Outcome Status**

Currently Being Assessed

**Outcome Types**

Student Learning

**Assessment Schedule**

2021 - 2022, 2023 - 2024, 2025 - 2026

**Start Date**

08/20/2012

**Curriculum Mapping**

TECH5306 (), TECH5310 (), MANA5305 (), TECH5390 (), TECH5335 ()

**Mapping**

Soules College of Business: (X - Aligned)

- (Fall 2007- Spring 2010) Providing professional service to the University, the College of Business and Technology, the professions, and the community.: X

- (Fall 2007 - Spring 2010) Educating students by emphasizing ethical values, conceptual knowledge, analytical skills, technical, and managerial skills; and leadership abilities needed in both domestic and international organizations. Educational opportunities include course delivered on the Tyler campus, through distance learning including interactive television and web-based instruction, and at the UT Tyler Longview University Center and Palestine campus. : X
- Core Value: Technological Competence: X

### Course Embedded Assessment

---

#### Assessment Method Status

Active

#### Assessment Method

Student will complete a comprehensive exam at the end of TECH 5335.

#### Criterion

At least 80% of students will pass the comprehensive exam.

#### Schedule

Every other fall semester.

#### Related Documents

[TECH 5335 FALL 2019.pdf](#)

#### Results/Action Plan

---

##### Result Date

02/08/2023

##### Result

15 out of 19 students or 79% of the students earned a 90% or higher on the final exam (highlighted in green on 2021 FALL TECH 5335 LEAN MGMT GRADES related document). 19 out of 19 or 100% earned an 80% or higher on the final exam (highlighted in green and yellow on 2021 FALL TECH 5335 LEAN MGMT GRADES related document).

##### Assessment Method Status

In-Progress

##### Assessment Cycle

2021 - 2022

##### Result Type

Criterion Met

##### Disaggregation by Location/Modality (Optional)

##### # of Online Only students assessed

19

##### # of Online Only students who met criteria

19

##### Related Documents

[TECH 5335 FALL 2021.csv](#)

##### Closing the Loop

##### What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?

We worked on developing an individual project in the TECH 5335 course that students were able to complete at home. This project replaced the collaborative project students had previously undertaken with local companies. Due to COVID restrictions, students were unable to participate in this collaborative project for the foreseeable future.

##### Analysis and Planning

##### Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?

For academic year 2022-23, the Office of Assessment & Institutional Effectiveness plans to update to the latest version of Nuventive to improve the systematic process for data collection and report. The assessment coordinator will dedicate the spring 2023 and summer 2023 semesters to training of new platform.

### **Results/Action Plan**

---

#### **Result Date**

11/02/2020

#### **Result**

5 out of 32 students or 16% of the students earned a 90% or higher on the final exam (highlighted in green on 2019 FALL TECH 5335 LEAN MGMT GRADES related document). 22 out of 32 or 69% earned an 80% or higher on the final exam (highlighted in green and yellow on 2019 FALL TECH 5335 LEAN MGMT GRADES related document). 28 out of 32 or 88% earned a 70% or higher on the final exam (highlighted in green, yellow, and red on 2019 FALL TECH 5335 LEAN MGMT GRADES related document)

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2019 - 2020

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[2019 FALL TECH 5355 LEAN MGMT Grades.csv](#)

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

A more thorough final exam review was given and 25 of the 27 students or 93% of the students earned an 80% or higher on the final exam in TECH 5335 Lean Management. Please refer to Spring 2019 grades for TECH 5335 which has the final exam grade column highlighted in yellow.

#### **Analysis and Planning**

#### **Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

We will work on developing an individual project in the TECH 5335 course that students will be able to complete at home. This project will replace the collaborative project that students have done in the past where they worked with local companies. They will no longer be able to participate in this collaborative project for the foreseeable future due to COVID restrictions.

### **Results/Action Plan**

---

#### **Result Date**

03/27/2019

#### **Result**

21 out of 40 students or 53% of the students earned a 90% or higher on the final exam (highlighted in green on 2017 FALL TECH 5335 LEAN MGMT GRADES related document). 31 out of 40 or 78% earned an 80% or higher on the final exam (highlighted in green and yellow on 2017 FALL TECH 5335 LEAN MGMT GRADES related document). 38 out of 40 or 95% earned a 70% or higher on the final exam (highlighted in green, yellow, and red on 2017 FALL TECH 5335 LEAN MGMT GRADES related document).

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2017 - 2018

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[2017 FALL TECH 5335 LEAN MGMT GRADES TracDat.xlsx](#)

[2019-SPRING-TECH-5335.060 for TracDat.xlsx](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 03/27/2019

Analysis & Planning: Students did not do as well on the final exam, however, more content is covered at a higher level so students will be better prepared for taking the ATMAE Lean Six Sigma Black Belt exam. Therefore, the criterion will be changed to a more universally recognized achievement level (from 90% to 80%).

- Closing The Loop Date: 06/28/2019

- Closing The Loop: A more thorough final exam review was given and 25 of the 27 students or 93% of the students earned an 80% or higher on the final exam in TECH 5335 Lean Management. Please refer to Spring 2019 grades for TECH 5335 which has the final exam grade column highlighted in yellow.

**Analysis and Planning****Results/Action Plan**

---

**Result Date**

11/27/2016

**Result**

53 out of 54 students or 98% of the students passed the final exam. Only one student earned less than a C or a 132 out of 200 points.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2015 - 2016

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[2015-FALL-TECH-5335.060.xlsx](#)

[2017 FALL TECH 5335 LEAN MGMT GRADES v2.xlsx](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/27/2016

Analysis & Planning: A final review will be given to assist students will learning the content.

- Closing The Loop Date: 01/10/2018

- Closing The Loop: 21 out of 40 students or 53% of the students earned a 90% or higher on the final exam (highlighted in green on 2017 FALL TECH 5335 LEAN MGMT GRADES related document). 31 out of 40 or 78% earned an 80% or higher on the final exam (highlighted in green and yellow on 2017 FALL TECH 5335 LEAN MGMT GRADES related document). 38 out of 40 or 95% earned a 70% or higher on the final exam (highlighted in green, yellow, and red on 2017 FALL TECH 5335 LEAN MGMT GRADES related document). Students did not do as well on the final exam, however, more content is covered at a higher level so students will be better prepared for taking the ATMAE Lean Six Sigma Black Belt exam. Therefore, the criterion will be changed to a more universally recognized achievement level (from 90% to 80%).

**Analysis and Planning**

## Industrial Research

---

### Outcome

The student will be able to successfully research a topic related to industrial management (Association of Technology, Management, and Applied Engineering (ATMAE) 2009 Accreditation Handbook standard 6.3.9).

### Outcome Status

Currently Being Assessed

### Outcome Types

Student Learning

### Assessment Schedule

2021 - 2022, 2023 - 2024, 2025 - 2026

### Start Date

08/18/2010

### Curriculum Mapping

TECH5303 (), TECH5329 (), TECH5302 (), TECH5366 (), TECH5371 ()

### Mapping

Soules College of Business: (X - Aligned)

- (Fall 2007 - Spring 2010) Educating students by emphasizing ethical values, conceptual knowledge, analytical skills, technical, and managerial skills; and leadership abilities needed in both domestic and international organizations. Educational opportunities include course delivered on the Tyler campus, through distance learning including interactive television and web-based instruction, and at the UT Tyler Longview University Center and Palestine campus. : X
- (Fall 2007 - Spring 2010) Engaging in intellectual contributions through applied research, instructional development, and limited basic research: X
- Core Value: Technological Competence: X

## Capstone Courses & Projects

---

### Assessment Method Status

Active

### Assessment Method

Effective 2014-15: Students in TECH 5329 Research Trends in Industry are assessed on a Final research project related to industrial management that includes a paper and class oral presentation.

### Criterion

New: 80% or more of the students earn at least an 85% on their research presentation/paper that culminates their educational experience in industrial management.

Old: 80% or more of the students earn at least an 80% on their research presentation/paper that culminates their educational experience in industrial management.

### Schedule

Data collected at the conclusion of the course is collected each time the course is offered and analyzed annually.

### Related Documents

[ATMAE Outcomes Assessment Handbook](#)

[TECH 5329 Final Project.png](#)

### Results/Action Plan

---

#### Result Date

02/08/2023

#### Result

19 of 22 students or 86% of the students earned 80% or higher on their final project in TECH 5329. The one student who earned failing grades did not finish the class and therefore did not complete their final projects.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2021 - 2022

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)**

**# of Online Only students assessed**

22

**# of Online Only students who met criteria**

19

**Related Documents**

[TECH 5329 Summer 2022 Results.csv](#)

[TECH 5329 Summer 2022 Part 1 Student 1.pdf](#)

[TECH 5329 Summer 2022 Part 1 Student 2.pdf](#)

[TECH 5329 Summer 2022 Part 2 Student 1.pdf](#)

[TECH 5329 Summer 2022 Part 2 Student 2.pdf](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Students consistently performed well on their final project in the TECH 5329 course. Consequently, we elevated the success criterion from requiring at least 80% of students to achieve an 80% or higher on their research presentation/paper to requiring at least 80% of students to attain an 85% or higher on their research paper/presentation

**Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

For academic year 2022-23, the Office of Assessment & Institutional Effectiveness plans to update to the latest version of Nuventive to improve the systematic process for data collection and report. The assessment coordinator will dedicate the spring 2023 and summer 2023 semesters to training of new platform.

**Results/Action Plan**

---

**Result Date**

11/02/2020

**Result**

24 of 27 students or 89% of the students earned 80% or higher on their final project in TECH 5329. The three students who earned failing grades did not finish the class and therefore did not complete their final projects

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2019 - 2020

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[TECH 5329 Summer 2020 Results.csv](#)

[TECH 5329 Summer 2020 Student 1 pp.pptx](#)

[TECH 5329 Summer 2020 Student 1.docx](#)  
[TECH 5329 Summer 2020 Student 2 pp.pptx](#)  
[TECH 5329 Summer 2020 Student 2.docx](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

We continued to monitor the success of students in this course. Given their consistently high scores on the final project, we have modified the project to delve deeper into the material.

### **Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Students have consistently excelled in their final project within the TECH 5329 course. Therefore, we have decided to raise the success criterion from requiring at least 80% of students to earn an 80% or higher on their research presentation/paper, to requiring at least 80% of students to earn an 85% or higher on their research paper/presentation

### **Results/Action Plan**

---

#### **Result Date**

11/24/2018

#### **Result**

18 of 20 students or 90% of the students earned 80% or higher on their final project in TECH 5329. One of the two students who earned failing grades did not finish the class and therefore did not complete their final projects.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2017 - 2018

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[TECH 5329 Summer 2018 Results.csv](#)  
[Tech 5329 Summer18 Student 1.docx](#)  
[Tech 5329 Summer18 Student 2.pdf](#)  
[Tech 5329 Summer18 Student 3.docx](#)

### **Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 06/28/2019

Analysis & Planning: Continually monitor the success of students in this course.

- Closing The Loop Date: 11/19/2019

- Closing The Loop: We have continued to monitor the success of students in this course. Since students have continued to score very well on the final project, the project has been altered to be more in-depth in the material.

### **Analysis and Planning**

### **Results/Action Plan**

---

#### **Result Date**

12/01/2016

#### **Result**

63 out of 67 students or 94% of the students earned 80% or higher on their final project in TECH 5329. Two of the four students who earned failing grades did not finish the class and therefore did not complete their final projects.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2015 - 2016

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[TECH 5329 SUMMER 2015 GRADES.xlsx](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 01/23/2017

Analysis & Planning: Continually monitor the success of students in this course.

- Closing The Loop Date: 01/18/2018

- Closing The Loop: Since the students did well on this outcome, nothing will be done at this time although this outcome will continually be monitored for student success.

**Analysis and Planning****Results/Action Plan**

---

**Result Date**

11/30/2015

**Result**

4 out of 67 earned below an 80% on the final project, therefore, 94% of the students earned an 80% or higher on their final project for the Spring 2015 offering of TECH 5329 Trends in Industry.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[TECH 5329 Trends in Industry final project grades.docx](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/30/2015

Analysis & Planning: Most of the students did really well on their research project so a more rigorous project will be required the next time the course is offered.

- Closing The Loop Date: 01/17/2017

- Closing The Loop: A more rigorous final project has now been incorporated to the course TECH 5329 by Dr. Lawrence.

**Analysis and Planning****Results/Action Plan**

---

**Result Date**

01/23/2015

**Result**

13-14: No data could be collected for this outcome so a new course will be used to collect the data.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Not Met

**Disaggregation by Location/Modality (Optional)**

**Notes**

This course is not taught by a Technology Department faculty member so the newly added research course TECH 5329 Trends in Industry (which is taught by a Technology faculty member) will now be used to collect the data.

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/29/2015

Analysis & Planning: TECH 5329 Trends in Industry was offered in the summer of 2015 to meet the research requirements of ATMAE accreditation.

- Closing The Loop Date: 01/17/2017

- Closing The Loop: The newly revised course TECH 5329, now called Research Trends in Industry was approved by the Provost.

**Analysis and Planning**

**Results/Action Plan**

---

**Result Date**

12/12/2010

**Result**

This course was no longer listed on the degree plan, however, it will now be a required course starting in the Fall 2014 semester. Data will be collected at that time.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)**

**Notes**

Data will be collected in December of 2014 from the course TECH 5303 Research Methods in HRD & Technology

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 01/23/2015

Analysis & Planning: Because a faculty member from another department has to report this data, we do not always receive it. Therefore, since TECH 5329 Trends in Industry was added as the second research course for the program (according to ATMAE accreditation guidelines), the data will be collected in that course because it is taught by a faculty member from the Technology Department.

- Closing The Loop Date: 01/17/2018

- Closing The Loop: A proposal for revising the course TECH 5329 Trends in Industry to Research Trends in Industry was proposed and sent to the Graduate Council for approval.

**Analysis and Planning**

**Results/Action Plan**

---

**Result Date**

11/09/2008

**Result**

2008: All the students have earned at least an 80% or better on their TECH 5303 Capstone research paper/presentation.

**Result Type**

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Notes**

TECH 5303 Research Techniques in HRD & Technology is considered the capstone course for all HRD & Technology graduate program majors.

#### **Related Documents**

[Fall 2007 Syllabus TECH 5303 Research Techniques in HRD & Technology.doc](#)

[DR ALLENS COURSE GRADES.pdf](#)

[TECH 5303 STUDENT RESEARCH PAPER GOOD EXAMPLE.pdf](#)

[TECH 5303 STUDENT RESEARCH PAPER BAD EXAMPLE.pdf](#)

[TECH 5303 STUDENT RESEARCH PAPER FAIR EXAMPLE.pdf](#)

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 05/12/2009

Analysis & Planning: Students will be required to turn in their draft research papers two weeks earlier so they can be reviewed in greater detail. Papers that exceeded expectations from previous semesters will be shown to the class to clarify grading criteria. Papers that have exceeded expectations are being copied for use as examples the next time the course is taught

- Closing The Loop Date: 05/22/2011

- Closing The Loop: Papers that exceeded expectations were shared as examples.

With the advent of a new dean who wants to encourage more integration between business and technology curricula, the industrial research course (TECH 5303 Research Techniques in HRD/Technology) was dropped in favor in 2010-2011 of an operations management course (MANA 5305) Decision Making in Operations Management. The research course was omitted from the degree plan beginning Fall 2010 and a MANA operations management was added to replace it. This outcome is no longer being measured.

#### **Analysis and Planning**

### **Supply Chain/Logistics**

---

#### **Outcome**

The student will demonstrate a thorough understanding of supply chain and logistics principles.

#### **Outcome Status**

Currently Being Assessed

#### **Outcome Types**

Student Learning

#### **Assessment Schedule**

2020 - 2021, 2022 - 2023, 2024 - 2025

#### **Start Date**

09/01/2016

#### **Curriculum Mapping**

TECH5306 (), MANA5305 (), TECH5348 (), TECH5331 ()

#### **Mapping**

Soules College of Business: (X - Aligned)

- Core Value: Professional Proficiency: X
- Core Value: Technological Competence: X

#### **Course Embedded Assessment**

---

#### **Assessment Method Status**

Active

#### **Assessment Method**

University Supply Chain Management Certification. TECH 5306.

**Criterion**

New: At least 80% of the students will earn 80% (160 out of 200 points) or higher on their final project.

Old: At least 70% of the students will earn 70% (140 out of 200 points) or higher on their final project.

**Schedule**

Every other spring semester.

**Related Documents**

[TECH 5306 Fall 2019 Syllabus.pdf](#)

**Results/Action Plan**

---

**Result Date**

11/01/2021

**Result**

Fall 2020: 20 of 21 students (95%) earned at least an 80% or higher on their final project. 1 Student earned a B and 19 Students earned an A.

Spring 2021: 13 of 14 students (93%) earned at least an 80% or higher on their final project. 1 Student earned a B and 12 Students earned an A.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2020 - 2021

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[TECH 5306 2020-2021 Student #1 Final Project.pptx](#)

[TECH 5306 2020-2021 Student #2 Final Project.pptx](#)

[TECH 5306 2020-2021 Student #3 Final Project.pptx](#)

[TECH 5306 2020-2021 Final Project Results.csv](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

The criterion of success was changed to reflect the higher standard of 80% of students will earn an 80% (160 out of 200 points) or higher on their final project.

**Analysis and Planning****Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Even though students performed well on the final project, there is still a need for continuous improvement. To add instructional substance for the graduate students, improvements will be made for the Logistics Management online course to introduce a zoom session each month during the semester. We will incorporate zoom sessions to improve student-instructor online interaction to discuss current world views and events that align with each chapter.

**Results/Action Plan**

---

**Result Date**

05/31/2019

**Result**

32 of 34 students (94%) earned at least a 70% or higher on their final project. 11 Students earned a B and 21 Students earned an A.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2018 - 2019

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[TECH 5306 Spring 2019 Results.csv](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Dr. Fazarro has created a more detailed rubric so there will be no more ambiguity and issues regarding student grading.

**Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

Students will be assessed at a higher criterion of success. The criterion for success will be increased from 70% of students will earn a 70% or higher to 80% of students will earn an 80% (160 out of 200 points) or higher to reflect the achievement level currently being achieved.

**Results/Action Plan**

---

**Result Date**

11/27/2016

**Result**

All of the 47 students earned at least a C (140 or higher) on their final project. Three of the students earned a C, 23 earned a B, and 21 earned an A.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2016 - 2017

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)**

**Notes**

More requirements will be listed so there will be a better distribution of grades.

**Related Documents**

[Copy of TECH 5306 \(SPRING 2016\).xlsx](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/27/2016

Analysis & Planning: A more detailed grading rubric will be devised to create a better distribution of grades.

- Closing The Loop Date: 01/18/2018

- Closing The Loop: Dr. Fazarro has created a more detailed rubric so there will be no more ambiguity and issues regarding student grading.

**Analysis and Planning**

**Project Management**

---

**Outcome**

Students will successfully apply the various components involved with managing a project

**Outcome Status**

Currently Being Assessed

**Outcome Types**

Student Learning

**Assessment Schedule**

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

**Start Date**

09/16/2019

**Curriculum Mapping**

MANA5350 (), TECH5306 (), MANA5305 (), TECH5348 (), TECH5331 ()

**Standardized Exams - Internal**

---

**Assessment Method Status**

Active

**Assessment Method**

Students will complete a final exam pertaining to Project Management

**Criterion**

80% of students will score an 80% or higher on the final exam.

**Schedule**

Every other Fall semester starting in Fall 2019 in TECH 5331.

**Related Documents**

[TECH 5331-2019 Fall Syllabus.pdf](#)

**Results/Action Plan**

---

**Result Date**

02/08/2023

**Result**

Fall 2021: 11 out of 12 students, or 92%, scored an 80% or higher on the final exam.

Spring 2022: 10 out of 10 students, or 100%, scored an 80% or higher on the final exam.

Summer 2022: 14 out of 15 students, or 93%, scored an 80% or higher on the final exam.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2021 - 2022

**Result Type**

Criterion Met

**Disaggregation by Location/Modality (Optional)****# of Online Only students assessed**

37

**# of Online Only students who met criteria**

35

**Related Documents**

[TECH 5331 - 2021-2022 Exam Results.xlsx](#)

**Closing the Loop****What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

For academic year 2021-22, the Office of Assessment & Institutional Effectiveness prepared for the SACSCOC reaffirmation visit in spring 2022. The assessment coordinator reviewed student learning outcomes, program learning outcomes, and assessment methods for quality and compliance.

**Analysis and Planning****Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

For academic year 2022-23, the Office of Assessment & Institutional Effectiveness plans to update to the latest version of Nuventive to improve the systematic process for data collection and report. The assessment coordinator will dedicate the spring 2023 and summer 2023 semesters to training of new platform.

### **Results/Action Plan**

---

#### **Result Date**

12/06/2021

#### **Result**

Fall 2020: 30 out of 38 students, or 78.94%, scored an 80% or higher on all of the exams.

Spring 2021: 8 out of 8 students, or 100%, scored an 80% or higher on all of the exams.

Summer II 2021: 13 out of 16 students, or 81.25%, scored an 80% or higher on all of the exams.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2020 - 2021

#### **Result Type**

Criterion Partially Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 02/23/2022

Analysis & Planning: We will continue refining using the project management software (MS-Project) that they use in the industry so that they will have a more applied, real-life knowledge of project management.

#### **Analysis and Planning**

### **Results/Action Plan**

---

#### **Result Date**

10/19/2020

#### **Result**

Fall 2019: 28 out of 31 students, or 90%, scored an 80% or higher on the final exam.

Spring 2020: 24 out of 26 students, or 92%, scored an 80% or higher on the final exam.

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2019 - 2020

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[TECH-5331 2019-20 Final Exam Results.csv](#)

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 10/28/2020

Analysis & Planning: We will use the project management software that they use in the industry so that they will have a more applied, real-life knowledge of project management.

#### **Analysis and Planning**

## Program Outcome

---

### Outcome

The UT Tyler Industrial Management graduate program evaluates viability, impact and effectiveness with regard to currency of the curriculum and student achievement.

### Outcome Status

Currently Being Assessed

### Outcome Types

Program Evaluation Outcome

### Assessment Schedule

2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026

### Start Date

09/01/2013

## External Program Review

---

### Assessment Method Status

Active

### Assessment Method

An External Program Review is conducted by The Association of Technology, Management, and Applied Engineering (ATMAE) on a regular cycle for the Human Resource Development & Technology programs within the College of Business and Technology. The program faculty complete a comprehensive self-study using the metrics outlined by the ATMAE program reviewers. A summary executive report is provided at the end of the comprehensive review by ATMAE. Priority recommendations are implemented for ongoing program improvement in the subsequent academic year(s).

### Criterion

Implement priority recommendations from the final peer review report.

### Schedule

ATMAE grants re-accreditation tenures of six years.

### Related Documents

[External Program Review](#)

### Results/Action Plan

---

#### Result Date

06/03/2019

#### Result

2018-2019: The Industrial Management faculty and administration completed a comprehensive self-study as part of the ATMAE accreditation requirements. Three ATMAE visiting team members from outside the institution conducted a campus site visit April 14-16, 2019.

The Industrial Management program received a glowing review from visiting ATMAE accreditation team. The program was in compliance on all standards with the exception of Standard 10: Administrative Support & Faculty Qualification. The team recommended that due to the growth of the program and the new building expansion, the team believes that an additional faculty is needed to support the department. A lab technician is also needed to help with the upkeep of all the equipment.

A new Soules College of Business Dean is scheduled to begin July 1, 2019. The personnel decision to create a new faculty line and a new laboratory technician position will be deferred to the new college dean.

#### Assessment Method Status

In-Progress

#### Assessment Cycle

2018 - 2019

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[2019 ATMAE Accreditation Final Letter to UT Tyler.doc](#)

[2019 ATMAE External Review\\_Written Response.docx](#)

[2019 UT Tyler ATMAE Report.doc](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 08/06/2019

Analysis & Planning: The University of Texas at Tyler will explore hiring additional faculty members to support both the Bachelor of Science (B.S.) in Industrial Technology and the Master of Science (M.S.) in Technology Management degree programs. The University plans to hire students to serve as laboratory technicians for the upcoming academic year.

**Analysis and Planning**

**Results/Action Plan**

---

**Result Date**

05/07/2012

**Result**

The Human Resources and Technology programs within the College of Business and Technology received a reaccreditation review from The Association of Technology, Management, and Applied Engineering (ATMAE), in April of 2012. Priority recommendations from the 2012 review were X.

**Assessment Method Status**

In-Progress

**Result Type**

Inconclusive

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[2012 ATMAE Self-study FEB 24 2012\(2\).pdf](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/29/2015

Analysis & Planning: Additional faculty are being hired to meet the demands of the ATMAE accreditation standards and to meet the accelerated growth in enrollment.

- Closing The Loop Date: 01/18/2018

- Closing The Loop: Dr. Ali was hired added to the faculty in the Fall of 2016.

**Analysis and Planning**

**Surveys**

---

**Assessment Method Status**

Active

**Assessment Method**

The UT Tyler Graduation Exit Survey is offered to all graduating students when they apply for graduation. Selected items on the graduate version of the Graduation Exit Survey are used as part of the Industrial Management Program assessment.

**Criterion**

90% Agreement or satisfaction is reached on all chosen questions

**Schedule**

Results are collected and analyzed annually.

## Related Documents

### Results/Action Plan

---

#### Result Date

02/06/2023

#### Result

2021-2022 (N=3)

Appropriate Professional Practice/Training Experiences: 100% Met Expectations, 0% exceeded expectations

Knowledge of the Discipline Literature: 100% Met Expectations, 0% exceeded expectations

Research Opportunities: 67% Met Expectations, 33% exceeded expectations

More Advanced in Academic Rigor: 100% Met Expectations, 0% exceeded expectations

Overall Satisfaction with Entire Education Experience: 33% Extremely Satisfied, 67% Satisfied

Advising:

Did Not See Anyone for Advising: 100%

Online (N=9)

Appropriate Professional Practice/Training Experiences: 58% Met Expectations, 42% exceeded expectations

Knowledge of the Discipline Literature: 50% Met Expectations, 50% exceeded expectations

Research Opportunities: 75% Met Expectations, 25% exceeded expectations

More Advanced in Academic Rigor: 33% Met Expectations, 67% exceeded expectations

Overall Satisfaction with Entire Education Experience: 33% Extremely Satisfied, 67% Satisfied

Advising:

Helped Understand Degree Requirements: 100% Agree

Helped Identify Campus Resources: 78% Agree

Helped Develop Academic/Career Goals: 89% Agree

Overall satisfaction: 100% Agree

Response rate for program: 12/21(57%)

### Assessment Method Status

In-Progress

### Assessment Cycle

2021 - 2022

### Result Type

Criterion Partially Met

### Disaggregation by Location/Modality (Optional)

# of Tyler (main) students assessed

12

# of Tyler (main) students who met criteria

12

### Related Documents

[2021-22 Ind Mgmt MS \(Tyler\) Graduation Exit Survey Dashboard.pdf](#)

[2021-22 Ind Mgmt MS \(Online\) Graduation Exit Survey Dashboard.pdf](#)

### Closing the Loop

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

For 2021-22, The AIE Office added questions regarding QEP.

**Analysis and Planning**

**Based on analysis of the data from the current assessment cycle, what are your plans for continuous improvement next year?**

For 2022-23, the AIE has created a committee to review the graduation exit survey to meet the needs of all departments. Questions regarding student belongingness are planned to be added.

**Results/Action Plan**

---

**Result Date**

03/02/2022

**Result**

2020-2021

Tyler

Appropriate Professional Practice/Training Experiences: 63% Met Expectations, 13% exceeded expectations

Knowledge of the Discipline Literature: 38% Met Expectations, 63% exceeded expectations

Research Opportunities: 50% Met Expectations, 13% exceeded expectations

More Advanced in Academic Rigor: 63% Met Expectations, 38% exceeded expectations

Overall Satisfaction with Entire Education Experience: 57% Extremely Satisfied, 43% Satisfied

Advising:

Helped Understand Degree Requirements: 100% Agree

Helped Identify Campus Resources: 63% Agree

Helped Develop Academic/Career Goals: 100% Agree

Overall satisfaction: 100% Agree

Online

Appropriate Professional Practice/Training Experiences: 50% Met Expectations, 50% exceeded expectations

Knowledge of the Discipline Literature: 58% Met Expectations, 42% exceeded expectations

Research Opportunities: 75% Met Expectations, 25% exceeded expectations

More Advanced in Academic Rigor: 50% Met Expectations, 42% exceeded expectations

Overall Satisfaction with Entire Education Experience: 100% Agree

Advising:

Helped Understand Degree Requirements: 100% Agree

Helped Identify Campus Resources: 67% Agree

Helped Develop Academic/Career Goals: 92% Agree

Overall satisfaction: 100% Agree

Response rate for college: 307/431 (71%)

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2020 - 2021

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[2020-21 Ind Mgmt MS \(Online\) Graduation Exit Survey Dashboard.pdf](#)

[2020-21 Ind Mgmt MS \(Tyler\) Graduation Exit Survey Dashboard.pdf](#)

**Closing the Loop****Analysis and Planning****Results/Action Plan**

---

**Result Date**

05/20/2021

**Result**

2019-2020

Tyler

Appropriate Professional Practice/Training Experiences: 50% Met Expectations, 25% exceeded expectations

Knowledge of the Discipline Literature: 50% Met Expectations, 50% exceeded expectations

Research Opportunities: 75% Met Expectations, 25% exceeded expectations

More Advanced in Academic Rigor: 50% Met Expectations, 25% exceeded expectations

Overall Satisfaction with Entire Education Experience: 100% Agree

**Advising:**

Communicated University Policies/Procedures Effectively: 100% Agree

Guidance to Achieve Graduation Timeline: 75% Agree

Easy to Contact: 75% Agree

Overall satisfaction: 75% Agree

**Online**

Appropriate Professional Practice/Training Experiences: 65% Met Expectations, 35% exceeded expectations

Knowledge of the Discipline Literature: 59% Met Expectations, 41% exceeded expectations

Research Opportunities: 65% Met Expectations, 35% exceeded expectations

More Advanced in Academic Rigor: 41% Met Expectations, 53% exceeded expectations

Overall Satisfaction with Entire Education Experience: 100% Agree

**Advising:**

Communicated University Policies/Procedures Effectively: 94% Agree

Guidance to Achieve Graduation Timeline: 94% Agree

Easy to Contact: 94% Agree

Overall satisfaction: 89% Agree

Response rate for college: 306/37881%

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2019 - 2020

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)****Related Documents**

[2019-20 Grad Exit Survey - Ind Mgmt Online.pdf](#)

[2019-20 Grad Exit Survey - Ind Mgmt Tyler.pdf](#)

### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 02/23/2021

Analysis & Planning: The AIE Office plans to reformat the entire survey so that topics are grouped more strategically, and plan to add optional open comments to receive better qualitative student feedback.

### **Analysis and Planning**

#### **Results/Action Plan**

---

##### **Result Date**

11/01/2019

##### **Result**

2018-2019

Tyler

Appropriate Professional Practice/Training Experiences: 57% Met Expectations, 26% exceeded expectations

Knowledge of the Discipline Literature: 74% Met Expectations, 26% exceeded expectations

Research Opportunities: 65% Met Expectations, 17% exceeded expectations

More Advanced in Academic Rigor: 48% Met Expectations, 35% exceeded expectations

Focus on Marketable Skills: 61% very well, 22% extremely well

Overall Satisfaction with Entire Education Experience: 100% Agree

##### Advising:

Accurate degree plan information: 91% Agree

Guidance to Achieve Graduation Timeline: 83% Agree

Easy to Contact: 87% Agree

Overall satisfaction: 91% Agree

##### Online

Appropriate Professional Practice/Training Experiences: 83% Met Expectations, 17% exceeded expectations

Knowledge of the Discipline Literature: 83% Met Expectations, 17% exceeded expectations

Research Opportunities: 67% Met Expectations, 33% exceeded expectations

More Advanced in Academic Rigor: 83% Met Expectations, 17% exceeded expectations

Focus on Marketable Skills: 71%% Very well, 14% extremely well

Overall Satisfaction with Entire Education Experience: 100% Agree

##### Advising:

Accurate degree plan information: 86% Agree

Guidance to Achieve Graduation Timeline: 86% Agree

Easy to Contact: 86% Agree

Overall satisfaction: 86% Agree

Response rate for college: 560/576 97%

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2018 - 2019

#### **Result Type**

Criterion Partially Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[Grad Exit Survey Graduate IndustMana Online 2018-19 final.pdf](#)

[Grad Exit Survey Graduate 2018-19 Soules COB overall.pdf](#)

[Grad Exit Survey Graduate IndustMana Tyler 2018-19 final.pdf](#)

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 11/01/2019

Analysis & Planning: With guidance from faculty and staff, the AIE Office plans to reformat the survey items on the graduation exit survey, and group survey items more strategically.

Qualitative questions will be added to better gauge student perceptions and to help guide future survey development. Research questions were rewritten to better capture the various types of research across the university.

- Closing The Loop Date: 03/02/2020

- Closing The Loop: AIE Office reformatted the survey items on the graduation exit survey and updated the criterion set for each program

#### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

07/24/2018

#### **Result**

2017-2018 Department/faculty advisor was easy to contact: 42 of 43 (98%) Agree, achieve graduation timeline: 42 of 43 (98%) Agree, accurate degree plan information: 41 of 43 (95%)

Agree; degree emphasized marketable skills: 42 of 43 (98%) Agree; Entire Education

Experience: 41 of 43 students (95%) Satisfied

#### **Assessment Method Status**

In-Progress

#### **Assessment Cycle**

2017 - 2018

#### **Result Type**

Criterion Met

### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[G 17-18 Results SCoB Industrial Management.docx](#)

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 04/16/2019

Analysis & Planning: Starting in 18-19, Exit Survey Advising Assessment will be in the college advisors plan. The Technology faculty will identify additional survey items to assess for next year.

- Closing The Loop Date: 11/01/2019

- Closing The Loop: Program outcomes for graduate programs are still including advising items, but additional survey items were added specific to graduate programs.

#### **Analysis and Planning**

#### **Results/Action Plan**

---

#### **Result Date**

07/24/2017

#### **Result**

2016-2017 Department or faculty advisor was easy to contact: 55 of 58 (95%) Agree, helped complete my degree in a timely manner: 53 of 58 (91%) Agree, helped create accurate degree plan: 50 of 58 (86%) Agree: Prepared for Career Field: 39 of 40 students (98%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 38 of 40 students (95%) Satisfied.

