



The Association of
Technology,
Management, and
Applied Engineering

2019 Self-Study Accreditation Report

for the

Master of Science

in

Industrial Management

at



Prepared by:

Department of Technology



March 14, 2019

Table of Contents

I. The On-Site Visit	5
A. Date of Visit	5
B. Visiting Team Members	5
C. Proposed On-Site Visit Agenda	5
D. Current Accreditation Status of Program	7
II. General Information	7
A. The Institution	7
1. Name and Address.....	7
2. Number of Students Enrolled.	7
a. Total.	8
b. Full-time.	8
c. Part-time.....	8
d. Full-time Equivalent.....	8
3. Total Full-time Equivalent Funding.....	8
4. Operating Budget.	8
a. Current.	8
b. Five-Year History.	8
5. Institutional Accreditation Organizations and Dates of Accreditation.	9
6. History of Accreditation by ATMAE.	10
7. Administration of the Institution.	10
a. Chief Executive Officer.....	10
b. Chief Academic Officer.....	10
8. Major Academic Units Within the Institution.	10
9. Institution Mission and Goals.	10
10. Relationship of Institution to Superior Governing Body.	33
B. Administrative Unit Information.....	33
1. Name and Address of Institution and/or Department Administrative Unit.....	34
2. Name of Dean and Department Head.....	34
3. Names of Other Departments in Administrative Unit.....	34
4. Name and Titles of Others with Program Administration Responsibility.....	34
5. Title of Programs for Which Accreditation is Being Requested.	35
6. Operating Budget for Administrative Unit in Which the Program Resides.....	35
a. Current.	35
b. Five-Year History.	35
Standard 1 - Preparation of Self-Study and campus visit.....	36
Standard 2 - Program Definition.....	37
Standard 3 - Program Title, Mission, and Program Outcomes.....	38
3.1 - Program Title, Mission is Compatible with ATMAE's Definition	38
3.2 - General Program Outcomes Shall Be Established	38
Standard 4 - Program Goals	39
Standard 5 - Program Learning Outcomes Identification & Validation	43
Standard 6 - Program Structure & Course Sequencing	44
6.1 - Program Minimum Curriculum Foundation	44
6.2 - Appropriate Laboratory Activities	46

6.3 - Appropriate Sequencing of Courses	46
6.4 - Advanced Level Course Sequencing.....	47
Standard 7 – Student Admission & Retention Standards.....	47
Standard 8 - Transfer Course Work	51
Standard 9 – Student Enrollment.....	51
Standard 10 - Administrative Support & Faculty Qualifications	53
10.1 - Qualified Administrators Assigned to Program	53
10.2 - Adequate Number of Qualified Full-time Faculty	54
10.3 - Faculty Qualifications.....	54
10.4 - Policies and Procedures for Selecting and Retaining Faculty.....	55
10.5 - Faculty Teaching Loads.....	57
10.6 - Faculty Qualifications for Part-time and Non-tenure Track Faculty...	58
Standard 11 – Facilities, Equipment & Technical Support	58
11.1 - Appropriate Technical Support	58
11.2 - Adequate Computer Equipment and Software	58
11.3 - Facility and Equipment Needs Included in Long-range Goals	59
Standard 12 - Program Operation.....	67
12.1 - Scheduling of Instruction	67
12.2 - Quality of Instruction	68
12.3 - Observance of Safety Standards	69
12.4 - Availability of Resource Materials	69
12.5 - Teaching and Measurement of Competencies	70
12.6 - Supervision of Instruction	75
12.7 - Placement Services Available to Graduates.....	75
12.8 - Syllabi Must Clearly Describe Appropriate Course Objectives/Comp	76
12.9 - Student Learning Competencies Mapped with Program Outcomes .	76
12.10 - Quality of Distance Learning Course Work.....	77
Standard 13 – Graduate Satisfaction with Program	77
Standard 14 - Employment of Graduates.....	79
Standard 15 - Job Advancement of Graduates	80
Standard 16 – Employer Satisfaction with Job Performance	80
Standard 17 - Advisory Committee Approval of Overall Program	82
17.1 - Policies for Advisory Committee	82
17.2 - Roster and Minutes of Advisory Committee Meetings	84
17.3 - Evidence of Advisory Committee Program Outcome Validation	86
Standard 18 – Outcome Measures Used to Improve Program	86
Standard 19 - Program Responsibility to Provide Information to the Public.....	92

List of Tables

Table 1 - Fall 2018 Student FTE	7
Table 2 - Total University Enrollment AY 2014-2018	7
Table 3 - Total Number of Faculty by Tenure, Rank, and Gender	8
Table 4 - The University Budget for FY 2019 and the Previous Five Years	8
Table 5 - University Operating Expenditures FY 2013-2015.....	9

Table 6 - Department of Technology – Retention by Major.....	51
Table 7 - Industrial Management Program Enrollment from 2013-2018	52
Table 8 - Number of Industrial Management Graduates from 2014-2018.....	53
Table 9 - Academic Preparation of Full-time Faculty Teaching Ind. Tech. Cours.	55
Table 10 - 2012-2019 Equipment & Materials Expenditures for the Dept. of Tech	60
Table 11 - Assessment Method for Core, Technology, & Mgmt. Competencies	73
Table 12 - Program Competencies Mapped with Courses.....	73
Table 13 - Mapping of Student Learning Competencies to Program Outcomes	77
Table 14 - Salary Ranges for Graduates of 2018.....	79
Table 15- Job Titles of Graduates	80
Table B - Outcome Measures Used to Improve Program	89
Table C - Master's Degree Semester Hour Requirement	45

List of Figures

Figure 1 - Soules College of Business Organizational Chart	33
Figure 2 - Campus Map	94

Appendices

Appendix A - Course Sample Syllabus	95
Appendix B - Course Sequencing	103
Appendix C - Tenure and Promotion Policy	104
Appendix D - Assessment Forms and Feedback	113
Assessment Unit Four Column – Industrial Technology BS	114
College of Business and Technology Performance Evaluation Guidelines	128
Soules College of Business Annual Faculty Performance Evaluation	139
Student Course Evaluation	141
University Graduation Survey	142
Alumni Graduate Survey	177
Employer Satisfaction with Job Performance of Graduates.....	208
Employer Survey from Internships.....	214
ATMAE Certified Manufacturing Specialist Exam Results.....	215
Curriculum Changes from 2013-2019.....	221
Program Goals Status Form	224
Appendix E - Faculty Credentials.....	228
Appendix F - Course and Program Continuous Improvement Model.....	301
Appendix G - Capital Request and Purchases Spreadsheets.....	302
Appendix H - Advisory Committee By- Laws & Meeting Minutes	307
Appendix I - Peer Review Observation Form	334
Appendix J - Safety Policy & Rules	342

ATMAE Accreditation Self-Study Report for the Master of Science in Industrial Management Program at The University of Texas at Tyler

I. The On-Site Visit

A. Date of the visit

April 14-16, 2019

B. Visiting Team Members

Dr. Argie Nichols, Chair ATMAE Visiting Team
University of Arkansas – Fort Smith
5210 Grand Ave
PO Box 3649
Fort Smith, AR 72913
argie.nichols@uafs.edu

Mr. Dan Cassler
University of Houston
2520 Robinhood Unit 1012
Houston, TX 77005
dcassler@uh.edu

Dr. Kenny Rigler, Jr.
Fort Hays State University
600 Park Street
Hays, KS 67601
klighler@mail.fhsu.edu

C. Proposed On-site Visit Agenda

Sunday, April 14, 2019

Arrive in Tyler
6:30 pm Dinner with Department Chair
8:30 pm Visiting Team meeting

Monday, April 15, 2019

8:15 am Introductions and Tour of Facilities

9:30 am Faculty interviews

- Dr. Mark R. Miller, Professor and Chair
- Dr. Dominick Fazarro, Associate Professor
- Dr. Heshium Lawrence, Associate Professor
- Dr. Mohammed Ali, Associate Professor

10:30 am Brief meeting with: *Dr. Argie Nichols*

- 11:15 am

 - Dr. Roger Lirely, Interim Dean of the Soules College of Business

Meet with Assessment Personnel

 - Meet with Halley Graham, Soules College of Business Assessment Coordinator
 - Meet with Dr. Lou Ann Berman, Assistant Vice President of Assessment & Institutional Effectiveness
- 12:00 am

Lunch with Advisory Committee
- 1:30 pm

Meet with University Personnel: *Dr. Kenny Rigler, Jr.*

 - Library –Rebecca McKay Johnson, Director
 - Student Services – Ona Tolliver, VP for Student Success
 - Enrollment Management – Dr. Rosemary Cooper, Executive Director of Career Success and Alumni Engagement

Meet with Administrators: *Dr. Argie Nichols*

 - Dr. Kimberly Laird, VP for Budget and Finance and Chief Financial Officer
 - Dr. Amir Mirmiran, Provost and VP for Academic Affairs; Chief Academic Officer
 - Dr. Roger Lirely, Interim 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 16, 2019

- 8:00 am

Review materials
- 9:30 am

Meet with students
- 10:00 am

Team Meeting Work Session
- 12:00 am

Lunch (Working Lunch)
- 1:00 pm

Exit interview with

 - Dr. Michael Tidwell, President

- Dr. Amir Mirmiran, Provost and VP for Academic Affairs; Chief Academic Officer
- Dr. Roger Lirely, Interim Dean of the Soules College of Business
- Dr. Mark Miller, Chair of the Department of Technology

2:00 pm Team Meeting in Conference Room

3:00 pm Depart Campus

D. Current Accreditation Status of Program(s)

The following program is currently accredited:

Bachelor of Science in Industrial Technology

II. General Information

A. The Institution

1. Names and Address

The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

2. Number of the Students Enrolled

- a. As listed in the Table 1 below, there were 10,206 enrolled at The University of Texas at Tyler. Of that total, 7,333 were undergraduate students and 2,873 were graduate students.

Table 1: Fall 2018 Student FTE

Level	FT	PT	Total	FTE
UGRD	4,708	2,625	7,333	5,583
GRAD	778	2,095	2,873	1,476
	5,486	4,720	10,206	7,059

Prepared by: The Office of Information Analysis

Table 2: Total University Enrollment AY 2014-2018

Year	Total University Enrollment Each Fall Semester
2014	7,966
2015	8,731
2016	9,738
2017	10,303
2018	10,206

**Source: Office of Information Analysis, OBIEE Reporting*

- b. The number of full-time students was 5,486 as of the 2018 Fall semester.
- c. There were 4,720 part-time students enrolled in the Fall 2018 semester.
- d. The total full-time-equivalent number of students was 7,059 as of the Fall 2018 semester.

3. Fall 2018 *estimated* Faculty FTE: 433.75 as noted by the Office of Assessment and Institutional Effectiveness.

Table 3: Total Number of Faculty by Tenure, Rank, and Gender

Faculty										
Total Faculty										
Total Faculty Headcount by Tenure										
	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017	
	N	%	N	%	N	%	N	%	N	%
Tenured	102	21.3%	120	22.3%	126	22.3%	123	19.8%	145	22.7%
On Tenure Track	85	17.7%	102	19.0%	107	19.0%	110	17.7%	96	15.0%
Non-Tenured	292	61.0%	315	58.7%	331	58.7%	387	62.4%	398	62.3%
Total	479		537		564		620		639	
Total Faculty Headcount by Rank										
	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017	
	N	%	N	%	N	%	N	%	N	%
Professor	47	9.8%	53	9.9%	58	10.3%	58	9.4%	71	11.1%
Associate Professor	65	13.6%	75	14.0%	75	13.3%	74	11.9%	83	13.0%
Assistant Professor	75	15.7%	94	17.5%	100	17.7%	101	16.3%	87	13.6%
Lecture/Other Faculty	249	52.0%	264	49.2%	279	49.5%	340	54.8%	309	48.4%
Teaching Assistant	43	9.0%	51	9.5%	52	9.2%	47	7.6%	89	13.9%
Total	479		537		564		620		639	
Total Faculty Headcount by Gender										
	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017	
	N	%	N	%	N	%	N	%	N	%
Male	212	44.3%	238	44.3%	253	44.9%	256	41.3%	280	43.8%
Female	267	55.7%	299	55.7%	311	55.1%	364	58.7%	359	56.2%
Total	479		537		564		620		639	

Source: CBMOB data

*Source: The University of Texas at Tyler Fact Book 2017-2018

4. Operating Budget

a. Current – (2018-2019) = \$165,578,384

b. Five-year history –

Table 4: The university budget for FY 2019 and the previous five years:

	2014	2015	2016	2017	2018	2019
Total Operating Expenses plus Interest	116,300,541	120,841,049	136,073,558	146,871,862	155,052,916	165,578,384

Source: Dr. Kim Laird, VP of Business Affairs & Chief Business Officer

Year	Budget without interest
FY 2017	\$139,079,416
FY 2016	\$135,588,321
FY 2015	\$124,423,236
FY 2014	\$110,676,309
FY 2013	\$105,998,840

Table 5: University Operating Expenditures FY 2013-2015

Finance					
Statement of Revenues, Expenses and Changes in Net Assets					
History Report - Fiscal Years: 2013 to 2017					
	FY 2013	FY2014	FY2015	FY2016	FY2017
Operating Revenues:					
Student Tuition and Fees	48,187,987	52,657,821	58,457,648	61,988,737	70,778,133
Discounts and Allowances	-18,818,602	-17,794,178	-19,170,133	-19,158,698	-23,454,249
Federal Sponsored Programs	2,292,537	1,287,704	924,577	331,820	1,370,863
Federal Sponsored Programs Pass-Through from Other State Agencies	4,120,030	5,368,939	5,548,527	4,988,248	2,905,770
State Sponsored Programs					
State Sponsored Programs Pass-Through from Other State Agencies	4,730,707	6,436,809	6,492,083	7,447,194	8,369,517
Local Sponsored Programs		62,244			
Private Sponsored Programs	2,238,290	1,277,232	630,800	221,147	707,775
Sales and Services of Educational Activities	3,216,841	3,058,707	3,807,889	5,905,804	11,055,415
Auxiliary Enterprises	4,582,798	5,780,662	7,448,949	8,287,820	9,530,359
Other Operating Revenue	891,419	176,784	221,070	458,937	226,070
Total Operating Revenues	51,441,987	58,322,724	64,160,210	70,446,912	81,489,452
Operating Expenditures:					
Instruction	37,473,646	40,857,798	48,547,838	50,882,073	53,178,572
Research	2,622,432	1,280,197	1,484,802	1,277,758	2,155,353
Public Service	2,430,561	1,007,882	1,220,491	373,140	744,506
Academic Support	9,727,670	12,982,800	14,444,155	18,764,347	19,404,913
Student Services	7,634,696	9,393,674	11,226,527	11,834,318	10,920,428
Institutional Support	12,074,559	12,762,637	11,876,655	12,818,523	14,041,838
Operation and Maintenance of Plant	7,558,330	8,234,338	10,233,623	11,526,862	9,139,379
Scholarships and Fellowships	8,665,550	5,073,851	3,854,987	4,329,540	5,647,414
Auxiliary Enterprises	6,434,525	7,462,727	8,363,469	9,323,109	9,776,396
Depreciation and Amortization	11,346,671	11,640,405	13,370,789	14,858,620	14,070,615
Total Operating Expenditures	105,998,840	110,676,309	124,423,236	135,588,321	139,079,416
Operating Income (Loss)	-54,556,853	-52,353,585	-60,263,026	-65,141,410	-57,589,964

Source: The University of Texas at Tyler 2017-2018 Fact Book

5. Institutional Accrediting Organization and Date of University Accreditation

The University of Texas at Tyler is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools(SACS) (1866 Southern Lane, Decatur, Georgia 30033-4097: telephone number 404-679-4501) to award bachelor's and master's degrees. The most recent re-accreditation was effective in December of 2010. Southern Association of Colleges and Schools, Commission on Colleges (SACS-COC) – 2010, Reaffirmation written report 2016

Discipline Specific Accreditations

Accreditation Council for Pharmacy Education - Pre-candidate Status 2015

American Chemical Society - 2012

Association of Technology, Management and Applied Engineering (ATMAE) - 2012

Association to Advance Collegiate Schools of Business International (AACSB) - 2018

Commission on Collegiate Nursing Education (CCNE) - 2015

Council for Accreditation of Counseling & Related Educational Programs (CACREP) - 2013

Engineering Accrediting Commission of ABET - 2015

National Association of Schools of Music (NASM) - 2013

Texas Board of Nursing - 2018

6. History of Accreditation by the Association of Technology, Management, and Applied Engineering

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 the BAAS program is no longer seeking accreditation and part of either department. In 2012 (the previous ATMAE accreditation 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 is also seeking accreditation for the first time. The Surveying and Mapping emphasis in Industrial Technology is not seeking accreditation.

7. Administration of the Institution

a. Chief Executive Officer

Dr. Michael Tidwell, President

b. Chief Academic Officer

Dr. Amir Mirmiran, Provost and VP for Academic Affairs

3900 University Blvd.

The University of Texas at Tyler

Tyler, TX 75799

8. Major Academic Units within the Institution

College of Arts and Sciences

Soules College of Business

College of Education and Psychology

College of Engineering

College of Nursing and Health Sciences

The Ben and Maytee Fisch College of Pharmacy

University College

9. Institutional Mission and Goals

2009-2015

The University of Texas at Tyler Inspiring Excellence Strategic Plan

Vision Statement

The University of Texas at Tyler will be nationally recognized as a destination university for high-ability, flagship-capable students. UT Tyler will be the premiere public university in Texas offering challenging academic programs and an exciting, personal university experience with smaller classes, service opportunities, and a residential, park-like campus that encourages learning.

Mission Statement

The University of Texas at Tyler is a comprehensive institution of higher education offering undergraduate and graduate degree programs as an institution of the renowned University of Texas System. The University of Texas at Tyler's vision is to be nationally recognized for its high quality education in the professions and in the humanities, arts and sciences, and for its distinctive core curriculum. Guided by an outstanding and supportive faculty, its graduates will understand and appreciate human diversity and the global nature of the new millennium. They will think critically, act with honesty and integrity, and demonstrate proficiency in leadership, communication skills, and the use of technology. The University is committed to providing a setting for free inquiry and expects excellence in the teaching, research, artistic performances and professional public service provided by its faculty, staff, and students. As a community of scholars, The University develops the individual's critical thinking skills, appreciation of the arts, humanities and sciences, international understanding for participation in the global society, professional knowledge and skills to enhance economic productivity, and commitment to lifelong learning. Within an environment of academic freedom, students learn from faculty scholars who have nationally recognized expertise in the arts and sciences, and in such professions as engineering, public administration, education, business, health sciences, and technology. The faculty engages in research and creative activity, both to develop and maintain their own scholarly expertise and to extend human knowledge. The results of that research and other creative efforts are made available to students in the classroom and to the general public through publication, technology transfer, and public service activities. The institution also seeks to serve individuals who desire to enhance their professional development, broaden their perspectives, or enrich their lives.

Challenges for Students

University students will need to strengthen their practical knowledge and skills in the professions in order to be productive soon after graduation. Given economic realities and global competition, university graduates must have knowledge and skills relevant to the workplace, and must have critical thinking abilities that allow them to adapt to rapid change. University students will face a world vastly different from those of a decade ago. A strong economy and political stability cannot be presumed,

and graduates will have to develop solutions to unforeseen problems. They will need a broad understanding of other cultures, religions, and political systems, and will need to be able to communicate with people unlike themselves. University students will need to develop a sense of responsibility for their own actions, for others, and for their environment. They will need to be able to make decisions based on evidence, and to communicate and defend their positions to stakeholders. They will need to develop leadership skills as well as to learn to be good team members.

Challenges for the University

In the last decade, The University of Texas at Tyler has been transformed into a four-year, comprehensive, regional university with a full range of solid undergraduate and graduate degree programs. The challenge now is to distinguish the University among its peer universities so that it may experience continued growth and stability and add substantial value to the economic and civic future of East Texas, the entire state, and the nation.

Points of Distinction

The Honors Program

The University Honors program provides intellectually stimulating opportunities for academically talented and motivated freshman and transfer students at UT Tyler. The emphasis is on fully developing the capabilities of very talented students, not only enriching their coursework, but providing them significant opportunities to grow as leaders, citizens, and as individuals. They will build their speaking and writing skills, work with scholars to discover new knowledge through research in their chosen fields, meet and share ideas with foremost political, business, and civic leaders, and have study and travel abroad opportunities to interact with new worlds beyond the campus.

Honors students will receive personalized academic advising, interdisciplinary honors courses with top faculty, special programming such as Honors Visitors, opportunities for research, and a variety of international study and travel abroad programs. Upon completion of the programs and graduation, students will receive a special Honors designation on their transcripts.

Global Awareness through Education (GATE)

The University will provide students the opportunity for multidisciplinary exploration of global issues through the GATE program: Global Awareness through Education: Living and Learning Communities. We will increase opportunities for students to study abroad, for international students to enroll in University undergraduate and graduate programs, and for students to be exposed to global and cultural issues in their programs of study. GATE will bring together a diverse group of students in a living and learning community. These students will be broadly engaged

in globally enhanced learning opportunities and cross-cultural experiences. GATE's objectives will be achieved through the integration of three curricular enhancements: 1) global learning communities, 2) on-campus programs focusing on globally enriched core courses, and 3) off-campus programs, including study abroad, international courses, and international internships.

Information Literacy

Faculty members and professional librarians at The University of Texas at Tyler believe that the ability to evaluate and incorporate information strategically will be critical in creating a competitive advantage for students. Graduates will be skilled in locating, evaluating, and effectively using and communicating information in various formats. They will be aware of the economic, legal, and social issues concerning the use of information and will be able to access and use information ethically and legally. Within this comprehensive information literacy effort, the University will strive to develop the ability of its students to use information technology effectively in their work and daily lives. UT Tyler's information systems will be state-of-the-art and will serve as the central hub influencing, supporting, and integrating academic and administrative processes across the University.

University of Texas System Support

The University of Texas at Tyler will continue to take advantage of its position as a member of the renowned University of Texas System and as an institution supported by the State of Texas. UT Tyler, for the intermediate term, is classified a Masters Level I institution with selected doctoral programs. The University will continue to be a comprehensive, coeducational, high-quality institution with moderately selective admissions standards. The Strategic Plan that follows complements the UT System's strategic plan, which includes five major categories: 1) Enhancing student success, 2) Increasing research, global competitiveness, and technology transfer, 3) Enriching society through arts and cultural contributions, 4) Improving productivity and efficiency, and 5) Assuring integrity, accountability, and public trust.