**Assessment Method Status**

In-Progress

**Assessment Cycle**

2016 - 2017

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

[16-17 CBT M Industrial Management.docx](#)

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 01/18/2018

Analysis & Planning: We plan to close the survey items on student's perception of career field and grad/professional school preparation based on feedback that students are unable to respond accurately. It looked as though students were not as please with student advisement with regards to accurate degree plans so faculty of the Department of Technology offer to review them for any mistakes or further questions by students.

- Closing The Loop Date: 01/18/2018

- Closing The Loop: Closed the survey items: Prepared for grad/professional school and Prepared for career field. Added survey item: Degree emphasized marketable skills for future career plans. Dr. Miller has been assigned to review Industrial Management degree plans if any questions arise from students.

**Analysis and Planning**

**Results/Action Plan**

---

**Result Date**

09/13/2016

**Result**

2015-16: Prepared for Career Field: 5 of 5 students (100%) Excellent/Adequate; Prepared for Doctoral/Professional Program: 1 of 1 student (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 3 of 6 students (50%) Satisfied, 3 of 6 students Neutral (50%); Overall Academic Advising: 14 of 16 students (88%) Satisfied, 1 of 16 students (6%) Neutral, 1 of 16 students (6%) Dissatisfied; Department Faculty Advisor 1) Was easy to contact: 9 of 10 students (90%) Agree, 1 of 10 students (10%) Disagree, 2) Helped me complete my degree in a timely manner: 10 of 10 students (100%) Agree, 3) Helped me create an accurate degree plan: 9 of 10 students (90%) Agree, 1 of 10 students (10%) Neutral.

**Assessment Method Status**

In-Progress

**Result Type**

Criterion Partially Met

**Disaggregation by Location/Modality (Optional)**

**Related Documents**

**Closing the Loop**

**What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 09/12/2016

Analysis & Planning: Refine 2018 survey items on student perception of career and grad school or professional school preparation for accuracy. (2017 Survey already launched).

- Closing The Loop Date: 07/24/2017

- Closing The Loop: Changed the verbiage to "My degree emphasized marketable skill for my future career plans."

### **Analysis and Planning**

### **Results/Action Plan**

---

#### **Result Date**

09/15/2015

#### **Result**

2013-14: Prepared for Career Field: 6 of 6 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 6 of 6 students (100%) Very Satisfied/Satisfied.

2014-15: Prepared for Career Field: 12 of 12 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 14 of 14 students (100%) Very Satisfied/Satisfied.

TOTAL: Prepared for Career Field: 18 of 18 students (100%) Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 20 of 20 students (100%) Very Satisfied/Satisfied.

#### **Assessment Method Status**

In-Progress

#### **Result Type**

Criterion Met

#### **Disaggregation by Location/Modality (Optional)**

#### **Related Documents**

[13-14 Industrial Managemen  
Industrial\\_Management](#)

#### **Closing the Loop**

#### **What action plan(s) did you implement based on analysis of the data during the previous assessment cycle?**

Continuing Quality Assurance: 09/15/2015

Analysis & Planning: Add items on level of satisfaction with department academic advising. Items will include was easy to contact, helped me complete my degree in a timely manner, and helped me create an accurate degree plan.

- Closing The Loop Date: 01/18/2018

- Closing The Loop: Nothing was done since there was a 100% score on all the outcomes.

### **Analysis and Planning**



# Appendix I: Advisory Committee Meeting Information



## Department of Technology

### Soules College of Business

#### ADVISORY BOARD MEETING

#### Agenda

Monday, April 15, 2019

11:30 am-1:00 pm

At

**The University of Texas at Tyler**

**New College of Business Building (COB) Room 350.55**

**(Across from Steak'n Shake on University Blvd.)**

**Tel: 903-566-7310**

1. Call the meeting to order
2. Introductions
3. Approve previous year's minutes
4. Results on the validation content for both programs competencies
5. Update of curriculum changes for both programs
6. Discuss any new business
7. Accreditation Team
8. Adjournment

**UT Tyler Industrial Advisory Board Meeting Minutes**  
**Department of Technology**  
**The University of Texas at Tyler**  
**Monday, April 15, 2019 at 11:30 A.M.**

**1. Introductions:**

Mark Miller	Department of Technology
Heshium Lawrence	Department of Technology
Dominick Fazarro	Department of Technology
Mohammed Ali	Department of Technology
Hannah Isleem	Industrial Technology
Raejean Griffin	Industrial Management
Brandy Smith	Admin Assistant II
Dr. Argie Nichols	ATMAE Visiting Team
Mr. Dan Cassler	ATMAE Visiting Team
Dr. Kenny Rigler, Jr.	ATMAE Visiting Team
Randell Farley	Trane
John Connolly II	Caterpillar Inc.
Eric Boettcher	Tyler Junior College
Michael Rostis	JS Food
Kelly Kaemmerling	Kilgore College
Daniel Lee	Trane
Dwight Evans	Kluber

**2. Electing a Chair for meeting:**

John Connolly II was elected chair for today's advisory board meeting. Mr. Connolly called the meeting to order and welcomed the ATMAE Accreditation Team.

**3. Review of previous year's minutes**

No corrections to previous minutes.

A motion to approve the minutes was presented by Dr. Lawrence, seconded by Dr. Fazarro and unanimously approved by the board.

**4. Results on validation content for both programs**

Dr. Miller – we have maintained course content with a rating of 2.5 or higher out of 5 while the other content was dropped.

We've checked into other university programs and try to offer what the employers want. We focus on what local business want from our students.

**5. Update of curriculum changes for both programs**

Dr. Miller announced he has previously sent out an email to the board showing changes that were made since the last meeting. He mentioned that we make changes every year to make our programs better.

The department offers a capstone course, this helps students get ready for interviews and what to expect once they graduate. This course also works on soft skills.

The department has added a minor in Industrial Technology as well as a minor in Manufacturing Management as the Board had suggested.

Dr. Miller noted the John Connolly had suggested at a previous board meeting to add SCRUM and project management certification to the curricula since it is a hot topic and a great way to advance projects that companies are working on. Two new courses were suggested by Dr. Miller to be sent forward if the Board agreed upon them. Randell Farley moved to approve the two new courses, TECH 5333 Agile and Scrum Principles and TECH 5334 Project Management Certification. Dwight Evans seconded the motion and the Board unanimously approved to get the courses approved.

Dr. Miller noted that due to Mr. Ayanequi's suggestion, the course TECH 3312 Facilities Operations would be retitled Facilities Operations and Maintenance. Daniel Lee moved to approve, seconded by Eric Boettcher and unanimously approved by the Board. In addition, Dr. Miller noted that he would try and obtain more funding for the course so there could be hands-on laboratory exercises for the course.

Randell Farley asked if a student transfers from a different program (engineering) will they have to start completely over in the industrial technology program?

Dr. Miller answered: He said they would still have to take all the required courses for our program; we still want our graduates to leave with the best knowledge for the industrial field. The transfer students could use some of their previous course for electives and some do substitute for other courses in our program. Typically, they do not lose much or any transfer credit.

## **6. Any new business to discuss**

John Connolly – We need to elect a vice chair

Daniel Lee was elected

Everyone agreed

Dr. Lawrence mentioned Soft Skills from the previous meeting.

Daniel Lee asked how can we work on soft skills if a course is offered online. The students need to engage with others, maybe we can focus on more face to face or zoom sessions.

We are going to offer more group projects for the online courses, we need more companies to give our students real industrial projects.

John Connolly mentioned he likes Hybrid courses.

Hannah Isleem mention a program called FLIPGRID, it's free software for students, and the LMS Canvas can also be linked to Flip-grid. Flip-grid is a social learning platform that allows educators to ask a question, then the students respond in a video. Students are then able to respond to one another, creating a "web" of discussion.

Dwight Evans mention his company uses ZOOM a lot for projects with other companies around the world.

Michael Rostis mentioned honest communication (let students know how meetings are). He wants more graduates to be able to come into a company meeting and take over if needed.

Dr. Fazarro said internships are great for helping students get the experience of being in the field. Students can get the chance to interact with companies and learn from experience.

Dr. Miller said he wished internships were mandatory; however, not many companies need interns. We do try to offer students real life projects in the industrial field.

John Connolly asked the advisory board for them to get together and make a list of projects for the upcoming semester.

Daniel Lee asked about the Doctoral Program.

Dr. Miller said that he and Dr. Lawrence have put in a request for the PhD program. We are currently thinking about partnering with Indiana State then eventually branch off to our own standalone program. We are taking a step forward with offering the PhD program in Technology Management, but we are currently waiting on the new dean. Hopefully, within the following year will be able to move forward with a PhD program.

The first step is getting a strategic plan.

Second is to keep requesting the program.

Usually takes 5 years to get the program started.

Dr. Fazarro mentioned that there was an orientation/residency requirement for Indiana State. It's usually a week long at their university, but it may no longer be required.

Dr. Miller added that the administration would like to keep the doctoral program in Texas if there was enough interest. Formula funding for a doctoral program is substantial.

Randell Farley offered to give a tour this summer to the welding lab students of Trane.

## **7. Does the Accreditation team have any comments for the Advisory Board**

No comments.

### **Adjournment – 1:30 p.m.**

John Connolly motioned

Dwight Evans seconded



## Department of Technology

### Soules College of Business

Virtual

ADVISORY BOARD MEETING

Agenda

Wednesday, December, 9, 2020

2:00-3:00 pm

Zoom Meeting Link:

<https://uttyler.zoom.us/j/96504660705?pwd=eTdQbTIJNnV0UmtUNjNyR0lFVy9mZz09>

1. Call the meeting to order
2. Introductions
3. Approve previous year's minutes
4. Results on the validation content for both programs competencies
5. Update of curriculum changes for both programs
6. Accreditation Update
7. New business
8. Adjournment

**Department of Technology at UT Tyler  
Industrial Advisory Board Meeting Minutes  
Wednesday, December 9, 2020 at 2:00 P.M.**

**1. Introductions:**

Mark Miller	Department of Technology
Krist Swimberghe	Interim Dean of Soules College of Business
Heshium Lawrence	Department of Technology/ Interim Associate Dean
Dominick Fazarro	Department of Technology
Mohammed Ali	Department of Technology
Raejean Griffin	Department of Technology
Brandy Smith	Admin Assistant II
Dennis Jones	Department of Technology
Eric Ayanegui	Cintas
Dwight Evans	Kluber
Michael Rostis	John Soules Food
Dane Clark	Cardinal Health
Joseph Bumgarner	Eastman Chemical
Kevin Rose	NTCC
Link Worthen	Tyler Junior College
John Connolly II	Solar Turbines

**2. Review of previous year's minutes**

Corrections to previous minutes. Mohammed Ali's name was mentioned twice in the introductions.

A motion to approve the minutes as amended was presented by Dwight Evans, seconded by John Connolly II and unanimously approved by the board.

**3. Results on validation content for both programs**

Dr. Miller – we have maintained course content with a rating of 2.5 or higher out of 5.

Advisory Board and students have full access to the information located on the department's webpage.

**4. Update of curriculum changes for both programs**

Dr. Miller announced that the graduate program now offers TECH 5333- *Agile and Scrum Principles* and TECH 5334- *Project Management Certification*.

Also, changed the course title of TECH 3312 – *Facilities Operations and Maintenance* for the BS program.

These courses were recommended by the Advisory Board in previous meetings.

Students will now be recommended to pass the PMI Certification Exam.

**6. Accreditation update**

For the first time we received a perfect score, we obtained ATMAE accreditation with no partial compliances or non-compliances for both the BS and MS programs.

Students were recognized by ATMAE at this year Conference for Outstanding Student Chapter.

### **7. Any new business to discuss**

Dominick Fazarro asked Eric about how the faculty could reach out to the professionals in industry to come and complete their degrees.

Eric Ayanegui answered, now that the university is more virtual friendly and is offering more online classes, and that more professionals will be interested. The programs just needs more advertising. He mentioned that our programs are moving right along with industry 4.0.

Mark Miller reminded everyone about our internship program and to reach out to him.

Eric mentioned bringing in guest speakers for the courses.

Dwight Evans asked if anyone could take the TECH 5334 Project Management Certification course.

Mark Miller answered, yes, if they have their BS or a MS degree.

Heshium Lawrence asked if any of advisory board members have alumni working for them, if so, have them reach out to Dr. Miller. We like to keep track of how they are doing in industry and could have them be guest speakers.

Dominik Fazarro invited the Advisory Board to come to the next ATMAE Conference in 2021 in Orlando, Florida.

Dane – Wants to know how he/others can communicate/ share resources.

John Connolly- Suggested they have a mini conference, where they can collaborate ideas and share knowledge.

Eric – Agreed to this idea and suggested guest speakers and that they invite other business professionals to this meeting.

Mark Miller mentioned that Rob Springer would be able to help with other contacts if the Advisory board was interested.

Mark Miller wanted them to know the department's next goal is to move forward with the Ph.D. program, and are planning on partnering with Indiana state at first.

**Mark Miller motioned to adjourn at 2:40 p.m.**

**John Connolly seconded**

**Department of Technology**  
**Industrial Advisory Board Meeting Minutes**  
**Wednesday, December 8, 2021, at 2:00 P.M. via Zoom**

**1. Introductions**

All the following Advisory Board members introduced themselves:

Mark Miller	Department of Technology
Heshium Lawrence	Department of Technology/ Interim Associate Dean
Dominick Fazarro	Department of Technology
Mohammed Ali	Department of Technology
RaeJean Griffin	Department of Technology
Brandy Smith	Administrative Assistant II
Dennis Jones	Department of Technology
Eric Ayanegui	Cintas
Dwight Evans	Kluber
Michael Rostis	John Soules Food
Joseph Bumgarner	Eastman Chemical
Kevin Rose	NTCC
Joshua Smith	Carlisle Construction Materials
Kelly Kaemmerling	Kilgore College
Monica Davis	Delek
Randell Farley	Trane Technologies
Daniel Lee	Trane Technologies

Not Present:

Link Worthen	Tyler Junior College
John Connolly II	Solar Turbines
Dane Clark	Cardinal Health

**2. Review of previous year's minutes**

A motion to approve the minutes was presented by Eric Ayanegui, seconded by Heshium Lawrence, and unanimously approved by the board.

**3. Update curriculum changes for both programs**

Undergraduate Program:

Dr. Miller announced that the department had combined the two courses: TECH 3324 Plant Layout and Facilities Planning, and TECH 3312 Facilities Operations and Maintenance has now been approved as noted by the Board's vote from last year.

TECH 3312 is now called Facilities Layout and Maintenance and a \$30,000 Mechanical Drive Training System from Festo/Lab-Volt was purchased for hands-on laboratory activities for the course. The curriculum is divided into levels.

Eric Ayanegui commented about a new robot called Spot the Robot Dog. He said they are trying to introduce this to industry. Dr. Miller noted that he is purchasing more robots so students can be certified in several of them and thereby, being able to program any of them on the market.

Graduate Program:

The department wanted to combine TECH 5335 Lean Management with TECH 5366 Value Stream Management. This would allow students to earn a Lean Six Sigma Black Belt Certification by taking only three courses instead of four. This would be appealing to more students in the MBA program because the MBA students could now fit it into the three electives they have in their degree plans, and also attract more individuals to earn a certification (who are only seeking the certification, not a degree).

It was also noted that students should be able to earn a green belt just by completing the courses with a B or better. Eric Ayanegui agreed this would be beneficial for students when seeking a job in industry. Josh Smith seconded the motion and the Board unanimously approved a three course green belt certification.

#### **4. Enrollment**

Dr. Miller announced that enrollment was low in the fall semester due to COVID, but that the numbers were higher for the Spring semester.

#### **5. Plant Tours/Guest Speakers**

The department would like to have guest speakers and do plant tours again. Randell Farley and Daniel Lee said that Trane is still doing plant tours and they would both be a guest speaker in person or on Zoom if needed.

Dwight Evans said Kluber still has restrictions due to COVID, but he would be a guest speaker.

Eric Ayanegui said Cintas in the Dallas area would do tours and he would be a guest speaker.

Joe Bumgarner said Eastman still has restrictions due to COVID-19, but would be a guest speaker and would get in touch with Dr. Miller regarding Marcus from recruiting.

#### **6. Listing advisory board profiles on the website**

The department would like to list our advisory board on our website, this will look good for the program and for accreditation as well as give you the recognition you deserve. If everyone could send a headshot to Brandy or Dr. Miller, we will get this together as soon as possible.

#### **7. Board Suggestions for Program Improvement**

Daniel Lee mentioned that Manufacturing Analysis-ERP software should be covered in the curriculum.

Eric Ayanegui suggested an internet-connected program, he said the material is inexpensive. He will get more information next week from a conference he is attending.

Dr. Lawrence asked Daniel Lee if Industry 4.0 would be something the industry would be interested in. Daniel Lee said this would be beneficial for the program and the industry, Eric Ayanegui agreed.

Randell Farley suggested Dual Credit programs for high school students. Dr. Miller said he would follow up to see if it can be done by their department.

#### **8. Any new business to discuss**

No new business

## **9. Comments**

Kelly Kaemmerling said Kilgore College has created a new program, and that Dr. Miller can come to speak to the students and would get with Kelly over the 2+2 agreement.

## **Adjournment – 3:10 p.m.**

Dr. Miller moved to adjourn the meeting. Dr. Lawrence seconded the motion and the board voted unanimously to adjourn.



**Technology Department**  
The University of Texas at Tyler  
**ADVISORY BOARD MEETING**  
Agenda

Wednesday, October 5, 2022  
11:00am-1:00pm  
Dean's Event Room COB 307

Buffet Lunch 11-11:30am

1. Call the meeting to order
2. Introductions
3. Approve previous year's minutes
4. Update of curriculum changes for both programs
5. Equipment purchases
6. Rating of course objectives for both programs
7. Enrollment
8. LUC offerings, new programs?
9. Plant tours/Guest speakers/Internships
10. Listing profiles on the website
11. Board suggestions for program improvement
12. New business
13. Adjournment

**Department of Technology  
Industrial Advisory Board Meeting Minutes  
Wednesday, October 5, 2022, 11 AM- 1 PM**

**Introductions**

All the following Advisory Board members introduced themselves:

Mark Miller,	Department of Technology, Chair
Heshium Lawrence	Department of Technology, Interim Associate Dean SCOB
Dominick Fazarro	Department of Technology
Mohammed Ali	Department of Technology
RaeJean Griffin	Department of Technology
Brandy Smith	Administrative Assistant II
Dennis Jones	Department of Technology
Krist Swimberghe	Dean of Soules College of Business
Kelly Kaemmerling	Kilgore College
Daniel Lee	Trane Technologies
Link Worthen	Tyler Junior College
Chase Malone	Target
Alan Buckland	NASA
Edward Benavidez	Brookshires
Zachary Farina	Trinity Rail
Gabrielle Howard	Walmart
Rodney Ellis	Longview University Center Director
Victor Valle	Tyler Economic Development Council

**Regrets:**

John Connolly II, Dane Clark, Eric Ayanegui, Dwight Evans, Michael Rostis, Joseph Bumgarner, Kevin Rose, Joshua Smith, Monica Davis, Randell Farley, Ben Wainwright, Shawn Parrish, Barbara Grubbs, Connie Abernathy, Casey Hale, Howe Wallace, Morgan Erickson, Lisa Jones, Adam Renfroe and Luis Barra

**Review of previous year's minutes**

Please send an email for headshots. We want to list the Advisory board on our website.

A motion to approve the minutes was presented by Dennis Jones, seconded by Dominick Fazarro, and unanimously approved by the board.

**Update curriculum changes for both programs**

Undergraduate Program: We added a new robot course TECH 3317 Industrial Robotics, students will receive three robotics certifications; FANUC, Universal Robots, and Moto Man. This was to proceed with the Industry 4.0 initiative that the board had suggested at previous meetings.

Dr. Ellis asked about course GENB 1000 - Dr. Lawrence said this course is for all incoming first-year students; it is a course that gives them general information regarding the university and has helped with student retention.

### **Equipment Purchases:**

Industrial maintenance training stations for various industrial pumps

- Lab Volt Pumps Pump 1           \$11,810.00
- Lab Volt Pumps Pump 2           \$14,380.00

Online software, notebooks & training station w/wires & electrical parts

- AC/DC Training System   \$8,017.00

Universal Robot automatic screwdriver attachment

- Screwdriving Kit   \$12,550.00

Mechatronics training lab with conveyor, handling, and stacking stations

- Meclab System   \$11,490.00

Universal Robot quick change tooling station

- Wingman Tool Changer Kit   \$3,300.00

### **Rating of objectives for both programs**

We will send out a survey for both programs to rate our course learning objectives. This will allow the department to see what course learning objectives are important in the industry.

### **Enrollment**

Undergraduate: We are still seeing the effects of COVID-19, but we are doing more recruiting and thinking of ways to attract more students.

Graduate: We have increased enrollment numbers this fall. We worked with marketing on Google ads and went from 41 students in 2021-2022 AY to 50 enrolled this fall.

### **Plant Tours/Guest Speakers**

The department would like to invite guest speakers and do plant tours again. Daniel Lee said that Trane is still doing plant tours. Send him a couple of dates, and he will help plan.

Brookshire's is still under COVID Restrictions.

Trinity Rail can do tours.

NASA Center in Palestine can give tours.

### **Listing advisory board profiles on the website**

The department would like to list our advisory board on our website; this will look good for the program and accreditation, as well as give you the recognition you deserve.

### **LUC (Longview University Center) Offering/ Supply Chain Management Certification Program**

Dominick Fazarro presented a supply chain management certification at the undergraduate and graduate level. The Advisory board suggested that we list it on the degree plan for the students to take the third course in the electives to become certified.

## **Board Suggestions for Program Improvement**

Brochure:

- Elaborate more on Applied Engineering. Engineering is a buzz word and more verbiage added to the brochure could help bring more students in.
- Add Quality Engineers to job positions

Daniel Lee suggested bringing TQM back to the core classes for our students. Quality Management is becoming particularly important in the industry field. Daniel mentioned he could provide some content. He also said that students should understand the Taguchi Method-Lean Six Sigma.

Alan Buckland agreed, he suggested using ISO 9001- The ISO 9000 family of quality management systems is a set of standards that helps organizations ensure they meet customer and other stakeholder needs within statutory and regulatory requirements related to a product or service.

Alan Buckland suggested an Audit Class Certification prep course; the certification exam is high at \$1500, but that has become a standard qualification when hiring new employees.

Zachary Farina suggested that they need students to know more about the financial side. It should cover how to capture indirect cost, understand the payback method, etc.

Dennis Jones agreed, and he said we could add a decision analyst course and it can cover payback information and quality.

Chase Malone mentioned that Target is looking for more employees with a safety background. He suggested behavior safety, OSHA training, and Haz Whopper Training.

Alan Buckland mentioned NASA looks for their electrical technicians to be certified; he suggested looking up J-std-001-h CIS.

Edward Benavidez suggested students have some SAP experience because it would be beneficial if they knew some of the information; they do not have to be experts to have familiarity with it. Krist Swimberghe mentioned that Management and Marking offers a UT Tyler SAP certification to their students or any other majors who take the three-course sequence.

### **Any new business to discuss**

No new business

### **Adjournment – 1:15 PM.**

Dr. Miller moved to adjourn the meeting. Dr. Lawrence seconded the motion, and the board voted unanimously to adjourn.

**Technology Department**  
The University of Texas at Tyler  
**ADVISORY BOARD MEETING**  
Agenda

Wednesday, November 15, 2023  
11:00am-1:00pm  
Dean's Event Room COB 307

Buffet Lunch 11-11:30am

1. Call the meeting to order
2. Introductions
3. Approve previous year's minutes
4. Update of curriculum changes for both programs
5. Equipment purchases
6. ATMAE reaccreditation site visit
7. Review rating of course objectives for both programs
8. Enrollment
9. LUC offerings, new programs?
10. Plant tours/Guest speakers/Internships
11. Listing profiles on the website
12. Board suggestions for program improvement
13. New business
14. Adjournment

**Department of Technology  
Industrial Advisory Board Meeting Minutes  
Wednesday, November 15, 2023 11 AM- 1 PM**

**Introductions**

All the following Advisory Board members introduced themselves:

Mark Miller	Department of Technology, Chair
Heshium Lawrence	Department of Technology
Dominick Fazarro	Department of Technology
Mohammed Ali	Department of Technology
RaeJean Griffin	Department of Technology
Brandy Smith	Administrative Assistant II
Dennis Jones	Department of Technology
Krist Swimberghe	Dean of Soules College of Business
Gary Bouse	Director of Development
Halley Graham	Assessment Analyst
Randell Farley	Trane Technologies
Link Worthen	Tyler Junior College
D'Wayne Shaw	Kilgore College
Alan Buckland	NASA
Paul Kavul	Amazon
Monica Davis	Delek
Claudio Yanez	Komatsu

**Regrets:**

John Connolly II, Dane Clark, Eric Ayanegui, Dwight Evans, Michael Rostis, Joseph Bumgarner, Kevin Rose, Joshua Smith, Daniel Lee, Ben Wainwright, Shawn Parrish, Barbara Grubbs, Connie Abernathy, Casey Hale, Howe Wallace, Morgan Erickson, Lisa Jones, Adam Renfroe, Edward Benavidez, Zachary Farina, Rodney Ellis, and Luis Barra

**Review of previous year's minutes**

A motion to approve the minutes was presented by Alan Buckland, seconded by Dominick Fazarro, and unanimously approved by the board.

**Update curriculum changes for both programs**

No significant changes to the undergraduate program were made at the last advisory meeting. However, the faculty has updated the previous curriculum. They are currently working on adding a Supply Chain Management certification for undergraduate students. In addition, since only one or two students ever minor in Industrial Technology or Manufacturing Management the department proposed to remove a course or two so it would be easier for students from other programs to do so. Furthermore, a certificate at the undergraduate level for Manufacturing Technology and a certificate in Robotics and Industrial Automation is being developed so more students can earn technology certifications since it would only take three courses vs. six courses to get a certificate vs. a minor. The advisory board suggested that the department move forward with this plan.

Dr. Miller commented that the department at the graduate level has partnered with the Academic Partnerships (AP) to offer some of the graduate technology courses for their accelerated program. This is to allow MBA students in the AP program to earn three course certifications in Supply Chain Management and Project Management. Dr. Miller noted that the Lean Six Sigma Green Belt certificate courses would be included the following year. Randell Farley and other board members thought this was a good idea and there was a unanimous vote to move forward with this plan.

Dr. Swimberghe advises students to consider pursuing an MS in Industrial Management degree to further their business education, as he sees great potential in the program.

### **Equipment Purchases:**

The department did not make any equipment purchases this school year; ordered the items discussed in October 2022.

1. Industrial maintenance training stations for various industrial pumps
  - Lab Volt Pumps Pump 1           \$11,810.00
  - Lab Volt Pumps Pump 2           \$14,380.00
2. Online software, notebooks & training station w/wires & electrical parts
  - AC/DC Training System           \$8,017.00
3. Universal Robot automatic screwdriver attachment
  - Screwdriving Kit                 \$12,550.00
4. Mechatronics training lab with conveyor, handling, and stacking stations
  - Meclab System                    \$11,490.00
5. Universal Robot quick change tooling station
  - Wingman Tool Changer Kit       \$3,300.00

### **ATMAE Accreditation Site Visit**

The department has a crucial survey for its accreditation and needs the board's help to complete it. Board members can either fill it out now or wait for a follow-up email later this week.

The accreditation site visit is scheduled for the end of April, and the department plans to host an advisory board meeting during their visit. This would be an excellent opportunity for our board members to meet with the ATMAE accreditation site visit team and discuss the programs, so please make plans to attend the next advisory board meeting.

### **Review Ratings of Course Objectives for both programs**

Dr. Miller thanked everyone who participated in the program's survey before the meeting. He noted that the valuable feedback will be highly beneficial to the programs ATMAE Self Study Report. He will share the survey results with everyone via email. Please let him know if you have any feedback regarding what courses should be kept, removed, or even adding courses/content to the programs.

### **Enrollment**

The department has been collaborating with the university marketing team. Currently, they are working with Google Ads to attract more students to the graduate program. Faculty are also consistently visiting high schools and community colleges to recruit more students into the undergraduate program.

## **LUC offerings**

The Industrial Technology program offered at the LUC has relocated to the Kilgore College – Longview campus. The program is currently sharing their facility with students enrolled in programs that easily transfer into the Industrial Technology program. The intent is to attract more transfer students from Kilgore College and help grow the program. In addition, Dr. Ali attends multiple job and college career fairs to promote the program.

## **Plant Tours/Guest Speaker/Internships**

Please let us know if we can arrange a plant tour for our students, who enjoy visiting different plants. Also, if you are interested, you can be a guest speaker in person or over Zoom.

Regarding internships; the department would like to create a list of companies that it works with and include their contact information on our website. This way, students can easily find and contact these companies when looking for an internship.

## **Listing Profiles on the Website**

The department wants to list our advisory board on the program's website. Please meet with Brandy after the meeting to take a headshot or send it to her via email when we follow up.

## **Board Suggestions for Program Improvement**

During the meeting, Randell Farley suggested renaming the AutoCAD course to Industrial Software. He said it would be more beneficial to students and companies hiring them. Please share your thoughts on this recommendation.

Dr. Swimberghe would like to get with TJC and Kilgore College representatives to discuss what UT Tyler needs to do to appeal to their students so they will continue their degree at UT Tyler.

Dr. Miller asked if the department should offer more hybrid, online, or face-to-face classes. He said that the department wants to appeal more to students.

## **New business**

Alan Buckland asked Dr. Miller how the Industrial Technology program compares to others. Dr. Miller replied that their program is the only one in the area, as other colleges have merged with Engineering programs and now offer more engineering courses instead of business courses. Dr. Miller also mentioned that most students prefer having a minor in Business.

Alan Buckland also inquired about the need for a doctoral program in Industrial Technology. Dr. Miller explained that the university is still discussing this topic, as not many universities offer a doctoral program for this major, and they need more professors in Industrial Technology. Randell Farley added that he thinks such a program would benefit the area.

## **Adjournment – 1:07 PM.**

Dr. Miller moved to adjourn the meeting. Heshium Lawrence seconded the motion, and the board voted unanimously to adjourn.

# Appendix J: Faculty Credentials

# CURRICULUM VITAE

for

**MARK R. MILLER, Ph.D., CSTM, CSMS, CSEG, CLSSBB**

Soules College of Business

The University of Texas at Tyler

Office: (903) 566-7186

E-mail: mmiller@uttyler.edu

## ACADEMIC RANK

Professor & Chair of the Department of Technology

## EDUCATION

- Doctor of Philosophy      Texas A&M University, College Station, Texas (August, 1993). Major: Industrial Education, Dissertation title: Strategies for Developing an Exemplary Program in Manufacturing Engineering Technology.
- Master of Arts              Ball State University, Muncie, Indiana (August, 1983). Major: Industrial Education.
- Bachelor of Science        State University of New York, College at Buffalo (May, 1982). Major: Industrial Arts Education.

## PROFESSIONAL EMPLOYMENT HISTORY

- 2014 – Present              Tenured Professor and Department Head of the Department of Technology at The University of Texas at Tyler.
- 2017 – 2019                 Interim Department Head of Human Resource Development
- 2005 – 2014                 Tenured Professor and Coordinator of Industrial Technology and Industrial Management at The University of Texas at Tyler.
- 2004 – 2005                 Professor and Chair of the Industrial Technology Department at Texas A&M University-Kingsville.
- 1999 – 2005                 Associate Professor and Chair of the Industrial Technology Department at Texas A&M University-Kingsville.
- 1993 - 1999                 Assistant Professor in the Industrial Technology Department at Texas A&M University-Kingsville. Tenured September 1999.
- 1990 - 1993                 Full-time Lecturer in the Manufacturing Engineering Technology program at Texas A&M University.

## **PROFESSIONAL EMPLOYMENT HISTORY *continued***

1989 - 1990	Graduate teaching assistant for the Educational Human Resource Development Department at Texas A&M University.
1983 - 1989	Technology Education teacher at Cole Jr.-Sr. High School in San Antonio, Texas.
1982 - 1983	Teaching Assistant and Graduate Fellow for the Department of Industry and Technology at Ball State University.

## **LIST OF COURSES TAUGHT**

### **The University of Texas at Tyler – 2005-Present**

TECH 1301 Technology & Society  
TECH 1320 Industrial Materials  
TECH 3311 Manufacturing Processes  
TECH 3317 Industrial Robotics  
TECH 3333 Polymer Processing  
TECH 4302 Multiple Technology Systems  
TECH 4317 Computer Integrated Manufacturing  
TECH 4323 Lean Production  
TECH 4343 Advanced Manufacturing Processes  
TECH 4350 Topics in Industrial Studies: Robotics  
TECH 4351 Topics in Industrial Studies: Programmable Logic Controllers  
TECH 4372 Technology Capstone  
TECH 5309 Industrial Processes and Materials  
TECH 5335 Lean Management  
TECH 5317 Computer Integrated Manufacturing  
TECH 5366 Value Stream Management  
TECH 5329 Trends in Industry  
TECH 4370 & 5370 Internship in Technology  
TECH 4371 & 5371 Research Internship in Technology

### **Texas A&M University-Kingsville 1993-2005**

IMEN 5301 Industrial Management  
IMEN 5335 Industrial Safety and Risk Management  
ITEN 1311 Technical CAD  
ITEN 2321 Architectural CAD  
ITEN 4303 Advanced Computer Graphics  
ITEN 3331 Construction Technology  
ITEN 3308 Industrial Plastics  
ITEN 4336 Industrial Seminar  
ITEN 3300 Manufacturing Technology  
ITEN 3399 Industrial Internship  
ITEN 4303 Advanced Manufacturing Processes  
ITEN 2330 OSHA for General Industry  
ITEN 4353 Construction Management  
ITEN 4335 Senior Projects

### **Texas A&M University 1989-1993**

ENTC 181 Manufacturing and Assembly Processes I

ENTC 403 Fluid Power Technology

INED 302 Technology, Resources, and Society

### **Cole Jr.-Sr. High School 1983-1989**

Production Systems

Engineering Graphics

Architectural Graphics

Manufacturing Technology

Construction Technology

## **INTELLECTUAL CONTRIBUTIONS**

### **TEXTBOOKS:**

Miller, M. R., Miller, R. (2022). Welding licensing study guide (2<sup>nd</sup> ed.). New York: McGraw-Hill, pp. 448.

Miller, M. R., Miller, R. (2021). Pipefitters Licensing Study Guide. New York: McGraw-Hill, pp. 288.

Miller, R., & Miller, M. R. (2018). Plumbing: Licensing Exams Study Guide. Homewood, IL: American Technical Publishers, pp. 250.

Miller, R., Miller, M. R. (2018). HVAC Licensing Study Guide (3<sup>rd</sup> ed.). New York: McGraw-Hill, pp. 470.

Miller, R. & Miller, M. R. (2017). Robots and Robotics: Principles, Systems, and Industrial Applications. New York: McGraw-Hill, pp. 373.

Miller, M. R. & Miller, R. (2016). Carpentry & construction (6<sup>th</sup> ed.). New York: McGraw-Hill, pp. 767.

Miller, R., Miller, M. R. (2014). Industrial electricity and motor controls (2<sup>nd</sup> ed.). New York: McGraw-Hill.

Miller, R., Miller, M. R. (2012). HVAC Licensing Study Guide (2<sup>nd</sup> ed.). New York: McGraw-Hill.

Miller, R., Miller, M. R. (2012). Air conditioning and refrigeration. New York: McGraw-Hill.

Miller, R., Miller, M. R. (2011). Sheet metal skills: Tools, materials, and processes. Tinley Park, IL: Goodheart-Willcox.

Miller, R., Miller, M. R. (2011). Ugly's plumbing references. Sudbury, MA: Jones & Bartlett.

- Miller, M. R. & Miller, R. (2010). Carpentry & construction (5<sup>th</sup> ed.). New York: McGraw-Hill.
- Miller, R., Miller, M. R. (2008). Electricity and electronics for HVAC. New York: McGraw-Hill.
- Miller, R., Miller, M. R. (2007). Welding licensing study guide. New York: McGraw-Hill.
- Miller, R., Miller, M. R. (2007). HVAC licensing study guide. New York: McGraw-Hill.
- Miller, R., Miller, M. R. (2006). Air conditioning and refrigeration. New York: McGraw-Hill.
- Miller, M. R., Miller, R., & Baker, G. E. (2005). Miller's guide to home remodeling. New York: McGraw-Hill.
- Miller, M. R., Miller, R., & Baker, G. E. (2005). Miller's guide to home wiring. New York: McGraw-Hill.
- Miller, M. R., Miller, R., & Baker, G. E. (2005). Miller's guide to home plumbing. New York: McGraw-Hill.
- Miller, M. R., & Miller, R. (2004). Carpenter's and builder's math, plans, & specifications (7<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, M. R., & Miller, R. (2004). Carpenter's and builder's millwork, power tools, & painting (7<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, M. R., & Miller, R. (2004). Carpenter's and builder's layout, foundation, & framing (7<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, M. R., & Miller, R. (2004). Carpenter's and builder's tools, steel square, & joinery (7<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, R., Miller, M. R. & Leger, E. (2004). Complete building construction (5<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, R., & Miller, M. R. (2004). Refrigeration: Home and commercial (5<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, R., & Miller, M. R. (2004). Air conditioning: Home and commercial (5<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, R., & Miller, M. R. (2004). Pumps and hydraulics (6<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, R., & Miller, M. R. (2004). Questions and answers for plumbers' examinations (4<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, R., Miller, M. R. & Almond, J. P. (2004). Plumber's pocket manual (10<sup>th</sup> ed.). Indianapolis: Wiley.

- Miller, M. R., Miller, R., & Baker, G. E. (2004). Carpentry & construction (4<sup>th</sup> ed.). New York: McGraw-Hill.
- Miller, R., & Miller, M. R. (2004). Electric motors (6<sup>th</sup> ed.). Indianapolis: Wiley.
- Miller, M.R., & Miller, R. (2002). Electrician's helper (8<sup>th</sup> ed.). Lawrenceville, NJ: Peterson.
- Miller, R., & Miller, M. R. (2002). Electronics: The easy way (4th ed.). Hauppauge, NY: Barron's.
- Miller, M. R., Miller, R., & Baker, G. E. (1999). Carpentry & construction (3rd ed.). Hightstown, NJ: McGraw-Hill.
- Miller, R., & Miller, M. R. (1995). Electronics: The easy way (3rd ed.). Hauppauge, NY: Barron's.
- Miller, R., & Miller, M. R. (1993). Small gasoline engines (2nd ed.). New York: Macmillan.
- Miller, R., & Miller, M. R. (1993). Small electric motors (2nd ed.). New York: Macmillan.
- Miller, R., & Miller, M. R. (1992). Electric motor controls. Englewood Cliffs, NJ: Prentice-Hall.

#### **REFEREED JOURNAL ARTICLES:**

- Jones, D. & Miller, M. R. (submitted for publication, 2024). Strategies for Student Engagement in Online Technical Courses. Journal of Technology, Management, and Applied Engineering.
- Miller, M. R. & Donaldson, E. S. (Fall/Winter 2016). Do certifications make a difference with the recruitment of graduate students for Industrial Management Programs? Technology Interface International Journal.
- Lawrence, H. & Miller, M. R. (2015). The ATMAE lean six sigma certification exam: Why it matters to you? Journal of Technology, Management, and Applied Engineering, 31(3),1-19.
- Lawrence, H. & Miller, M. R. (June, 2014). A historical perspective of the evolution of technology education, International Journal on Integrating Technology in Education, 3 (2), 1-7.
- Miller, M. R. (April, 2011). Manufacturing education: Evolving to challenge adversity and public sentiment, Journal of Industrial Technology, 27(2), 1-8.
- Marsh, B. E. & Miller, M. R. (June, 2004). Dimensional metrology: A perspective on structure and lab integration, Journal of Industrial Technology, 20(3), 1-8.
- Miller, M. R. (May, 2000). The status of NAIT: Perceptions of industrial technology department chairs, Journal of Industrial Technology, 16(3), 1-8.
- Miller, M. R. (1996). Characteristics of exemplary manufacturing engineering technology programs, Journal of Engineering Technology, 13(1), 8-13.

Miller, M. R. & Leon, V. J. (1993). Using interactive computer simulation in the quality assurance laboratory, Journal of Engineering Technology, 10(2), 20-25.

### **REFEREED PROCEEDINGS & PRESENTATIONS:**

Miller, M. R., Lawrence, H R., & Jones, D. R. (2023). How to Use the ATMAE Certification Review and Training Sessions to Supplement Your Courses. Association of Technology, Management, and Applied Engineering Conference, Atlanta, GA.

Jones, D. R., Miller, M. R., & Lawrence, H R. (2023). Proven Motivational Techniques for Online Courses. Association of Technology, Management, and Applied Engineering Conference, Atlanta, GA.

Miller, M. R., Lawrence, H R., Jones, D. R., & Griffin, R. (2022). The New ATMAE Certified Manufacturing Specialist Online Exam Preparation Course. Association of Technology, Management, and Applied Engineering Conference, Louisville, KY.

Jones, D. R., Miller, M. R., Lawrence, H R., & Griffin, R. (2022). Tricks to Motivating Your Students to Succeed in Online Technical Courses. Association of Technology, Management, and Applied Engineering Conference, Louisville, KY.

Jones, D. R., Miller, M. R. (2021). The Impact of COVID-19 on the Undergraduate Work Ethic: Strategies to Reverse this Trend. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.

Lawrence, H R., Miller, M. R., & Griffin, R. (2021). The ATMAE Learning Management System: Your User Friendly Online Certification and Training Center. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.

Miller, M. R., Lawrence, H R., & Griffin, R. (2020). Insights to a Successful ATMAE Accreditation: Tips to Keeping Standards in Compliance. Association of Technology, Management, and Applied Engineering Conference, Virtual.

Miller, M. R., Lawrence, H R., & Griffin, R. (2019). Surviving the New ATMAE 2019 Accreditation Standards: What is New and How it Must Be Addressed. Association of Technology, Management, and Applied Engineering Conference, Charlotte, NC.

Miller, M. R., & Lawrence, H. (2018). The New ATMAE Learning Management System: Streamlining Certification and Training Association of Technology, Management, and Applied Engineering Conference, Kansas City, MO.

Miller, M. R., & Lawrence, H. (2017). Does Offering Certifications Assist in the Recruitment of Undergraduate Majors? Association of Technology, Management, and Applied Engineering Conference, Cincinnati, OH.

Miller, M. R. and Donaldson, E. S. (2016). Do certifications make a difference with the recruitment of graduate students for technology-related programs? IAJC-ISAM Joint International Conference. Orlando, FL.

- Miller, M. R., Lawrence, H. R., Donaldson, E. S., & Fazarro, D. E. (2016). The ATMAE lean six sigma prep course: Affordable training just a click away. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.
- Lawrence, H. R., Miller, M. R., Donaldson, E. S., & Fazarro, D. E. (2016). The defined, measured, analyzed, and improved ATMAE lean six sigma exam: What you need to know for the future. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.
- Donaldson, E. S., Miller, M. R., Lawrence, H. R., & Fazarro, D. E. (2016). The unintended consequences resulting from superior preparation of students in technology for industry; diverting the pipeline away from advanced degrees and academic careers. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.
- Miller, M. R., & Lawrence, H. (2016). The Development of an affordable lean six sigma certification and assessment instrument forged from a strong alliance between academia and industry. Sixth International Conference on Lean Six Sigma. Edinburgh, Scotland.
- Lawrence, H. Miller, & M. R., (2016). An Academic Model for Significantly Increasing the Number of Lean Six Sigma Qualified Professionals. Sixth International Conference on Lean Six Sigma. Edinburgh, Scotland.
- Miller, M. R., & Lawrence, H. (2015). ATMAE certification and training: What does training bring to the table? Association of Technology, Management, and Applied Engineering Conference, Pittsburgh, PA.
- Lawrence, H. Miller, & M. R., (2015). The ATMAE lean six sigma certification exam: First year status report. Association of Technology, Management, and Applied Engineering Conference, Pittsburgh, PA.
- Reily, S. & Miller, M. R. (2015). Fast-track to developing supply chain management professionals. TPA Supply Chain Conference, Phoenix, Arizona.
- Miller, M. R., & Lawrence, H. (2014). The ATMAE assessment and certification exams: What's new to make your life easier?. Association of Technology, Management, and Applied Engineering Conference, St. Louis, MO.
- Lawrence, H. Miller, & M. R., (2014). The ATMAE lean six sigma certification exam: Now available and ready for use. Association of Technology, Management, and Applied Engineering Conference, St. Louis, MO.
- Miller, M. R., Lawrence, H., & Fazarro, D. (2013). Strategies for passing the ATMAE certification exams. Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.

## **REFEREED PROCEEDINGS & PRESENTATIONS *continued*:**

- Miller, M. R., Fazarro, D. & Lawrence, H. (2013). The Genesis of a nanotechnology workforce: How will it impact manufacturing and curricula? Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.
- Miller, M. R., Doggett, M. & Fernandes, M. (2013). Major changes for ATMAE certification: New platform, new exam modules, greater industry involvement. Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.
- Lawrence, H. & Miller, M. R. (2013). The ATMAE Lean Six Sigma Certification Exam: Revised Content, Timeline to Completion, and Accreditation. Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.
- Miller, M. R., Lawrence, H., & Fazarro, D. (2012). The ATMAE Lean Six Sigma Exam: Who, What, Where, and Why. Association of Technology, Management, and Applied Engineering Conference, Nashville, TN.
- Roberts, P. & Miller, M. R. (2012). How to Manage Multiple Accreditations Efficiently and Effectively. Association of Technology, Management, and Applied Engineering Conference, Nashville, TN.
- Lawrence, H., Miller, M. R., & Fazarro, D. (2012) Why and How to Rejuvenate an ATMAE Student Chapter: What's In It for Me? Association of Technology, Management, and Applied Engineering Conference, Nashville, TN.
- Miller, M. R., Lawrence, H., & Fazarro, D. (2011). Where does nanotechnology fit into a general technology program's curriculum? Association of Technology, Management, and Applied Engineering Conference, Cleveland, Ohio.
- Miller, M. R. & Lawrence, H. (2011). The CTM exam: Revised, restructured, and rejuvenated. Association of Technology, Management, and Applied Engineering Conference, Cleveland, Ohio.
- Lawrence, H. & Miller, M. R. (2011). How to offer online quality coursework without losing that traditional face-to-face feel. Association of Technology, Management, and Applied Engineering Conference, Cleveland, Ohio.
- Fazarro, D., Kornegay, A. & Miller, M. R. (2011). Learning through skits: A pilot study using contextual learning to achieve learning outcomes in safety education. Association of Technology, Management, and Applied Engineering Conference, Cleveland, Ohio.
- Miller, M. R., Fazarro, D., & Lawrence, H. (2010). The technical professional certification exam: Development, content, and implications. Association of Technology, Management, and Applied Engineering Conference, Panama City Beach, Florida.
- Miller, M. R., Fazarro, D. & Lawrence, H. (2010). Increasing graduate enrollment: generalizing industrial curricula to attract all majors. Association of Technology, Management, and Applied Engineering Conference, Panama City Beach, Florida.

## **REFEREED PROCEEDINGS & PRESENTATIONS *continued*:**

- Martin, J. & Miller, M. R. (2010). Developing an internationally recognized certification exam for construction managers. Proceedings Paper of the Association of Technology, Management, and Applied Engineering Conference, 43-46.
- Miller, M.R. (2009). Marketing your manufacturing/industrial technology program as clean, neat and glamorous. Association of Technology, Management, and Applied Engineering Conference, Louisville, Kentucky. (Awarded best paper for the Manufacturing Track)
- Miller, M.R. & Heidari, F. (2008). The NAIT manufacturing specialist exam: A live demonstration and detailed look of its content. National Association of Industrial Technology Conference, Nashville, Tennessee.
- Miller, M.R. & Heidari, F. (2007). The NAIT manufacturing specialty certification exam: Final draft. National Association of Industrial Technology Convention, Panama City, Florida.
- Miller, M.R. & Heidari, F. (2006). The making of the NAIT manufacturing specialty certification exam. National Association of Industrial Technology Convention, Cleveland, Ohio.
- Heidari, F. & Miller, M.R. (2006). Mastercam X update and demonstration. National Association of Industrial Technology Convention, Cleveland, Ohio.
- Miller, M.R., & Heidari, F. (2005). An overview of the long-awaited study guide developed for the NAIT certification exam. NAIT Convention, St. Louis, Missouri.
- Heidari, F. & Miller, M.R. (2005). Design and implementation of a scoring rubric for industrial technology courses. Proceedings of the 38<sup>th</sup> Annual Convention of the National Association of Industrial Technology,
- Miller, M. R., Marsh, B. E., & Heidari, F. (2004). How to change the NAIT certification exam to make it a benchmark for all industrial technology programs: A survey of industrial technology chairs. Proceedings of the 37<sup>th</sup> Annual Convention of the National Association of Industrial Technology, 17-21.
- Miller, M. R., Marsh, B. E., & Heidari, F. (2003, November). The new image for industrial technology: A mode for excellence and growth, National Association of Industrial Technology Convention, Nashville, Tennessee.
- Miller, M. R. & Marsh, B. E. (2002, November). Developing an inexpensive departmental CD for prospective students. National Association of Industrial Technology Convention, Panama City, Florida.
- Miller, M. R. (2001, November). Industrial technology vs. industrial management: Is there a difference and which is more recognized? National Association of Industrial Technology Convention, Dearborn, Michigan.

## **REFEREED PROCEEDINGS & PRESENTATIONS *continued*:**

- Heidari, F., Marsh, B. E., & Miller, M. R. (2001, November). Converting bitmap images to vector files for CAD/CAM integration. National Association of Industrial Technology Convention, Dearborn, Michigan.
- Heidari, F., Marsh, B. E., & Miller, M. R. (2001, November). Design and layout of a manufacturing cell. National Association of Industrial Technology Convention, Dearborn, Michigan.
- Marsh, B. E., Heidari, F., & Miller, M. R. (2001). Assessing and benchmarking efficiency and effectiveness within manufacturing and service operations. Proceedings of the 34<sup>th</sup> Annual Convention of the National Association of Industrial Technology, 150-154.
- Miller, M. R., Marsh, B. E., & Heidari, F. (2000). Recruitment and retention: What really works? Proceedings of the 33<sup>rd</sup> Annual Convention of the National Association of Industrial Technology, 49-53.
- Marsh, B. E., Heidari, F., & Miller, M. R. (2000). Enhancing statistical quality control (SQC) instruction through the use and application of spreadsheet programs and templates. Proceedings of the 33<sup>rd</sup> Annual Convention of the National Association of Industrial Technology, 218-222.
- Miller, M. R. (1999). Is NAIT prepared for the next millennium? Proceedings of the 32<sup>nd</sup> Annual Convention of the National Association of Industrial Technology, 33-37.
- Miller, M. R. (1997). Exemplary programs in manufacturing engineering technology: Who, what, where, and why? Proceedings of the American Society for Engineering Education Gulf-Southwest Annual Conference, 482-487.
- Miller, M. R. & Nelson, M. S. (1997, December). What are time compression technologies and how do they affect technology education? American Vocational Association Convention, Las Vegas, Nevada.
- Miller, M. R. (1997, October). Time compression technologies: A competitive advantage for industry & industrial technologists. National Association of Industrial Technology Convention, Atlanta, Georgia.
- Miller, M. R. (1996). Virtual reality: Desktop applications for manufacturing education. Proceedings of the SME International Conference on Education in Manufacturing, 3, 395-7.
- Miller, M. R. (1995, October). Virtual reality: Desktop applications for industrial technology curricula. National Association of Industrial Technology Conference, Savannah, Georgia.

## **JOURNAL & CONFERENCE PAPER REVIEW ACTIVITIES:**

2016- Present Reviewer for the International Journal of Productivity and Performance Management.

2008- Present Reviewer for ATMAE Manufacturing Division abstracts & papers.

2011- Present Reviewer for ATMAE Nanotechnology Division abstracts & papers.

2009- 2011 Associate Editor for The Journal of Technology Studies.

## **RESEARCH AND CREATIVE ACTIVITIES:**

National Science Foundation (October 16, 2002): Not funded. Proposal entitled, *Expediting Technology Education Teacher Certifications*, for \$443,540 to fund a Technology Education Laboratory and student stipends. Principal Investigator.

National Science Foundation (October 9, 2002): Not funded. Proposal entitled, *Engineering for Physical Science, Mathematics and Engineering Teachers*, for \$822,605 to fund a new Engineering Education degree for preparing secondary teachers. Co-Principal Investigator.

*Society of Manufacturing Engineers Education Foundation* (June 1998): Awarded \$62,375 worth of computer software for use in manufacturing related coursework.

*Society of Manufacturing Engineers Education Foundation* (June 1995): Awarded \$475,600 worth of computer software for use in manufacturing related coursework.

Higher Education Assistance Funds, College of Engineering (1998-2002): Awarded \$142,527 over a four year period for equipment for lecture and laboratory courses.

*Faculty Development Fund* (December 1993): Awarded \$374 for assistance in travel to attend faculty development training in Geometric Dimensioning and Tolerancing in Chicago, Illinois.

## **PROFESSIONAL GROWTH ACTIVITIES:**

### **Member**

American Society for Engineering Education (ASEE)

Association for Career and Technical Education (ACTE)

Association of Technology, Management, and Applied Engineering (ATMAE)

Epsilon Pi Tau (EPT) Honor society for professions in technology

Institute of Electrical and Electronics Engineers (IEEE) Computer and Nanotechnology

Society of Manufacturing Engineers (SME)

### **Leadership Roles in Professional Societies**

Chair, Association of Technology, Management, and Applied Engineering Conference Committee. Term: 2023-2024.

Chair, Association of Technology, Management, and Applied Engineering Certification Board. Terms: 2008-Present.

Chair, Association of Technology, Management, and Applied Engineering Marketing Committee: 2024-2025.

### **Member of Professional Societies**

Member, Association of Technology, Management, and Applied Engineering Certification Board. Terms: 2000-2008.

President, Association of Technology, Management, and Applied Engineering Manufacturing Division. Terms: 2008-2010.

Member of the National Association of Industrial Technology Certification Board. Terms: 2000-2007.

Member of the Society of Manufacturing Engineers Student Relations Subcommittee Term: 2004-2008.

Society of Manufacturing Engineers - 2008 – 2016, Chair for Chapter 126 in East Texas

Society of Manufacturing Engineers - 2003, Chair for Chapter 121 in San Antonio, TX

Society of Manufacturing Engineers - 1999, Chairman for Chapter 121 in San Antonio, Texas

Society of Manufacturing Engineers - 1998, Chair-elect for Chapter 121 in San Antonio, Texas

Society of Manufacturing Engineers faculty advisor for The University of Texas at Tyler student chapter S358 from 2006 - present (increased membership from 0 to 26)

Society of Manufacturing Engineers faculty advisor for TAMUK student chapter S264 from 1994 - 2005 (increased membership from 29 to 85)

### **Professional Society Meetings**

Attended and presented at all the ATMAE & NAIT annual conferences from 1993-present.

Attended the Society of Manufacturing Engineers Annual Convention in Dallas, TX on May

29-June 1, 2002.

**Professional Society Meetings *continued*:**

Attended the 1997 ASEE Gulf-Southwest Annual Conference in Houston, TX on March 24-25, 1997.

Attended the American Vocational Association Convention in Las Vegas, Nevada on December 10-14, 1997.

Attended the Society of Manufacturing Engineers Annual Convention in Cleveland, OH on May 29-31, 1998.

Attended the Society of Manufacturing Engineers Regional Conference in Dallas, TX on November 12-14, 1998.

Attended all of the Society of Manufacturing Engineers San Antonio Chapter 121 meetings from November of 1993 – June 2005.

**SERVICE ACTIVITIES**

**Committee Work**

**The University of Texas at Tyler (2005-Present)**

Member of the college Graduate Curriculum and Assessment Committee, 2023-2025

Chair of the university Undergraduate Council 2021-2023

Chair of the college Undergraduate Curriculum and Assessment Committee, 2019-2022

Member of the College Student Awards and Scholarship Committee, 2019-2021

Chair of the University Undergraduate Council, 2014- 2019

Member of the CBT Graduate Curriculum and Standards Committee, 2016-2018

Chair if the CBT Tenure and Promotion Committee, 2015

Member of the University Undergraduate Council, 2013-2014

Member of the University Undergraduate Council Subcommittee: Undergrad. Curriculum

Chair of the CBT Undergraduate Curriculum Committee, 2013-2016

Chair of the CBT Faculty Governance Committee 2013-2016

Treasurer for the Faculty Senate, 2012-2015.

**The University of Texas at Tyler (2005-Present) *continued*:**

Member of the Department's Tenure and Promotion Committee, 2009-2014.

Member of the Department's Curriculum Committee 2005-Present.

Chair of the Industrial Technology Re-accreditation Committee, 2010- present

Member of the CBT Promotion and Tenure Committee, 2011-2013.

Chair of the University Faculty Affairs Committee, 2010-2011.

Chair of the School of HRD & Technology SACS Committee, 2007-2010.

Chair-Elect of the University Faculty Affairs Committee, 2008-2011.

Member of the University Graduate Council, 2009-2012.

Member of the College of Business & Technology Leadership Team, 2009-2010.

Member of the University Graduate Council from 2009-2012.

Chair of the University Information Technology Committee from 2007-2008.

Member of the University Information Technology Committee from 2005-2007.

Member of the Provost Search Committee from 2007-2008.

**Texas A&M University-Kingsville (1993-2005)**

Member of the Dean of the College of Engineering Search Committee from 2001-2002.

Member of the College of Engineering Recruitment Committee from 2004-2005.

Member of the university's SACS Technology committee from August 2002-2005.

Chair of the department's curriculum committee 1999-present.

Chair of the university 1997-2000 Calendar Committee.

Chair of the 1997-1998 search committee for a full-time departmental faculty member.

Member of the College of Engineering Curriculum Committee from 1995 – 2005.

Member of the Dean of the College of Business Search Committee from 1998-1999.

Member of the BAAS Advisory Committee from 1995-2005.

**Texas A&M University-Kingsville (1993-2005) *continued*:**

Member of the Council of Chairs Committee from 1999-2005.

Member of the Accessibility Compliance Committee from 1999-2005.

Member of the Engineering Ethics Committee in 1994.

**Student Organizations:**

Co-Trustee for Epsilon Pi Tau – Delta Gamma Chapter (Honor society for technology professionals).

Faculty advisor for the Association of Technology, Management, and Applied Engineering student chapter at The University of Texas at Tyler, 2005-2011.

Faculty advisor for the Society of Manufacturing Engineers student chapter S358, 2006-Present. Established new chapter in 2006.

Faculty advisor for the Society of Mfg. Engineers student chapter S264, 1993-2005.

Faculty advisor and Trustee for Epsilon Pi Tau - Alpha Nu chapter, 2000-2005. Reactivated the chapter in April, 2000.

Installed the Epsilon Pi Tau, Delta Gamma chapter at The University of Texas at Tyler in March, 2005.

**Awards and Certifications**

2022 Epsilon Pi Tau Distinguished Service Award

2021 Universal Robots Certified Trainer status

2020 Yaskawa Motoman Certified Trainer authorization

2018 FANUC robotics certification in vision systems

2017 Charles W. Keith Award, is administered by the Chair of the Board. It should be noted that this award is not a yearly award, but will be given only when an individual is judged by the current Chair of the Board and two past chairs to have displayed exemplary accomplishments toward the significant development of ATMAE over an appreciable period of time.

2014 Phi Kappa Phi Member, All-discipline Honor Society, The University of Texas at Tyler Chapter

2012 Recipient of the ATMAE Faculty Excellence Award

**Awards and Certifications *continued*:**

2012 Earned Lean Six Sigma Black Belt Certification

2012 Recipient of the Faculty Senate Service Award

2012 Recipient of the ATMAE Outstanding Faculty Excellence Award

2012 Recipient of the College of Business & Technology Faculty Service Award

2012 Authorized Certified Trainer for FANUC robots (CERT)

2011 Earned Certified Senior in Engineering Graphics status

2010 Earned Certified Senior Technical Professional status.

2009 Who's Who in America – 63<sup>rd</sup> Edition

2009 Earned Certified Manufacturing Specialist status.

2009 Earned Certified Senior Technology Manager status

2007 Earned Certified Senior Industrial Technologist status.

2006 Recipient of the National Association of Industrial Technology Outstanding Professor of Technology Award.

2005 Awarded the prestigious Laureate Citation from the international honor society for professions in technology, Epsilon Pi Tau.

2001-2004 OSHA Authorized Outreach Trainer

1995 GD&T Level 1 Training by SME

1988 Texas permanent teaching certificate

1982 New York state provisional teaching certificate

**OTHER PROFESSIONAL ACTIVITIES NOT COVERED PREVIOUSLY:**

Prepared the self-study report for re-accreditation of the Industrial Technology program at The University of Texas at Tyler by the Association of Technology, Management, and Applied Engineering in the all-new 2023 outcomes format.

Prepared the self-study report for initial accreditation of the Industrial Management graduate program

at The University of Texas at Tyler by the Association of Technology, Management, and Applied Engineering in the all-new 2023 outcomes format.

**OTHER PROFESSIONAL ACTIVITIES NOT COVERED PREVIOUSLY *continued:***

Prepared the self-study report for re-accreditation of the Industrial Technology program at The University of Texas at Tyler by the Association of Technology, Management, and Applied Engineering in the all-new 2019 outcomes format.

Prepared the self-study report for initial accreditation of the Industrial Management graduate program at The University of Texas at Tyler by the Association of Technology, Management, and Applied Engineering in the all-new 2019 outcomes format.

Assisted with and coordinated the external review self-study report for the Human Resource Development master's program at The University of Texas at Tyler, 2019).

Assisted with and coordinated the external review self-study report for the Human Resource Development doctoral program at The University of Texas at Tyler, 2019).

Purchased and setup new equipment for the new College of Business building as well as packed and setup existing equipment from the HPR building. Spent countless hours drawing up the plans and meeting with architects about the new laboratory requirements.

Purchased and setup new equipment in order to create a brand new manufacturing laboratory at the Longview University Center.

Gave numerous presentations to local organizations and industries regarding the start of the new Industrial Technology program at the Longview University Center.

Developed the Supply Chain Management certificate program for the graduate program in Industrial Management in 2014.

Authored the ATMAE Certified Lean Six Sigma Online Study Guide in 2014.

Coordinated and assisted with the development of the ATMAE Lean Six Sigma certification exam from 2009-2014.

Developed the Lean Six Sigma Black Belt certificate program for the graduate program in Industrial Management in 2013.

Annually revise the curricula for the Industrial Technology and Industrial Management programs in order to meet ATMAE accreditation standards.

Prepared the self-study report for re-accreditation of the Industrial Technology program at The University of Texas at Tyler by the Association of Technology, Management, and Applied Engineering (reaccredited with no partial or non-compliances, 2012).

Assisted with the development of the new ATMAE Certified in Engineering Graphics exam from 2009- 2011.

Coordinated, developed, and prepared the new online ATMAE Technical Professional Certification exam from 2007-2010.

**OTHER PROFESSIONAL ACTIVITIES NOT COVERED PREVIOUSLY *continued:***

Authored the ATMAE Certified Technical Professional online Study Guide in 2010.

Coordinated, developed, and prepared the new online ATMAE Manufacturing Specialist Certification exam from 2005-2009.

Authored the ATMAE Certified Manufacturing Specialist online Study Guide in 2008.

Authored the ATMAE Certified Technology Manager online Study Guide in 2006.

Ordered and setup new equipment, tables, chairs, cabinets, tool cribs, etc. for the manufacturing laboratory in rooms HPR 256 and 261 in 2005-2012.

Assisted and developed assessment instruments and other documents essential for full (6 year) ATMAE (NAIT) accreditation status for the HRD & Technology Department at UT Tyler (2005).

Developed and prepared the proposal for a graduate program in Industrial Management for the Industrial Technology Department at Texas A&M University-Kingsville which was approved by The Texas Higher Education Coordinating Board on February 19, 2004.

Developed and prepared the Industrial Technology Department at Texas A&M University-Kingsville's Self Study Report for Accreditation by the National Association of Industrial Technology (awarded full accreditation of 6 years from 2003-2009).