The Planning Process

Strategic planning to meet the needs of our students actually began more than a decade ago. Using ideas expressed by students and focus groups that included civic, business, and educational leaders from across East Texas and The University of Texas System, the Strategic Planning Team worked together to build a long-range plan for the University.

The plan has been evaluated over time, with the current process of strategic planning beginning during the 2006-2007 academic year with excellent work done by a committee appointed by the President to develop

a student retention plan. Part of the charge was to assess the University's academic and campus life to determine areas of strength and opportunities to improve. The University continued its planning process by gathering additional information from campus constituencies through focus groups with students in the 2007-2008 academic year. Also in January 2007, the University brought in a creative ideation facilitator from Buffalo State University to conduct a planning retreat with administrators, faculty, staff, and students. In the fall of 2008, the University continued the planning process by holding a strategy session with faculty, students, and staff, and continued the discussions virtually. Participants were invited to develop goals, strategies, and tactics for the new Strategic Plan. After much discussion, collaboration, and refinement, UT Tyler's new vision for the next six years emerged. The resulting plan recognizes the University's excellence and traditions and is grounded on the successful implementation of the University's *2000 New Millennium Vision*. The *New Millennium Vision* outlined a direction that has proven nothing short of revolutionary in scope. Over the years, we adhered to guiding principles that, thus far, have withstood the test of time. Today, they remain the cornerstone of our new effort to revise and update our strategic plan for the next six years.

Guiding Principles and Beliefs

University

We will promote inquiry and academic freedom.

We will work together to be productive and achieve excellence.

We will serve the public interest.

We will promote stewardship of all resources.

We will display ethical behavior.

People

We will display civility in all relationships.

We will foster respect for all individuals and all racial and ethnic groups.

We will be honest in all interactions and value integrity highly.

We will be accountable for results and professional behavior.

Process

We will share governance and promote cooperation throughout the institution.

We will promote openness and trust in all relationships.

We will commit to quality and continuous improvement.

We will recognize personal and professional development and accomplishment.

Inspiring Excellence 2009-2015

The six major goals that came out of the strategic planning process that built on the New Millennium Vision, and adhered to the Guiding Principles, are:

1. UT Tyler will become nationally known for excellence in undergraduate and graduate programs
2. UT Tyler will promote excellence in scholarship, research, creative endeavor, and innovation
3. UT Tyler will serve the community of East Texas and beyond
4. UT Tyler will cultivate and inspire through the fine and performing arts.
5. UT Tyler will enhance the quality of campus life
6. UT Tyler will maintain outstanding stewardship of University resources

As we move forward, we will continue building on our framework in six key areas: Teaching and Learning, Research, Service, Arts and Culture, Campus Life, and Stewardship of Resources.

Goal One: TEACHING AND LEARNING

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

UT Tyler will enhance student success, emphasizing excellence in undergraduate and graduate programs; employing dynamic educators; a variety of innovative pedagogies consistent with Boyer's paradigm of "the scholarship of integration; the scholarship of application; and the scholarship of teaching" (Scholarship Reconsidered, 1990, p. 16); challenging course work; and unusual learning opportunities that promise success for a broader spectrum of learners. UT Tyler's core curriculum includes courses from a variety of disciplines that require students to enhance their critical thinking skills; understand ethical systems; acquire knowledge and its application to the exploration of social, economic, cultural, or scientific issues; and effectively communicate. To these ends we will employ the following strategies:

Curriculum

Create in every college new or redesigned programs of superior quality and relevance that foster intellectual inquiry and critical thinking and that prepare students to be innovative and successful citizens in a global society.

Create transformational learning opportunities such as student assisted research, study abroad, or service learning that actively engage students in the discovery, expansion, and application of knowledge within their disciplines, across disciplines, and with respect to global issues.

Develop students' communication skills in both written and oral forms through instruction and practice in activities such as publication, research presentations, colloquia, and debates.

Instill commitment to global citizenship by developing curricula that enhance students' understanding of the worldwide community of people and cultures.

Extend opportunities for technological and scientific knowledge and fluency and increase students' participation in disciplines related to Science, Technology, Engineering, and Mathematics (STEM).

Develop an honors program for high-ability students that offers challenging cross-disciplinary course work, leadership training, and unique opportunities for personal growth.

Add high-demand new programs such as environmental studies, health administration, media studies, and graphic design.

Implement a system of formal periodic reviews of each degree program to assure that it fulfills the needs and engages the interests of our students.

Strive to be both efficient and effective in delivering academic programs.

Support

Use academic advising creatively to help students form and follow their own educational and professional goals.



Support student learning by encouraging utilization of existing systems such as the Writing Center, Robert R. Muntz Library, The Mathematics Learning Center, Supplemental Instruction, and Student Learning Communities.



Proactively attend to student success through early monitoring and positive intervention for students struggling academically.



Use relevant technologies in academic activities when and wherever possible, ranging from research and problem-solving to communication.



Offer opportunities for students to graduate with enhanced credentials, including travel, study abroad, and internships related to their field.

Develop more scholarships and fellowships and explore other forms of compensation for TAs and RAs.



Form partnerships with graduate degree-granting institutions in order to offer easy acceptance and transition to doctoral programs.

Faculty

Attract and support dynamic and inspiring teaching faculty.



Attract and retain faculty with distinguished research or creative profiles, or with potential to become distinguished and productive scholars.



Encourage and reward faculty who achieve balance in teaching and research or creative activities.



Develop a campus-wide learning effectiveness center that offers information and guidance for faculty members on topics such as learning assessment and technological resources.



Improve compensation of faculty whenever possible by raising salaries, using merit and equity funds, and increasing the number of endowed chairs.



Provide more opportunities for professional development, including semester leaves and travel funds.

Recruiting

Implement recruiting and retention programs to significantly increase diversity in the student population—including students from outside the U.S.



Recruit more high-ability freshmen, sophomores, and transfer students.



Recruit and retain more quality graduate students.



Recruit and retain a more diverse faculty.



Proactively recruit outstanding teachers and scholars in targeted fields.

Goal Two: RESEARCH

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

UT Tyler promotes an enterprising, faculty-driven research environment that produces new knowledge, enhances teaching and learning, and addresses local and societal challenges.

Leadership

Promote research, scholarship, and creative endeavors in every academic discipline.



Generate research funding for breakthrough advancements or outcomes that can positively impact those around us.



Contribute to human and intellectual diversity by advancing research projects addressing global issues.



Design and execute research projects that develop local collaborative partnerships or that have the potential to contribute to local economic development.



Create and support graduate programs with effective research initiatives.



Create a formal undergraduate research initiative.



Demonstrate the highest standards of ethics and integrity in all research enterprises.



Establish distinctive research centers and institutes, especially those that collaborate with local entities. Plans include a Center for Research Excellence in Community Health, a Center for Reading and Learning, and a Center for New Media and Digital Arts.



Increase the number of endowed chairs and international scholars.

Support

Aggressively seek grant support for faculty research projects and graduate programs.



Seek research partnerships with other universities, companies, and nonprofit organizations in Texas, the nation, and worldwide.



Create a superior research infrastructure as a model for effectiveness, efficiency, and responsiveness.



Develop a top-tier library for research and education with high quality information professionals, a global collection, and featuring the latest innovations in technology.



Increase the number of conferences and publications with national and international reach that are hosted and supported by UT Tyler.



Provide opportunities for off-site faculty research.



Nurture emerging talent through increased use and support of graduate assistants.



Launch aggressive marketing, advertising, and promotional campaigns to highlight UT Tyler's accomplishments in research, scholarship, and creativity.

Goal Three: SERVICE

Serve the community of East Texas and beyond.

UT Tyler will work to enhance opportunities for our students to learn and develop their leadership skills through service to the community and make sure East Texas benefits from our educational, research, and creative activities. Plans targeted in this effort include:

Leadership Training and Service Learning For Students

Create internships and service learning projects that provide students opportunities to learn and grow personally.



Encourage opportunities for students to work with alumni and other local leaders in business, government, education, philanthropy, and non-profit organizations.

Provide education and training in leadership to students, faculty, and staff by bringing in leaders from a variety of backgrounds through mentoring programs, the Distinguished Lecture Series, colloquia, seminars, and teleconferences.



Sponsor campus-wide discussions of ethics, responsibility to others, and civic engagement.



Establish student and faculty speaker's bureaus.

Community Projects

Serve the community and promote economic development through research and creative activities that are community-based, project-oriented, and problem solving.



Seek opportunities to form new service relationships throughout the area, partnering with educational organizations, not-for-profit groups, and corporations.



Establish research centers that serve regional educational, health, and economic needs, such as a Center for Reading and Learning, Center for

Interdisciplinary Health Studies, and Center for New Media and Digital Arts.



Help to build a community of life-long learners in East Texas by establishing a university-level continuing education program.



Offer summer camps to area junior high and high school students in the STEM disciplines (science, technology, engineering, and mathematics) to encourage students to consider careers in those fields.



Encourage faculty to develop community-based and project-oriented research and educational services that can be extended to East Texas cities, counties, school districts, or other public bodies.



Maintain and further expand UT Tyler's role as the cultural center for East Texas and the primary forum for exchange of ideas by continuing to offer and expand its world-class lecture series and performing arts series.

Developing our Regional Campuses

Enhance the effectiveness of regional campuses by improving their integration into main campus activities.



Construct a new building at the Palestine campus to better serve that area.



Extend the reach of our communications about UT Tyler's economic, academic, artistic, cultural, and athletic programs and opportunities to the communities in East Texas near our satellite campuses.

Partnering with Local Educational Entities

Develop strong ties with primary and secondary schools in the region, promoting common educational interests through initiatives such as the P-Council, Minds-Matter, and graduate certificate programs for teachers.



Host academic conferences on school performance, inviting speakers from organizations such as the Education Trust in Washington, D.C.



Develop enhanced working relationships between UT Tyler and other higher education institutions in the East Texas area.

Goal Four: ARTS AND CULTURE

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

Recognizing the importance of a culturally rich society, The University of Texas at Tyler is committed to cultivating and inspiring students through the fine and performing arts and contributing to the cultural life of East

Texas. Specifically, the University will support the arts and culture by implementing programming initiatives and enhancing facilities.

Programming

Raise the profile of student performances and exhibitions.



Create inventive programs to increase campus and community engagement and attendance at student performances and exhibitions.



Incorporate the arts into the University's ceremonies and events when appropriate.



Develop appreciation of the arts globally and the role of art in other cultures.

Challenge established perceptions of the fine and performing arts.

Establish a Center for Excellence in Fine and Performing Arts that complements

UT Tyler's educational mission.

Increase the number and breadth of performance groups and increase financial support of existing performance groups.

Establish an endowment for the R. Don Cowan Fine and Performing Arts Center to support its mission of providing programming to the region.

Facilities

Expand the R. Don Cowan Fine and Performing Arts Center to include a 300- to 400-seat auditorium, an adequate stage, and rehearsal space.

Consider unique arts space requirements when planning all capital improvements.

Goal Five: CAMPUS LIFE

Enhance Quality of Campus Life.

Recognizing that our students, faculty, and staff are the life of the institution, UT Tyler is committed to creating a vibrant campus life for them that addresses the needs of the whole person. To enhance the sense of community and deepen engagement in campus life at UT Tyler, we will provide or enhance amenities, services, security, communication, and leisure opportunities for all members of our university family.

Communication

Host town hall-style meetings with students, faculty, and administration to collect input and exchange ideas on key issues.