## **Dominick E. Fazarro, Ph.D., CSTM**

Department of Technology  
The University of Texas at Tyler  
Tyler, TX 75799  
Mobile-469.910.9181

### **EDUCATIONAL HISTORY**

Ph.D., Industrial Education and Technology, 2001	Iowa State University Ames, Iowa
M.S., Industrial Management, 1992	Central Missouri State University Warrensburg, Missouri
B.S., Manufacturing Design Technology, 1989	Norfolk State University Norfolk, Virginia

### **ACADEMIC EXPERIENCE**

<b>The University of Texas at Tyler</b> Department of Technology <ul style="list-style-type: none"><li>• Professor</li></ul>	August 2019
<b>The University of Texas at Tyler</b> Department of Technology <ul style="list-style-type: none"><li>• Associate Professor (<i>Tenured</i>)</li></ul>	August 2015 - August 2019
<b>The University of Texas at Tyler</b> Dept. of Human Resources Development and Technology <ul style="list-style-type: none"><li>• Associate Professor</li><li>• Doctoral Faculty (Ph.D. Program-Human Resource Development)</li></ul>	August 2010 – August 2014
<b>Sam Houston State University</b> Department of Agricultural and Industrial Sciences Industrial Technology Program <ul style="list-style-type: none"><li>• Associate Professor</li></ul>	July 2007 - July 2010
<b>University of Arkansas at Pine Bluff</b> Industrial Technology Program Department of Mathematical Sciences and Technology <ul style="list-style-type: none"><li>• Associate Professor (promoted in 2007)</li></ul>	August 2002 - May 2007
<b>Longview Community College</b> Applied Sciences Department <ul style="list-style-type: none"><li>• Adjunct Drafting Instructor</li></ul>	August 1997 - May 1998
<b>Iowa State University</b> Student Affairs George Washington Carver Academy	August 2001-June 2002

- Assistant Coordinator – Post-Doctoral

## RESEARCH AGENDA

My research agenda focuses on various areas of innovative technologies which requires unique instruction to enhance learning outcomes

- Learning Styles
- Nanotechnology Safety and Education/Risk Assessment
- Nanotechnology Workforce Education and Development
- Workforce Development
- Evaluation and Assessment

## INDUSTRY AND UNIVERSITY ACCREDITATION EXPERIENCE

- Assisted in University of Tyler ATMAE accreditation process (2013 & 2016)-Full Accreditation Status
- Completed NAIT/ATMAE Outcome-Based Assessment Training (2007 & 2009)
- Data Manager & Assessor-NSF STEM/ HBCU-UP Program University of Arkansas at Pine Bluff, (July 2004-May 2007)
- National Association of Industrial Technology (NAIT) ACCREDITATION University of Arkansas-Pine Bluff, (2006-2007)
- Data Manager & Assessor-NSF STEM/ HBCU-UP Program University of Arkansas at Pine Bluff, (July 2004-May 2007)
- Data Manager & Assessment Coordinator, Standard Two Assessment Team-National Accreditation for Teacher Education (NCATE University of Arkansas-Pine Bluff, (November 2004-May 2005)
- Evaluation Committee Chairperson –University Assessment NCA/HLC(UAPB), (2005-2006)
- Directed university-wide data assessment on customer satisfaction survey, (August-December, 2006)
- Composite Designer-Newport News Shipbuilding and Drydock Co., (1989-1990)
- Data Manager-EDS/GM Fairfax Plant-Kansas City, Kansas, (1996-1997)
- Inventory Control/Logistics-U.S. Army, (1993-2001)
- Assistant Researcher (Research Internship)-Kauffman Foundation, Kansas City, MO, (June-August 1995)

## CONSULTING-ASSESSMENT & EVALUATION

- External Evaluator-NSF-STEM/ HBCU-UP Program/Florida A&M University, (2009-2012)
- Data analysis and created reports for Pulaski Special County School District's Multiage Program, (2007-2011)
- External Provider-Minnesota Department of Education, (2007)
- Conducted needs assessment at the Alexandria Center's (Department of Youth Services-AR) Education Program, (2007)
- Generated survey data for Arkansas Baptist College, (October-December 2006)
- Coordinated the evaluation of The Online Journal for Workforce Education and Development (Southern Illinois University), (2006)
- Consulted for Edu-Care International (Supplemental Education Service Provider), (July 2004-March 2005)
- Designed an evaluation model for the Teacher Advisement Grant-Savannah School District, (2005)
- Conducted data analyses and developed data bases for the Kiwanis Pheifer Camp, (2004-2005)

- Evaluated the effectiveness of the John Deere Team Scholars Program, (Feb-May 1999)

## PUBLICATIONS

NSE=Scholarship in Nanotechnology Safety Education    RC=Scholarship in Research Collaboration  
 NW=Scholarship in Nanotechnology Workforce        LS=Scholarship in Learning Style  
 WD=Scholarship in Workforce Development

### Peer-Reviewed Journal Publications (n=32)

1. <sup>RC</sup>Scott, D. & **Fazarro, D.** (2021) The Need for integration of smart glasses in policing for the 21st century, but is the technology there yet? *Technology Interface International Journal*, (A Journal) 22(1), 53-59.
2. <sup>NSE</sup>Scott, D. & **Fazarro, D.** (2020) Bridging over criminal justice to address the growing threats of nanotechnology in local communities: An introspective look at how nanotechnology is impacting first responders. *Technology Interface International Journal*, (A Journal) 20(2), 31-34.
3. <sup>NSE</sup>**Fazarro, D.** & Trybula, W. (2020) Meeting the needs of the 21<sup>st</sup> century workforce: Nanotechnology safety training. *The Online Journal for Workforce Education and Development*. (B Journal) 10(1), 1-15.
4. <sup>NSE</sup>**Fazarro, D.** & Sayes, C. (2018). Students' perception of learning experience of risk management for nanoscaled materials. *Journal of Technology, Management, and Applied Engineering* 34 (3), 2-11. (A+Journal)
5. <sup>NSE</sup>**Fazarro, D.**, Hanks, C., Trybula, W., & Tate, J. (2016). Introducing Engineering and Technology Majors to Nano-Safety and Ethics. *Technology Interface International Journal*, 17 (1), 5-17. (A+Journal)
6. <sup>NSE</sup>Tate, J. , Hernandez, R.A., Hanks, C., Trybula, W., & **Fazarro, D.** (2016). Addressing ethical and safety issues of nanotechnology in health and medicine in undergraduate engineering and technology curriculum. *Global Journal of Engineering Education*, 18(1), 1-5. (B Journal)
7. <sup>NSE</sup>Tate, J. , Espinoza, S., Hanks, C., Trybula, W., & **Fazarro, D.** (2015). Military and National Security Implications of Nanotechnology. *Journal of Technology Studies*, 41 (3), 20-28. (B Journal)
8. <sup>RC</sup>Kornegay, A., Fasanya, B., **Fazarro, D.** (2015) Technology Driven Innovation — Strengthening Industry and Academia Partnerships for Advanced Manufacturing Gains. *Technology Interface Journal*, 15(2), 62-66. (A+Journal)
9. <sup>NSE</sup>**Fazarro, D.**, Tate, J. & et. al. (2015). Evaluating Students' Perceptions for the Ethics Module Content in Nanotechnology Safety: Meeting the Needs for Post-Secondary Students in STEM Areas. *Journal of Technology, Management, and Applied Engineering*, 31(1), 1-20. (A+Journal)
10. <sup>RC</sup>Grant, G. J., **Fazarro, D.** & Steinke, L. J., (2014). Implementing problem-based learning into multimedia technology courses: Reinforcing industries' needs. *The Online Journal for Workforce Education and Development*, 7(1), 1-17. (B Journal)
11. <sup>LS</sup>Wu, C. & **Fazarro, D.** (2013). Investigation of Learning Style Preferences of Business Students. *The Online Journal for Workforce Education and Development*, 6(2), 2-20. (B Journal)
12. <sup>NSE</sup>**Fazarro, D.** & Trybula, W. (2012). Nanotechnology Safety Training: Addressing the Missing Piece. *Journal of Technology Studies*, 38 (1), 43-52. (B Journal)

13. <sup>NSE</sup>Fazarro, D. (2012). The urgency of nanotechnology safety education. *IEEE Nanotechnology Magazine*, 6 (1), 24. (*Peer-Review, Journal with a H Index 7*) (A+Journal)
14. <sup>NSE</sup>Fazarro, D., Newberry, D., Trybula, W. & Hyder, J. (2012). Introducing a nanotechnology curriculum and considerations for bridging academic/industry relationships for applied technology-oriented programs: The new challenge for ATMAE. *Journal of Technology, Management, and Applied Engineering*, 28 (1), 1-8. (A+Journal)
15. <sup>RC</sup>Fazarro, D., & McWhorter, R. (2011). Leveraging green computing for increased viability and sustainability. *Journal of Technology Studies*, 37 (2), 116-123. (B Journal)
16. <sup>NSE</sup>Fazarro, D., Heshium, L. & McWhorter, R. (2011). Going virtual: Delivering nanotechnology safety education on the web. *Journal of sTEem Teacher Education*, 48(2), 38-62. (B Journal)
17. <sup>RC</sup>Pannkuk, T. & Fazarro, D. (2011). Strengthening collaborations with landscaping industry and department of agricultural sciences: Using the structured group interview approach for enhancing the 21<sup>st</sup> century workforce. *The Online Journal for Workforce Education and Development*, 5(2), 1-15. (B Journal)
18. <sup>RC</sup>Fazarro, D., Stevens, A., Reed, D., & Carwile, D. (2011-2012). Learning style preferences of African American students in agriculture sciences. *National Forum of Education Administration and Supervision Journal*, 28 (3), 32-51. (A Journal)
19. <sup>LS</sup>Fazarro, D., Putnam, A. & Steinke, L. (2011). What should engineering technology instructors know about learning styles: Improving the learning environment for diverse students? *Workforce Education Forum*, 35 (2), 21-31. (B Journal)
20. <sup>RC</sup>Yildiz, F., Fazarro, D., Coogler, K. (2010). The green approach: Self-powered house design concept for undergraduate research. *Journal of Industrial Technology*, 26 (2), 1-10. (A+Journal)
21. <sup>RC</sup>Beverly, M. Lau, M., Stutts, K. & Fazarro, D. (2009). Evaluation of customer survey data to develop an effective marketing plan for state parks: A case study using the Texas Parks and Wildlife Department State Park study. *Journal of Business Case Studies*, 5 (5), 19-28. (**Impact Factor: .06**)
22. <sup>NSE</sup>Trybula, W., Fazarro, D. & Kornegay, A. (2009). The emergence of nanotechnology: Establishing the new 21<sup>st</sup> century workforce. *The Online Journal for Workforce Education and Development*, 4 (3), 1-10. (B Journal)
23. <sup>RC</sup>Kornegay, A., Fazarro, D. & Hoffa, D. (2009). Gearing up to manufacture biofuels including ethanol and biodiesel. *International Journal of Modern Engineering (IJME)*, 9 (2), 13-16. (A+Journal)
24. <sup>WD</sup>Fazarro, D., Pannkuk, T., Pavelock, D. & Hubbard, D. (2009). The effectiveness of instructional methods based on learning style preferences of agricultural students: A research tool for continuous improvement for faculty in career and technical education (CTE) programs. *Journal of Industrial Teacher Education*, 45(3), 84-104. (B Journal)
25. <sup>RC</sup>Ullrich, D. R., Pavelock, D. & Fazarro, D. (2007). Effectiveness of career and technology student organizations (CTSOs) in Texas. *The Online Journal for Workforce Education and Development*, 3 (4), 1-11. (B Journal)

26. <sup>WD</sup>Lusk, S. & **Fazarro, D.** (2006). The effects of psychosocial factors on career and workforce development for students with disabilities. *The Online Journal for Workforce Education and Development*, 2 (3), 1-20. (B Journal)
27. <sup>LS</sup>**Fazarro, D** & Buckner, E. (2005). What is your learning style preference? A look at industrial technology and agriculture students. *The Online Journal for Workforce Education and Development*, 1(3), 1-14. (B Journal)
28. <sup>LS</sup>**Fazarro, D.** (2005). An investigation of learning style preferences based on socio-economic status of African American students at a historical black university in the delta region of South Central United States. *International Journal of Knowledge, Culture and Change Management*, (4), 1076-1079. (B Journal)
29. <sup>LS</sup>**Fazarro, D.** & Stevens, A. (2004). Topography of learning styles preferences for undergraduate students in industrial technology and engineering programs at historically Black and predominately white institutions. *Journal of Industrial Teacher Education*, 41 (3), 5-30. (Awarded Outstanding Manuscript of the Year 2003-04 by the journal) (B Journal)
30. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2004). Comparison of learning styles of agriculture, human sciences, and industrial technology students at a historically black university. *Workforce Education Forum*, 31 (2), 17-26. (B Journal)
31. <sup>WD</sup>**Fazarro, D.** (2003). Tech-Upward bound program: A program to introduce students to world of technology. *TechDirections*, 63 (7), 26-27. (A Journal)
32. <sup>LS</sup>**Fazarro, D.** (1999). Motivating African American youth in technology education. *TechDirections*, 59 (1), 25-27.

#### Peer-Reviewed Proceedings (n=7)

1. <sup>NSE</sup>Hanks, C., Tate, J., **Fazarro, D.** & et. al. (2015). A multi-disciplinary multi-institutional approach to teaching ethics of emerging technologies. Proceedings of The 2015 American Society of Engineering Education (ASEE) Gulf-Southwest Annual Conference, March 25-27, 2015.
2. <sup>RC</sup>Kornegay, A., Fasanya, **Fazarro, D.** & et. al. (2014). Technology-Driven Innovation—Strengthening Industry and Academia Partnerships for Advanced Manufacturing Gains. Proceedings of The 2014 IAJC-IME International Conference, ISBN 978-1-60643-379-9, September 25-27, 2014.
3. <sup>NSE</sup>Hanks, C., **Fazarro, D.**, Tate, J. & et. al. (2014). The Continuing Shock of the New: Some Thoughts on Why Law, Regulation, and Codes Are Not Enough to Guide Emerging Technologies (Paper 2014-10610). Proceedings of The 2014 American Society of Engineering Education (ASEE), June 14-17, 2014.
4. <sup>NSE</sup>Hanks, J. C., Tate, J., **Fazarro, D.**, Trybula, W., McLean, R. J. C., Dutta, S., & et. al. (2014). Fostering ethical, social, Environmental, Health, and Safety Awareness in Tomorrow's Engineers and Technologists. In *ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE)*. (Vol. 14). American Society of Mechanical Engineers (ASME). doi: 10.1115/IMECE2014-38264
5. <sup>NSE</sup>**Fazarro, D.** & Trybula, W. (2011). Empowering Academia to Look Into the Future: Nanotechnology Safety Education-Creating the Workforce That You Will Need. Proceedings of the IEEE Conference, Portland, OR., August 15-18, 2011.

6. <sup>RC</sup>Yildiz, F., **Fazarro, D.** & Coogler, K. (2009). Self-Sufficient, Energy-Efficient House Design (AC2009-1073). Proceedings of The 2009 American Society of Engineering Education (ASEE), June 14-17, 2009.
7. <sup>RC</sup>Kornegay, A. **Fazarro, D.** & Hoffa, D. (2008). Biotechnology: Gearing up to Manufacture Biofuels Including Ethanol and Biodiesel (Paper 012, ENT 204), Proceedings of The 2008 IAJC-IJME International Conference, ISBN 978-1-60643-379-9, November 18-22, 2008.

## Books

**Fazarro, D., Trybula, W., Hanks, C., Tate, J.**(Eds.).(2023). NANO-SAFETY: What workers need to know, 2<sup>nd</sup> Ed. DeGruyter: Germany. ISBN-978-3-11-078182-3

**Fazarro, D., Trybula, W., Hanks, C., Tate, J.**(Eds.).(2017). NANO-SAFETY: What workers need to know. DeGruyter: Germany. ISBN-978-3-11-037375-2

**Fazarro, D.** (2015). (Editorial Advisory Board) Impact of diversity on organization and career development. Hershey, PA: IGI Global. Edited Book.

## Book Chapters (*n=5*)

1. <sup>NSE</sup> Trybula, W., Newberry, D., **Fazarro, D.** & Hanks, C., (2020). Minimizing Negative Long-term Occurrences in Nanotechnology Development. (Chapter 11) ,pp. 189-209. *In Intellectual Property Issues in Nanotechnology*, CRC Press: Boca Raton, FL.
2. <sup>NSE</sup> Trybula, W., Newberry, D. & **Fazarro D.** (2018). Nanotechnology Health, Safety, Environment Overview (Chapter 35). In Nanopackaging: Nanotechnologies and Electronics Packaging, (2<sup>nd</sup> Ed.) by James E. Morris, Springer: Switzerland.
3. <sup>NSE</sup>Trybula, W., **Fazarro, D.**, Hanks, C., Tate, J. (2016). Nanotechnology safety education. In *Global Perspectives of Nanoscience and Engineering Education (223-235)*, by Winkelmann, Kurt, & Bhushan, Bharat (Eds.), Springer: Switzerland.
4. <sup>NSE</sup>**Fazarro, D.** & Fitzimmons, V. (2013). *Nanotechnology Certification* (Chapter 15). In Nanotechnology Safety Education by R. Asmatulu, Elsevier: Holland.
5. <sup>NW</sup>**Fazarro, D.** (2010). Lateral diffusion of nanoeducation: Developing the new workforce. In Nanoscience education, workforce training, and k-12 resources, by Aznar, M.F. & Lightfeather, J. CRC: Press, Boca Raton, FL.

## Practitioner Publications

Lau, M., Beverly, M., Stutts, K., & **Fazarro, D.** (2008). State park visitor survey: Statewide report. Texas Parks and Wildlife Department Assessment Report.

**Fazarro, D.** (2008). Industry division shifting focus for 21<sup>st</sup> century. *IT Insider*, 10(2), 6.

## Other Print Publications

Mass Media Materials being interviewed as an expert in the subject area of nanotechnology safety

Bloomberg BNA-Occupational Safety & Health Reporter, (2013). *U.K. safety agency releases nanotechnology guide*. 43(14), 313-332.

Bloomberg BNA-Occupational Safety & Health Reporter, (2013). *NIOSH seeks guidance on priorities for nanotechnology research through 2016*. 43(5), 89-112.

## GRANTS

### Federal Funded -(Total: \$ 451,769) (Total Amount-\$ 489,569)

Year	Title	Amount/Type	Awarding Agency	Role/ Position
2014	Nanotechnology Environment, Health, and Safety Awareness...	\$5,992 (Supplement)	National Science Foundation (Nanotechnology Education Division)	Co-PI
2014	NanoTRA -Texas Regional Alliance to Foster Nanotechnology Environment, Health, and Safety Awareness...	\$10,000 (Research Education Teaching)	National Science Foundation (Nanotechnology Education Division)	Co-PI
2012	NanoTRA -Texas Regional Alliance to Foster Nanotechnology Environment, Health, and Safety Awareness...	\$199,777	National Science Foundation (Nanotechnology Education Division)	Co-PI
2010	Technical Approach and Program Design: Project for Nano-Safety Education and Training	\$236,000	Susan Hardwood Grant Training Grant Program	Co-PI Internal Evaluator

### State Funded (Total: \$ 19,000)

Year	Title	Amount/Type	Awarding Agency	Role/ Position
2008	State Park On-Site Visitor Survey Assessments	\$19,020	Texas Parks and Wildlife Department	Co-PI

### University Faculty Research Incentive (Total: \$ 18,800)

Year	Title	Amount/Type	Awarding Agency	Role/Position
2019	Molecular Mechanisms of Growth Factor Receptor Activation by Bacterial Protease: Application and Education of Nanocarrier Biotechnology	\$17,000	The University of Texas at Tyler	Co-PI
2006	Investigation of the Learning Preferences of Biology and Chemistry students	\$600	The University of Arkansas at Pine Bluff	PI
2003	Learning Style Research-STEM majors	\$1,200	The University of Arkansas at Pine Bluff	PI



12. <sup>NSE</sup>Hanks, C., Tate, J. **Fazarro, D.** & et. al. (2014). Infusing ethical, safety, health, and environmental education in engineering and technology curricula. *New Horizons in Texas STEM Education Conference*, San Antonio, TX, March 27-28, 2014.
13. <sup>NSE</sup>**Fazarro, D.**, Tate, J., & et. al. (2014). NSF-NUE: NanoTRA-Texas alliance to foster nanotechnology environment, health, and safety awareness in tomorrow's engineering and technology leaders. *ASEE Annual Conference*, Indianapolis, IN., June 15-18, 2014.
14. <sup>NSE</sup>Hanks, C., Tate, J. **Fazarro, D.** & et. al. (2014). The continuing shock of then New: Some thoughts on why law, regulation, and codes are not enough to guide emerging technologies. *ASEE Annual Conference and Exposition*, Indianapolis, IN, June 15-18, 2014.
15. <sup>NSE</sup>Hanks, C., Tate, J. **Fazarro, D.** & et. al. (2014). A multi-disciplinary, multi-institutional approach to teaching ethical, social, health, safety, and environmental issues in nanotechnology. *IEEE International Symposium on Ethics in Engineering, Science, and Technology*, Chicago, IL, May 23-24, 2014.
16. <sup>NSE</sup>**Fazarro, D.**, Tate, J., & et. al. (2014). Preparing the nano workforce: A look at educating undergraduate students in nano-safety. *2014 Micro Nanotechnology Conference (MNT)*, Albuquerque, MN June 4-6, 2014.
17. <sup>RC</sup>**Fazarro, D.** & Kornegay A. (2014). Advanced Manufacturing: Increasing innovation technologies through industry-academic partnerships. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, St Louis, Mo., November 19-22, 2014.
18. <sup>RC</sup>**Fazarro, D.**, Tate, J., & et. al. (2014). We are seed planters: A look at teaching students' nanotechnology, environmental, health, and safety. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, St Louis, Mo., November 19-22, 2014.
19. <sup>NSE</sup>Miller, M., **Fazarro, D.**, & Lawrence, H. (2013). The genesis of a nanotechnology Workforce: How it impacts manufacturing and curricula. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, New Orleans, LA, November, 20-23, 2013.
20. <sup>NSE</sup>**Fazarro, D.** (2013). The future of nanotechnology: Developing skills set for a new workforce. *Association of Career and Technical Education Vision (ACTE)*, Las Vegas, NV, December 2-7, 2013.
21. <sup>NSE</sup>**Fazarro, D.** & Steinke, L. (2012). Equipping ATMAE programs with nanotechnology courses: Developing the new white collar workforce. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
22. <sup>NSE</sup>**Fazarro, D.** (2012). NanoSafety Training: Being proactive to train workers to handle nanomaterials. *MicroNano Technology Conference*, Penn State, PA, May, 7-9, 2012.
23. <sup>RC</sup>Miller, M., Lawrence, H., & **Fazarro, D.**, (2012). The ATMAE lean six sigma certification exam: Who, what and why? *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
24. <sup>RC</sup>Kornegay, A, Wright, J. , & **Fazarro, D.** (2012). Strengthen our connections: Academia and industry working together. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
25. <sup>NSE</sup>**Fazarro, D.** (2012). Introduction to nanotechnology. *Inaugural 2012 San Antonio Nanotechnology Forum*, San Antonio, TX, October 18, 2012.

26. <sup>RC</sup>Lawrence, H., **Fazarro, D.**, & Miller, M. (2012). Why and how to rejuvenate and ATMAE student chapter: What's in it for me? *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Nashville, TN, November, 14-17, 2012.
27. <sup>NSE</sup>Miller, M., Lawrence, H., & **Fazarro, D.** (2011). Where does nanotechnology fit into a general technology program's curriculum? *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
28. <sup>NSE</sup>**Fazarro, D.** & Trybula, W. (2011). Lateral diffusion of nanotechnology safety education: Preparing nanotechnology workers to handle nanoparticles. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
29. <sup>NSE</sup>**Fazarro, D.** (2011). Taking the first step: Introducing nanotechnology in high schools. *STEM 2011: Bridging Research and Practice*. Austin, TX, January 19-21, 2011.
30. <sup>NSE</sup>**Fazarro, D.** & McWhorter, R. (2011). Educating the millennial student in nanotechnology: developing the new workforce. *Journey to Nanotech*. Applied Nanotech, Inc., Austin, TX, June 30, 2011.
31. <sup>NSE</sup>**Fazarro, D.** & Trybula, W. (2011). Empowering academia to look into the future: Nanotechnology safety education-creating the workforce that you will need. *The IEEE Conference*, Portland, OR, August, 15-18, 2011.
32. <sup>RC</sup>**Fazarro, D.**, Kornegay, A., & Miller, M. (2011). Learning through skits: A pilot study using contextual learning to achieve learning outcomes in safety education. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
33. <sup>RC</sup>Wright, J. & **Fazarro, D.** (2011). World class environment health and safety. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Cleveland, OH, November, 9-12, 2011.
34. <sup>NSE</sup>**Fazarro, D.** & Trybula, W. (2010). The Evolution of Nanotechnology Education: Lateral diffusion for the 21<sup>st</sup> Century Workforce. *National Association of Workforce Development Professionals (NAWDP)*, Albuquerque, MN, May 2-5, 2010.
35. <sup>RC</sup>Kornegay, A., **Fazarro, D.**, & Bethea, M. (2010). A joint fortune 500 manufacturing company/doctoral Research-intensive university collaborate to develop a 40-hour school of technology lean manufacturing academy. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
36. <sup>RC</sup>Miller, M., **Fazarro, D.**, & Lawrence, H. (2010). Increasing graduate enrollment: Generalizing industrial curricula to attract all majors. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
37. <sup>RC</sup>**Fazarro, D.** & Keren, N. (2010). Students' perspective on safety education using second life as a tool for effective learning. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
38. <sup>RC</sup>Miller, M., **Fazarro, D.**, & Lawrence, H. (2010). The technology certification exam: Development, content, and implications. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.

39. <sup>RC</sup>Fazarro, D. & Steinke, L. (2010). Creating nanotechnology courses using the DACUM approach: Linking academia and industry to creating programs for the 21<sup>st</sup> century. *Association of Career and Technical Education (ACTE)*, Las Vegas, NV, December 2-4, 2010.
40. <sup>RC</sup>Fazarro, D. & Field, D. (2010). Scholarly publishing: Overcoming the fear factor and how to be productive in the field. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Panama City Beach, FL, October 27-30, 2010.
41. <sup>RC</sup>Yildiz, F., Fazarro, D. & Coogler, K. (2009). Self-sufficient, energy-efficient house design. *American Society of Engineering Education (ASEE)*, Austin, TX, June 14-17, 2009
42. <sup>RC</sup>Kornegay, A. & Fazarro, D. (2009). The next migration of improved manufacturing efficiency: A Manufacturing execution system (MES). *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Louisville, KY, November 10-14, 2009
43. <sup>RC</sup>Fazarro, D., Patrick, C., & Freeman, S. (2009). Scholarly publishing: Overcoming the fear factor and how to be productive in the field. *Association of Technology, Management, and Applied Engineering (ATMAE) Conference*, Louisville, KY, November 10-14, 2009.
44. <sup>NSE</sup>Fazarro, D. (2009). Future Shock: What would a nanotechnology curriculum look like? *Texas Career Education Conference*, Houston, TX, July 13-16, 2009.
45. <sup>RC</sup>Fazarro, D. & Caso, R. (2008). Empowering faculty to conduct student-learning-centered program evaluation with course-embedded assessment and virtual data room. *9<sup>th</sup> Annual Texas A&M University Annual Assessment Conference*, College Station, TX, February 21-25, 2008.
46. <sup>NSE</sup>Fazarro, D. (2008). The evolution of nanotechnology education: Lateral diffusion for the 21<sup>st</sup> century workforce. *NanoTx Conference*, Dallas, TX, October 2-3, 2008.
47. <sup>NSE</sup>Trybula, W. & Fazarro, D. (2008). Developing a need for nano-safety: Presenting the unknowns, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008.
48. <sup>RC</sup>Steinke, L. & Fazarro, D. (2008). Implementing problem-based learning into multimedia courses, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008.
49. <sup>RC</sup>Hoffa, D., Fazarro, D., & Kornegay, A. (2008). The national training and consulting database initiative, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008.
50. <sup>RC</sup>Kornegay, A. Hoffa, D., & Fazarro, D. (2008). Biotechnology: Gearing up to manufacture alternative fuels, *National Association of Industrial Technology (NAIT) Conference*, Nashville, TN, November 18-22, 2008
51. <sup>NSE</sup>Fazarro, D. & Kornegay, A. (2008). Future Shock: What would a nanotechnology curriculum look like? *Association of Career and Technical Education (ACTE)*, Charlotte NC, December 4-6, 2008.
52. <sup>RC</sup>Steinke, L., Fazarro, D., & Putnam, A.R. (2008). Implementing problem-based learning into technology education: Reinforcing industries' needs, *Association of Career and Technical Education (ACTE)*, Charlotte, NC, December 4-6, 2008.

53. <sup>RC</sup>Pavelock, D., Ullrich, D., Kingman, D. & **Fazarro, D.** (2007). Using service activities to recruit students for higher education: An effective means of time and effort? *The Clute Institute Teacher and Learning Conference*, Las Vegas, NV, October 1-4, 2007.
54. <sup>RC</sup>Kornegay, T., **Fazarro, D.** & Kornegay, A. (2007). Training and development of a nanomanufacturing workforce. *National Association of Industrial Technology Conference*, Panama City Beach, FL, October 23-27, 2007.
55. <sup>RC</sup>**Fazarro, D.** & Caso, R. (2007). Empowering faculty using embedded assessment for program evaluation and intuitively understandable displays of assessment evidence for accreditation. *The Clute Institute Teacher and Learning Conference*, Las Vegas, NV, October 1-4, 2007.
56. <sup>RC</sup>**Fazarro, D.** & Kornegay, A. (2007). Virtual data room: empowering industrial technology programs to prepare for NAIT accreditation. *National Association of Industrial Technology Conference (NAIT)*, Panama City Beach, FL, October 23-27, 2007.
57. <sup>LS</sup>**Fazarro, D.** (2006). Learning Styles: What do we need to do to improve the learning environment? *Association of Career and Technical Education Conference (ACTE)*, Atlanta, GA, Nov 28-Dec 2, 2006.
58. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2005). The use of learning style preferences in selected majors at a historically black university. *American Education Research Association (AERA)*, Montreal, Canada, April 11-15, 2005.
59. <sup>RC</sup>**Fazarro, D.** & Colen, C. (2005). Recruiting minority students in the industrial technology program at the University of Arkansas at Pine Bluff through the Science, Technology, Engineering, and Mathematics (STEM) Program. *National Association of Industrial Technology (NAIT) Conference*, St. Louis, MO, November 16-19, 2005.
60. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2005). The comparisons of learning style preferences of vocational-technical programs. *American Education Research Association (AERA)*, Montreal, Canada, April 11-15, 2005.
61. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2005). The use of learning style preferences in selected majors at a historically black university. *American Education Research Association (AERA)*, Montreal, Canada, April 11-15, 2005.
62. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2004). The comparison of learning style preferences of African American freshman students by parent structure and socio-economic status at a Historically Black Colleges and Universities (HBCU). *American Education Research Association (AERA)*, San Diego, CA, April 12-16, 2004.
63. <sup>LS</sup>**Fazarro, D.** (2004). An investigation of learning style preferences based on socio-economic status of African American college students at a historical black university in the delta Region of south-central United States. *The 4<sup>th</sup> International Conference of Knowledge, Culture, and Change in Organizations*, University of Greenwich, London, England, August 3-6, 2004.
64. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2004). The comparison of learning style preferences of African American freshman students by parent structure and socio-economic status at a Historically Black Colleges and Universities (HBCU). *American Education Research Association (AERA)*, San Diego, CA, April 12-16, 2004.
65. <sup>LS</sup>**Fazarro, D.** & Martin, B. (2003). Comparative study of learning styles of Agriculture, Human Sciences, and Industrial Technology majors. *Association of Career and Technical Education (ACTE)*, Orlando, FL, December 10-14, 2003.

66. <sup>LS</sup>Fazarro, D. (2003). Motivating African American students in technology at predominately white institutions. *The National Higher Education Students of Color Conference*, Minneapolis, MN, October 27-30, 2003.
67. <sup>RC</sup>Fazarro, D., Colen, C., & Duffy, O.C. (2003). Industrial mentoring program: A proactive program to mold industrial technology students for industry. *National Association of Industrial Technology Conference (NAIT)*, Nashville, TN, November 19-22, 2003.
68. <sup>LS</sup>Fazarro, D. & Martin, B. (2003). Comparative study of learning styles of Agriculture, Human Sciences, and Industrial Technology majors. *Association of Career and Technical Education (ACTE)*, Orlando, FL, December 10-14, 2003.
69. <sup>LS</sup>Fazarro, D. & Sommerville-Allen, L. (2002). Learning Styles: What We Need to Know. *2002 Iowa State Conference on Race and Ethnicity*. Ames, IA, March 1, 2002.

### **Invited Presentations in Various Research Areas**

#### Member of Panel Discussions

Advances in Nanotechnology in Engineering and biomedical Applications, University of Texas at San Antonio, November 16, 2016

Nanotechnology Safety and Education. 2008 Nano TX Conference, Dallas TX, October 2-3, 2008.

A Parent and Community Empowerment Summit: Our Children-Our Responsibility "No Child Left Behind": Linking Quality Workforce and Career Education to College Preparation. Little Rock, AR, December 7, 2003.

#### Webinars

Horiba Webinars (August 21, 2014) NANO-SAFETY: What Workers Need to Know. Horiba, Inc., Edison, NJ (25 attendees)

### **TEACHING & CURRICULUM DEVELOPMENT EXPERIENCE**

My teaching focuses on preparing graduates with the necessary skills sets to cope with the challenges of a knowledge-based economy. My course and curriculum development stresses innovation and preparedness for the 21<sup>st</sup> century workplace.

#### **Programs/Certificate Programs Developed**

- Industrial Safety Management, Sam Houston State University-Approved by the Texas Higher Education Coordinating Board, Spring 2009
- Nano/Advanced Material Safety Certificate- Association of Technology, Management, and Applied Engineering

## Courses Developed

Course Name (Taught at University of Texas at Tyler) 2010-Present	Credit
TECH 530 Management of Nano-scaled Materials	3
TECH 4313 Risk Management of Nanomaterials	3
TECH 3303 Introduction to Nanotechnology	3
Course Name (Taught at Sam Houston State University) 2007-2010	
ETDD 3310 Product Design and Development	3
IT 469 Leadership Energy and Environmental Development (LEED)	3
IT 467 Engineering Materials Technology	3
IT xxx Nanotechnology Safety	3
ETDD 3310 Product Design and Development	3
Course Name (Taught at University of Arkansas at Pine Bluff) 2002-2007	
TECH 3302 Advanced Design*	3

## EXTERNAL DOCTORAL CONSULTANT ACTIVITIES

### External Methodological Consultant

- Mentored eight University of Arkansas-Little Rock doctoral students (Education Leadership Ph.D. program) (2004-07)
- Explained various research methods and statistical analysis that are suitable for research topics at various universities (2004-10)
- Assisted students in preparing PowerPoint defense presentations at various universities (2004-2010)
- Facilitated a dissertation boot camp-Nova University, Palm Beach, FL. (July 2004)

### Doctoral/Masters' Thesis Committees

#### Doctoral

- Doctoral Committee Member-University of Texas at Tyler (Shannon Rodriguez)
- Doctoral Committee Member-Salisbury University (Ethae Johnson), Graduated 2021
- Doctoral Committee Member-University of Arkansas Medical School (Marion Evans), Graduated Spring 2010
- Doctoral Committee Member/Methodologist-Sam Houston State University (Edna Kingsley), Graduated Summer 2010
- Doctoral Committee Member-University of Central Florida (Wanda Holmes), 2009-2010

#### Masters

- Masters Committee Chair-University of Texas at Tyler (Racquel Lovelace), Graduated Summer 2016
- Masters Committee Chair-Sam Houston State University (Mariana Freties), Graduated Spring 2010

## PROFESSIONAL AFFILIATIONS

IEEE: Advancing Technology for Humanity (Senior Member)-Nanotechnology Council  
Association of Technology, Management, Applied Engineering (ATMAE)  
Epsilon Pi Tau Honor Society (EPT)  
National Industry Advisory Council (NIAC)  
Association for Career and Technical Education (ACTE)  
Association of Career and Technical Education Research (ACTER)  
National Association of Workforce Development Professionals (NAWDP)

## SERVICE

### National

ATMAE Accreditation Visitation Team  
ATMAE Foundation Board (Chair) (2020-2023)  
IEEE Nanotechnology Council (NTC) Standards Committee  
2018 ATMAE Awards Committee  
Region 4 Director-Epsilon Pi Tau Honorary Society (2018-2021)  
U.S. National Committee (USNC) Technical Advisory Group-IEC TC 113 (Nano-Electrotechnologies)  
ATMAE Board of Directors (Vice Chair) (2015-2017)  
2015 NSF Reviewer (Nanotechnology Undergraduate Education Division)  
2014 ASTM International Nanotechnology E56 National Committee  
2013 ACTER-Research Paper Reviewer  
2013 ACTER-Research Conference-Session A-1 Discussant  
2013 ATMAE Conference, OSHA-10 facilitator  
2013 NSF-NUE Review Panel (July 8-9, 2013)  
Founder-Nanotechnology Focus Group (ATMAE) (2011)  
President Industry Division (ATMAE) (2009-2010)  
Nomination Chair (ATMAE) (2009-2010)  
Vice Chair-Executive Board (ATMAE) (2009-2010)  
Chaired -Member of the National Visiting Committee-National Science Foundation Grant (Omaha, NB) (March 2008)  
President Elect-Industry Division (ATMAE) (2007-2009)  
Association for Career and Technical Education (ACTE)-Engineering and Technology Education Division (2010-2013) Policy Chair  
Association for Career and Technical Education (ACTE)-Engineering and Technology Education Division (2007-2010) Post-Secondary Representative  
Member of the National Visiting Committee-National Science Foundation Grant (Omaha, NB) (2006-2008)  
Chairperson of Awards Committee- Engineering and Technology Education Division (ACTE) (2004-2007)  
Representative -ACTE Public Information Standing Committee (2004-2006)

### State

Texas-Israel CoC Nanotech Committee (2011)  
Advisory Board-Centers of NANO-SAFETY-Texas State University (2008-2010)  
Co-founded the Texas State University System Nanotechnology Task Force (2008-10)

### Local

School Board Member-University of Texas at Tyler University Academy  
Technology Committee-Tyler Chamber of Commerce (2011-2012)

### University

Research Council (UT-Tyler)  
Strategic Planning Committee- Soules College of Business (UT-Tyler)  
Outside Committee Member—School Improvement Doctoral Program (College of Education & Psychology) (2020-Present) (UT-Tyler)  
Soules College of Business—Dean Search Committee (2021) (UT-Tyler)  
Soules College of Business—Dean Search Committee (2019) (UT-Tyler)  
Soules College of Business P&T Committee (2019-Present) (UT-Tyler)  
Faculty Senate (2019-Present) (UT-Tyler)  
Graduate Curriculum and Standards Committee (2018) (UT-Tyler)  
Undergraduate Curriculum and Standards Committee (2014-2018) (UT-Tyler)  
Soules College of Business--Governance (2019-2021) (UT-Tyler)

Chapter Advisor-Veterans Association (2017-2018) (UT-Tyler)  
Chapter Advisor-IEEE Nanotechnology Student Chapter (*1<sup>st</sup> in Texas, 2<sup>nd</sup> in the world*)  
Full Faculty Graduate Status (UT-Tyler)  
Faculty Recognition Subcommittee-(UT-Tyler) (2011-2013)  
Graduation Marshall -UT-Tyler (2010-Present)  
COBT Faculty Awards Development Team (2011-2013) (UT-Tyler)  
Undergraduate Education Committee-College of Business and Technology (2010-2012) (UT-Tyler)  
Trustee-Epsilon Pi Tau (Delta Gamma Chapter) (2010-2018) (UT-Tyler)  
Presenter -2010 University Development Conference UT Touch Conference (UT-Tyler)  
University Faculty Awards Planning Committee (2011-2013) (UT-Tyler)  
UT Tyler Mentor Program (2011-2012)  
Search Committee Chair –Industrial Technology Program (SHSU) (2009)  
Associate Graduate Faculty Status (SHSU) (2007-2009)  
NAIT Student Chapter Advisor (SHSU) (2007-2009)  
Curriculum Committee (SHSU) (2007-2009)  
NCATE Standard 2 (Assessment)-Committee (UAPB) (2006)  
NSF/HBUC-UP STEM Program-Data Manager (UAPB) (2005-2007)  
2004 Keynote speaker (Assessment Conference at UPAB)  
Ronald McNair Faculty Mentor (UAPB) (2003-2006)

### **Editorial Appointments**

JTMAE Editorial Board-Chairperson  
Editorial Board-International Vocational Education and Training  
Special Issue Editor- (Nanotechnology Safety Education) /IEEE Magazine (2020)  
JTMAE Editorial Board-Vice Chairperson (2014-2015)  
Editorial Advisory Board –Impacting of Diversity on Organizational and Career Development (2014)  
External Book Reviewer- Impacting of Diversity on Organizational and Career Development (2014)  
Column Editor-IEEE Nanotechnology Magazine (2011-2012)  
Reviewer-Workforce Education Forum (2011)  
Editorial Board-Journal of Workforce Development (2005-2011)  
Editorial Review Board-International Journal of Engineering Research and Innovation (IJERI) (2009-2017)  
Editorial Board -Journal of sTEM Teacher Education (JsTEm) (2008-2011)  
Editor and Chief -Journal of Technology Studies (2008-2010)  
Editor-Special Issue “Evaluating Workforce Education”- Online Journal for Workforce Education and Development Vol. 3 Number 4 (2007)  
Editorial Board-Online Journal for Workforce Education and Development (Southern Illinois University) (2006-Present)  
Reviewer- JTMAE (2003-Present)

### **Conference Assignments**

2013 ACTER Conference- Discussant  
2013 AHRD Proposal Reviewer  
Conference Committee Member- Texas Israel CoC NanoSafety & Regulatory Symposium (2012)  
IEEE Nanotechnology Council Paper Reviewer (2011)  
Co-Session Chair-Nanotechnology Education Division of IEEE (2011)  
ACTER Paper Reviewer (2010-Present)  
International Journal of Engineering Research and Innovation (IJERI) (2009-2017)  
ACTE Paper Reviewer (2006-2013)  
ATMAE Paper Reviewer (2005-Present)

## HONORS & AWARDS

2020 ATMAE Senior Fellow  
2016 National Academy of Engineering-Exemplars of Engineering Ethics Education  
2015-2016 UT at Tyler Certificate of Achievement for Scholarship and Creativity  
2015 EPT Distinguished Service Citation  
2014 Warner Professional Practice Award (Region 4)-Epsilon Pi Tau  
2013 ATMAE White Paper Award (Developing the Future Workforce Theme)  
2013 UT-Tyler College-Wide Research Award (College of Business & Technology)  
2013 Latino American Who's Who  
2010 Sar Levitan Award Recipient (National Recognition-Workforce Education and Development)  
2010 ATAME Faculty Award for Academic Excellence (first recipient of new award)  
2009 Outstanding Service Award-Engineering & Technology Education Division/Association for Career and Technical Education (ACTE)  
2009 Faculty/Staff Recognition (SHSU)  
2008 Faculty/Staff Recognition (SHSU)  
2007 Epsilon Pi Tau Laureate Citation  
2007 Who's Who Among American Teachers  
2007 Distinguished Service Award (ACTE)  
2006 NAITTE-G. Harold Silvius Outstanding Young Teacher Educator Award  
2005 Outstanding Service on the Public Information Committee (ACTE)  
2004 Service Award-Technology Education Division/Association for Career and Technical Education (ACTE)  
2003-04 Research Article of the Year-Journal of Industrial Teachers Education (JITE)  
1998 International Who's Who of Professional Management

## CERTIFICATIONS

ATMAE Certified Senior Technology Manager  
OSHA 511 General Industry  
OSHA 30 Hour General Industry  
OSHA 501-Authorized Outreach Trainer

## PROFESSIONAL DEVELOPMENT

OSHA 511 General Industry-Texas A&M Engineering Extension Service, Bryan, TX.  
OSHA 30 Hour General Industry-Workforce Development Risk Management Institute, Kilgore, TX.  
OSHA 501 Authorized Outreach Trainer- Texas A&M Engineering Extension Service, Mesquite, TX.  
January 27, 2012)  
Certificate-Penn State Center for Nanotechnology Education and Utilization (September 2014)  
Nanotechnology Course Resources I: Safety, Processing & Materials Applications (Penn State University-NACK Center, September 14-18, 2014)  
Webinar-Ways of Introducing Nanotechnology into Your Program: (Penn State University-NACK Center, January 27, 2012)  
Nanotechnology Course Resources II: Patterning Characterization & Applications (Penn State University-NACK Center, October 3-6, 2011)

## CREATIVE WORKS

**PATENT FILED:** Use of Atomic Microscopy to Examine Latent Fingerprints (2024)

## EDUCATION

---

### ***Mississippi State University – Starkville, MS***

Ph.D. in Instructional Systems and Workforce Development  
May 2010

#### *Dissertation title:*

An Investigation of Alumni Perceptions of the Industrial Technology Undergraduate Program At Mississippi State University and Its Transferability to Industry

#### *Specialization:*

Educational Technology  
Instructional Technology  
Educational Research  
Industrial Technology

#### *Research Agenda:*

Examination of Industrial Technology undergraduate programs  
Pedagogy and Industrial Technology  
Improving the curriculum of Industrial Technology  
Examination of industry and its impact on Industrial Technology students

### ***Mississippi State University – Starkville, MS***

M.S. in Instructional Technology  
May 2004

#### *Concentration:*

Educational Technology  
Instructional Technology  
Curriculum Development  
Pedagogy/Andragogy of Technology Integration

### ***Mississippi State University – Starkville, MS***

B.S. in Industrial Technology  
May 2003

## PROFESSIONAL EXPERIENCE

---

Spring 2020-Present	Interim Associate Dean- Soules College of Business	The University of Texas at Tyler; Tyler, TX
Fall 2016-Present	Associate Professor	The University of Texas at Tyler; Tyler, TX
Fall 2010-Fall 2016	Assistant Professor	The University of Texas at Tyler; Tyler, TX
Fall 2008-Fall 2009	Adjunct Instructor	Jackson State University; Jackson, Mississippi
Fall 2003-Spring 2009	Graduate Teaching Assistant	Mississippi State University Starkville, Mississippi

## PUBLICATIONS

---

2019 Delello, J. A., McWhorter, R. R., **Lawrence, H. R.** (2019, April). Fostering a Community of Inquiry in Online Discussions. *Academic Exchange Quarterly*, 23 (1), 11-19

2016 **Lawrence, H. R.**, & Rochell R. McWhorter, & Sherry Jackson, & Anny Gilley, & Jerry W. Gilley (2016). Managerial Behaviors that Support Participative Decision Making. *Journal of Scholastic Inquiry: Business Special Edition* 7 (1), 75-103

2015 **Lawrence, H. R.** & Miller, M. R. (2015). The ATMAE Lean Six Sigma Certification Exam: Why it Matters to You? *Journal of Technology, Management, and Applied Engineering* 31(3), 1-19.

Gilley, J., & Gilley, A., Avery, S, & **Lawrence, H. R.** (2015). Managerial Practices and Organizational Conditions that Encourage Employee Growth and Development. *Performance Improvement Quarterly* 28(3), 71-93.

2014 **Lawrence, H. R.** (2014). Integrating Human Relation Skills into the Curriculum of Industrial Technology Related Programs. *International Journal on Integrating Technology in Education* 3(1), 53-62.

**Lawrence, H. R.** & Miller, M. R. (2014). A Historical Perspective of the Evolution of Technology Education. *International Journal on Integrating Technology in Education* 3(2), 1-7.

2013 Delello, J. A., Everling, K. M., McWhorter, R. R., **Lawrence, H. R.** (2013, June). Fostering Presence in Online Discussions. *Academic Exchange Quarterly*, 17(2), 51-58. *Editor's Choice Award.*

2011 Fazarro, D., **Lawrence, H. R.**, & McWhorter, R. (2011). Going Virtual: Delivering Nanotechnology Safety Education on the Web. *Journal of sTEM Teacher Education*, 48(2), 38-62.

## **BOOK CHAPTERS**

---

2012 **Lawrence, H. R.** (2012). Women's roles: Do they exist in a Technological Workforce In T. Hartsell & S. Wang (Eds.), *Technology Integration and Foundations for Effective Technology Leadership* (pp. 57-69). Doi: 10.4018/978-1-4666-2656-0.ch004

2010 **Lawrence, H. R.** (2010). Cognitive. Nanotechnology. Nontraditional Student. Technology. In L. Tomei (Ed.), *Lexicon of Online and Distance Education* (pp. 43, 158-159, 163, 215). Distinguished Contributing Author. Lanham, MA: R&L Publishing

2008 **Lawrence, H. R.** (2008). Industrial Technology Pedagogy: Need for Human Relations Skills. In L. Tomei (Ed). *Encyclopedia of Information Technology Curriculum Integration* (pp. 400-405).

## **NATIONAL PEER-REVIEWED CONFERENCE PRESENTATIONS/WORKSHOPS**

---

2023 Miller, M. R., **Lawrence, H. R.** & Jones, D. (2023). How to use the ATMAE Certification Review and Training Sessions to Supplement your Courses. Association of Technology, Management, and Applied Engineering Conference, Atlanta, GA.

Jones, D., Miller, M. R. & **Lawrence, H. R.** (2023). Proven Motivational Techniques for Online Courses. Association of Technology, Management, and Applied Engineering Conference, Atlanta, GA.

2022 Jones, D., Miller, M. R., **Lawrence, H. R.** & Griffin, R. (2022). Tricks to Motivating Your Students to Succeed in Online Technical Courses. Association of Technology, Management, and Applied Engineering Conference, Louisville, KY.

Miller, M. R., **Lawrence, H. R.** Jones, D. & Griffin, R. (2022). The New ATMAE Certified Manufacturing Specialist Online Exam Preparation Course. Association of Technology, Management, and Applied Engineering Conference, Louisville, KY.

2021 **Lawrence, H. R.** & Miller, M. R. (2021). The ATMAE Learning Management System: Your User-Friendly Online Certification and Training Center. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.

**Lawrence, H. R.** & Miller, M. R. (2021). **Workshop**. ATMAE Lean Six Sigma Certification Exam Prep Workshop. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.

2020 Miller, M. R., **Lawrence, H. R.**, & Griffin, R. (2020). Insights to a Successful ATMAE Accreditation: Tips to Keeping Standards in Compliance. Association of Technology, Management, and Applied Engineering (Virtual Conference)

2019 Miller, M. R., **Lawrence, H. R.**, & Griffin, R. (2019). Surviving the New ATMAE 2019 Accreditation Standards: What is New and How it Must Be Addressed Association of Technology, Management, and Applied Engineering Conference, Charlotte, NC.

2018 Miller, M. R., & **Lawrence, H. R.**, (2018). The New ATMAE Learning Management System: Streaming Certification and Training. Association of Technology, Management, and Applied Engineering Conference, Kansas City, MO.

2017 Miller, M. R., & **Lawrence, H. R.**, (2017). Does Offering Certifications Assist in the Recruitment of Undergraduate Majors? Association of Technology, Management, and Applied Engineering Conference, Cincinnati, OH.

2016 **Lawrence, H. R.** & Miller, M. R., (2016). The Defined, Measured, Analyzed, and Improved ATMAE Lean Six Sigma Exam: What You Need to Know for the Future. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.

Miller, M. R., & **Lawrence, H. R.**, (2016). The ATMAE Lean Six Sigma Pre Course: Affordable Training Just a Click Away. Association of Technology, Management, and Applied Engineering Conference, Orlando, FL.

**Lawrence, H. R.** & Miller, M. R., (2016). The Development of an Affordable Lean Six Sigma Certification and Assessment Instrument Forged from a Strong Alliance between Academia and Industry. The Sixth International Conference on Lean Six Sigma, Edinburgh, Scotland.

Miller, M. R. & **Lawrence, H. R.**, (2016). An Academic Model for Significantly Increasing the Number of Lean Six Sigma Qualified Professionals. The Sixth International Conference on Lean Six Sigma, Edinburgh, Scotland.

2015 **Lawrence, H. R.** & Miller, M. R., (2015). The ATMAE Lean Six Sigma Certification Exam: First year status report. Association of Technology, Management, and Applied Engineering Conference, Pittsburg, PA.

Miller, M. R., & **Lawrence, H. R.**, (2015). ATMAE Certification and Training: What does training bring to the table? Association of Technology, Management, and Applied Engineering Conference, Pittsburg, PA.

2014 **Lawrence, H. R.** & Miller, M. R., (2014). The ATMAE Lean Six Sigma Certification Exam: Now Available and Ready for Use. Association of Technology, Management, and Applied Engineering Conference, St. Louis, MO

Miller, M. R., & **Lawrence, H. R.**, (2014). The ATMAE Assessment and Certification Exams: What's New to Make Your Life Easier. Association of Technology, Management, and Applied Engineering Conference, St. Louis, MO

2013 Miller, M. R., **Lawrence, H. R.**, & Fazarro, D., (2013). Strategies for passing the ATMAE certification exams. Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.

Miller, M. R., Fazarro, D. & **Lawrence, H. R.**, (2013). The Genesis of a nanotechnology workforce: How will it impact manufacturing and curricula? Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.

**Lawrence, H. R.** & Miller, M. R., (2013). The ATMAE Lean Six Sigma Certification Exam: Revised Content, Timeline to Completion, and Accreditation. Association of Technology, Management, and Applied Engineering Conference, New Orleans, LA.

2012 **Lawrence, H. R.**, Miller, M. R., & Fazarro, D., (2012). Why and How to Rejuvenate an ATMAE Student Chapter. What's In It for Me? Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Nashville, Tennessee.

Miller, M. R., **Lawrence, H. R.**, & Fazarro, D., (2012). The ATMAE Lean Six Sigma Certification Exam: Who, What, When, and Why. Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Nashville, Tennessee.

2011 **Lawrence, H. R.**, & Miller, M. R., (2011). How to Offer Online Quality Coursework without Losing that Traditional Face-to-Face Feel. Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Cleveland, Ohio.

Miller, M. R., **Lawrence, H. R.**, & Fazarro, D., (2011). Where does Nanotechnology Fit into a General Technology Program's Curricula? Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Cleveland, Ohio.

Miller, M. R., & **Lawrence, H. R.**, (2011). The CTM Exam: Revised, Restructured, and Rejuvenated. Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Cleveland, Ohio.

2010 **Lawrence, H. R.**, & Wyatt, J., (2010). *Hybrid Courses: Can they be used for Industrial Technology programs?* Paper accepted for the 2<sup>nd</sup> International Conference on Education Research in New Orleans, Louisiana.

Miller, M. R., Fazarro, D., & **Lawrence, H. R.**, (2010). *The technical professional certification exam: Development, content, and implications.* Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Panama City Beach, Florida.

Miller, M. R., Fazarro, D., & **Lawrence, H. R.**, (2010). Increasing graduate enrollment: Generalizing industrial curricula to attract all majors. Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Panama City Beach, Florida.

2009 **Lawrence, H. R.**, (2009). *Hybrid Course Structures in Industrial Technology.* Paper presented at the annual Association for Career and Technical Education (ACTE) Conference in Nashville, Tennessee.

2008 **Lawrence, H. R.**, (2008). *The Role of Hybrid Course Structures and their Advantages in Industrial Technology.* Paper presented at the annual National Association of Industrial Technology (NAIT) Conference in Nashville, Tennessee.

2007 **Lawrence, H. R.** & Okojie-Boulder, T., (2007). *A Study of the Perceived Role of Human Relations Skill in Work Organization.* Paper presented at the 5th Annual Graduate Student Association (GSA) Research Symposium at Mississippi State University, Mississippi.

2006 Okojie-Boulder, T.C., **Lawrence, H. R.**, Boulder, J., Lin, C. F. & Yu, W. C. (2006). *The Role of Human Relations Skills in the Workplace*. Paper presented at the November-December Connecting Education and Careers in Atlanta, Georgia.

Okojie-Boulder, T., Boulder, J., **Lawrence, H. R.**, Lin, C. F. & Yen, L. (2006). *Exploring the Relationship between Technology and Instructional Process*. Paper presented at the October 2006 Association for Educational Communications and Technology (AECT) Exploring the Vision Conference in Dallas, Texas.

2005 Okojie, M., Okojie-Boulder, T., **Lawrence, H. R.**, Boulder, J., Lin, C. F., & Yen, L. (2005). *An examination of teacher's perceptions and its impact on technology integration in the classroom*. Paper presented at the October 2005 Association for Educational Communications and Technology (AECT) Exploring the Vision Conference in Orlando, Florida.

## **GRANTS**

---

### **Grant Proposals Funded:**

Co-Investigator: "Gender and Race Wage Differentials in East Texas", Sponsored by The University of Texas at Tyler Office of Research and Scholarship, \$7,173. (August 2021-July 2022).

Co-PI Follow-up study of students in the department of Instructional Systems, Leadership and Workforce Development between 2001-2005 funded for \$6,656. (Mississippi State University)

## **COURSES INSTRUCTED**

---

### ***The University of Texas at Tyler***

#### ***Graduate Courses***

Spring 2017-present *TECH 5303 Research Techniques in Technology (online instruction)*: a graduate course designed to engage students with various backgrounds in learning and practicing basic steps in conducting and reporting original research.

Summer 2015-present *TECH 5329 Trends in Industry (hybrid instruction)*: a graduate course that explores Six Sigma concepts and utilizes the statistical software, Minitab

Spring 2015-present *TECH 5308 Strategic Sourcing (traditional/ t.v instruction/ Online)*: a graduate course that explores the concepts of Strategic Sourcing

2013-present *TECH 5390 Adv. LSSBB Techniques (online instruction/hybrid)*: a graduate course that involves discussions, analysis and application of the DMAIC Six Sigma process as well as Lean concepts.

Spring 2012-Spr. '15 *TECH 5331 Project Management (online instruction/ traditional)*: a graduate course that provides students with the fundamental concepts related to the field of project management. Gantt and PERT concepts will be implemented and studied.

Fall 2011-present *TECH 5310 Six Sigma Quality (online instruction)*: a graduate course that involves discussions, analysis and application of quality control concepts to include both attribute and variable quality control techniques. Advanced graphical problem solving techniques in Six Sigma will be studied.

Spring 2011-present *TECH 5320 Total Quality Management (traditional/online instruction)*: a graduate course that focuses on the analysis and application of total quality management principles with an emphasis on Six Sigma methodologies.

### ***Undergraduate Courses***

Fall 2015-present *TECH 1320 Industrial Materials (traditional/t.v instruction)*: an undergraduate lab and instructional based course that explores the fundamental make-up and use of metals.

Fall 2011-present *TECH 2311 Mechanical and Fluid Systems (traditional instruction)*: an undergraduate laboratory based course that introduces students to the fundamentals of mechanical and fluid power systems.

Summer 2011-2013 *TECH 2323 Introduction to Computer Applications (traditional instruction)*: an undergraduate course that addresses technology skills, presentation skills and integration of computer applications into teaching and learning.

Summer 2011 *TECH 4350 TPS in Industrial Studies (online instruction)*: an advanced database course that integrated industrial applications.

Fall 2010-present *TECH 3310 (formerly 4310) Total Quality Management (traditional/t.v. and online instruction)*: an undergraduate applied computer course that focuses on the analysis and application of total quality management principles.

Fall 2010-Spring 2011 *TECH 1330 Fundamentals of Electronics (traditional instruction)*: an undergraduate laboratory-based course that addresses the basic AC and DC concepts as well as the fundamentals of electronics.

### ***Jackson State University***

Fall 2008-Fall 2009 *IT 100 Introduction to Industrial Technology (traditional instruction)*: an undergraduate course that addresses the past, present and future direction of the field of Industrial Technology as well as terminology.

### ***Mississippi State University***

Fall 2009 *TKI 3383 Forecasting & Cost Modeling (traditional instruction)*: an undergraduate course addressing the higher functions of spreadsheet software to undertake costing of manufacturing process routes and to forecast changes in manufacturing scenarios.

Fall 2009 *TKI 4263 Manufacturing System (traditional instruction)*: an undergraduate course focusing on the understanding and application of the basic concepts of modern manufacturing process management systems, with regards to quality, just-in-time, lean manufacturing and six sigma.

Fall 2003-Fall 2009 *TKT 1273 Computer Applications in Education (online and traditional instruction)*: an undergraduate course that addresses technology skills, presentation skills and integration of computer applications into teaching and learning.

Spring 2007 *TKB 2122 Introduction to Database Management (online)*: an undergraduate course addressing database management technology as it applies to business applications in today's contemporary business environment.

Spring 2007/Fall 2007 *TKT 4000 Directed Independent Study*: an undergraduate course that enables students to apply their theoretical knowledge and technological skills to create and present technology-based projects and papers.

Summer 2006 *TKB 2132 Introduction to Spreadsheet Design and Analysis (traditional instruction)*: an undergraduate course that addresses electronic spreadsheet technology applied to business applications in today's contemporary business environment.

Fall 2005-SU 2006 *TKB 1123 Document Formatting/Information Processing (traditional instruction)*: an undergraduate course addressing keyboarding principles and mastery of word processing competencies required to produce business documents.

Spring 2006 *TKI 4363 Manufacturing Systems (traditional instruction)*: an undergraduate course focusing on the understanding and application of the basic concepts of modern manufacturing process management systems, with regards to quality, just-in-time, lean manufacturing and six sigma.

## **COURSES DEVELOPED**

---

### ***The University of Texas at Tyler***

Spring 2016 Research Techniques in Technology (Graduate)

Spring 2015 Strategic Sourcing (Graduate)

Summer 2013 Advanced Lean Six Sigma Black Belt (Graduate)

Spring 2012 Project Management (Graduate)

Fall 2011 Six Sigma (Graduate)

Fall 2010 Total Quality Management (Undergraduate/Graduate)

## **SERVICES/ASSIGNMENTS**

---

### ***The University of Texas at Tyler***

#### **HRD DOCTORAL ADVISEES and DOCTORAL COMMITTEE MEMBERSHIPS**

Susan Grove (Fall 2012-2014 Cohort, Graduated, 2018)

Dissertation: *Examining the Relationship between Employee Engagement, Job Satisfaction, Job Burnout, and Turnover Intention of Student Services Employees in Higher Education*

David Macauley (Fall, 2015-2017 Cohort, Graduated, 2018)

Dissertation: *Examining Managerial Leadership Behavior, Perceived Proximity, and Job Satisfaction in Distributed Work Arrangements*

Jim Rumsey (Fall, 2011-2013 Cohort, Graduated, 2014)

Dissertation: *The Difference in the Social Styles of Career and Volunteer Fire Chiefs*

Afton Barber (Fall, 2011-2013 Cohort, Graduated, 2014)

Dissertation: *Exploring Generational Differences Between Generation Y and Baby Boomers in Work-Life Balance*

## **ADDITIONAL SERVICES/ASSIGNMENTS**

---

### ***The University of Texas at Tyler***

Fall 2023-Fall 2026 Undergraduate Council

Fall 2023-Fall 2025 SCOB Undergraduate Curriculum and Assessment Committee

Fall 2023-Fall 2025 SCOB Tenure and Promotion Committee

Fall 2022-present Military and Veterans Success Center (MVSC's) Hazelwood Appeal Committee

Fall 2022-present Patriot Athletic Advisor (Men's Soccer)

Spring 2020-present Soules College of Business (SCOB) Strategic Planning Committee Chair

Spring 2022-present Reviewer for *International Journal of Lean Six Sigma*

Spring 2022 Student Learning Committee-Undergraduate/Graduate Problem- Solving

Spring 2022 SCOB Longview University Center/Kilgore College Committee representative

Fall 2020-present SCOB Commencement Committee representative

Spring 2020-present SCOB Student Success Committee

Spring 2020-present SCOB Endowment Committee

Summer 2019-present Visiting Scholar for the National Training Institute (NTI)

Fall 2017-2019 Member of SCOB Tenure and Promotion Committee

Summer 2013-present Dissertation Committee member for Ph.D. Candidates

Spring 2011-present Faculty advisor for Epsilon Pi Tau (EPT)- Delta Gamma Chapter (Honor society for technology professionals)

Fall 2011-present Marshall for SCOB Commencement Ceremonies

Fall 2010-present Faculty advisor for the Association of Technology, Management, and Applied Engineering (ATMAE) student chapter

Fall 2018/Spring 19 Reviewer for *Journal of Management Development*

Fall 2017 Reviewer for *Technology Interface International Journal*

Fall 2017-present Reviewer for *Quality Engineering*

Fall 2016-2017 Co-chair CBT Undergraduate Curriculum Committee

Summer 2016-present Reviewer for the *Journal of Technology, Management, and Applied Engineering*

Spring 2016-2018 Member of CBT Faculty Awards and Research Committee

Fall 2015-Fall 2017 Member of CBT Student Awards and Scholarship Committee

Spring 2015 Reviewer for *Human Resource Development Quarterly*

Spring 2014 Reviewer for *International Journal of Vocational and Technical Education*

Fall 2013-2016 Chair of The University of Texas at Tyler Traffic and Parking Citation Appeals Panel

Fall 2012-Fall 2013 Member of The University of Texas at Tyler Traffic and Parking Citation Appeals Panel

Fall 2012-2014 Member of CBT Undergraduate Curriculum Committee

Fall 2012-2014 Member of the CBT Undergraduate Council (HRD and TECH)

Summer 2012 Served on the search committee for Student Life & Leadership for the Student Development Specialist I position

Spring 2012 Reviewer for *Technology Integration and Foundations for Effective Leadership*

Spring 2012 Served as a CBT mission committee member (HRD and TECH)

Fall 2011-Fall 2013 Member of the Writing Assessment Task Force Committee

Fall 2011-Fall 2014 Assurance of Learning (AOL) Committee member

### ***Mississippi State University***

Fall 2006-Spring 2009 Instructional Technology Advisory Committee (ITAC) representative for the Department of Instructional Systems, Leadership and Workforce Education

Fall 2006-Spring 2009 Instructional Technology Advisory Committee: worked in a team environment to evaluate and implement technology usage at Mississippi State University as well as discuss the creation, use, ownership, royalties of electronically and traditionally developed course materials.

Spring 2005/Fall 2005 Served as a guest speaker in the TKT 9213: Foundation, Trends and Issues in Instructional Systems, Leadership and Workforce Development (ISLWD) Graduate class at MSU; conducted a discussion about the US education system in regard to its roots and origins

### **PROFESSIONAL AND ACADEMIC ASSOCIATIONS**

---

Fall 2019-present Association of Technology, Management, and Applied Engineering (ATMAE) Certification Board Commissioner for the Lean Six Sigma Exam Commission

Fall 2019-present Association of Technology, Management, and Applied Engineering (ATMAE) Board of Directors-Past Chair

Fall 2018-Fall 2019 Association of Technology, Management, and Applied Engineering (ATMAE) Board of Directors-Chair

Fall 2017-Fall 2018 Association of Technology, Management, and Applied Engineering (ATMAE) Board of Directors-Vice Chair

Spring 2018-Present Association of Technology, Management, and Applied Engineering (ATMAE) Awards Committee-Chair

Spring 2018-Present Association of Technology, Management, and Applied Engineering (ATMAE) Membership Committee-Chair

Spring 2018-Present Association of Technology, Management, and Applied Engineering (ATMAE) Student Division Liaison

Fall 2011-present Industrial Technology/Industrial Management Advisory Committee: works in a team environment to advance the Industrial Technology/Industrial Management curriculum and students involvement throughout East Texas

Fall 2011-present Tyler Chamber Technology Committee: works with Tyler Chamber of Commerce members and The University of Texas faculty to promote technology innovation and programs in the Tyler, TX area.

Spring 2011-present Association of Technology, Management, and Applied Engineering (ATMAE) advisor for the Student Division

Fall 2010-present Epsilon Pi Tau (EPT): Honor society for professions in technology

Fall 2016-Fall 2018 Association of Technology, Management, and Applied Engineering (ATMAE) Board of Directors (At-Large Representative)

Fall 2012-Fall 2017 East Texas Lean Consortium board member: works with East Texas companies to improve/implement Lean concepts

Fall 2014-Fall 2016 Association of Technology, Management, and Applied Engineering (ATMAE) President for the National Student Division

Fall 2011-Fall 2016 Association of Technology, Management, and Applied Engineering (ATMAE) Certification Board Commissioner for the Lean Six Sigma Exam Commission

Fall 2012-Fall 2014 Association of Technology, Management, and Applied Engineering (ATMAE) Vice President for the National Student Division

## **AWARDS/CERTIFICATES**

---

2023 Certificate in [Inclusive Instruction for Equitable Learning or Fostering a Culture of Belonging]-Association of College and University Educators

Soules College of Business (SCOB) Faculty Service Award

Epsilon Pi Tau's (EPT) William E. Warner Professional Practice Award-Region 4

2022 Epsilon Pi Tau's (EPT) William E. Warner Professional Practice Award-Region 4

2021 Epsilon Pi Tau's (EPT) William E. Warner Professional Practice Award-Region 4

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Orlando, FL- 5 students

2019 Laureate status in Epsilon Pi Tau (EPT)

The Association of Technology, Management, and Applied Engineering (ATMAE) Executive Board Chair Service Award

The Association of Technology, Management, and Applied Engineering (ATMAE) Faculty Excellence Award

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Charlotte, NC- 11 students

2018 Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Kansas City, MO-7 students

2017 The College of Business and Technology Service Award

2016 The Association of Technology, Management and Applied Engineering Outstanding Student Chapter Award-ATMAE Conference (Advisor)

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Orlando, FL-5 students

Epsilon Pi Tau's (EPT) William E. Warner Professional Practice Award-Region Four

Outstanding Accomplishment at The University of Texas at Tyler's "Faculty and Staff Publications and Presentations Reception"

2015 The Association of Technology, Management and Applied Engineering Outstanding Student Chapter Award-ATMAE Conference (Advisor)

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Pittsburgh, PA-4 students

Outstanding Accomplishment at The University of Texas at Tyler's "Faculty and Staff Publications and Presentations Reception"

2013 Editor's Choice Award for article accepted in *Academic Exchange Quarterly*, 17(2).

The Association of Technology, Management and Applied Engineering Outstanding Student Chapter Award-ATMAE Conference (Advisor)

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, New Orleans, LA-8 students

2012 The Association of Technology, Management and Applied Engineering Outstanding Student Chapter Award-ATMAE Conference (Advisor)

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Nashville, TN-5 students

2011 Nominated for The University of Texas at Tyler's Outstanding Student Organization Advisor Award

The Association of Technology, Management and Applied Engineering Outstanding Student Chapter Award-ATMAE Conference (Advisor)

Awarded University co-curricular funding for lodging and travel for students at The Association of Technology, Management, and Applied Engineering (ATMAE) Conference, Cleveland, OH-5 students

## **LICENSES / CERTIFICATION**

---

2016 Certified Lean Champion (CLC)

2012 Certified Lean Six Sigma Black Belt (CLSSBB)

Certified Senior Technology Manager (CSTM)

Certified Senior Manufacturing Specialist (CSMS)

2011 Certified Technology Manager (CTM)

Certified Manufacturing Specialist (CMS)

## **PROFESSIONAL AFFILIATIONS**

---

Epsilon Pi Tau (EPT) Honor society for professions in technology

The Association for Career and Technical Education (ACTE)

Association of Technology, Management and Applied Engineering (ATMAE)

Association for sTEm Teacher Education (ASTE)

## **PROFESSIONAL CONFERENCES/WEBINARS AND WORKSHOPS:**

---

- How to Present with Slides More Effectively (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Post-Pandemic Teaching and Learning: What Stays? What Goes? (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Ep 12: Tying It All Together: The Future of Co-Curricular Learning & Assessment (Suitable Company)
- Re-Envisioning Student Engagement Ep11: Building Student Resilience Through Asset-Based Thinking (Suitable Company)

- How Do I Help My Students? (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Faculty 180 (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Who Are Our Undergraduate Students? (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Active Learning Strategies in STEM Courses with Keynote: Dr. Carolyn Hushman (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Global Awareness & Diversity Professional Learning Community Meeting (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Designing Courses for Active Learning Keynote Speaker: Dr. Barbi Honeycutt ~ FLIP It Consulting (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Publication, and Peer Review Panel Discussion (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Managing Classroom Incivility (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Designing Teaching for Diverse Learners (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Connecting with Students in an Online Environment (The University of Texas at Tyler's Center for Excellence in Teaching and Learning)
- Going the Distance: Distance Learning Challenges & Solutions-IGI Global
- Faculty & Staff New Year Kickoff Workshop Series (The University of Texas at Tyler, Fall '20):
  - What do I do when...
  - Supporting Student Resiliency during a Pandemic
- Ethics and the Pandemic panel discussion (The University of Texas at Tyler)
- Academic Impressions: Strategies to Effectively Engage Students in Online Learning (The University of Texas at Tyler)
- Association of Technology, Management and Applied Engineering (Annually)
- Digital Tools to Empower 21<sup>st</sup> Century Learners (The University of Texas at Tyler)
- APA 7<sup>th</sup> Edition workshop (The University of Texas at Tyler)
- Canvas LMS training (The University of Texas at Tyler)
- Lean Management Systems (Heriot-Watt University, Edinburgh, Scotland, UK)
- Small Teaching: Everyday Lessons from the Science of Learning (The University of Texas at Tyler)
- End Note workshop (The University of Texas at Tyler-Library)
- Zoom workshop (The University of Texas at Tyler)
- Ten Principles for Online Course Assessment Webinar (The University of Texas at Tyler)
- 10 Strategies to Improve Blended Course Design 2012 Webinar (The University of Texas at Tyler)
- Tegrity Lecture Capture workshop (The University of Texas at Tyler)

- Camtasia Studio 7 workshop (The University of Texas at Tyler)

**DENNIS R. JONES**  
The University of Texas at Tyler  
Tyler, Texas 75799  
(608) 334-7190  
dennisjones@uttyler.edu

**OBJECTIVE:**

To strive to continuously improve the presentation and materials of the courses I teach. To create, write, and publish high-quality research papers in tier 1A peer reviewed publications and journals in the first quartile of a list (i.e. Q1). I also desire to collaborate with others from different disciplines in order to expose myself to new thought processes and thinking. I desire to develop close ties with local industry partners to obtain access to their facilities and work with them in order to help solve problems and increase productivity and efficiency. This will allow me to apply for government grants by having an industry partner which I would be working with. This will also help improve the economic development of the East Texas area.