Improve the use of campus media such as the campus newspaper, Blackboard, blogs, and e-mail to announce policies and events. Provide a more friendly and accessible e-mail system to students and employees.

Promote opportunities for faculty and students to engage outside the classroom.

Provide wireless connectivity from any location on campus.

Establish a campus Internet radio station.

Campus Activities

Raise awareness of and access to student performances and athletic events.

Develop a greater sense of community among graduate students with a graduate student support center that addresses their unique needs.

Offer popular games and a variety of student-selected entertainment activities in the University Center.

Increase weekend and leisure activities, paying particular attention to constituents of a broad range of cultures and with a variety of interests.

Create campus-wide activities that can become traditions and that will promote camaraderie among students and enhance students' identification with their *alma mater*.

Facilities and Services

Provide expanded health and wellness facilities and initiatives for all members of the UT Tyler community, utilizing and helping to expand the knowledge and skills of faculty and students in pertinent colleges and disciplines such as Kinesiology and Nursing.

Offer convenient, affordable daycare utilizing and helping to expand the knowledge and skills of faculty and students in pertinent colleges and disciplines such as Education and Nursing.

Provide postal, banking, and copying services at a convenient location and with expanded hours.

Provide a variety of meal options for students, staff, and faculty, including a Faculty Club.□

Construct an alumni center with space to house career services and interview facilities and space for the necessary campus entertaining of special supporters of the University.

Increase signage, lighting, and the number of campus security personnel.

Monitor the campus warning system to ensure that the best practices are employed.

Outreach

Provide opportunities for our campus neighbors to participate in on-campus activities, including an annual open house for neighbors.

Promote retail development near the campus

Promote stronger connections between alumni and the University.

Goal Six: STEWARDSHIP

Maintain outstanding stewardship of university resources.

UT Tyler is committed to responsible use of its financial and natural resources. We will ensure proper management and allocation of funding, preserve our natural and built environment, and work to protect our campus for generations to come. Strategies to these ends include:

Budgeting

Ensure efficiency and transparency in all financial affairs by employing zero-based budgeting, convening annual budget hearings, and using System, State, Federal, and University auditors.

Conscientiously monitor contractual, legislated, and other agreements and obligations.

Information Management

Acquire hardware and software necessary to accomplish the University's mission, including full installation and operation of PeopleSoft and upgrading of Blackboard.

Administrative Functions

Create a communication plan and policies to foster working relationships among administrative and academic units.

□

Monitor and regularly update faculty and staff training.



Encourage partnerships among units to share services, expensive equipment, and other 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.

Educate researchers about commercialization opportunities.

Encourage development of continuing education programs, and other entrepreneurial ways of delivering education to the region.

The Campus

Retain and enhance the park-like quality of the University's campus through management of our existing spaces and purchase of adjacent properties as opportunities arise.

Develop and monitor a schedule to maintain campus buildings.

Encourage foot and bike traffic on campus by developing footpaths and bike paths and design parking to protect green space.

Be Green

Endeavor to "be green" in all our operations and use of energy, including the initiation of a campus-wide recycling program and provision of convenient ways for the community to conserve.

Encourage understanding of environmental issues, methods of conservation, and green technologies among students, staff, faculty, and throughout the East Texas community.

Draft 2015-2025 Strategic Plan

The next strategic plan was only a draft and it was entitled *The University of Texas at Tyler Strategic Plan 2015-2025*. It was in the process of being approved when the university president, Dr. Rod Mabry, announced his retirement. During that time the new president, Dr. Michael Tidwell, noted that the university would be working together on a new strategic plan and the timeline is as follows:

2016 From the Office of the President

The University of Texas at Tyler Strategic Plan

What is Strategic Planning?

Strategic planning is the process of developing a vision and plan for the future of UT Tyler. Since January 2017, following the arrival of the University's fourth president, Dr. Michael Tidwell, the University has been going through the process of creating a plan to take the university forward through the next five years.

Timeline

Spring 2017

University leaders have been gathering input from the University community. More than 30 conversations were held around the campus with faculty, staff, students, and community members. The conversations centered around the following 11 topics:

- Career and Placement Services for Students
- University Centers of Excellence
- Enhancing Community Partnerships
- Supporting Regional Economic Development
- Faculty and Staff Training and Development
- Internationalization
- Marketing and Branding
- New Academic Programs
- Student Extracurricular Experience
- Student Qualifications and Recruitment
- University Mission

Summer 2017

The University Leadership Team will review all the input from the Strategic Planning meetings and develop a DRAFT of the plan. University faculty and staff will be polled through the summer months for additional input, as needed.

Fall 2017

The draft of the strategic plan will be presented to the University Community for further input.

Spring 2018

The UT Tyler Strategic Plan is presented to the UT System Board of Regents for approval. Following Board approval, the plan goes into effect.

Fall 2018-2022

Plan for implementation

New Strategic Plan for 2018-2022

VISION STATEMENT

Our aspiration is to be the primary educational and economic driver of East Texas.

MISSION STATEMENT

UT Tyler is committed to student success by providing a uniquely balanced student experience in an environment of innovative teaching and research shaped to serve and advance the educational, economic, technological, and public interests of East Texas and beyond.

Initiatives for Success

The initiatives that make up the action items of this strategic plan were culled from an open submission process, where all faculty and staff were encouraged to generate innovative ideas to advance the newly articulated vision and mission of UT Tyler. The initiatives have been sorted into the four pillars of success, and further sorted by areas of impact under each pillar. Brief summaries of each initiative follow in the next four sections. We believe the passion that the people of The University of Texas at Tyler will bring to these initiatives will yield successes for our students, our communities and all of East Texas.

Pillar I: Student Success

The initiatives of Pillar I focus on supporting educational and career goals with high impact, data-driven solutions.

Strategic Goal:

Catalyze student retention, graduation and career progression.

Impact Area: A Campus Community Focused on Student Success

We will reaffirm our commitment to growing a student-centered campus culture.

Initiative 1. Provide Student Service Training.

Opportunities for student service training will be available to all faculty and staff of The University of Texas at Tyler to support our core initiative to be a student-centered campus wholly focused on student success.

Impact Area: Supporting Academic Success from Recruitment to Graduation

We will launch data-driven programming to help improve our recruitment, persistence and graduation efforts.

Initiative 1: Establish the OnCourse Program for FTFT Freshmen.

UT Tyler will launch a suite of course-level supports to improve the first-year grade point averages and retention of first-time, full-time freshmen, and ultimately increase their graduation rates. This will include a series of on-demand digital course-related supports in first-year classes along with professional development for faculty.

Initiative 2: Encourage Adoption of Open Educational Resources.

The cost of textbooks can be a prohibitive factor for students. The university will create a faculty incentive grant program to support the adoption of OER, which include freely accessible textbooks, workbooks and other course materials.

Initiative 3: Pilot On-demand Degree Programs.

This initiative will be piloted with the RN-BSN program, which provides a baccalaureate degree to registered nurses who hold associate degrees. On-demand programs will offer a flexible alternative for working students pursuing a second degree or graduate degree from UT Tyler. This program differs from the accelerated seven-week programs in that it has much more flexibility to accommodate the working/ professional student.

Initiative 4: Redefine and Broaden the Recruitment Funnel.

UT Tyler seeks to improve the academic preparedness of its students to increase retention, persistence and student success. We are implementing changes to the freshman holistic admission review criteria; redefining and expanding our communication plan; and hosting regional events to recruit students ranked in the top 10 percent of their class.

Impact Area: Innovative, Student- Centered Teaching

Our faculty will be properly equipped to deliver learner-centered teaching.

Initiative 1: Provide Professional Development for Faculty Emphasizing Learner-centered Teaching.

The UT Tyler Center for Excellence in Teaching and Learning will provide faculty with resources and opportunities including comprehensive workshops, conferences and seminars on best practices for student-centered teaching.

Impact Area: Funding Success

We will expand grant- and scholarship-based financial aid.

Initiative 1: Align Financial Aid Programs to Enrollment Management Strategies.

UT Tyler seeks to recruit and retain high ability students with financial aid incentives. Those include leveraging institutional, state and federal grants in conjunction with scholarship redesign. Undergraduate new student scholarship criteria, award amounts and processes will be implemented to align with our desired student academic profile.

Impact Area: Position Every Student for Career Success

Career success begins with intensive coaching and career services for students.

Initiative 1: Establish Career Placement Services Within Each College.

UT Tyler career services will be expanded with the creation of an Office of Career Placement Services in each college. Each office will provide students with career path information, career building opportunities and placement services relevant to fields of study within the college.

Initiative 2: Establish Mentoring Programs.

In partnership with UT Tyler Alumni Relations and University Advancement, the College of Engineering will form a pool of professionals in engineering industries to mentor students and expose them to best professional practices in the workplace. The College of Education and Psychology will establish a mentor center to support student retention and ultimately position students to launch successful careers. Graduate assistants trained to provide academic, social and emotional support will staff the center.

Initiative 3: Initiate Honors 360.

The UT Tyler Honors Program will implement a holistic approach to engaging honors students, including advising, peer mentoring, career counseling, experiential learning and academics. Combining these strategies will impact graduation and retention rates to position students for success.

Initiative 4: Create Student Success 360.

Implemented through UT Tyler's Student Success Division, Student Success 360 will be designed to strengthen each student's ability to engage through a unified communication platform. It also will serve to augment the student's sense of belonging and promote academic success, personal development and financial literacy.

Pillar II: Student Engagement

The initiatives of Pillar II are meant to ensure each UT Tyler student has access to a rich, individualized educational experience

Strategic Goal:

To stimulate the growth of traditions and programming that engages students in unique and compelling ways.

Impact Area: Encouraging Student Involvement in Research & Discovery

We will promote the UT Tyler student experience by incentivizing engagement in faculty-led research.

Initiative 1: Implement Incentive Programs to Support Student Involvement in Research.

Incentives are being developed in several colleges to support student engagement in faculty-led research, and the expansion and strengthening of internal grants.

Impact Area: Connecting Students with Successful Alumni

Creating opportunities for students to connect with alumni from their discipline/field will improve student engagement.

Initiative 1: Design and Deliver the Alumni Career Success Conference.

UT Tyler will hold an annual one-day event in which alumni will be invited to campus to share their stories and advice to business students. The event will foster career-focused engagement of students and engagement of alumni with the university.

Additionally, colleges will work to develop innovative activities to connect their alumni with current students.

Impact Area: Connecting Students to Campus

We will stimulate the growth of student clubs, participation in the arts and general student development.

Initiative 1: Formalize a Student Organization Activity and Engagement Contest.

The College of Engineering will create a yearlong tournament of student organization activities, which will be scored on a rubric based on participation, quality and impact. The contest will be designed to increase faculty-to-student and student-to-university connectivity while enhancing opportunities for career and professional interactions.

Initiative 2: Provide Opportunities for Students to Attend Annual Arts Education Performances.

The Cowan Fine and Performing Arts Center will provide opportunities for UT Tyler students to attend Arts in Education Series performances. Student attendance will be integrated into university course curriculum.

Initiative 3: Create Distinguished Lecture Series Engagement with Honors Students and Faculty.

Through the Cowan Center, students in the UT Tyler Honors Program will have opportunities to attend Distinguished Lecture Series events followed by a post-lecture discussion with faculty members. Students will report back to their professors as part of their course curriculum.

Initiative 4: Graduate Student Workshops.

The university will establish a Graduate Student Professional Development Center, which will sponsor a Workshop Series with Live Zoom and on-demand recorded workshops on topics relevant to graduate students. Programming will include networking, social and special events; panel discussions with industry professionals and alumni; and international student development programs.