**EDUCATION:**

**PhD Industrial and Systems Engineering**, August 2006. University of Wisconsin - Madison. Specialty areas: Robotics, Controls, Mechanical Engineering, Multi-robot Interaction and Coordination, Aerial Robotics, Machine Learning, Manipulation, Industrial and Systems Engineering, Operations Management, Data Analytics, Supply Chain Management, Logistics, Healthcare Administration, Project Management, Occupational Safety Management, Ergonomics, Loss Control, Manufacturing Processes, Computer-Aided Engineering, Product Design, Industrial Automation, Rapid Prototyping, CAD/CAM, Manufacturing Systems Management, Methods Improvement, Quality and Reliability, Lean Manufacturing, Six Sigma, Economic Decision Analysis, Production Systems, Operations Research, Manufacturing Systems, Flexible Manufacturing, Production Management, Agile Manufacturing, Safety, Human Factors Engineering, Technology Management, Human Computer Interaction, and Small Business Entrepreneurship, and New Technology Implementation.

**Business Minor:** Business Administration, Operations Management, Data Analytics, Supply Chain Management, Logistics, Small Business Management, Entrepreneurship, Technological Innovation, International Business, Change Implementation, Venture Development, Venture Financing, Venture Capital Evaluation, New Technology Implementation, Initial Public Offering Coordination, and Small Business Entrepreneurship.

**Dissertation Research:** "Ergonomics and Work Organization Approaches for Evaluating Employee Health and Well-Being in a Manufacturing Environment : A Participatory Ergonomics Intervention." *Dissertation Advisor: Michael J. Smith, PhD, Professor, Department of Industrial and Systems Engineering.*

**Research Interests:** Robotics, Controls, Mechanical Engineering, Multi-robot Interaction and Coordination, Aerial Robotics, Machine Learning, Manipulation, Industrial and Systems Engineering, Operations Management, Data Analytics, Supply Chain Management, Logistics, Management, Marketing, International

Business, Healthcare Administration, Project Management, Occupational Safety Management, Ergonomics, Loss Control, Manufacturing Processes, Computer-Aided Engineering, Product Design, Industrial Automation, Rapid Prototyping, CAD/CAM, Manufacturing Systems Management, Methods Improvement, Quality and Reliability, Lean Manufacturing, Six Sigma, Economic Decision Analysis, Production Systems, Operations Research, Manufacturing Systems, Flexible Manufacturing, Production Management, Agile Manufacturing, Safety, Human Factors Engineering, Technology Management, Human Computer Interaction, and Small Business Entrepreneurship, and New Technology Implementation.

**Teaching Interests:** Robotics, Controls, Mechanical Engineering, Multi-robot Interaction and Coordination, Machine Learning, Manipulation, Industrial and Systems Engineering, Operations Management, Data Analytics, Supply Chain Management, Logistics, Healthcare Administration, Project Management, Occupational Safety Management, Ergonomics, Loss Control, Manufacturing Processes, Computer-Aided Engineering, Product Design, Industrial Automation, Rapid Prototyping, CAD/CAM, Manufacturing Systems Management, Methods Improvement, Quality and Reliability, Lean Manufacturing, Six Sigma, Economic Decision Analysis, Production Systems, Operations Research, Manufacturing Systems, Flexible Manufacturing, Production Management, Agile Manufacturing, Safety, Human Factors Engineering, Technology Management, Human Computer Interaction, and Small Business Entrepreneurship, and New Technology Implementation.

**MS Industrial Engineering,** December 1983. University of Wisconsin - Madison. Specialization in: Manufacturing Process Engineering, CAD, Simulation Modeling Techniques, Optimization Modeling Techniques, and Computer Science.

**MBA Finance:** August 1982. University of Wisconsin - Whitewater. Specialization in: Business Finance, Investment Strategies, International Business, and Operations Management.

**MBA Management:** August 1981 University of Wisconsin - Whitewater. Specialization in: Supply Chain Management, Business Management, Organization Structures, International Business, and Human Relations Management.

**BS Mathematics and Computer Science:** May 1977 University of Wisconsin - Whitewater. Specialization in: Mathematics, Information Systems, and Computer Science.

## **PROFESSIONAL EXPERIENCE:**

**Principal Investigator/Owner:** D. R. Jones and Associates, LLC, Poynette, Wisconsin, May 2010 – present. D.R. Jones and Associates provides engineering/business consulting to businesses, industry, and people needing expert evaluation services. Areas of expertise are as follows:

- Industrial Engineering and Manufacturing Engineering. Familiar with all aspects of the manufacturing process.
- Supply Chain Management and Logistics.
- Industrial Maintenance

- Project Management.
- Project/Team Leadership.
- Coordination of new equipment and process implementation.
- Expediting technological innovations.
- Controlling direct and indirect labor manpower.
- Coordination of facility changes and improvements.
- Managing outside contractor work responsibilities.
- Establishing production line rates and speeds.
- Implementing synchronous productivity activities.
- Implementing Lean manufacturing production activities.
- Determining and implementing ergonomics improvements.
- Determining and evaluating cost reduction improvements.
- Establishing Six Sigma programs.
- Implementing quality and reliability initiatives and programs.
- Determining and evaluating safety, ergonomics, and human factors initiatives.
- Establishing facility system layouts for optimal efficiency and productivity.

**Senior Manufacturing/Facilities Engineer:** John Deere Company, Horicon, Wisconsin, June 1999 – August 2002.

- Experienced professional with 20 years of Industrial Engineering and Manufacturing Engineering experience. Familiar with all aspects of the manufacturing process.
- Industrial Maintenance Department general supervisor and foreman.
- Served as senior project manager.
- Served as project/team leader.
- Coordinated new equipment and process implementation.
- Expedited technological innovations.
- Coordinated supply chain management and logistics.
- Controlled direct and indirect labor manpower.
- Developed and maintained plant facility layouts.
- Coordinated facility changes and improvements.
- Managed outside contractor work responsibilities.
- Calibrated production line rates and speeds.
- Supported synchronous productivity activities.
- Supported lean manufacturing production activities.
- Facilitated ergonomics improvements.
- Interpreted cost reduction improvements.

**Senior Industrial/Manufacturing Engineer:** General Motors Corporation, Janesville, Wisconsin, May 1977 - May 1997.

- Experienced professional with 20 years of Industrial Engineering and Manufacturing Engineering experience. Familiar with all aspects of the manufacturing process.
- Industrial Maintenance Department general supervisor and foreman.
- Served as project/team leader.
- Coordinated new equipment and process implementation.
- Expedited technological innovations.
- Coordinated supply chain management and logistics.
- Compared alternative methods of production.

- Performed work measurement and methods analysis activities.
- Controlled direct and indirect labor manpower.
- Developed and maintained plant layouts.
- Calibrated production line rates and speeds.
- Supported synchronous productivity activities.
- Facilitated ergonomics improvements.
- Collected data on cost savings initiatives.
- Arbitrated union grievances.
- Interpreted cost reduction improvements.

#### **ACADEMIC EXPERIENCE:**

**Assistant Professor:** Department of Technology, Soules College of Business. The University of Texas at Tyler, August 2021 – present.

- Developed and taught course entitled “Project Management”, “Engineering Graphics”, and “Project Management Certification”.
- Developed course syllabus, weekly lesson plans, lectures, assignments, and all course activities for several different courses.
- Delivered courses in traditional classroom lecture format, online format, and hybrid delivery systems.
- Developed and presented all lectures and ‘hands-on’ labs.
- Developed and presented lectures on Supply Chain Management, Logistics, Operations Research, Industrial Maintenance, Applied Statistics, Simulation, Reliability, Quality, Ergonomics, Lean Manufacturing, and Six Sigma.
- Developed homework, quizzes, examinations, labs, and course projects.
- Evaluated students on skills performances, homework assignments, examinations, quizzes, laboratory write ups, and course project presentations and write ups.
- Organized and conducted extensive project work with industry clients utilizing student teams and project management to solve ‘real-world’ industry problems.
- Collaborated with other faculty; both internal and external to the College of Engineering; in order develop research publication and papers, and to write grant applications and apply for research funding.
- Initiated development of collaborative relationships between business / industry clients and the University of mutual benefit to students, faculty, and business / industry clients.
- Participated in Departmental and College activities and was an active member on several Departmental and University committees.
- Attended several University sponsored personal development programs in order to enhance my skills and professional growth as a teacher and researcher.

**Assistant Professor:** Department of Operations and Management, College of Science, Technology, Engineering, Mathematics, and Management. University of Wisconsin - Stout, August 2014 – May 2020.

- Developed and taught course entitled “Production and Operations Management”, “Ergonomics”, “Service Operations Management”, “Service Quality Assurance”, “Project Management”, “Manufacturing Enterprise Practicum”, “Production Control Systems”, “Plant Layout and Material Handling”, “Work Simplification and Measurement”, “Advanced Project Management”, “Senior Design Project”, “Student Internship”, “Engineering Economy”, “Special Topics”, “Technology Workshop”, and “Advanced Independent Study”.

- Developed course syllabus, weekly lesson plans, lectures, assignments, and all course activities for several different courses.
- Delivered courses in traditional classroom lecture format, online format, and hybrid delivery systems.
- Developed and presented all lectures and ‘hands-on’ labs.
- Developed and presented lectures on Supply Chain Management, Logistics, Operations Research, Industrial Maintenance, Applied Statistics, Simulation, Reliability, Quality, Ergonomics, Lean Manufacturing, and Six Sigma.
- Developed homework, quizzes, examinations, labs, and course projects.
- Evaluated students on skills performances, homework assignments, examinations, quizzes, laboratory write ups, and course project presentations and write ups.
- Organized and conducted extensive project work with industry clients utilizing student teams and project management to solve ‘real-world’ industry problems.
- Collaborated with other faculty; both internal and external to the College of Engineering; in order develop research publication and papers, and to write grant applications and apply for research funding.
- Initiated development of collaborative relationships between business / industry clients and the University of mutual benefit to students, faculty, and business / industry clients.
- Participated in Departmental and College activities and was an active member on several Departmental and University committees.
- Attended several University sponsored personal development programs in order to enhance my skills and professional growth as a teacher and researcher.

**Assistant Professor:** Department of Engineering Technology, College of Engineering, Northern Illinois University, August 2006 – May 2010.

- Developed and taught course entitled “Supply Chain Management”, “Logistics”, “Occupational Safety Management”, “Ergonomics”, “Environmental Safety”, “Disaster Preparedness”, “Loss Control”, “Industrial Data Processing”, “Legal Aspects of Safety”, “Production Control Systems”, “Plant Layout and Material Handling”, “Work Simplification and Measurement”, “Industrial Project Management”, “Advanced Project Management”, “Manufacturing Technical Problems”, “Operations Research”, “Industrial Quality Control”, “Senior Design Project”, “Student Internship”, “Human Factors”, “Ergonomics”, “Engineering Economy”, “Special Topics”, “Technology Workshop”, and “Advanced Independent Study”.
- Developed course syllabus, weekly lesson plans, lectures, assignments, and all course activities for several different courses.
- Developed and presented all lectures and ‘hands-on’ labs.
- Developed and presented lectures on Operations Research, Industrial Maintenance, Applied Statistics, Simulation, Reliability, Quality, Ergonomics, Lean Manufacturing, and Six Sigma.
- Developed homework, quizzes, examinations, labs, and course projects.
- Evaluated students on skills performances, homework assignments, examinations, quizzes, laboratory write ups, and course project presentations and write ups.
- Organized and conducted extensive project work with industry clients utilizing student teams and project management to solve ‘real-world’ industry problems.
- Collaborated with other faculty; both internal and external to the College of Engineering; in order develop research publication and papers, and to write grant applications and apply for research funding.

- Initiated development of collaborative relationships between business / industry clients and the University of mutual benefit to students, faculty, and business / industry clients.
- Acted as Faculty Advisor and Trustee for the Epsilon Pi Tau Technology Honor Society. Actively recruited membership, and coordinated all Engineering Technology Honor Society activities.
- Participated in Departmental and College activities and was an active member on several Departmental and University committees.
- Provided academic advising for several undergraduate and graduate students.
- Member of several graduate student Master's project thesis committees.
- Attended several University sponsored personal development programs in order to enhance my skills and professional growth as a teacher and researcher.
- Provided engineering consulting to several industry clients and partners.

**Research/Project Assistant:** Department of Industrial Engineering, University of Wisconsin - Madison, with Professor Michael J. Smith, PhD, May 1998 – August 2006.

- Created employee based ergonomic team.
- Coordinated research activities with employee based ergonomic team, and management at a manufacturing company.
- Performed data collection on site at a manufacturing company.
- Performed ergonomic evaluation of manufacturing company workstations.
- Performed job and task analysis.
- Performed data management and analysis.
- Wrote preliminary reports.
- Presented results to employee based ergonomic team and management.
- Wrote final report.

**Instructor/Teaching Assistant:** Department of Industrial Engineering, University of Wisconsin - Madison, with Professor Michael J. Smith, PhD, August 1998 – June 1999.

- Assisted with teaching the course entitled "Introduction to Human Factors Engineering".
- Developed weekly lesson plans and lab presentations/demonstrations.
- Developed and presented lectures on Ergonomics, Occupational Stress, and Fatigue.
- Developed examination questions.
- Evaluated students on skills performances and laboratory write ups.
- Instructional contents/topics for laboratory: anthropometry, task analysis, risk/hazard analyses, accident prevention, universal design, product and warning labels design, and team project design

**Teaching Assistant:** Department of Industrial Engineering, University of Wisconsin - Madison, with Professor Leah C. Newman, PhD, August 1997 - May 1998.

- Assisted with teaching the course entitled "Engineering Economic Analysis".
- Developed weekly lesson plans and discussion section presentations.
- Developed and presented lectures on Present Worth Analysis, Annual Cash Flow Analysis, Rate of Return Analysis, Depreciation, and Replacement Analysis.
- Developed homework assignments.
- Developed examination questions.

- Evaluated students on skills performances, homework assignments, and exam write ups.
- Instructional contents/topics for discussion sections: present worth analysis, annual cash flow analysis, rate of return analysis, depreciation, income taxes, replacement analysis, and spreadsheets for before-tax and after-tax cash flows.

**Lecturer:** School of Business, University of Wisconsin - Madison, May 1983 - August 1983.

- Designed and taught the course entitled “Computer Information Systems and Data Structures”.
- Developed course syllabus, weekly lesson plans, lectures, and course activities.
- Developed and presented all lectures.
- Developed homework, examinations, and course project.
- Evaluated students on skills performances, homework assignments, examination write ups, and course project write up.
- Instructional contents/topics for course: information systems, computer data processing concepts, and data structure strategies.

**Lecturer:** School of Business, University of Wisconsin - Whitewater, January 1982 - May 1983.

- Designed and taught several computer science courses entitled “Introduction to Data Processing”, “Management Information Systems”, “Computer Information Systems”, “Structured Programming”, and “Data Structures”.
- Developed course syllabus, weekly lesson plans, lectures, and course activities.
- Developed and presented all lectures.
- Developed homework, examinations, and course project.
- Evaluated students on skills performances, homework assignments, examination write ups, and course project write up.
- Instructional contents/topics for course: computer data processing concepts, management information systems, structured programming techniques, and data structure strategies.

## **PROFESSIONAL ACTIVITIES:**

### **The Association of Technology, Management, and Applied Engineering (ATMAE)**

Member, The University of Texas at Tyler.

### **Epsilon Pi Tau Technology Honor Society (EPT)**

Member, The University of Texas at Tyler.

### **Henry F. Vilas Scholar – College of Engineering**

Award winner, University of Wisconsin - Madison.

### **Epsilon Pi Tau Technology Honor Society (EPT)**

Faculty Advisor and Trustee, Northern Illinois University.

### **Science & Engineering Education Scholars Program (SEESP)**

Selected Participant, University of Wisconsin - Madison.

**Society of Manufacturing Engineers (SME)**

Member, University of Wisconsin - Madison Chapter.

**Human Factors and Ergonomic Society (HFES)**

Member, University of Wisconsin - Madison Chapter.

**Institute of Industrial Engineering (IIE)**

Member, University of Wisconsin - Madison Chapter.

**American Society of Ergonomic Systems Engineering (ASESE)**

Member, University of Wisconsin - Madison Chapter.

**American Society of Engineering Education (ASEE)**

Member, University of Wisconsin - Madison Chapter.

**Students Uniting Business and Engineering (SUBE)**

Member, University of Wisconsin - Madison Chapter.

**Teaching Assistants Association (TAA)**

Steward, University of Wisconsin - Madison Chapter.

**PUBLICATIONS:**

**Research Reports:**

Jones, D. R. & Miller, M. R. (2024), "Tricks to Motivating your Students to Succeed in Online Technical Courses". *Journal of Technology, Management, and Applied Engineering*. Accepted for publication.

Jones, D. R. & Miller, M. R., "What is holding ATMAE Back from being a Household Name in Industry". submitted to the *Journal of Technology, Management, and Applied Engineering* for publication.

Jones, D. R., "The Relationship between Working Conditions and Musculoskeletal / Ergonomic Disorders in a Manufacturing Facility: A Longitudinal Research Study" to be submitted to *Applied Ergonomics* in January 2025.

Jones, D. R., "Introducing Applied Project Management into the Classroom" to be submitted to *The Journal of Technology Education* in December 2024.

Jones, D. R., "Work Organization and Stress Factors in Musculoskeletal Disorders" to be submitted to *The Ergonomics Open Journal* in November 2024.

Jones, D.R. (2006). *The Relationship between Working Conditions and Musculoskeletal / Ergonomic Disorders in a Manufacturing Facility*. PhD thesis, University of Wisconsin – Madison, Department of Industrial and Systems Engineering, Madison, Wisconsin.

Jones, D.R. (1998). *The Pleasant Company Project: A Participatory Ergonomics Intervention*. Department of Industrial Engineering. University of Wisconsin - Madison.

### **Conference Proceedings:**

Jones, D. R., Miller, M. R. & Lawrence, H. R. (2023). The Importance of Evaluating Alternative Project Costs for ATMAE Accredited Graduates. The Association of Technology Management, and Applied Engineering 2023, Atlanta, Georgia, USA.

Miller, M. R., Jones, D. R. & Lawrence, H. R. (2023). How to Use the ATMAE Certification Review and Training Sessions to Supplement Your Courses. The Association of Technology Management, and Applied Engineering 2023, Atlanta, Georgia, USA.

Miller, M. R., Jones, D. R. & Lawrence, H. R. (2023). Proven Motivational Techniques for Online Courses. The Association of Technology Management, and Applied Engineering 2023, Atlanta, Georgia, USA.

Miller, M. R., Lawrence, H. R., Jones, D. R. & Griffin, R. C. (2022). The New ATMAE Certified Manufacturing Specialist Online Exam Preparation Course. The Association of Technology Management, and Applied Engineering 2022, Louisville, Kentucky, USA.

Miller, M. R., Jones, D. R., Lawrence, H. R. & Griffin, R. C. (2022). Tricks to Motivating you Students to Succeed in Online Technical Courses. The Association of Technology Management, and Applied Engineering 2022, Louisville, Kentucky, USA.

Jones, D. R. & Miller, M. R. (2021). The Impact of COVID-19 on the Undergraduate Work Ethic: Strategies to Reverse this Trend. The Association of Technology Management, and Applied Engineering 2021, Orlando, Florida, USA.

Jones, D. R. (2018). Psychosocial Aspects of New Technology Implementation. Human-Computer Interaction International 2018, Las Vegas, Nevada, USA.

Jones, D. R. (2017). Psychosocial Aspects of New Technology Implementation. Applied Human Factors and Ergonomics 2016, Los Angeles, California, USA.

Jones, D. R. (2016). The Relationship between Working Conditions and Ergonomic or Musculoskeletal Disorders in a Manufacturing Facility. Applied Human Factors and Ergonomics 2016, Orlando, Florida, USA.

Jones, D. R. (2015). The Relationship between Working Conditions and Musculoskeletal / Ergonomic Disorders in a Manufacturing Facility – A Longitudinal Research Study. Applied Human Factors and Ergonomics 2015, Las Vegas, Nevada, USA.

Jones, D. R. (2009). The Relationship between Working Conditions and Musculoskeletal / Ergonomic Disorders in a Manufacturing Facility – A Longitudinal Research Study. Human-Computer Interaction International 2009, San Diego, California, USA.

Jones, D. R. (2008). The Relationship between Working Conditions and Ergonomic / Musculoskeletal Disorders in a Manufacturing Facility – A Longitudinal Research Study. Applied Human Factors and Ergonomics 2008, Las Vegas, Nevada, USA.

Jones, D. R. (2007). The Relationship between Working Conditions and Musculoskeletal / Ergonomic Disorders in a Manufacturing Facility – A Longitudinal Research Proposal. Human-Computer Interaction International 2007, Beijing, P. R. China.

- Jones, D. R. & Smith, M. J. (2005). Psychosocial Aspects of New Technology Implementation. Human-Computer Interaction International 2005, Las Vegas, Nevada, USA.
- Jones, D. R. & Smith, M. J. (2004). Implementing New Technology. Human Factors & Ergonomics Society 2004, New Orleans, Louisiana, USA.
- Jones, D. R. & Smith, M. J. (2003). New Technology Implementation. Human Factors & Ergonomics Society 2003, Denver, Colorado, USA.
- Jones, D. R. & Smith, M. J. (2002). Team Implementation of New Technology. Human Factors & Ergonomics Society 2002, Baltimore, Maryland, USA.
- Jones, D. R. & Smith, M. J. (2001). Implementation of New Technology. Human Factors & Ergonomics Society 2001, Minneapolis, Minnesota, USA.
- Smith, T. J. (chair), Albin, T. J., Koscheyev, V. S., Leon, G. S., Mattila, M. & Jones, D. R. (2000). Future Trends in Management of Hazardous Environments (panel discussion). Human Factors & Ergonomics Society 2000, San Diego, California, USA.
- Jones, D. R. (1999). Hands-On Human Factors and Ergonomics Education. Human Factors & Ergonomics Society 1999, Houston, Texas, USA.
- Barnes, K., Caldwell, B., Jones, D., Monot, J., Rogers, M., Varnell, K., & Watson, J. (1998). Using Information Terrains in Information Displays. Computational & Mathematical Organization Theory 1998, Montreal, Canada.

## RaeJean Griffin

[linkedin.com/in/raejean-griffin](https://www.linkedin.com/in/raejean-griffin)

---

### QUALIFICATIONS

- MS in Industrial Management and BS in Industrial Technology
- Lecturer/ Lab Manager for Department of Technology (2020-Present)
- Adjunct Lecturer for Department of Technology- Fall 2019
- Teaching Assistant for Technology (Welding Lab) – Summer 2019
- Five years professional experience in manufacturing
- Industrial Equipment Maintenance and Operation
- Auto CAD and Inventor Design Software Applications
- SAP and Peoplesoft Enterprise Management Software Applications

### EDUCATION

The University of Texas at Tyler, Tyler, Texas, August 2019.

Degree: Master of Science Major: Industrial

Management GPA: 4.0

The University of Texas at Tyler, Tyler, Texas, December 2017.

Degree: Bachelor of Science Major: Industrial

Technology Minor: Business Administration

GPA: 3.67

### CERTIFICATIONS

Maintenance Manager Certification, (Anticipated 2021)

Certified Reliability Leader Certification, 2020

Black Belt Six Sigma Certification, 2019

Supply Chain Certification, 2019

Occupational Health and Safety Administration (OSHA) 30, 2017 FANUC

Robotics Certification, 2017

### RELEVANT PROFESSIONAL EXPERIENCE

The University of Texas at Tyler, Tyler, Texas 2009 – Present.

**Lecturer 2020 – Present**

#### Courses Taught

- TECH 1320 – Industrial Materials
- TECH 3311 – Manufacturing Processes
- TECH 3312 – Facilities Operations and Maintenance
- TECH 3320 – Lean Six Sigma Green Belt Techniques
- TECH 3333 – Polymers Processing
- TECH 4372 – Capstone
- TECH 3310 – Total Quality Management
- TECH 3355 – Supply Chain Management
- TECH 4343 – Advanced Manufacturing Processes (Welding)
- TECH 3324 – Plant Layout and Facilities Planning
- TECH 2311 – Electrical and Fluid Systems
- TECH 5335 – Lean Management

The University of Texas at Tyler, Tyler, Texas 2009 – Present.

**Adjunct Lecturer – 2019**

- TECH 3311 – Manufacturing Processes
- Developed an additional new project using wood lathe to create miniature baseball bats
- Offer review sessions for exams to increase student success
- Ensure student safety protocols within the laboratory

**COURSES DEVELOPED**

**TECH 3312 - Facilities Operations and Maintenance**

- Developed new course curriculum to prepare students for maintenance in the workforce. Students learn Mechanical Drive Systems and Single-Phase Pump systems during the lab portion of the course giving them real world experiences.

**OTHER PROFESSIONAL EXPERIENCE**

The University of Texas at Tyler, Tyler, Texas 2009 – 2020.

**Administrative Associate- Soules College of Business-Department of Management and Marketing, 2016-2020**

- Managed financial operations for the Department Chair
- Prepared, monitored and managed expenditures within budgets for the Department
- Conducted monthly reconciliations of accounts for the Department
- Processed purchase requisitions, payment vouchers, travel arrangements and travel reimbursements
- Obtained all bids and contracts on large purchases
- Created and maintained all blanket Purchase Orders for the Department
- Provided administrative support for 30 faculty
- Trained new Administrative Assistants in policies and procedures on purchasing, payment vouchers, travel arrangements, reimbursements, and all other departmental duties
- Created faculty, staff and student worker appointments and terminations for the department
- Planner and coordinator of student Mock Team Interviews every semester
- Processed H-1B Visa and Citizenship paper work for international faculty
- Scheduled and monitored course enrollment in Management, Marketing and Executive MBA
- Enrolled students in courses
- Maintained department physical and non-physical inventory

**Administrative Services Officer (ASO)/Administrative Associate- College of Nursing and Health Sciences-Dean's office, 2014-2016**

- Managed financial operations for the Dean and College Departments
- Processed purchase requisitions, payment vouchers, travel arrangements and reimbursements
- Obtained all bids and contracts on large purchases
- Created and maintained all blanket Purchase Orders for the College
- Prepared, monitored and managed expenditure budgets for the Dean and College Departments
- Prepared, monitored and managed Texas Higher Education Coordinating Board NSRP reports and expenditures
- Assisted Associate Dean with accreditation reports (AACN, BON and CCNE)
- Conducted monthly reconciliations of accounts for the Dean, and College Departments
- Overseen faculty workload and input release time
- Monitored courses for enrollment each semester

- Created faculty, staff and student worker appointments for the college; requested computer access and keys for new hires; submitted paperwork for terminations
- Served as a timekeeper; input vacation and sick time for all faculty, staff, and student workers
- Trained administrative assistants on policies and procedures
- Assisted Dean on a daily basis to assigned duties, dean's electronic calendar, work orders, schedule events, curriculum scheduling
- Maintained faculty and staff files, processed recruiting and new faculty hire paperwork
- Provided administrative support to 70+ faculty
- Administrated new and renewal clinical contracts for undergraduate nursing and health & kinesiology for student practicums
- Prepared facility reaffirmation letters annually for clinical sites
- Coordinated hiring process for unit's clerical and secretarial applicants; interviewed, made hiring recommendations

### **Administrative Assistant III – College of Nursing and Health Sciences- Graduate Nursing Programs, 2010-2014**

- Assisted in applying for HRSA Advanced Nursing Education Grant from 2010-2013. Created Annual Detailed Budget each year according to HRSA policies and procedures, monitored expenditures; processed purchase requisitions, payment vouchers, monthly reconciliations, appointments, travel reimbursements and assisted with the end-of-year grant reports
- Obtained all bids and contracts on large purchases
- Created and maintained all blanket Purchase Orders for the Department
- Maintained Graduate and Ph.D. program applications and application packets for new students
- Campus coordinator for Nexus Program
- Monitored graduate student files, using Access database
- Advised current students in all graduate programs each semester
- Scheduled courses in MyUTTyler for Fall, Spring and Summer
- Event Coordinator for new student orientation and graduation reception for MSN and Ph.D.
- Assisted Associate Dean with US News Annual Report, AACN Annual Survey Report

### **Administrative Assistant – Campus Computing Services, 2009-2010**

- Direct Report to Manager of Campus Computing Services
- Entered new fiscal year operating budget DEFINE
- Managed the departments account using financial software DEFINE for purchasing, accounts payable/receivables on a departmental level, monthly reconciliations and budget creations
- Obtained all bids and contracts on large purchases for IT equipment for the University
- Created and maintained all blanket Purchase Orders for the Department
- Created faculty, staff and student appointments using HRMS

### **Borg Warner, Longview, Texas 1995-2000. Procurement/Quality**

#### **Control/Administrative Assistant**

- Authorized purchase requisitions and prepared purchase orders
- Worked with vendors on price negotiations and delivery times
- Scheduled contractors, and large equipment for plant machinery incoming
- Monitored and expedited orders
- Verified stock of raw materials; scheduled deliveries
- Verified receipt of items; resolved shipments in error with suppliers
- Authorized payment for purchases and forwarded receiving documentation to accounts payables.
- Maintained MSDS data base

- Assisted maintenance Supervisor with preventive maintenance schedules
- Assisted maintenance department with emergency maintenance of machinery
- ISO 9000 assistant coordinator
- Assisted production line with quality assurance procedures
- Assisted Human Resources with annual OSHA based safety training
- Executive Administrative Assistant to the President at the Longview plant.

## **PEER REVIEWED PRESENTATION**

- Miller, M., Lawrence, H., & Griffin, R. (2019). Surviving the new ATMAE 2019 Accreditation Standards: What is new and how it must be addressed. 2019 Annual ATMAE Conference, Charlotte, N.C.
- Miller, M., Lawrence, H., & Griffin, R. (2020). Insights to a Successful ATMAE Accreditation: Tips to Keeping Standards in Compliance. Nov. 2020 Annual ATMAE & IAJC Joint Conference, Louisville, KY.
- Miller, M., Lawrence, H., & Griffin, R. (2021). Insights to a Successful ATMAE Accreditation: Tips to Keeping Standards in Compliance. Nov. 2021 Annual ATMAE Conference, FL.
- Miller, M., Lawrence, H., & Griffin, R. (2022). Insights to a Successful ATMAE Accreditation: Tips to Keeping Standards in Compliance. Nov. 2022 Annual ATMAE & IAJC Joint Conference, Louisville, KY.
- Griffin, R. (2023). How to start a student organization with Women in Manufacturing (WiM). Oct. 2023 Annual ATMAE Conference, Atlanta, GA.

## **HONORS AND AWARDS**

- Epsilon Pi Tau, International Technology Honor Society, 2019
- Cum Laude Graduate, The University of Texas at Tyler, 2017
- Presidents Honor Roll, The University of Texas at Tyler, Spring 2017 Star Award (Employee of the Month) The University of Texas at Tyler, November 2012

## **VOLUNTEER SERVICE**

- Association of Technology, Management, and Applied Engineering (ATMAE) Conference Committee Member, 2021
- Association of Technology, Management, and Applied Engineering (ATMAE) Conference Committee Member, 2020
- ATMAE Membership Committee Member, 2020
- ATMAE Reviewer – Teaching Innovation & Distance Learning proposals for ATMAE Conference, 2020
- Faculty Member, Department of Technology Advisory Board, 2020- 2022
- ATMAE, Secretary 2016-2019
- ATMAE Conference Committee Member, 2019
- Habitat for Humanity, Smith County– Home Building Project, Re-Habitat Homes -2019 – present
- Tyler Area Ambucs – Ramp Project- 2019- present
- Southside Park Community Build Day, Tyler Area Ambucs, and City of Tyler, 2019 University Career Success Conference, volunteer, 2018-2019
- Adopt-A-Street, City of Tyler, 2016- **Present**
- University Chili Cook-Off, first place student organization division, head cook, 2018

University Staff Advisory Council (USAC), The University of Texas at Tyler, 2018-2021, 2014-2017  
Policies and Procedures Committee Member, The University of Texas at Tyler, 2018-Present  
Graduate Student Member, Department of Technology Advisory Board, 2018-2019  
Staff Development Committee Member, The University of Texas at Tyler, 2016 Homecoming  
Committee Member, The University of Texas at Tyler, 2016

### **ORGANIZATIONS AND ACTIVITIES**

The Association of Technology, Management, and Applied Engineering (ATMAE) 2015- Present  
Society of Manufacturing Engineers (SME), 2016-Present  
Project Management Institute (PMI), 2018-Present American  
Welding Society (AWS), 2018 – Present  
Women in Manufacturing (WiM), 2023-Present

## Mohammed Ali

Longview University Center Program Coordinator and  
Associate Professor of Industrial Technology and Industrial Management  
Department of Technology, The University of Texas at Tyler  
UT Tyler – KC Longview LH 230C  
300 South High Street, Longview, TX 75601, USA  
Phone: (903) 236-2040, Email: mohammedali@uttyler.edu

### OBJECTIVES

---

- Serving the University of Texas at Tyler through teaching, scholarship, service, and professional collegiality;
- Applying my strong teaching, research, and industrial experience to experiential learning;
- Teaching face-to-face and online both undergraduate and graduate levels Industrial Technology and Industrial Management courses;
- Engaging students in applied research in the areas of pulmonary drug delivery, biomedical devices, and additive manufacturing;
- Providing academic and co-curricular advising to the students and contributing to student development, registration, retention, and timely graduation;
- Undertaking scholarship and professional services to ATMAE and EPT;
- Enhancing student recruitment through advisement, 2+2 MOU articulation, community outreach, college fair, and Undergraduate/Graduate science and engineering research fair.
- Serving various committees of the department, college and university.