Initiative 5: Pursue the Advancement of Athletics from NCAA DIII to NCAA DII.

The university is moving forward as a candidate for Division II membership. The successful transition to DII will elevate student enthusiasm for athletics with more exciting, competitive events.

Impact Area: Improving Campus Accommodations for Students

We will expand campus facilities in ways that promote success and engagement.

Initiative 1: Launch a Campus Master Plan.

The university will form a new master plan of facility improvements to enhance student life and engagement as well as the overall student experience on campus.

Initiative 2: Create “Third Spaces” for Student Engagement Around Campus.

UT Tyler will enhance existing and create new third spaces — social areas designed for organic engagement, innovation and discovery.

Pillar III: Research and Scholarship

The initiatives of Pillar III will foster discovery through scientific, technological, intellectual and creative expression.

Strategic Goal:

To endorse discovery that expands knowledge and transforms East Texas.

Impact Area. Expanding the Field of Knowledge

We will incentivize research that expands knowledge in ways that connect the campus to the region.

Initiative 1: Launch an Early Career Tenure-track Faculty Research Support Fund.

The Soules College of Business will make grants available to support the research of tenure-track faculty and expand the field of knowledge in business and technology. Progress will be measured in the increase of journal articles published.

Initiative 2: Develop a Health/Wellness Interdisciplinary Research Collaborative.

The College of Nursing and Health Sciences, College of Education and Psychology and Fisch College of Pharmacy are working with the Faculty Senate to expand interdisciplinary research at UT Tyler. A range of complex health and wellness-

related problems exist in the greater East Texas area, requiring this type of interdisciplinary approach to produce positive outcomes.

Initiative 3: Foster Research Programs Targeting Health and Wellness in East Texas.

A UT Tyler center for health and wellness will be developed to improve the quality of life in East Texas. This effort, led by the College of Nursing and Health Sciences, is a collaboration with the Fisch College of Pharmacy and the College of Education and Psychology. The primary center will be located near the Tyler campus, with satellite centers developed in high-need areas of East Texas.

Initiative 4: Fund Publication Fees for Team Members Publishing in Quality Open Access Journals.

The university will fund publication fees for faculty, students and staff who publish in quality Open Access Journals. This will ensure the scholarship of our university is openly accessible.

Impact Area: Expanding Student Research Activities

We will increase the use of student research as a tool for engaged learning, critical thinking and the creation of knowledge.

Initiative 1: Provide Workshops to Guide Students through the Research Cycle.

Honors Program faculty and staff will host an annual series of workshops covering various aspects of the research cycle. Open to all students, the workshops will promote a culture of strong student research at UT Tyler.

Initiative 2: Create Graduate Assistantships Across All Programs.

The Division of Academic Affairs is making semester teaching assistantship stipends available to thesis-track students in each college. Nominated by faculty, students awarded the stipend will be committed to completing a thesis. Faculty will be committed to supporting the graduate assistant's thesis work.

Initiative 3. Implement Grad School 180.

The university will launch a Three-Minute Thesis type event for dissertations, master's theses and graduate projects to promote knowledge creation and enhance student success and engagement. Participants will present their research to a live audience and online. The event will include a Graduate Student Excellence in Visual Arts Award.

Pillar IV: Community Engagement

Pillar IV initiatives will encourage local and regional collaborations and partnerships with governmental entities, businesses and nonprofit organizations to improve the quality of life in our communities.

Pillar IV initiatives will encourage local and regional collaborations and partnerships with governmental entities, businesses and nonprofit organizations to improve the quality of life in our communities.

Strategic Goal:

To successfully deploy the university's intellectual capital to address regional needs.

Impact Area: Improving East Texas' Economic Diversity

We will connect the region to the university's intellectual capital to improve economic development.

Initiative 1: Strengthen and Expand Partnerships Between Academic Units and Regional Organizations.

This initiative includes enhancing the Soules College of Business partnership with the Tyler Innovation Pipeline (TIP), which is operated under the auspices of the city of Tyler. The college will provide its expertise by serving as co-director of TIP, with UT Tyler technology students operating the program's Maker Space.

Initiative 2: Launch the East Texas Policy Summit.

The university will bring together the top leaders in business, government, education and the nonprofit sector for substantive conversations about leveraging regional resources to advance economic development throughout East Texas. The East Texas Policy Summit will be an annual event.

Initiative 3: Diversify procurement of products and services in all areas of campus.

The university will maximize opportunities for Historically Underutilized Businesses companies to provide services, materials, supplies and equipment to serve the needs of the campus.

Impact Area: Educational and Cultural Engagement

We will launch lifelong learning and continuing education opportunities for the region.

Initiative 1: Create a Hearts for the Arts Program.

The UT Tyler Cowan Center has been a major contributor to the arts and cultural fiber of the region. Hearts for the Arts will be an outreach program for those who have not had the opportunity to experience the arts. Donors will be matched with recipients for a select number of shows annually.

Initiative 2: Support Free Course Voucher for UT Tyler Alumni.

To encourage lifetime learning in the region, the university will send a UT Tyler-branded graduation gift to all of its graduates, along with a free course voucher that can be redeemed by the alumnus or shared with a friend.

Initiative 3: Strengthen the Project Lead the Way Partnership to Promote STEM Engagement.

The College of Engineering will partner with PTLW at the high-school level to promote dual credit opportunities available to pre-college students. Pre-engineering students will have opportunities to receive college credit while increasing their STEM readiness.

Initiative 4: Establish an Adopt a School District Program.

The College of Education and Psychology's East Texas Center for School Based Research and Instruction will provide high quality professional development opportunities for school districts to increase K-12 student achievement. School districts throughout Northeast Texas will be invited to be members of the center and receive its services.

Initiative 5: Launch Comprehensive Overnight Summer Camps.

The university will engage the youth of East Texas in educational and recreational camps in several areas of campus, including athletics, academic units, the Honors Program and the Cowan Fine and Performing Arts Center. 15 | Strategic Plan 2018-2023

Any successful plan builds new initiatives on a foundation of operational support. The elements of these operational foundations support success, and we expect to

continue to enhance these tools as part of this five-year plan. One could consider this a fifth pillar of the plan, supporting the other initiatives behind the scenes, as we work toward institutional success.

Strategic Goal:

To operate using effective, efficient and creative strategies.

Impact Area: Design and Launch New Centers of Excellence

The University of Texas at Tyler faculty and staff will work together to design and launch new Centers of Excellence. A successful center of excellence will interconnect the four pillars of the strategic plan in a unique and innovative manner, cutting across multiple academic and support units on campus. This will bring together different constituencies of the university including members of the community to help elevate the brand of the university at a national level.

Impact Area: Support College and Departmental Faculty and Staff Development

Recognizing that faculty and staff play an important role in student success and student engagement both in and out of the classroom, the university will invest resources in their professional development. UT Tyler will form communities of practice (learning communities) as campus experts and stakeholders come together with a shared interest in one focal area. These areas will tie to the four pillars of the strategic plan, ultimately developing the culture of teamwork across campus with high-impact practices.

Impact Area: Create New Marketing and Advancement Strategies

Recognizing the significance that marketing and advancement play in meeting our institutional goals, both units will be realigned and reorganized with a new focus on brand management and alumni engagement, respectively. Where appropriate, centralization should occur to realize operational efficiency, quality improvements and better adherence to industry best practices.

Impact Area: Initiate Sustainable Financial Management Strategies

The University of Texas at Tyler is committed to a sustainable financial model in support of the strategic plan. Steps taken to ensure this support include: Realignment of departments and divisions to ensure effective operations and organizational communication; Adopting a philosophy of having highly developed and motivated employees for a workforce of quality personnel rather than quantity; Continuous analysis to ensure the best use of faculty resources through course scheduling and class size guidelines; Revised budgeting practices that make the best use of all available financial resources; A commitment to continuous improvement efforts toward increased efficiency, a paperless environment, automated processes and reduced costs; Efforts to work with the UT System on initiatives to leverage the size of the University of Texas System to obtain better pricing for commonly purchased commodities and services.

Impact Area: Create and Sustain IT Infrastructure to Support Strategic Educational Initiatives

The University of Texas at Tyler will work to continuously improve its IT infrastructure to find efficiencies and help improve the business processes and educational initiatives of the university. Additionally, IT will continually assess new

initiatives, many of which will be brought online as a part of this strategic plan, to assure they are supported with the appropriate IT infrastructures in the most efficient and effective manner possible.

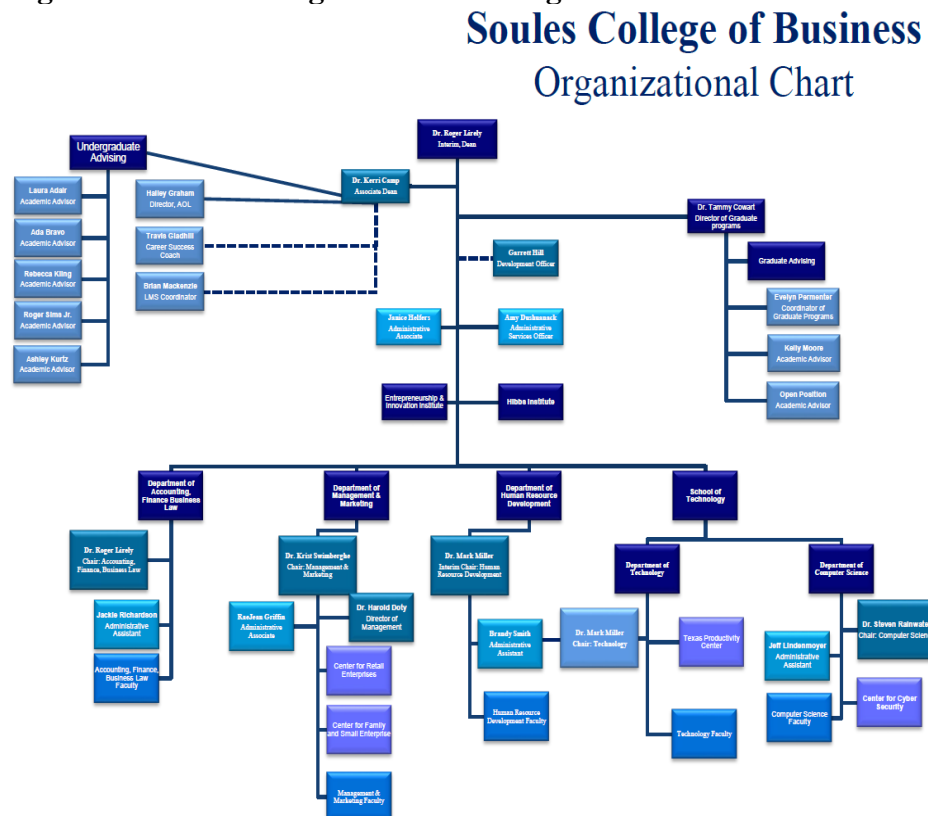
10. Relationship of Institution to Superior Governing Body

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

B. Administrative Unit

Figure 1: Soules College of Business Organizational Chart



1. Names and Address of Administrative Units

College

Soules College of Business
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

Department

The Department of Technology
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

2. Names of Dean and Department Head

Dean

Roger Lirely, DBA, Interim Dean, Soules College of Business

Department Head

Mark R. Miller, PhD, Chair, Department of Technology and
Interim Chair, Department of Human Resource Development

3. Names of Other Departments in the Administrative Unit

The Department of Management & Marketing
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

The Department of Accounting, Finance & Business Law
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

The Department of Human Resource Development
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

The Department of Computer Science
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

4. Names and Titles of Others with Program Administration and/or Coordination Responsibility

Dr. Mohammed Ali, Coordinator for the Longview University Center
Industrial Technology program

5. Titles of Degrees, Programs and Concentrations for which Accreditation is being requested

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

6. Operating Budget for administrative unit in which the Degree, Program, and Concentrations for which Accreditation is being requested reside

a. Current: About the same as last year, although we can ask for more with appropriate justification.

b. Five-Year History

<u>Year</u>	<u>Budget</u>	<u>Percent</u>
2017-2018	\$1,239,564.41	
2016-2017	\$834,765.96	
2015-2016	\$777,597.04	
2014-2015	\$593,960.03	
2013-2014	HRD & Technology was one department	

Standards for Accreditation

Standard 1 - Preparation of Self-Study and campus visit. The Self-Study Report shall follow the guidelines of the Accreditation Handbook version in place at the time of the accreditation application. The report shall be completed by a representative portion of the institutions administrative staff and teaching faculty directly related to the program(s) to be reviewed. Students should be involved in the accreditation preparation process. Representative student transcripts for each program and/or option shall be included in the self-study and made available for the visiting team. Representative examples of student's management and/or technical graded work shall be available for each course in the Self-study and/or campus documentation room. Examples of textbooks and instructional materials for each management and/or technical course shall be provided for the visiting team.

The self-study report for the Association of Technology, Management, and Applied Engineering accreditation has been an ongoing process since the 2000-2001 academic year. This document is the result of broad participation by The University of Texas at Tyler's administration, faculty, staff, Advisory Committee, students, and graduates.

The Department of Technology has used the completion of the self-study report as a means to achieve several goals. They include:

- To prepare a self-study report assessing the current practices and procedures used in the Industrial Management program compared to the standards of the Association of Technology, Management, and Applied Engineering.
- To use the self-study report to identify and assess opportunities for future development and planning.
- To prepare a document which can be used as a format for continued collection and analysis of data regarding the program.
- To prepare a document which can be used to acquaint others with the Industrial Management program.

The process for preparing the self-study report was conducted under the direction of Dr. Mark Miller and involved all faculty and staff from the Department of Technology.

In addition to the participation of the faculty, staff, and students within the Department, the Advisory Committee has provided direction, information, and feedback, which has been beneficial in this self-study report. External information from our graduates and their employers has been useful in the preparation of this document, particularly the information contained in the Graduation and Alumni Surveys. Also of assistance were the following offices on campus which provided needed assistance and data used in this report:

- President's Office
- Provost's Office
- Business Affairs Office
- Dean's Office
- Office of Assessment & Institutional Effectiveness
- Office of Institutional Analysis

- Registrar's Office
- Career Success and Alumni Engagement Office
- Office of Admissions
- Robert R. Muntz Library

This self-study report accurately reflects the Technology program at The University of Texas at Tyler as of February 2019. Examples of student work, textbooks, other instructional materials, etc. will be on display in the department's conference room for the ATMAE Accreditation Visiting Team to review at their leisure. The Department of Technology faculty and its Advisory Committee are confident that the program meets all professional standards set forth by the Association of Technology, Management, and Applied Engineering.

Standard 2 - Program Definition: A program is a set of courses leading to a degree. A program may have more than one option, specialization or concentration, but specific course requirements for each option shall be clearly specified, and as appropriate all program/options shall meet ATMAE standards. In situations where an option is not appropriate for ATMAE accreditation based upon the approved definition of technology, management, and applied engineering, the request for accreditation should clearly state which option, concentration, or specialization is seeking accreditation and which ones are excluded. The case for exclusion should be made with the application for accreditation. If an option, concentration or specialization is excluded and the program becomes accredited, the program must identify specifically which concentrations, options and specializations are and are not accredited in all their publications and promotional materials that mention accreditation. Only institutions legally authorized under applicable state law to provide degree programs beyond the secondary level and that are recognized by the appropriate regional and/or national accrediting agency are considered for accreditation. Evidence must exist that the programs are understood and accepted by the university/college community, and the business/industry community.

Legal Authorization to Provide Degree Programs

The University of Texas at Tyler was created by the Texas Legislature in 1971 and became a component of The University of Texas System in 1979, as a result of action by the 66th Texas Legislature. Originally established as an upper-level university, UT Tyler's mission was expanded in 1997 when the 75th Texas Legislature passed House Bill 1795 authorizing it to offer classes for a restricted number of freshman and sophomore students. The University began the unrestricted admission of freshman in 2002.

The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) is the regional accrediting body for The University of Texas at Tyler. UT Tyler successfully submitted its 5th year report in the Spring semester of 2016 for SACSCOC as part of its reaffirmation requirements.

Program Inputs:

Standard 3 - Program Title, Mission, and Program Outcomes: Each program/option shall have appropriate titles consistent with the approved ATMAE definition of Technology, Management, and Applied Engineering.

3.1 - The program/option title, definition and mission shall be compatible with the ATMAE definition of Technology, Management, and Applied Engineering. The program/option shall lead to a degree at the associate, bachelor, or master's level.

The Department of Technology has adopted the definition of Industrial Management which was taken from the Classification of Instructional Programs (CIP 2010), code 15.1501. This definition is listed on the U.S. Department of Education Institute of Education Sciences website. The Department's definition is a variation of this definition because the original definition lists more than 12 areas that could be covered by the program. Since the program can only offer 12 courses for the degree, some of the content had to be omitted.

Definition: A program that focuses on the application of engineering principles to the planning and operational management of industrial and manufacturing operations, and prepares individuals to plan and manage such operations. Includes instruction in financial management, industrial and human resources management, management information systems, continuous improvement and optimization, quality control, operations research, safety, supply chain, and project management.

A mission statement for the Industrial Management program was derived from the College of Business' mission statement which aligned with that of the university:

Program Mission Statement: The Master of Science in Industrial Management provides students with the latest philosophies and technical expertise deemed necessary for pursuing successful leadership positions. Our high quality program offers courses online and face-to-face, thereby enabling students the flexibility to earn a degree that fits their schedule. Students will explore research opportunities with nationally recognized faculty with expertise in various technologies. Furthermore, students can earn several certifications while completing their degree.

3.2 - General program outcomes shall be established for each program/option that provides a framework for the development of specific measurable program learning outcomes.

The University of Texas at Tyler has determined that to be an educated person, a student needs certain intellectual skills in order to participate effectively in society and in the workplace. The faculty of the Department of Technology has identified seven general outcomes (further defined into program core competencies) that fulfill the university's definition of an educated person and simultaneously contribute to the core values of the Soules College of Business. These general program outcomes:

1. Instill confidence with computer software, database, and internet search skills,
2. Cultivate effective oral and written communication skills
3. Promote team-based skills including leadership and conflict resolution abilities,
4. Stimulate critical thinking,
5. Encourage ethics in decision making and behavior,
6. Foster personal accountability for achievement,
7. Provide competence in basic technology skills and principles.

Standard 4 - Program Goals: Each program shall have short and long-range goals, plans for achieving these goals, and document progress of the goals.

The 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 2009 and again in 2018 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 develop goals that were deemed most appropriate to the mission of the University. Departmental long and short-range objectives 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.

(lro) = Long Range Outcomes (sro) = Short Range Outcomes

The 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 current program goals are listed as follows:

University Goal One: TEACHING AND LEARNING

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

- The program will be known to have the same reputation for quality as the best programs in the country (lro).

- The program will earn ATMAE accreditation (sro).
- The program will continue to produce graduates that can pass national certification exams (sro).
- The program will have state-of-the-art laboratories (sro).

University Goal Two: RESEARCH

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

- The program will consist of faculty with excellent scholarly and research records (lro).
 - The program will consist of faculty who publish as required by the Soules College of Business Tenure and Promotion Policy (sro).
 - The program will have at least one research proposal submitted over a three year period (sro).
 - The program will consist of faculty who present at the national level annually (sro).
 - The program will consist of faculty who are known for innovative endeavors (sro).

University Goal Three: SERVICE

Serve the community of East Texas and beyond.

- The program will provide opportunities for students and faculty to build long term relations with the community of East Texas and beyond (lro).
 - The program will maintain and expand its Advisory Board to provide input to the program so it can produce graduates that are adequately prepared for the workforce in the surrounding areas and beyond (sro).
 - The program will provide internship opportunities for majors in order to better prepare them for real life careers (sro).
 - The program will provide opportunities for students to participate in volunteer projects to help the community of East Texas and beyond (sro).

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 (lro).

- The program will create and/or offer a variety of student organizations and honor societies for students to participate in (sro).
- The program will provide opportunities for students to partake in external field trips to various local, regional, and national events related to the discipline (sro).

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

2018-2023 University Strategic Plan

The new university strategic plan is centered around four pillars to ensure student success. The short and long term goals for the program were developed to align with these four pillars. Furthermore, the expected short term and long term goals for colleges and departments are actually written in the strategic plan, therefore, those will be reviewed below.

Pillar I: Student Success

The initiatives of Pillar I focus on supporting educational and career goals with high impact, data-driven solutions.

Strategic Goal:

Catalyze student retention, graduation and career progression.

Impact Area: A Campus Community Focused on Student Success

- The faculty of the program will improve their teaching by some means of training (lro).
 - Faculty of the program will be encouraged to attend at least one sponsored event by the UT Tyler Center for Excellence in teaching annually (sro).

Pillar II: Student Engagement

The initiatives of Pillar II are meant to ensure each UT Tyler student has access to a rich, individualized educational experience

Strategic Goal:

To stimulate the growth of traditions and programming that engages students in unique and compelling ways.

Initiative 1: Design and Deliver the Alumni Career Success Conference.

UT Tyler will hold an annual one-day event in which alumni will be invited to campus to share their stories and advice to business students. The event will foster career-focused engagement of students and engagement of alumni with the university. Additionally, colleges will work to develop innovative activities to connect their alumni with current students.

- Faculty of the program will engage and encourage students to network with alumni from UT Tyler (lro).
 - Faculty of the program will assist with university held programs to promote career success annually (sro).
 - Students of the program will participate in university held programs to promote career success (sro).

Pillar III: Research and Scholarship

The initiatives of Pillar III will foster discovery through scientific, technological, intellectual and creative expression.

Strategic Goal:

To endorse discovery that expands knowledge and transforms East Texas.

Impact Area. Expanding the Field of Knowledge

We will incentivize research that expands knowledge in ways that connect the campus to the region.

Initiative 1: Launch an Early Career Tenure-track Faculty Research Support Fund.

The Soules College of Business will make grants available to support the research of tenure-track faculty and expand the field of knowledge in business and technology. Progress will be measured in the increase of journal articles published.

- Tenure-track faculty will be encouraged to conduct research as required in the College's Guidelines for Tenure and Promotion (lro).
 - Tenure-track faculty will be expected to submit research proposals annually for college sponsored research grants (sro).

Pillar IV: Community Engagement

Pillar IV initiatives will encourage local and regional collaborations and partnerships with governmental entities, businesses and nonprofit organizations to improve the quality of life in our communities.

Pillar IV initiatives will encourage local and regional collaborations and partnerships with governmental entities, businesses and nonprofit organizations to improve the quality of life in our communities.

Strategic Goal:

To successfully deploy the university's intellectual capital to address regional needs.