### EDUCATION

---

**Ph. D.**, University of Arkansas at Little Rock, Little Rock, Arkansas, USA, May 2008.  
Area of Emphasis: **Applied Science – Manufacturing of Drug Delivery Devices**

**M.S.**, Oklahoma City University, Oklahoma City, Oklahoma, USA, Aug. 2001.  
Major: Computer Science  
Supporting Areas of Emphasis: **Database and Artificial Intelligence**

**M.B.A.**, Asian Institute of Technology, Bangkok, Thailand, April 1995.  
Major: **Management of Technology**

**M.E. Coursework**, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh,  
August 1993.  
Major: **Industrial and Production Engineering**

**B.S.**, Chittagong University of Engineering and Technology (*Formerly* Bangladesh Institute of  
Technology), Bangladesh Sept. 1992. Summa Cum Laude, Class Rank: 2<sup>nd</sup> out of 60.  
Major: **Mechanical Engineering**

### TEACHING & PROFESSIONAL POSITIONS

---

1. **Associate Professor** of Industrial Technology and Industrial Management and Program Coordinator, Longview University Center, The University of Texas at Tyler, Texas, USA. (Sept 2016 - ) w/tenure.

2. **Associate Professor** of Industrial Systems and Technology and Program Coordinator of Manufacturing and Design, Jackson State University, Jackson, Mississippi, USA. (Aug 2013 -16) w/tenure.
3. **Assistant Professor**, Department of Industrial Technology, Jackson State University, Jackson, Mississippi, USA. (August 2007 – July 2013).  
Received **ATMAE Faculty Excellence Award 2011** for Teaching, Research, and Service.  
Received departmental **Outstanding Faculty for Research Award 2012**.
4. **Faculty Fellow**, Summer Faculty Research Program, United States Navy and Air Force, Naval Surface Warfare Division, Dahlgren, Virginia, and Tyndall Air Force Base, Florida. USA. (May-Aug, 2014, 2013, 2011, 2010).
5. **Research Fellow**, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina, USA. (June 1, 2007 - July 30, 2007).
6. **Teaching Assistant**, Departments of Engineering Technology and Systems Engineering, University of Arkansas at Little Rock, Little Rock, Arkansas, USA. (January 1, 2005 - May 30, 2007).
7. **Adjunct Professor**, University of Arkansas at Little Rock, Little Rock, Arkansas, USA. (August 1, 2004 - December 30, 2004).
8. **Assistant Professor**, University of Information Technology and Sciences, Dhaka, Bangladesh. (January 1, 2004 - July 30, 2004).
9. **Lab Administrator**, Oklahoma City University, Oklahoma City, Oklahoma, USA. (January 1, 2000 - August 30, 2001).
10. **Management Consultant**, Institute of Water Modeling, Dhaka, Bangladesh. (December 1, 1997 - August 15, 1999).
11. **Technical Advisor**, Material and Metallurgy Engineering Company, Bangkok, Thailand. (April 1, 1995 - November 30, 1997).

## TEACHING EXPERIENCE AND INTERESTS

<ul style="list-style-type: none"> <li>• Computer Integrated Manufacturing (CIM)</li> <li>• Programmable Logic Controller (PLC)</li> <li>• Manufacturing Processes</li> <li>• Lean Production</li> <li>• Polymer Processing</li> <li>• Advanced Manufacturing Processes</li> <li>• Total Quality Management</li> <li>• Plant Layout and Facilities Planning</li> <li>• Research Techniques in HRD/Technology</li> <li>• Research Trends in Industry</li> <li>• Value Stream Management</li> <li>• Advanced Production Management</li> <li>• Logistics and Supply Chain Management</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced Supply Chain Management</li> <li>• Materials Testing and Machine Design</li> <li>• Production and Inventory Management</li> <li>• Statics and Materials Mechanics</li> <li>• Hydraulics and Fluid Power, Hydraulic and Pneumatic Module Lab</li> <li>• Computer Aided Drafting (AutoCAD, Inventor)</li> <li>• Advanced Computer Aided Drafting (SolidWorks, Pro-E)</li> <li>• Motion and Time Study</li> <li>• Licensing and Certification - ATMAE</li> <li>• Introduction to Aerosol Science and Technology</li> </ul>
--	---

## TEACHING EVALUATION BY STUDENTS

---

The average score of teaching evaluation was 4.75. Students were asked to evaluate the teaching effectiveness of various classes taught on a 1 to 5-point scale. 1 represents the lowest and most negative impression, which is unsatisfactory, 2 for some extent satisfactory, 3 for very satisfactory, 4 for exceeding expectations, and 5 represents the highest and most positive impression. The following table summarizes the overall ratings for respective courses.

Course Number and Title	Overall Rating (1 to 5 point scale)
Advanced Manufacturing Processes	4.90
Lean Production	4.75
Plant Layout and Facilities Planning	4.80
Polymer Processes	4.71
Research Trends in Industry	4.60
Total Quality Management (UG/Grad)	4.75

## LEAD ORGANIZER OF MIDDLE AND HIGH SCHOOL SUMMER CAMPS

---

**Lead Organizer and Instructor, 3D Printing and Robotics** summer camp every year since 2018. Twenty attendees ranged from 8<sup>th</sup> to 11<sup>th</sup> grade. Activities include a) industrial plant tour, b) designing 3D models of machine parts and miniature rockets (~300 ft. flight) using CAD and manufacture of these models using additive 3D printing technology and laser cutter, and c) programming robotic ssssssssss at a virtual factory.

## SELECTED AWARDS & HONORS

---

1. **Outstanding Faculty Research Award 2019** awarded by the Soules College of Business, The University of Texas at Tyler.
2. **ACA Scholarship Award 2018**, awarded by the Epsilon Pi Tau, International Honor Society for Professions in Technology.
3. **Best Faculty Award 2012 for Research** awarded by College of Science, Engineering and Technology, Jackson State University
4. **Faculty Excellence Award 2011, selected from 97 ATMAE-accredited college and university program faculties in the nation**, awarded by the Association of Technology, Management, and Applied Engineering (ATMAE) for demonstrated excellence in teaching, research, and service in an academic career.
5. **US Navy Summer Faculty Fellowship Award**; Naval Surface Warfare Center, Virginia. (2013-15).
6. **US Air Force Summer Faculty Fellowship Award**; Tyndall Air Force Base, FL. (2010, 2011).
7. **ASME Early Career Technical Conference Presentation Award** (2009, 2010).
8. **Biltmore Who's Who Honored** in United States of America (July 2009).
9. **Research Achievement Award**, American Association of Bangladesh Pharmaceutical Scientists. (November 15, 2008).
10. **Graduate Student Research Forum Award**, University of Arkansas at Little Rock. (2006, 2007).
11. **NIEHS Fellowship Award** from the National Institute of Health. (June 2007).
12. **Best Student Research Award**, Arkansas Society for Public Health Education. (March 2007).

13. **Faculty Inductee**, Alpha Epsilon Lambda, Engineering Professional Honor Society. (October 2006).
14. **Winner of United States National Collegiate Award**, US Achievement Academy. (Sep 2001).
15. **Graduate Inductee**, Upsilon Pi Epsilon, Computing Professional Honor Society. (May 2001).

## LICENSURES & CERTIFICATIONS

---

- **Certified in Effective College Instruction** since 2022, Certified by the Association of College & University Educators (ACUE) and the American Council on Education (ACE).
- **Certified Senior Manufacturing Specialist (CSMS)**, since 2011, Certified by the Association of Technology, Management and Applied Engineering (ATMAE) for the USA.
- **Certified Educational Robot Training Instructor** by FANUC America Corp. (June 2017)
- **Engineer Intern**, Texas Board of Professional Engineers, Louisiana Professional Engineering, and Land Surveying Board, since 2003.

## PROFESSIONAL MEMBERSHIP & LEADERSHIP

---

- **Professional Member**, Association of Technology, Management and Applied Engineering (ATMAE).
- **Chapter Trustee**, Delta Gamma Chapter, Epsilon Pi Tau, The UT Tyler, 2018 – To date
- **Professional Member**, Intl. Society of Toxicology (SOT), and Texas Lone Star SOT. 2021- To date
- **Professional Member**, American Society of Mechanical Engineers (ASME), 2010-2016.
- **Member**, American Association for Aerosol Research, 2006-2009.
- **Member**, American Association of Pharmaceutical Scientists, 2006-2008.
- **Member**, Mississippi Academy of Science, since 2008.
- **Life Member**, Alpha Epsilon Lambda.
- **Life member**, Upsilon Pi Epsilon.

## HOLDING OFFICE PROFESSIONAL ASSOCIATIONS

---

1. **President**, ATMAE Micro and Nanotechnology Division (2019 - 2022).
2. **Program Evaluator**, ATMAE Accreditation Visiting Team (every year since 2016).
3. **Exam Commission Member**, ATMAE Certified Manufacturing Specialist (every year since 2010).
4. **Advisory Board Member**, Kilgore College Maintenance and Corrosion Technology Programs, Texas 2017- to date
5. **Advisory Council Member**, East Texas Advanced Manufacturing Academy, Longview, TX. 201- To date
6. **Chair**, Executive Committee of the ASME Mississippi Chapter (2013-2016).
7. **Vice Chair**, Executive Committee of the ASME Mississippi Chapter (2010-2012).
8. **College and Student Relations**, Officer of the ASME Mississippi Chapter (2011-2012).
9. **Faculty Advisor & University Liaison**, Society of Manufacturing Engineers MS Chap. (2007-2016)

## JOURNAL EDITORIAL BOARD MEMBER

---

1. **Editorial Board Member**, Intl Journal of Management and Engineering Integration. (since 2008).
2. **Associate Editor**, ASME Early Career Technical Conferences and Journals. (since 2012).

3. **Editorial Reviewer**, Journal of Manufacturing and Design Science. (since 2014).
4. **Editorial Reviewer**, Advances in Mechanical Engineering. (since 2013).
5. **Editorial Reviewer**, ATMAE J. of Technology, Management, and Applied Engineering (since 2013).
6. **Promotion & Tenure Dossier Reviewer**, 2013, Southern Illinois University Carbondale, IL, USA.
7. **Editorial Reviewer**, JSU Journal of The Researcher, Jackson, Mississippi. (2009-2016).
8. **Invited Reviewer**, Journal of Respiratory Care. (since 2010)
9. **Invited Reviewer**, Aerosol Science and Technology Journal. (since 2011).
10. **Invited Reviewer**, AAPS Journal of Pharmaceutical Science and Technology. (since 2009).

## **GRANTS & SCHOLARSHIPS REVIEW PANELIST**

---

1. Panelist, NSF Graduate Research Fellowship Program (GRFP), (every year since 2013).
2. Panelist, NIH Grant Proposals at the Center for Scientific Review (CSR), National Institute of Health (since Aug 2012).
3. Panelist, American Society for Engineering Education and the Dept of Defense SMART Scholarship Review Panel, (since 2011).

## **PH.D. DISSERTATION EXAMINER AND M.S. RESEARCH**

---

1. Examined Doctoral Dissertation (February 2014), "A novel framework of cloud-based e-learning architecture for higher education." Ph.D. Candidate: M. A. H. Masud, Charles Stuart University, NSW, Australia.
2. Examined Doctoral Dissertation (August 2012), "Effect of Wire EDM parameters on surface integrity in the machining of aluminum alloy", Ph.D. Candidate: P. Srinivasa Rao, Department of Mechanical Engineering, Andhra University College of Engineering, India.
3. Supervised Masters' Research (January 1, 2010 - August 31, 2010), "Biosimulation of aerosol deposition in the human lung." MS Student: Vijay Maddipatla.

## **SUPERVISED GRADUATE AND UNDERGRADUATE RESEARCH**

---

1. Supervised 2 graduate student research on Toyota grant-funded Logistics and Intelligent Transportation Systems, "Multi-Criteria Route Selection Model Utilizing Linear Programming to Optimize Incident". (May 2015 – August 2016). PhD Students: Kendrick Walker and Di Wu.
2. Supervised Research, REO Grant Funded by MS-INBRE, "Computational simulation of Micro- and Nano-Particle Deposition inside Mouse Lung Model". (May 2016 – Aug 2016). REO Student: Breaunna Lewis.
3. Supervised Research, REO Grant Funded by MS-INBRE, "Computational Simulation of Micro- and Nano-Particle Deposition inside Human Lung Model." (May 2015 – Aug 2015). REO Student: Anupria Davenport.
4. Supervised Research, REO Grant Funded by MS-INBRE, "Measurement of Particle Size and Charge Distributions of Asthma Drug Dry Powder Inhaler Aerosols." (May 2013 – Aug 2013). REO Student: Marina Ali.
5. Supervised Research, Research Grant Funded by MS-INBRE, "Electromechanical Phenomena of Drug Delivery Device Generated Submicron Particles." (August 2012 – May 2013). Undergraduate Research Assistant: Beruh Dejene and Ieshia Hubbard.

6. Supervised Research, REO Grant Funded by MS-INBRE, "Characterizing principles of laboratory graded aerosols generated from pressurized metered-dose aerosol generators." (June 1, 2009 - August 31, 2009). REO Student: Courtney L. Johnson.
7. Supervised Research, REO Grant Funded by MS-INBRE, "Respiratory aerosol characterization comparisons between the electronic single particle aerodynamics relaxation time analyzer and TSI aerodynamic particle sizer spectrometer." (June 1, 2008 - August 31, 2008). REO Student: Allen Sinegal.

## **ADVISORY COMMITTEE MEMBER OF INTERNATIONAL CONFERENCE**

---

1. **Member, Advisory Committee**, International Conference on Mechanical Engineering and Renewable Energy, Chittagong University of Engineering and Technology, Chittagong, Bangladesh. Every year since 2011.

## **JUDGING AND CHAIRING NATIONAL CONFERENCE SESSIONS**

---

1. **Judge**, The UT Tyler Student Research Showcase, Honors Program, and the Center for Teaching and Learning (every year since 2017).
2. **Judge**, Students Robotics Competition organized by the Manufacturing Division of ATMAE at the Annual Conference since 2013.
3. **Session Chair**, American Society of Mechanical Engineers Early Career Technical Conference, University of Alabama, Birmingham, November 3, 2013.
4. **Session Chair**, American Society of Mechanical Engineers Early Career Technical Conference, University of Alabama, Tuscaloosa, October 2, 2009.
5. **Session Chair**, International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 9, 2009.

## **ORGANIZER OF REGIONAL WORKSHOP**

---

1. **Organizer of Regional Workshop (thrice)**, American Society of Mechanical Engineers (ASME) District-F annual workshop was organized during the Engineers Week celebration at JSU campus on February 17-22, 2014; February 16-21, 2012 and November 8, 2012 for the first time at JSU.

## **NATIONAL & INTERNATIONAL CITATIONS OF SCHOLARLY WORK**

---

1. Google Scholar - total 208 as of 12/24/2024
2. Scholars Work at UT Tyler – 2015 downloads of 68 papers from 34 countries since I first registered in the fall of 2018.

**Please see all at a glance at the end of this CV.**

## **SCIENTIFIC PUBLICATIONS**

---

The entire Research Profile is available at <https://works.bepress.com/mohammedali/>.

### **Peer Reviewed and Refereed Journals (Selected)**

---

1. **Ali, M.** (2024). A novel technique of investigating Big Data to determine academic performance in the college. *Journal of College Student Development (under peer review)*.
2. **Ali, M.** (2024). Big data-driven innovations thrive in the supply chain. *Journal of Technology, Management, and Applied Engineering* (final revision submitted for spring 2024 issue)

3. **Ali, M.** (2023). Lean Six Sigma body of knowledge for healthcare industry administrators: implementation of lessons learned in applied engineering. *Journal of Technology Studies*, 48(1), 18-32. DOI:10.21061/jts.410. [https://scholarworks.utt Tyler.edu/tech\\_fac/11](https://scholarworks.utt Tyler.edu/tech_fac/11)
4. **Ali, M.** (2023). Predictability augmentation by in-silico study to in-vivo and in-vitro results of lung doses of airborne fine and ultrafine particles inhaled by humans at industrial workplaces. *Nature Environment and Pollution Technology*, 22(4), 1911-1920. DOI: 10.46488/NEPT.2023.v22i04.017 [https://neptjournal.com/upload-images/\(17\)D-1493.pdf](https://neptjournal.com/upload-images/(17)D-1493.pdf)
5. **Ali, M.** (2022). Multiple path particle dosimetry modeling employability to complement in-vitro ultrafine particle toxicity study. *Current Trends in Engineering Science*, 2(2). DOI:10.54026/CTES/1017. [https://scholarworks.utt Tyler.edu/tech\\_fac/10/](https://scholarworks.utt Tyler.edu/tech_fac/10/)
6. **Ali, M.** (2021). Computational fluid dynamics simulation of inhaled submicron bioaerosol particles flow and deposition in the human lung. *International Journal of Modern Engineering*, 22(1), 5-11. [https://scholarworks.utt Tyler.edu/tech\\_fac/7/](https://scholarworks.utt Tyler.edu/tech_fac/7/)  
[https://ijme.us/issues/fall2021/X\\_IJME%20fall%202021%20v22%20n1.pdf#page=7](https://ijme.us/issues/fall2021/X_IJME%20fall%202021%20v22%20n1.pdf#page=7)
7. **Ali, M.** (2020). Novel technique to analyze the effects of cognitive and non-cognitive predictors on students course withdrawal in college. *Technology Interface International Journal*, 20(2), 36-41. [https://scholarworks.utt Tyler.edu/tech\\_fac/5/](https://scholarworks.utt Tyler.edu/tech_fac/5/)
8. **Ali, M.** (2019). Mechanistic implications of mouthpiece design geometry on successful generation and delivery of aerosolized submicron to nano-sized particles from respiratory drug delivery device. *International Journal of Modern Engineering*, 20(1), 12-19. [https://scholarworks.utt Tyler.edu/tech\\_fac/8/](https://scholarworks.utt Tyler.edu/tech_fac/8/)
9. **Ali, M.** (2019). Self-regulated learning pedagogy for teaching applied engineering and technology class. *Journal of Technology, Management and Applied Engineering*, 35(1), 1-11. [https://scholarworks.utt Tyler.edu/tech\\_fac/1/](https://scholarworks.utt Tyler.edu/tech_fac/1/)  
<https://www.iastatedigitalpress.com/jtmae/issue/1084/info/>
10. **Ali, M.**, Gutting, B.W., and van-Hoek, M.L. (2017). Multiple path particle dosimetry for prediction of mouse lung deposition of nanoaerosol particles. *International Journal of Advanced Research in Engineering and Technology*, 8(4), 10-20. [https://scholarworks.utt Tyler.edu/tech\\_fac/3/](https://scholarworks.utt Tyler.edu/tech_fac/3/)  
[https://iaeme.com/Home/article\\_id/IJARET\\_08\\_04\\_002](https://iaeme.com/Home/article_id/IJARET_08_04_002)
11. **Ali, M.** (2016). Antimicrobial agent treated filtering face-piece respirators for inactivation of airborne viruses during environmental catastrophe. *International Journal of Innovations in Biological and Chemical Sciences*, 9(1), 39-46. [https://scholarworks.utt Tyler.edu/cqi/preview.cqi?article=1004&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cqi/preview.cqi?article=1004&context=tech_fac)  
<https://whitesscience.com/product-category/ijibcs/volume-9-ijibcs>
12. **Ali, M.** (2015). Effects of three dry powder inhalers on deposition of aerosolized medicine in the human oral-pharyngeal-laryngeal regions. *Journal of Drug Design and Research*, 2(1), 1009-1015. [https://scholarworks.utt Tyler.edu/tech\\_fac/2/](https://scholarworks.utt Tyler.edu/tech_fac/2/) DOI: <https://doi.org/10.47739/2379-089X/1009>
13. **Ali, M.** (2014). Engineered aerosol medicine and drug delivery methods for optimal respiratory therapy. *Journal of Respiratory Care*, 59(10), 1608-1610. DOI: <https://doi.org/10.47739/2379-089X/1009>.  
<http://rc.rcjournal.com/content/respcare/59/10/1608.full.pdf>  
[https://scholarworks.utt Tyler.edu/tech\\_fac/13](https://scholarworks.utt Tyler.edu/tech_fac/13)
14. **Ali, M.**, and Ibrahim, E.A. (2013). Determination of particle aerodynamic size distributions and viability of aerosolized H1N1 virus. *ASME Early Career Technical Journal*, 12(1), 1-7. [https://scholarworks.utt Tyler.edu/cqi/preview.cqi?article=1006&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cqi/preview.cqi?article=1006&context=tech_fac)
15. Ibrahim, E.A. and **Ali, M.** (2012). Comparative effects of forces acting on swirling annular liquid sheets. *ASME Early Career Technical Journal*, 11(1), 228-235. [https://scholarworks.utt Tyler.edu/cqi/preview.cqi?article=1007&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cqi/preview.cqi?article=1007&context=tech_fac)
16. **Ali, M.**, and Ibrahim, E.A. In-vitro investigation of the aerodynamic performance of Collison nebulizer in generating biological aerosols. *Journal of Aerodynamics* (under peer review)
17. **Ali, M.**, (2012). Novel method for inhalation control of workplace anthropogenic pollutant particles. *Journal of Particles and Particles Systems Characterization*, 29(4), 311-318.

- <https://doi.org/10.1002/ppsc.200900089>.  
[https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1008&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1008&context=tech_fac)
18. Ali, M., and Ibrahim, E.A. (2011). Computational investigation of particle settling effects on inhaled submicron bioaerosol deposition in the human lung. *ASME Early Career Technical Journal*, 10(1), 1-5. [https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1009&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1009&context=tech_fac)
  19. Ali, M. (2011). Mechanical Human Lung for Inhalation Toxicity Research. Peer Reviewed Conference Proceedings of the International Conference on Mechanical Engineering and Renewable Energy (ISSN Number: 2221-2213). [https://icmerecoet.org/?page\\_id=131](https://icmerecoet.org/?page_id=131)
  20. Ali, M., Mazumder, M. K., Martonen, T. B. (2010). Measurements of electrodynamic effects on the deposition of MDI and DPI aerosols in a replica cast of human oral-pharyngeal-laryngeal airways. *Journal of Aerosol Medicine and Pulmonary Drug Delivery*, 22(1), 35-44. <https://doi.org/10.1089/jamp.2007.0637>  
[https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1014&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1014&context=tech_fac)  
<https://www.researchgate.net/publication/23266686>
  21. Ali, M. (2010). In-silico simulation of electrostatic charge effects on inhaled aerosol particle deposition in the human lung. *ASME Early Career Technical Journal*, 9(1), 75-79. [https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1010&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1010&context=tech_fac)
  22. Ali, M. (2010). A novel method of characterizing medicinal drug aerosols generated from pulmonary drug delivery devices. *PDA Journal of Pharmaceutical Science and Technology*, 64, 364-372. <https://pubmed.ncbi.nlm.nih.gov/21502037/>  
[https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1011&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1011&context=tech_fac)
  23. Ali, M., and Johnson, C. L. (2010). Characterizing principles of laboratory-graded aerosols generated from pressurized metered dose aerosol generators. *Journal of the Mississippi Academy of Sciences*, 55 (1), 125-126. <https://msacad.org/journal/jan10journal/jan10.pdf>
  24. Ali, M. (2009). Operating performance comparisons between laser doppler velocimetry and time of flight techniques." *Journal of Management and Engineering Integration*, 2(2), 1-13. [https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1012&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1012&context=tech_fac)  
[https://www.journalmei.com/files/ugd/f76c8e\\_435c560adc77488db883346f24f49533.pdf](https://www.journalmei.com/files/ugd/f76c8e_435c560adc77488db883346f24f49533.pdf)
  25. Ali, M. (2009). Mechanical tracheobronchial model for human lung inhalation study. *ASME Early Career Technical Journal*, 8(1), 133-139. [https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1013&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1013&context=tech_fac)
  26. Ali, M., and Sinegal, A. (2009). Respiratory aerosol characterization comparisons between the electronic single particle aerodynamics relaxation time analyzer and TSI aerodynamic particle sizer spectrometer. *Journal of Mississippi Academy of Science*, 54(1), 93-94. <https://msacad.org/journal/jan09journal/jan09.pdf>
  27. Ali, M., Reddy, R. N., Mazumder, M. K. (2008). Electrostatic charging effect on workplace aerosol particle deposition in a hollow throat cast. *Journal of Electrostatics*, 66(7-8), 401-406. <https://doi.org/10.1016/j.elstat.2008.02.005>  
[https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1015&context=tech\\_fac](https://scholarworks.utt Tyler.edu/cgi/preview.cgi?article=1015&context=tech_fac)
  28. Ali, M., Ejiwale, J. A., Mazumder, M. K. (2008). Investigation of the electromechanical properties of asthma medicinal drugs using laser Doppler velocimetry. *Journal of Mississippi Academy of Science*, 53(1), 103-104. <https://msacad.org/journal/jan08journal/jan08.pdf>
  29. Ali, M., Reddy, R. N., Mazumder, M. K. (2008). Simultaneous characterization of aerodynamic size and electrostatic charge distributions of inhaled dry powder inhaler aerosols. *Journal of Current Respiratory Medicine Review*, 4(1), 2-5. <http://dx.doi.org/10.2174/157339808783497819>.  
<https://www.eurekaselect.com/article/27178>. [https://scholarworks.utt Tyler.edu/cgi/ir\\_submit.cgi](https://scholarworks.utt Tyler.edu/cgi/ir_submit.cgi)
  30. Ali, M., Reddy, R. N., Mazumder, M. K., Milanova, M. G., Zhang, J., Biris, A. S. (2007). Electrostatic charge polarity effect in inhaled aerosol deposition in the glass bead tracheobronchial airway model. *Journal of Arkansas Academy of Science*, 61(1), 20-26. <https://scholarworks.uark.edu/jaas>.  
[https://scholarworks.utt Tyler.edu/tech\\_fac/4/](https://scholarworks.utt Tyler.edu/tech_fac/4/)

31. **Ali, M.**, Wu, N., Good, M. L. (2006). Analysis of the effects of cognitive and non-cognitive predictors on college performance: an innovative application of decision tree and association rules. *The Journal of Computing Sciences in Colleges*, 21(5), 43-44.
32. **Ali, M.**, Speece, M. W. (1997). Competitiveness of Bangladeshi ready-made garment. *Journal of Euro-Asian Management*, 3(2), 1-30. <https://ssrn.com/abstract=2576101>.

## Book Chapters

---

1. **Ali, M.** (2020). Big Data Driven Manufacturing and Industry 4.0. In *Big Data in Supply Chain Management*, edited by Arun Nambiar, pp. 1-17, IGI Global Publishing, Hershey, Pennsylvania, USA.
2. **Ali, M.** (2010). Pulmonary Drug Delivery. In *Handbook of Non-Invasive Drug Delivery Systems*, edited by Vitthal Kulkarni, pp. 209-246, Elsevier Inc., Amsterdam, The Netherlands. [https://scholarworks.uttyler.edu/tech\\_fac/12](https://scholarworks.uttyler.edu/tech_fac/12)  
ISBN: 9780815520252. <https://doi.org/10.1016/B978-0-8155-2025-2.10009-5>

## Presentations and Peer-reviewed Conference Proceedings (Selected)

---

1. **Ali, M.** ATMAE Annual Conference 2024, "Electrostatics and Van-der Waals forces effects on micro and nano pharmaceutical powders in drug manufacturing." Las Vegas, Nevada. (Oct 28-31, 2024).
2. **Ali, M.** ATMAE Annual Conference 2023, "Electrodynamic processing of micro and nano pharmaceutical powders enhances blended ordered mixture." Atlanta, Georgia. (Oct 25-27, 2023).
3. **Ali, M.** and Miller, M. ATMAE Annual Conference 2022, "Electromechanical effects on micro and nano particles generated from drug delivery devices and their implications in flow and deposition efficiency." Louisville, Kentucky. (Nov 9-11, 2022). [http://scholarworks.uttyler.edu/tech\\_fac/9](http://scholarworks.uttyler.edu/tech_fac/9)
4. **Ali, M.** and Johnson, NM. SOT: Micro & Nanoparticle Safety Annual Conference 2022, "In-silico simulation of ultrafine and nanoparticles toxicity burdens." San Diego, California. (March 27-31, 2022).
5. **Ali, M.** ATMAE Annual Conference 2021, "Computational simulation of the lung doses of air-borne fine and ultrafine particles inhaled by humans at industrial workplaces." Orlando, Florida. (Nov 3-5, 2021).
6. **Ali, M.** "Lean six sigma applied engineering curriculum for healthcare administration majors." *Proceedings of ASEE Annual Conference and Exposition*, Long Beach, California. (July 26-28, 2021).
7. **Ali, M.** ATMAE Annual Conference 2020, "Micro and nanoparticle spectrometry: a comparison between laser doppler velocimetry and time of flight techniques." Louisville, Kentucky. (Oct 7-9, 2020).
8. Miller, M. and **Ali, M.** ATMAE Annual Conference 2020, "Insights to a successful ATMAE accreditation: tips to keeping standards in compliance." Louisville, Kentucky. (Oct 7-9, 2020).
9. **Ali, M.**, Miller, M., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2019, "Aerodynamic effects on nano and sub-micron respiratory drug particles flow and deposition efficiency." Charlotte, North Carolina. (Nov 6-8, 2019).
10. **Ali, M.** 14<sup>th</sup> International Manufacturing Science and Engineering Conference 2019, "Manufacturing design effects on aerosolized particles from respiratory drug delivery devices." Pen State Erie, Pennsylvania. (June 10-14, 2019). [https://scholarworks.uttyler.edu/fac\\_posters/18](https://scholarworks.uttyler.edu/fac_posters/18)
11. **Ali, M.** East Texas Research Conference 2019, "Manufacturing process implications on aerosolized submicron to nano-sized particles from respiratory drug delivery devices." The UT Tyler, Tyler, Texas. (May 9-10, 2019).
12. **Ali, M.**, Miller, M., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2018, "Mechanistic implications of mouthpiece design geometry on successful generation and delivery of aerosolized submicron to nano-sized particles from respiratory drug delivery device." Kansas City, Missouri. (Nov. 7-9, 2018).
13. Miller, M., **Ali, M.**, and Lawrence, H. ATMAE Annual Conference 2018, "The new ATMAE learning management system: streamlining certification and training." Kansas City, Missouri. (Nov. 7-9, 2018).

14. **Ali, M.**, Donaldson, S., Miller, M., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2017, "Automatic identification data capture towards robust material handling: a key learning pedagogy for warehousing class." Cincinnati, Ohio. (Nov 1-3, 2017).
15. Miller, M., **Ali, M.** Donaldson, S., Lawrence, H., and Fazarro, D. ATMAE Annual Conference 2017, "Does offering certifications assist in the recruitment of undergraduate majors?" Cincinnati, Ohio. (Nov 1-3, 2017).
16. **Ali, M.** ATMAE Annual Conference 2016, "Self-regulated learning pedagogy for teaching applied engineering and technology class." Orlando, Florida. (November 2-5, 2016).
17. Davenport, A., **Ali, M.** Mississippi Academy of Science 80<sup>th</sup> Annual Conference, "Computational simulation of micro- and nano-particle deposition inside human lung model." Hattiesburg, Mississippi. (February 17-19, 2016).
18. **Ali, M.**, Gutting B.W., and van-Hoek, M.L. 31st Southern Biomedical Engineering Conference, "Multiple path particle dosimetry simulation of respiratory deposition of nanoaerosol in the mouse lung." New Orleans, Louisiana. (April 30–May 3, 2015).
19. **Ali, M.** ATMAE Annual Conference 2014, "A Novel Method of Determining the Manufacturing and Design Effects on Aerodynamic and Electromechanical Performance of Aerosol Particles Generated from Respiratory Drug Delivery Devices," Association of Technology, Management and Applied Engineering (ATMAE), St. Louis, MO. (November 21-23, 2014).
20. Ali, M., **Ali, M.** Mississippi Academy of Science 78<sup>th</sup> Annual Conference, "Measurement of particle size and charge distributions of asthma drug particles generated by dry powder inhalers." Hattiesburg, Mississippi. (March 6-7, 2014).
21. **Ali, M.**, Ibrahim, E.A. ASME Early Career Technical Conference 2013, "Determination of particle aerodynamic size distributions and viability of aerosolized H1N1 virus." American Society of Mechanical Engineers, University of Alabama, Birmingham, Alabama. (November 2-3, 2013).
22. **Ali, M.**, Dejene, B. The 2013 MS-INBRE Annual Research Symposium, "Mechanistic Phenomena of Inhaled Submicron Bioaerosol Particles Flow and Deposition in the Human Lung." University of Southern Mississippi, Hattiesburg, Mississippi. (February 23, 2013).
23. Ali, M., Dejene, B., Hubbard, I., **Ali, M.** Mississippi Academy of Science 77<sup>th</sup> Annual Conference, "Electrochemical Determination of Aerodynamic Performance of Asthma Drug Particles Generated by Metered Dose Inhalers." Hattiesburg, Mississippi. (February 21-22, 2013).
24. **Ali, M.**, Ibrahim, E.A. ASME Early Career Technical Conference 2012, "Comparative effects of forces acting on swirling annular liquid sheets." American Society of Mechanical Engineers, Georgia Institute of Technology, Atlanta, Georgia. (November 2 - 3, 2012).
25. **Ali, M.** NISBRE Conference 2012, "In-silico investigation of particle inertial impaction effects on inhaled submicron bioaerosol deposition in the human lung." National IDeA Symposium of Biomedical Research Excellence (NISBRE), Washington, DC. (June 25 - 27, 2012).
26. **Ali, M.** ICMERE Annual Conference 2011, "Mechanical Human Lung for Inhalation Toxicity Research," International Conference on Mechanical Engineering and Renewable Energy (ICMERE), Chittagong, Bangladesh. (December 24-26, 2011).
27. **Ali, M.**, Harnish, D. A., Heimbuch, B. K. et al. AAAR Annual Conference 2011, Accelerated attenuation of viability of bioaerosols by acquired oxidants. American Association of Aerosol Research (AAAR), Orlando, FL. (October 4 - 7, 2011).
28. **Ali, M.** ATMAE Annual Conference 2011, "A novel use of data mining on college students' academic performance," Association of Technology, Management and Applied Engineering (ATMAE), Cleveland, OH. (November 9 - 12, 2011).
29. **Ali, M.**, Ibrahim, E.A. ASME Early Career Technical Conference 2011, "Computational investigation of particle settling effects on inhaled submicron bioaerosol deposition in the human lung." American Society of Mechanical Engineers, Georgia Institute of Technology, Atlanta, Georgia. (Nov. 4-5, 2011).

30. **Ali, M.** ASME Early Career Technical Conference 2010, "In-silico simulation of electrostatic charge effects on inhaled aerosol particle deposition in the human lung." American Society of Mechanical Engineers, Georgia Institute of Technology, Atlanta, Georgia. (October 1 - 2, 2010).
31. Johnson, C., and **Ali, M.** American Association of Pharmaceutical Scientists Annual Conference and Exposition 2010, "Characterization principles aerosol medicine generated from asthma drug inhalers," American Association of Pharmaceutical Scientists, New Orleans, Louisiana. (November 14-18, 2010).
32. **Ali, M.** 2010 ATMAE Annual Conference, "A novel use of data mining on college students' withdrawals from registered courses," Association of Technology, Management and Applied Engineering (ATMAE), Panama City Beach, FL. (October 26 - 30, 2010).
33. **Ali, M.** American Association of Aerosol Research Annual Conference 2009, "Mouth-Throat Losses for Sitting versus Lying Administration of Respiratory Drug Aerosols," American Association of Aerosol Research, Minneapolis, Minnesota. (October 26, 2009).
34. **Ali, M.** ASME Early Career Technical Conference 2009, "Mechanical Tracheobronchial Model for Human Lung Inhalation Study," American Society of Mechanical Engineers, Tuscaloosa, Alabama. (October 2, 2009).
35. **Ali, M.** 15th International Conference on Industry, Engineering, and Management Systems, "A Novel Method of Characterizing Medicinal Drug Aerosols Generated from Pulmonary Drug Delivery Devices," Association of Industry, Engineering, and Management Systems, Cocoa Beach, Florida. (March 9, 2009).
36. **Ali, M.** 2008 National Association of Industrial Technology Annual Conference, "Design effects of asthma drug delivery devices on the emitted aerosol losses in the human mouth-throat region," Association of Technology, Management and Applied Engineering (Former NAIT), Nashville, TN. (November 18, 2008).
37. **Ali, M.** American Association of Pharmaceutical Scientists Annual Conference and Exposition 2008, "Electrical Polarity Effects on Liposome Endocytosis by Alveolar Epithelial Cells," American Association of Pharmaceutical Scientists, Atlanta, Georgia. (November 15, 2008).
38. **Ali, M.** 5th International Symposium on Recent Advances in Environmental Health., "A novel method to control workplace anthropogenic pollutant particles." NIH RCMI - Center for Environmental Health, JSU, MS, Jackson, Mississippi. (September 14, 2008).
39. **Ali, M.,** Reddy, R. N., Mazumder, M. K., American Association of Aerosol Research 2007 Annual Conference, "Electromechanical properties analysis of four pressurized metered dose inhalers by a single particle aerodynamic relaxation time analyzer," American Association of Aerosol Research, Reno, Nevada. (November 11, 2007).
40. **Ali, M.,** Reddy, R. N., Mazumder, M. K., American Association of Pharmaceutical Scientists Annual Conference and Exposition 2007, "Real time analysis of charge and aerodynamic size distribution of dry powder inhaler aerosol particles," American Association of Pharmaceutical Scientists, San Diego, California. (September 24, 2007).
41. **Ali, M.,** Reddy, R. N., Mazumder, M. K., et al., Seventh International Conference on Mars, "Computational model for respiratory drug delivery in the Martian atmospheric environment," NASA Jet Propulsion Laboratory, CalTech, Pasadena, California. (July 9, 2007).
42. **Ali, M.,** Reddy, R. N., Mazumder, M. K., 2007 Electrostatic Society of America Annual Conference, "Electrostatic charge effects on dry powder inhaler aerosols drug delivery," Purdue University, West Lafayette, Indiana. (June 12, 2007).
43. **Ali, M.,** Reddy, R. N., Mazumder, M. K., et al., 91st Annual Conference of the Arkansas Academy of Science, "Glass bead tracheobronchial airways model for in-vitro studies of respiratory drug delivery," Arkansas Academy of Science, Russellville, Arkansas. (April 13, 2007).
44. **Ali, M.,** Mazumder, M. K., 2006 American Association of Pharmaceutical Scientists Annual Conference and Exposition, "Electrostatic effects on the transport and dispersion of pharmaceutical powders," American Association of Pharmaceutical Scientists, San Antonio, Texas. (October 6, 2006).
45. Berlinski, A., **Ali, M.,** Mazumder, M. K., International Conference of the American Thoracic Society-2006, "Aerosol characterization of nebulized Formoterol," American Thoracic Society, San Diego, California. (May 5, 2006).

46. Ali, M., Mazumder, M. K., Sharma, R., Srirama, P. K., International Conference on Frontiers of Aerosol Dosimetry, "In-vitro studies of nebulizer aerosol particles deposition as a function of aerodynamic size and electrostatic charge in an anatomical throat cast," University of California Irvine, Irvine, California. (October 19, 2005).
47. Ali, M., Mazumder, M. K., Sharma, R., Srirama, P. K., Chowdhury, P., Straub, K. D., International Conference on Frontiers of Aerosol Dosimetry, "War of the worlds: winning the battle against extraterrestrial dusts in human missions to Mars and the Moon," University of California Irvine, Irvine, California. (October 19, 2005).
48. Mazumder, M. K., Ali, M., Sharma, R., Srirama, P. K., Calle, C. I., Pruessner, K., IEEE Industry Applications Society Conference, "Research needs in electrostatics for Lunar and Mars Space missions," IEEE, Hong Kong. (October 12, 2005).
49. Mazumder, M. K., Ali, M., Sharma, R. et al., 3rd New England International Nanomanufacturing Workshop, "Biohazards of Lunar and Martian ultrafine dusts: strategies for measurement, mitigation and respiratory drug delivery," Northeastern University, Boston, Massachusetts. (June 1, 2005).

## **FUNDED RESEARCH GRANTS & CONTRACTS**

---

1. Ali, M. (*Principal Investigator*), "Quantitative measurement of inhaled ultrafine particles by fetal mice using multiple path particle dosimetry," Sponsored by The UT Tyler Office of Research, Scholarship and Sponsored Programs, \$7,195.00. (Sept 2020 – January 2023).
2. Ali, M. (*Principal Investigator*), "Mechanistic implications of mouthpiece design geometry and powder mixture homogeneities on successful generation of aerosolized submicron particles from respiratory drug delivery devices," Sponsored by Soules College of Business Healthcare Grant, \$5,000.00. (July 2018 – July 2019).
3. Ali, M. (*Principal Investigator*), "Longview University Center Industrial Technology Summer Camp," Sponsored by The UT Tyler Internal Grant, \$5,396.00. (May 1, 2018 – July 31, 2018).
4. Ali, M. (*Principal Investigator*), "Acquisition of Aerosol Particle Analyzers for Interdisciplinary , Collaborative Research and Education in Biomedical Engineering Program at Jackson State University," Sponsored by Dept. of Defense, United States Army Research, Development and Engineering Command, \$470,636.00. (Sept 1, 2016 – August 31, 2017).
5. Ali, M. (*Senior Personnel*), William McHenry (PI) "Toyota Research and Workforce Development," Sponsored by Toyota Motors Corp., Corporate, \$940,000.00. (Jan 1, 2014 – Dec 31, 2017).
6. Ali, M. (*Senior Personnel*), Kyle Bray (PI) "Verizon Minority Male Maker summer program – hands-on summer learning experience on solid modeling and 3D printing for Blackburn Middle School students," Sponsored by Verizon Communications, Corporate, \$92,000.00. (June 1, 2015 – July 31, 2016).
7. Ali, M. (*Senior Personnel*), Wei Zhang (PI) "Implementing Self-Regulated Learning Assessment in Diverse STEM Learning Settings," Sponsored by NSF, Federal, \$unknown. (Aug 1, 2014 – July 31, 2016).
8. Ali, M. (*Conference Travel Grant*) JSU Center for University Scholars \$1,250 x 5 = \$6,250, every year since 2010.
9. Ali, M. (*Principal Investigator*), "Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-NIGMS MS-INBRE, Federal, \$49,993.00. (Jun 1, 2012 – May 31, 2013).
10. Ali, M. (*Principal Investigator*), "Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-NCRR MS-NBRE, Federal, \$29,897.00. (Jun 1, 2011 – May 31, 2012).
11. Ali, M. (*Principal Investigator*), "Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-MFGN, Federal, \$18,972.00. (Sept 1, 2010 – May 31, 2011).

**Note:** Though the titles of the above three grants are the same, each work focused on a particular component of electromechanical deposition mechanisms of submicron and nanoparticles.

12. Ali, M. (**Principal Investigator**), "In-vitro and Mathematical Simulation of Aerosol Particle Deposition in the Human Lung Airway," Sponsored by NSF MS-EPSCoR, Federal, \$46,307.00. (Jan 1, 2010 – Dec 31, 2010).
13. Ali, M. (**Principal Investigator**), "In Vitro Investigation of the Electrostatic Charge Effect on Deposition of Asthma Drug Metered Dose Inhaler in the Oral-Pharyngeal-Laryngeal Region of Human Respiratory Airway," Sponsored by Center for University Scholars, Jackson State University, \$13,910.00. (June 1, 2008 - July 31, 2008).
14. Ali, M. (**Senior Personnel**), Dr. Mehri Fadavi (PI) JSU Department of Physics, Atmospheric and Geosciences, "Mississippi Academy for Science Teaching," Sponsored by NSF, Federal, \$8.7m, Jan 1, 2008 – Dec 30, 2013.
15. Ali, M. (**REO Mentor**) - Mississippi Functional Genomics Network Summer Research 2008 & 2009 Grant, \$12,000.00.

## **PENDING & UNFUNDED GRANTS**

---

1. Ali, M. (**Principal Investigator**), "Quantitative Measurement of Inhaled Ultrafine Particles by Fetal Mice using Multiple Path Particle Dosimetry," Sponsored by UTT Office of Research and Scholarship, \$9,859.00. (June 15, 2020).
2. Ali, M. (**Principal Investigator**), "Manufacturing Implications on Performances of the Respiratory Drug Delivery Devices," Sponsored by Academic Partnership, UTT Souls College of Business, \$4,670.00. (June 15, 2018).
3. Ali, M. (**Principal Investigator**), "Two 3D printers -Dremel DigiLab 3D45 for LUC - Industrial Tech Lab," Sponsored by Phillips 66 Pipeline, Midland, TX, \$4,000.00. (March 6, 2018).
4. Ali, M. (**Principal Investigator**), "Development of Biomedical Materials Curriculum for Biomedical Engineering Program," Sponsored by the NIH-NIGMS MS-INBRE, Federal, \$36,270. (June 2016 – May 2017). (Pending)
5. Ali, M. (**Principal Investigator**), "Simulation of Nanoaerosol Particle Flow and Deposition Physics in the Respiratory Airway, Sponsored by the US Department of Defense (DoD), Federal, \$330,000. (Aug 2015 – July 2018). (Unfunded)
6. Ali, M. (**Principal Investigator**), "Increased Enrollment and Retention, and Training for Manufacturing Specialist Certification for African-American Minority Students at Jackson State University, Sponsored by the U.S. Department of Education, Federal, \$243,000. (Jan 2015 – Dec. 2018). (Unfunded)
7. Ali, M. (**Principal Investigator**), Tuluri, Francis, "Nuclear Technology Bridge Course Modules for Enhanced Minority Nuclear Technical Workforce," Sponsored by Nuclear Science and Security Consortium and Minority Serving Institution, Federal, \$244,129. (Jan 1, 2013 – December 31, 2015). (Unfunded)
8. Ali, M. (**Principal Investigator**), "In-silico Simulation of Bioaerosol Particle Deposition in the Human Lung," Sponsored by NIH-AREA (Academic Research Enhancement Award), Federal, \$468,877. (Jun 1, 2013 – May 31, 2016). (Unfunded)
9. Ali, M. (**Principal Investigator**), Colonias, John (Co-Principal), "RET: Aerosol Science and Engineering Research Experience for Jackson Public School District Science Teachers of Mississippi," Sponsored by National Science Foundation, Federal, \$438,000. (Unfunded)
10. Ali, M. (**Principal Investigator**), Buck, Jessica L., "GSE/RES: Choosing Careers of African-American Women in STEM," Sponsored by National Science Foundation, Federal, \$449,040. (Unfunded)
11. Ali, M. (**Principal Investigator**), Yuan, Pao-Chiang, "MRI: Acquisition of Aerosol Particle Analyzers for Interdisciplinary, Collaborative Research and Education in Jackson State University," Sponsored by National Science Foundation, Federal, \$261,512. (Unfunded)

12. Ali, M. (**Senior Personnel**), Fadavi, Mehri (PI), "Mississippians Engaged in Research and Inquiry-based science Teaching—Project MERIT," Sponsored by Howard Hughes Medical Institute, Private, \$2,200,000. (Unfunded)
13. Ali, M. (**Principal Investigator**), Payton, Marinelle (Co-PI), "Electromechanical Properties Effects on Pulmonary Drug Aerosol Particle Deposition in the Human Upper Respiratory Airways," Sponsored by Mississippi Functional Genomics Network, State, \$469,481. (Unfunded)

## **ACADEMIC CITIZENSHIP & UNIVERSITY SERVICE**

---

### **Departmental Service-----**

1. Program Coordinator, Industrial Technology & Management, Dept. of Technology, LUC, (2016 – To date).
2. Program Coordinator, JSU Industrial Systems and Tech Dept's Industrial Advisory Board (2012 – 2015).
3. Program Advisor, Manufacturing & Design Technology, Student Advisory Committee, (2007 - 2015), JSU.
4. Committee Member, BS and MS Program Assessment Committee. (February 2, 2009 - 2015), JSU, UITS.
5. Faculty Advisor, Society of Manufacturing Engineers. (September 15, 2007 - 2016).
6. Coordinator, Accreditation by ATMAE (Association of Technology, Management, and Applied Engineering), 2010-2016, JSU.
7. Member, Chair Selection Committee of Technology Department, 2013-2014, JSU.

### **College Service-----**

1. Member, UT Tyler Soules College of Business Awards & Scholarship Committee (2023 – To date).
2. Member, UT Tyler Soules College of Business Governance Committee (August 2021 – 2023).
3. Member, JSU CSET College Promotion and Tenure Committee. (August 2014 - 2016).
4. Member, JSU CSET College Sabbatical Committee. (August 2011 - 2016).
5. Member, JSU CSET College Performance Base Pay. (August 2013 - 2016).
6. Chair, JSU CPH Research Poster Sub-committee and Member of Steering Committee for Health Disparities Conference. (October 9, 2007 - 2013).
7. Judge, Jackson State University (JSU) Region II Science and Engineering Fair. (March 26, 2008 - 2016)

### **University Service-----**

1. University Undergraduate Curriculum Committee at JSU, (August 15, 2010 - 2016).
2. University Faculty Personnel Committee at JSU, (August 15, 2010 – 2016).
3. Committee Member, JSU SACS Self Study Committee. (December 4, 2008 - 2013).
4. Committee Member, JSU Quality Enhancement Planning (QEP) at JSU, (September 18, 2008 - 2014).

## **FACULTY TEACHING, RESEARCH & PROFESSIONAL DEVELOPMENTS**

---

1. **Coursework**, "ACUE Effective Teaching Practices." Association of College and University Educators. Fall-Spring, two semester-long coursework of 25 interactive learning modules (Sept 2021 – April 2022).
2. **Workshops**, Eight topics on Professional Development – UT Tyler Center for Excellence in Teaching & Learning - How Do I Help My Students; 33 Simple Strategies for Faculty (A guide to Teaching First Year and First- Generation Students; Who Are Our Undergraduate Students; Librarian Magic: Using Library

Tools to Access and Manage Scholarly Literature; Evidence Based Practice in the Classroom; Student Research PLC Meeting; Designing Courses for Active Learning; How Emotion Impacts the Brain's Successful Learning and What To Do About It (Aug 2021 – April 2022).

3. **Symposium**, "Manufacturing Standards Education" NIST- Georgia Southern University. (June 1, 2022).
4. **Workshop**, " Additive Manufacturing Education Using Virtual Environment Resources" NSF - Tennessee Technological University. (Nov 30, 2021).
5. **Workshop**, "Micro Nano Tech Health and Safety." University of Minnesota. (June 1-4, 2021).
6. **Training**, " Diversity: Inclusion in the Modern Workplace." EVERFI and the UT Tyler. (Apr 15, 2021).
7. **Coursework**, "Self-Paced Teaching Online Academy." Center for Instructional Design, University of Texas at El Paso, Texas. (March 19 – April 5, 2021).
8. **Workshop**, "Material Handling Teachers Institute." College Industry Council on Material Handling Education and Texas State University, San Marcos, Texas. (July 23-26, 2019).
9. **Workshop**, "Advanced Automation, Robotic and Manufacturing Education for 21<sup>st</sup> Century Workforce Needs." Texas A & M University's Innovative Curriculum for Industrial Automation. Richland College, Dallas, Texas. (July 17, 2018).
10. **Training**, "FANUC Robots – Handling Tool Operation and Programming." FANUC America Corp. Rochester Hills, Michigan. (May 29 – June 2, 2017).
11. **Workshop**, "Automatic Identification and Data Capture," University of Memphis, Tennessee. (May 22-27, 2016).
12. **Workshop**, "ABET Fundamentals of Program Assessment," Dallas, Texas. (October 24, 2015).
13. **Training**, "Advanced Additive Manufacturing and 3D Scanning," Mississippi Polymer Institute, USM, Hattiesburg, Mississippi. (August 19, 2015).
14. **Workshop**, "SAP (Systems, Applications and Products) - Modules of Supply Chain, Transportation Logistics, Warehouse and Connected Manufacturing Operation Planning and Implementation," Las Vegas, Nevada. (March 29 – April 1, 2015)
15. **Training**, "CAD, CAM, CNC and 3D Additive Manufacturing," TechShop Workforce Development Center, Round Rock-Austin, Texas. (December 9-10, 2014).
16. **Workshop**, "NSF Major Research Instrumentation Award Proposal Follow-up Workshop," Quality Education for Minorities, Washington, DC. (November 15, 2013).
17. **Workshop**, "NSF Research Initiation Award Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (April 18 -20, 2013).
18. **Continuing Education Program**, "ASME Leadership Training Course (LTC)," American Society of Mechanical Engineers. (February 28-March 3, 2013).
19. **Workshop**, "Implementation of the **PIC Microcontroller** Training System and Curriculum on **Embedded System Designs** in On-campus and Distance Classes," Association of Technology, Management and Applied Engineering (ATMAE). (Nov 15, 2012).
20. **Workshop**, "ATMAE Accreditation Member Training," Association of Technology, Management and Applied Engineering (ATMAE). (Nov 14, 2012).
21. **Workshop**, "JSU Course Redesign with Blackboard 9," The Center for Distance Learning and Instructional Technology (CDLIT). (July 2, 2012 - August 3, 2012).
22. **Continuing Education Program**, "ASME Leadership Training Course (LTC)," American Society of Mechanical Engineers. (March 1, 2012 - March 4, 2012).
23. **Continuing Education Program**, "ASME MS Section National Engineers' Week" Lecture," American Society of Mechanical Engineers. (February 21, 2012).

24. **Dept of Defense SMART Scholarship Evaluation Panel**, "The Science, Mathematics And Research for Transformation (SMART) Scholarship," American Society of Mechanical Engineers & Dept of Defense. (January 19, 2012 - January 21, 2012).
25. **Workshop**, "NASA MUREP Proposal Development Workshop," NASA and Marshall Space & Flight Center. (February 23, 2011 - February 24, 2011).
26. **Workshop**, "NIH Proposal Development Workshop," NIH and the University of Kentucky. (May 13, 2010 - May 19, 2010).
27. **Workshop**, "NSF Career Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (February 19, 2010 - February 20, 2010).
28. **Workshop every year since 2008**, "Annual Conference Eliminating Health Disparities in Mississippi: Stroke and Obesity," JSU College of Public Health. 2008, 2009, 2010, 2011, 2012
29. **Workshop**, "Symposium on Advances in Atmospheric Modeling, Climate Change, and Geospatial / Visualization Technologies," NOAA (Conducted by Trent Lott Geo Spatial Visualization Research Center of Jackson State University, Mississippi). (July 30, 2009 - July 31, 2009).
30. **Workshop**, "MRI Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (October 24, 2008 - October 25, 2008).
31. **Workshop**, "MARC: Summer Institute In Bioinformatics," NIH (Conducted by Pittsburg Super Computing Center, Carnegie Mellon University). (July 14, 2008 - July 25, 2008).
32. **Workshop**, "Introducing Science Faculty to Materials Science and Engineering," NSF (Conducted by the University of Alabama, Tuscaloosa). (June 8, 2008 - June 27, 2008).

## National and International Reputation – M. Ali

**Google Scholar**

Review affiliation | Add co-authors

**Mohammed Ali, PhD, MBA, CSMS**

Associate Professor and Program Coordinator, The University of Texas at Tyler, Longview University  
Verified email at uttyler.edu - Homepage  
Additive Bio-manufacturing | Pulmonary Drug Delivery Modeling and Bio-simulation | Micro and Nano-sized Aerm...

Cited by	All	Since 2017
Citations	208	103
h-index	7	5
i10-index	4	3

TITLE	CITED BY	YEAR
Factors influencing purchase of FMCG by rural consumers in South India: an empirical study M.A. Ali, V.R. Thandhi, N.S. Rao International Journal of Business Research and Development 1 (1)	52	2012
Electrostatic charge effect on respirable aerosol particle deposition in a cadaver based throat cast replica M.A. Ali, T.V. Reddy, M.K. Balarcondra Journal of Electrostatics 88 (7-8): 481-498	42	2018
Measurements of electrodynamic effects on the deposition of MDI and DPI aerosols in a replica cast of human oral-pharyngeal-laryngeal airways M.A. Ali, M.K. Balarcondra, S.R. Marthandan Journal of Aerosol Medicine and Pulmonary Drug Delivery 22 (1): 34-44	37	2009
Pulmonary drug delivery M.A. Ali Handbook of Inhalative Drug Delivery Systems, 204-240	34	2010
Engineered aerosol medicine and drug delivery methods for optimal respiratory therapy M.A. Ali Respiratory care 53 (10): 1619-1635	9	2014

Citations per year

**Tracking Citations of Scholarly Research Work. – UTT Scholar Works - 2015 total downloads and Google Scholar- 208 citations since 2018.**

From: Scholar Works at UT Tyler

Dear Author,

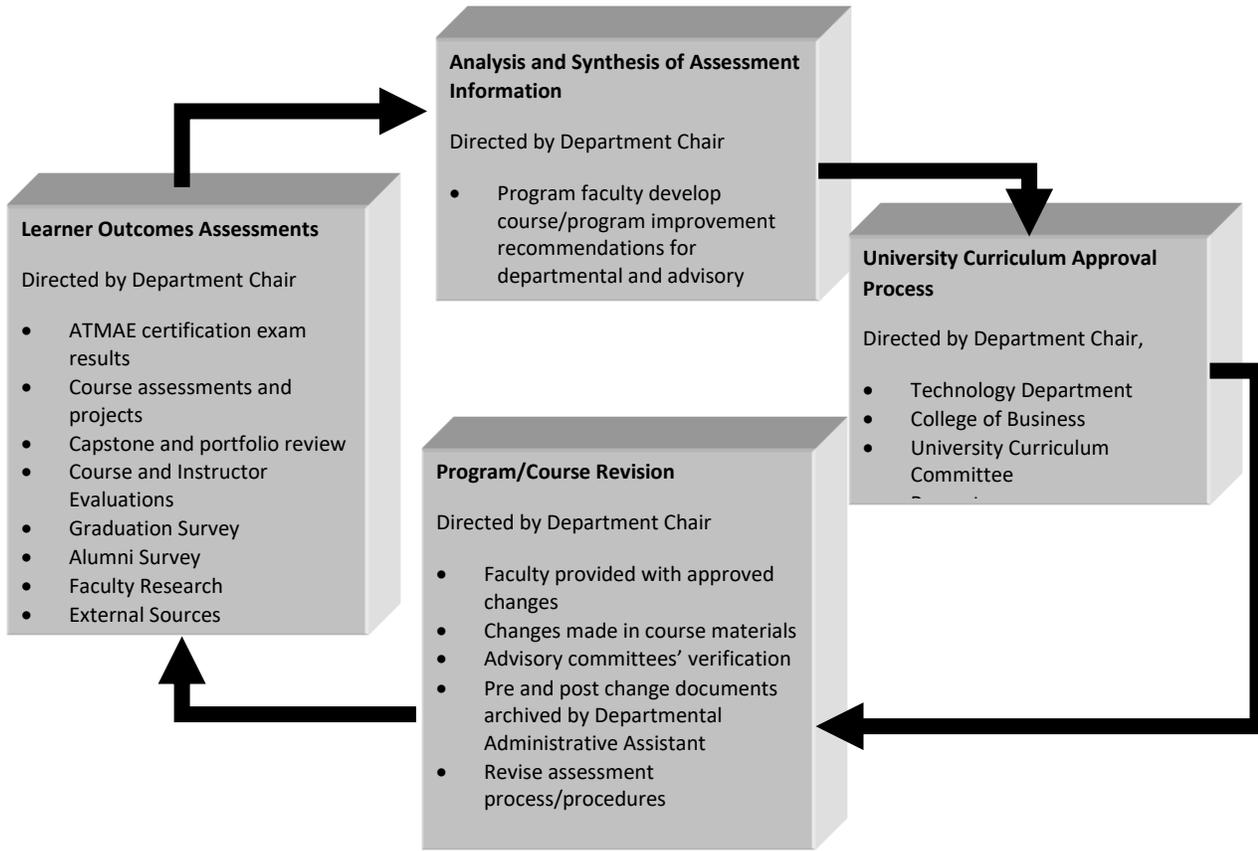
You had **43** new downloads in February 2024 across your **68** papers in Scholar Works at UT Tyler. Your current readership:

**2015** Total Downloads  
 **VISIT MY DASHBOARD ICON**  
**VISIT MY DASHBOARD**

These monthly reports are provided to you by bepress on behalf of Scholar Works at UT Tyler. For questions, comments, or to add more content and increase your readership and visibility as an author, please contact your repository administrator:

[tgullings@uttyler.edu](mailto:tgullings@uttyler.edu)

# Appendix K: Continuous Improvement Model



## Course and Program Continuous Improvement Model

Appendix L:  
ATMAE Certification Exam  
Information



The Association of  
Technology,  
Management, and  
Applied Engineering

**May 3, 2023**

RaeJean Griffin  
University of Texas at Tyler  
rgriffin@uttyler.edu

Dear RaeJean Griffin,

Thank you for using the ATMAE certification exam for your program. Please make sure to tell your students passing their exam to [apply for certification](#) to become certified. The following pages contain the analysis of the data obtained from the ATMAE Certified Manufacturing Specialist Exam administered to your students. The examination consists of varying numbers of questions from over 16 categories shown in the report.

A minimum score of 95 out of 175 is currently required to qualify for certification. The passing threshold represents over 100 accredited programs across the U.S. that use this exam to meet standards for numerous industry professions. The average national pass rate for the exam is 63.16%. Please feel free to contact me at (903) 566-7186 or [mmiller@uttyler.edu](mailto:mmiller@uttyler.edu) should you have any questions concerning this report.

Thank you for using this exam at your institution.

Sincerely,

Mark R. Miller, Ph.D., CSTM, CSMS  
Chair of the ATMAE Board of Certification

**Participant Institutions:**

Alcorn State University	Illinois State University	Southwestern Oklahoma State University
Ashland Community and Technical College	Indiana State University	St. Cloud State University
Bemidji State University	Iowa State University	SUNY/Buffalo State
Bossier Parrish Community College	Ivy Tech Community College	Tarleton State University
California Polytechnic State University	Jackson State University	Tennessee Technological University
California State University Fresno	James Madison University	Texas A&M University - Kingsville
California State University Los Angeles	Kent State University	The University of Texas at Tyler
Central Connecticut State University	Millersville University	University of Idaho
Central Michigan University	Morehead State University	University of North Dakota
East Carolina University	Ohio University	University of Southern Maine
Eastern Kentucky University	Purdue University	University of Tennessee at Chattanooga
Elizabeth City State University	San Jose State University	Western Kentucky University

(CMS) Exam-Griffin-UTT-04272023

Total number of attempts: 9

Number of passed attempts: 4

Passing Threshold: 54.29%

Average score: 53.33%

Average score by category:

## Summary Report:

### Certified Manufacturing Specialist

Manufacturing Joining Processes: Solid State/Resistance Welding	22.22%
Manufacturing Joining Processes: Brazing and Soldering	44.44%
Manufacturing Joining Processes: Mechanical Fastening	55.56%
Manufacturing Joining Processes: Arc/Gas Welding	57.78%
Manufacturing Joining Processes: Arc/Gas Cutting	77.78%
Manufacturing Forming Processes: Shearing	51.85%
Manufacturing Forming Processes: Drawing/Extrusion/Forging	44.44%
Manufacturing Forming Processes: Sheet Metal Fabrication Nomenclature	40.74%
Manufacturing Forming Processes: Bending	33.33%
Manufacturing Forming Processes: Sheet Metal Classification	44.44%
Manufacturing Casting Processes: Expendable-Mold Casting	41.67%
Manufacturing Casting Processes: Casting Nomenclature	64.44%
Manufacturing Casting Processes: Permanent-Use Casting	77.78%
Nontraditional Machining: Chemical	77.78%
Nontraditional Machining: Mechanical	72.22%
Nontraditional Machining: Electrical	55.56%
Nontraditional Machining: Thermal	55.56%
Machining: Hole Making	66.67%
Machining: Turning	41.67%
Machining: Thread Manufacturing	44.44%
Machining: Milling	66.67%
Machining: Miscellaneous Machining Processes	61.11%
Machining: Gear Manufacturing	51.85%
Machining: Abrasive	59.26%
Machining: Feed/Speed/and Material Removal Rate Calculation	40.74%
Manufacturing Philosophies: Lean	38.89%

Manufacturing Philosophies: Benchmarking	55.56%
Manufacturing Philosophies: Theory of Constraints	55.56%
Manufacturing Philosophies: TQM	77.78%
Polymers: Molecular Composition and Properties	72.22%
Polymers: Types of Plastics	55.56%
Polymers: Chemicals and Additives	33.33%
Polymers: Processing Equipment	69.44%
Polymers: Mold Pressure Calculations	33.33%
Industrial Materials: Material Classifications and Properties	33.33%
Industrial Materials: Material Strength Terminology	0%
Industrial Materials: Heat Treatment of Materials	50%
Industrial Materials: Material Tests	66.67%
Industrial Materials: Phases of Ferrous Materials	88.89%
CIM: G&M Code Terminology	51.85%
CIM: CNC and CAD/CAM Nomenclature	60%
CIM: Types of Manufacturing Systems	100%
CIM: Robotics	55.56%
Quality: Control Charts	58.33%
Quality: Six Sigma Quality & ISO Standards	0%
Quality: Statistical Concepts	66.67%
Quality: Diagrams	48.15%
Quality: Quality Management	44.44%
Production Planning: Techniques for Process Planning	40.74%
Production Planning: Master Production Scheduling	61.11%
Production Planning: Inventory Planning and Control	55.56%
Production Planning: Capacity Planning	74.07%
Wood Technology: Classification of Lumber	55.56%
Wood Technology: Types of Lumber	48.15%
Wood Technology: Types of Wood Processing Equipment	25.93%

Wood Technology: Wood Joints	55.56%
Wood Technology: Abrasives	55.56%
Wood Technology: Adhesives	44.44%
Metrology: Standards of Measurement	61.11%
Metrology: Decimal Equivalency	94.44%
Metrology: Measuring Instruments and Machines	70.37%
Metrology: Reading Measuring Instruments	48.15%
Supervision/Management: Roles of Managers and Supervisors	77.78%
Supervision/Management: Management Concepts and Skills	58.33%
Supervision/Management: Relationship and Team Building	55.56%
Supervision/Management: Functions of Management	38.89%
Supervision/Management: Communication and Motivation	66.67%

Supervision/Management: Leadership Styles	44.44%
Supervision/Management: Discrimination	55.56%
Supervision/Management: Appraisal and Discipline	27.78%
Technical Drafting: Multiview Projection	55.56%
Technical Drafting: Drafting Nomenclature	50%
Technical Drafting: Geometric Dimensioning and Tolerancing	61.11%
Technical Drafting: Axonometric Projection	29.63%
Technical Drafting: Oblique Projection	11.11%
Technical Drafting: Perspective Projection	55.56%
Technical Drafting: Sectional Views	11.11%
Technical Drafting: Classification of Fits	27.78%
Electronics: Circuits, Voltage, Resistance and Current	66.67%
Electronics: Electronic Components	52.78%
Electronics: Electrical Power	77.78%

## Individual Results:

First Name	Last Name	Email	Overall Score	Date-time submitted	Passed
Oscar	Cruz	Ocruz@patriots.utt Tyler.edu	67%	4/26/2023 11:34	✓
Jaden	Newton	jadennewton2002@gmail.com	33%	4/27/2023 19:11	✗
Andres	Ruiz	ARuiz7@patriots.utt Tyler.edu	48%	4/27/2023 19:13	✗
Hector	Ramirez	hector890adidas@gmail.com	55%	4/27/2023 19:13	✓
zachariah	dare	zdare@patriots.utt Tyler.edu	51%	4/27/2023 19:14	✗
Logan	Jameson-Hatch	ljamesonhatch@patriots.utt Tyler.edu	62%	4/27/2023 19:14	✓
Jess	Atteberry	jessatteberry@yahoo.com	77%	4/27/2023 19:15	✓
Pedro	Barco	Pedrobarco0302@gmail.com	40%	4/27/2023 19:15	✗
KeUndrea	Brantley	keundreabrantley@yahoo.com	47%	4/27/2023 19:18	✗

## UT TYLER CMS RESULTS 12/07/2023

A quiz component called Certified Manufacturing Specialist (CMS) Exam, which is part of a product called Certified Manufacturing Specialist (CMS) Exam-Griffin-120723-UTT was just submitted by ritchie roberts, ritchie roberts2008@gmail.com.

The Test Score is: 127.

The Test Status is: Pass

A quiz component called Certified Manufacturing Specialist (CMS) Exam, which is part of a product called Certified Manufacturing Specialist (CMS) Exam-Griffin-120723-UTT was just submitted by Samuel Davidson, samdavidson3054@yahoo.com.

The Test Score is: 105.

The Test Status is: Pass

**NOTE: More ATMAE certification scores are available upon request.**