Impact Area: Improving East Texas' Economic Diversity

We will connect the region to the university's intellectual capital to improve economic development.

Initiative 1: Strengthen and Expand Partnerships Between Academic Units and Regional Organizations.

This initiative includes enhancing the Soules College of Business partnership with the Tyler Innovation Pipeline (TIP), which is operated under the auspices of the city of Tyler. The college will provide its expertise by serving as co-director of TIP, with UT Tyler technology students operating the program's Maker Space.

- Faculty and students of the program will promote academic partnerships throughout the region (lro).
 - Faculty of the program will assist with the setup of equipment for the TIP (sro).
 - Students of the program will assist patrons of the TIP in making innovative projects by assisting them with the operation of the equipment and software (sro).

Initiative 5: Launch Comprehensive Overnight Summer Camps.

The university will engage the youth of East Texas in educational and recreational camps in several areas of campus, including athletics, academic.

- The Department of Technology will provide events for East Texas youth to promote the Industrial Technology program (lro).
 - Faculty of the program will develop a curriculum for summer camps that will recruit new students to the Industrial Technology program (sro).
 - Faculty of the program will offer summer camps either annually or biennially (sro).

Plans for achieving goals: All goals are developed by Technology faculty at the beginning of the academic school year. Once the goals are reviewed, faculty are assigned specific goals to achieve by the end of the year. Objectives are developed to break down goals into quantifiable units that can be measured and obtained. Goals that are not met are put on the agenda for next year's faculty meeting prior to the beginning of the start of the semester. Faculty brainstorm strategies for achieving unmet goals or revise the goals so that they are achievable with the resources at hand. Outcomes for these goals are listed in Appendix D under the section Program Goals Status Form.

Standard 5 - Program Learning Outcomes Identification & Validation: Measurable program learning outcomes shall be identified, assessed and validated for each program/option. These outcomes must align with the program goals established for the program/option and validation shall be accomplished through a combination of external experts, an industrial advisory committee and, after the program is in operation, follow up studies of direct and indirect measures for each outcome.

The program outcomes for the Industrial Management program were determined from guidance from the university's Office of Assessment and Institutional Effectiveness, a thorough review of the curriculum from similar accredited Industrial Management programs, input from the program's Industrial Advisory Board as well as input from the faculty and students. These program outcomes include characteristics that distinguish the program from other programs at the university. These unique traits are reviewed annually and continuous improvement measures are implemented to properly prepare students for gainful employment.

The Master of Science in Industrial Management is designed to prepare the individual for employment which involves management, administration, and other types of leadership positions in industry, business, government, or education.

Program Outcomes

Industrial Management students at the time of graduation are expected to be able to:

1. demonstrate a thorough understanding of Lean Philosophies to eliminate waste in processes;
2. implement Six Sigma Quality methods for continuous improvement efforts;
3. conduct research related to the field of industrial management;
4. demonstrate a thorough understanding of current project management theory and practices, and;
5. describe and express an in depth knowledge of supply chain and logistics principles.

Standard 6 - Program Structure & Course Sequencing: Each program/option shall meet **minimum** foundation semester hour requirements. Programs/options may exceed maximum foundation semester hour requirements specified in each area, as long as minimums are met. A specific list of courses and credit hours that are being counted toward each category shall be included in the Self-Study Report (please use the attached table C). Institutions utilizing quarter hours shall convert the course work to semester hours (hours based on Federal Regulations)

The Industrial Management meets the minimum number of credit hour requirements for AMTAE accreditation and it also does not exceed the maximum number of credit hours allowed for each category as illustrate in Table C.


6.1 Program Minimum Curricula Foundation

C. Master's Degree: Programs/options shall be a minimum of 30 semester hours ATMAE 2019 Accreditation Handbook - 10 - and shall meet the following minimum/maximum foundation semester hour requirements:

Communications and/or Problem Solving.....	6-12
Research	6-12
Management and/or Technical	12-18
Electives	0-6

Note: Students must successfully complete a minimum of 10 semester hours of graduate level coursework at the institution seeking accreditation.

**Table C Masters' Degree Foundation Semester Hour Requirements Table
For the Master of Science in Industrial Management at UT Tyler**

 <small>The Association of Technology, Management, and Applied Engineering</small>	School/Program Degree Requirements Course prefix, number and title	Semester Hours
Problem Solving (Continuous Improvement) 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
Research 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
Management and/or Technical 12-18 Semester Hours	MANA 5350 Strategic Human Resources Management	3
	or	
	TECH 5348 Warehousing	3
	MANA 5305 Decision Making in Operations Management	3
	TECH 5331 Project Management	3
	TECH 5306 Logistics Management	
Electives 0-6 Semester Hours	Total	12
	TECH 5308 Strategic Sourcing	3
	TECH 5309 Industrial Processes and Materials	3
	TECH 5312 Total Productive Maintenance	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
ATMAE Minimum Total 30 Sem. Hours	Total (Select from above or any graduate course)	6
	Degree Total	36

6.2 - 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 and/or options may not have formal laboratory activities, but must maintain a balance between the practical application of “how” and the conceptual application of “why.”

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. Moreover, several courses require the use of a computer lab for assignments.

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

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 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.

6.4 - Furthermore, sequencing should ensure that advanced level courses build upon concepts covered in beginning level courses.

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. 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.

Standard 7 - Student Admission & Retention Standards: There shall be evidence showing that the quality of technology, management, and applied engineering students is comparable to the quality of students enrolled in other majors at the institution. Additionally, the standards for admission and retention of technology, management, and applied engineering students shall compare favorably with institutional standards. (Sources of admission information may include test scores and grade rankings. Sources of retention information shall include general grade point averages of technology, management, and applied engineering students compared to programs in other institutional programs.)

Admission Requirements

The minimum graduate admission requirements for The Graduate School are below. Specific programs may have additional requirements. Please check the requirements for your chosen degree program on our Graduate Programs page. Bachelor's Degree or Recognized Comparable

Applicants must hold a baccalaureate degree from a regionally accredited institution in the US or the foreign equivalent. Applicants should submit official transcripts demonstrating proof of degree directly to the Office of Graduate Admissions. Official transcripts are typically mailed in a sealed university envelope directly from the issuing institution. UT Tyler also accepts electronic transcripts sent via a secure delivery method (Parchment, E-Script Safe, Speed-E, etc.) directly from the issuing institution. Electronic transcripts forwarded by the applicant are not considered official.

Community or junior college transcripts are typically not required, unless otherwise stated on your academic program's page. UT Tyler transcripts need not be forwarded by the applicant.

International Transcript Evaluation

With a few exceptions, detailed below, applicants with foreign transcripts must submit a detailed, course-by-course international transcript evaluation.

The following programs do not require evaluations unless specifically requested by the program:

- Computer Science
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering

The evaluation determines an applicant's degree comparability to a US bachelor's degree and provides their GPA on the US scale. UT Tyler accepts international transcript evaluations conducted by the following service providers:

- * World Education Services (WES)
- * JSA Joseph Silny & Associates, Inc.
- * International Education Research Foundation
- * International Academic Credential Evaluators
- * Global Credential Evaluators, Inc. (GCE)
- * Educational Credential Evaluators, Inc.
- * Span Tran ([Click here to go directly to the UT Tyler form](#))

GRE or GMAT Scores

UT Tyler does not have a designated minimum GRE or GMAT score, but the desired minimum GRE score range for most programs is 290-300. You can find more information about the GRE exam on the Educational Testing Service (ETS) website. The official GRE score transmission code for The University of Texas at Tyler is 6850. You can find out more about the GMAT exam on the Graduate Management Admission Council (GMAC) website.

Certain programs, like our Non-Degree Seeking options, do not require an entrance exam, while others offer waivers. Please check the requirements for your chosen degree program on our Graduate Programs page.

Proof of English Proficiency

Applicants with an undergraduate degree from a foreign institution must submit results of an English proficiency examination. Evidence of English proficiency must be submitted before admission will be granted.

Accepted tests are the Test of English as a Foreign Language (TOEFL), the

Pearson Test of English (PTE), or the International English Language Testing System (IELTS).

Minimum scores are as follows:

TOEFL – 79 (iBT) or 550 (pBT)

IELTS – 6.5 band score with 6.0 in each subsection

PTE Academic - 53

EIKEN - Grade 1

NOTE: Applicants to graduate Psychology and Counseling programs must have a minimum TOEFL score of 87 or IELTS score of 7.0 with 6.5 or greater in each subsection. Applicants to Accountancy must have a minimum TOEFL score of 105 with a minimum score of 24 for each section or IELTS score of 7.5 (band score).

UT Tyler's Educational Testing Service (ETS) code for TOEFL is 6850. An institutional code is not required to submit your official IELTS scores. Please contact your IELTS testing center to request that your IELTS scores be electronically transmitted to UT Tyler.

There are some exemptions to our language proficiency requirement. Each exemption is outlined below:

Official documents should be submitted to the Office of Graduate Admissions at the following address:

Graduate Admissions, STE 345
The University of Texas at Tyler
3900 University Blvd.
Tyler, TX 75799

All submitted documents become the property of UT Tyler and cannot be returned to applicants.

Proof of Bacterial Meningitis Vaccination – for those under 22 years of age
Please see UT Tyler's Meningitis Policy.

Students enrolled in online-only programs may email ogs@uttyler.edu to have the bacterial meningitis vaccination hold released. The email should be sent from their Patriots Email and should state:

"I have read and understand the Bacterial Meningitis Policy. I am not currently enrolled in any on-campus classes, and I understand that if I do enroll in any on-campus classes I must submit documentation of immunization from an appropriate medical professional 10 days prior to the first class meeting. Failure

to provide documentation will cause delays in the registration process." The submission of documents in support of applications for admission and fellowships such as transcripts, diplomas, test scores, references, essays, or the applications themselves, that are forged, fraudulent, altered from the original, plagiarized, materially incomplete, obtained under false pretenses, or otherwise deceptive (collectively referred to as fraudulent documents) is prohibited by The University of Texas at Tyler and may be punishable by: a bar on applying for admission, fellowships, suspension, and/or expulsion. Students who submit fraudulent documents are not eligible to reapply.

Retention of students is also influenced by the confidential student counseling and testing services provided to students enrolled at the university. Individual counseling, enrichment courses, group counseling and referrals are conducted by a licensed professional counselor. Students may also request disability services through contacting the Student Counseling Center 30 days prior to the beginning of each semester. UT Tyler Testing services are provided to students to include the administration of many standardized examination instruments. Such instruments may include GMAT and GRE exams. Students can find additional information about student counseling and university testing services on the following web site: <http://www.uttyler.edu/student-services>. University Student Counseling and Testing office hours are 8:00 AM to 5:00 PM or by appointment. There are no additional charges for student counseling services.

In order to make it easier for the Soules College of Business Graduate Advising Office, all graduate programs have to follow the same admission standards. The Industrial Management students entering the college meet the same minimum score requirements on the GMAT as students entering the MBA, HRD, or Computer Science programs.

In Table 6 it can be noted that the graduation and retention rates were steadily increasing except after 2016. University personnel have noted that the tightening of immigration laws after the last presidential election has led to many international students not entering the country or finishing their degree in another country. A majority of the Industrial Management program's majors were from India and have informed faculty that Australia and Canada have better immigration laws so they are going elsewhere. Retention and graduation rates for the university in general have been in the 60% range. Overall, the Industrial Management program is doing an above average job of retaining and graduating its majors averaging over 80% for the last five years.

Table 6: The University of Texas at Tyler
Department of Technology - Retention by Major – TEIMMS
 TEIMMS (TE = Tecnology Department, IM = Industrial Management, MS = Master of Science)

TEIMMS Industrial Mgmt.	"Enrolled in Fall"	"Enrolled Following Fall"	"Degree During Year"	"Retained or Gradauted"
FALL 2013	36	15	14	81%
FALL 2014	79	32	38	89%
FALL 2015	86	21	60	94%
FALL 2016	81	26	41	83%
FALL 2017	76	30	32	82%

Source: Office of Information Analysis

Standard 8 - Transfer Course Work: The institution shall have policies in place to ensure that coursework transferred to the program is evaluated and approved by program faculty.

The University of Texas at Tyler accepts appropriate transfer credit from accredited institutions providing the grade for the course is B or better. Only six hours can be transferred for the graduate degree in Industrial Management.

All course work is evaluated the Technology Department's curriculum representative and then checked by the Department Chair. A copy of the transfer course's syllabus is attached to a form that then goes to the dean of the College for approval. It is then sent to the Vice Provost and Graduate Dean for review. If approved, it goes to the Registrar's Office and they then enter it into the computer system as a recognized transfer course.

Only coursework from regionally accredited institutions of higher education are allowed to be accepted as transfer work. All major course work identified by the Office of Admissions is subsequently reviewed by the student's major advisor. Experiential education credits are not allowed for this option.

Standard 9 - Student Enrollment: Program enrollment shall be tracked and verified. There shall be evidence of an adequate number of program majors to sustain the program, and to operate it efficiently and effectively, as defined by your state or institution standards.

The enrollment for the department has increased every year since the last ATMAE accreditation site visit except for the past two years. There are several reasons for the decline in enrollment. First of all, the unemployment rate has decreased over the past two years under the newly elected President of the United States, thereby; many students with technical backgrounds have found employment without the need for an additional degree and even obtained promotions to retain them. 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 is now less than 10 students from India enrolled in the program.

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 and four 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 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 the tables 7 and 8. As illustrated in the table 8 below, 226 Industrial Management students have graduated in a five year period from 2014-2018 which in itself is 15 times the state requirement of 15 graduates over a five year period. Therefore, the program is healthy and viable.

Table 7: Industrial Management Program Enrollment from 2013-2018

Semester	Female	Male	Total	Female %	Male %
Fall 2013	6	29	35	17.14%	82.86%
Spring 2013	4	26	30	13.33%	86.67%
Summer 2013	3	18	21	14.29%	85.71%
Fall 2014	11	73	84	13.10%	86.90%
Spring 2014	9	41	50	18.00%	82.00%
Summer 2014	4	43	47	8.51%	91.49%
Fall 2015	15	74	90	17.78%	82.22%
Spring 2015	13	82	95	13.68%	86.32%
Summer 2015	13	65	78	16.67%	83.33%
Fall 2016	20	63	83	24.10%	75.90%
Spring 2016	20	69	89	22.47%	77.53%
Summer 2016	17	50	67	25.37%	74.63%
Fall 2017	19	55	74	25.68%	74.32%
Spring 2017	18	60	78	23.08%	76.92%

Summer 2017	12	45	57	21.05%	78.95%
Fall 2018	18	40	58	31.03%	68.97%
Spring 2018	17	49	66	25.76%	74.24%
Summer 2018	12	31	43	27.91%	72.09%

Table 8: Number of Industrial Management Program Graduates from 2014-2018

Year	2014	2015	2016	2017	2018	Total
Industrial Management Graduates	40	61	57	34	34	226

Source: Office of Information Analysis, Cindy Strawn

Standard 10 - Administrative Support & Faculty Qualifications: There must be evidence of appropriate support from the institution for the technology, management, and applied engineering program/option.

10.1 - Appropriately qualified administrators are assigned to the program/options.

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 10 years and a coordinator at UT Tyler for another 10. He has taught industrial technology and engineering technology courses at various institutions since 1982.

10.2 - An adequate number of appropriately qualified full time faculty members are available and assigned to teach courses in the technology, management, and applied engineering program/option.

The Department of Technology has 5 full time faculty and 4 adjuncts for a total of 146 students. There are a total of 282 students for the Department of Human Resource Development which has 7 full time faculty and 6 adjuncts. If 5 FTE faculty plus 4 PT faculty or 9 faculty are divided into 146 students then the student to faculty ratio would be 16.22 for the Department of Technology. A 21.63 student to faculty ratio would be obtained if you divided the total number of faculty, 13, for the Department of Human Resource Development by the total number of students (282). Therefore, it can be determined that there is an adequate number of faculty for the Department of Technology. However, there are currently four adjuncts working for the department, which could be replaced by a lecturer who could also help recruit and advise students.

10.3 - Full time faculty qualifications shall include emphasis upon the extent, currency and pertinence of: (a) academic preparation; (b) industrial professional experience (such as technical supervision and management); (c) practical/industrial business experience using applied technology; (d) membership and participation in appropriate technology, management, and applied engineering professional organizations; and (e) scholarly activities. The following minimum qualifications for full time faculty are required (except in unusual circumstances which must be individually justified):

C. Master's Degree: 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).

The Department of Technology has an excellent faculty. There are five full-time members. Four of the existing faculty are tenured and one is on tenure track. Our recently hired tenure-track assistant professor did not pass her third year review so a national search is now being conducted to fill that position. All of the 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 9 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 E.

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, Associate Professor
 Dr. Heshium R. Lawrence, Associate Professor
 Dr. Mohammed Ali, Associate Professor
 Dr. Shirl Donaldson, Assistant Professor

Table 9: Academic Preparation of Full-Time Faculty Teaching I.T. Courses

Faculty	Degree	Rank	Teaching Exp. (yrs.)	Industrial Exp. (yrs.)	ATMAE member (yrs.)
Lawrence	Ph.D.	Assoc. Prof.	15	1	18
Fazarro	Ph.D.	Assoc. Prof.	16	13	20
Miller	Ph.D.	Professor	36	1	25
Ali	Ph.D.	Assoc. Prof.	25	5	21
Donaldson	Ph.D.	Asst. Prof.	10	9	2

The part-time adjunct faculty that assist with courses in which industrial technology majors take is Mr. Daniel Lee and Mr. Kelly Kaemmerling. They both hold Industrial Technology and Industrial Management degrees from the department. Furthermore, two more adjunct faculty who earned a master's degree from the department are Mr. John Connolly II and Mr. Randell Farley. They are all committed to giving back to the department.

10.4 - Policies and procedures for faculty selection, appointment, reappointment and tenure shall be clearly specified and shall be conducive to the maintenance of high

quality instruction. This should include policies and procedures for the selection and reappointment of 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: <http://www.uttyler.edu/ohr/hop/>. Refer to Appendix C for the College of Business and Technology Tenure and Promotion policies.

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 E.

10.5 - Faculty teaching, advising, and service loads shall be reasonable and comparable to the faculty in other professional program areas.

All the faculty in the 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 College of Business Undergraduate and Graduate advising departments.

10.6 - 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.

Dr. Geiger, the Vice Provost and Dean of the Graduate School, has developed a form for SACSCOC 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.

The link to the digital Rightsignature form is:

https://www.uttler.edu/academicaffairs/files/Faculty_Qualifications_rightsignature.pdf

Standard 11 – Facilities, Equipment & Technical Support: Facilities and equipment shall be adequate to support program/options goals.

11.1 - Appropriate technical support necessary to assure safety and for maintenance is available.

Presently, the chair of the department with the assistance of work study students and graduate assistants prepares and maintains all the equipment in the laboratories. He is also in charge of purchasing all the materials for laboratory activities as well as their preparation. In most cases, he must pick up the supplies at local stores as well. This has been a tremendous burden on top of all the chair duties involved with the Technology Department as well as being interim chair of the Department of Human Resource Development. A letter to the Provost that requested the assistance for a technician was submitted in the Fall 2018 semester. His response was that if the tenure-track faculty member was replaced with a lecturer, then the university could pay the lecturer the additional salary from the tenure-track position to also perform the duties of the technician. The College of Engineering is advertising for a full time technician at a salary of \$4,500+ a month.

11.2 - Current computer equipment and software programs to cover functions and applications in each program area is available.

The College of Business maintains a computer lab in room COB 251 specifically for students in Technology and those who are taking courses that require the use of SAP software. This lab is available whenever there is not a class scheduled in it. In fact, since the lab houses 60 computers, most faculty allow students from other classes to work in the back of their class as long as they are quiet. The lab is available as long as the building is open. All of these computers are brand new and have the speed and processing power of gaming computers.

The Department of Technology also has 30 older computers that were taken from the move to the new building and are now housed in room COB 160 (Computer Integrated Manufacturing Laboratory). They are mainly used to make corrections to programs so students do not have to go upstairs again to edit their programs that run on the CNC machines or robots in COB 160. However, these computers do have quad processors and are still quite fast.

Computer Lab Configurations

Key software Installed

Operating System: Microsoft Windows 10

Office Tools: Microsoft Office 2018, SAP Front End

Drafting and CAM Tools: AutoCAD 2018, AutoCAD Mechanical 2018, Autodesk Inventor 2018, and ProModel.

Simulation Tools: Intelitek RoboCell for Scorbot ER-4U robot, SCORBASE, CellSetup, spectraCAD Engraver, spectraCAM Milling, spectraCAM Turning, CNC Motion for intelitek CNC, and CNC Base fro proLIGHT 3000 Turning.

The university has an “itsupport” staff that takes care of the installation and maintenance of the computers. Faculty just fill out a support ticket and one of their technicians typically makes contact and resolves the problem within one to two business days.

11.3 - Facility and equipment needs shall be included in the long-range goals and budget plans for the program.

Although it has taken several years, the Department of Technology has finally moved into a new building with almost three times the lab space from the previous building. 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 \$3,000 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 ten fold.

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 fourteen 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 along way over these years. The following is a table of all the equipment and material expenditures from the years 2012-2019. Essentially, everything that was purchased after the department's last reaccreditation site visit is listed in the table below.

Table10 : 2012-2019 EQUIPMENT & MATERIALS EXPENDITURES for the DEPARTMENT OF TECHNOLOGY				
Academic Year	Transaction Date	Vendor	Items Purchased	Amount
2012-2013	9/12/2012	Lowes	Plywood, Screws, Bolts, Rods	113.29
	9/12/2012	The Home Depot	Plywood, Red Oak Iron On Edgeband	118.86
	9/19/2012	Fastenal Company	HCS 1/2 - 20x2 YZ8	1.25
	9/16/2012	Lowes	materials for TECH classes	68.31
	9/18/2012	Holliday Sheet Metal Company	2 Sheets 24 GA GALV 3 X 10	69
	9/19/2012	Northern Tool Equipment	21 Piece Tap and Die Set-S	17.99
	9/22/2012	ENCO	48" x 22" Gauge Pan and Box Brake	399.95
	9/26/2012	Lowes	materials for TECH classes	92.35
	10/2/2012	Fastenal Company	screws and bolts	2.96
	10/2/2012	Automotive Workwear	protective clothing for tech lab	64.05
	10/3/2012	Wal-Mart	spray paint for tech class project	142.54
	10/3/2012	Lowes	paint thinner, goof off, rods, grit	66.13
	10/3/2012	Lowes	supplies for tech class	5.24
	10/3/2012	Grizzly Industrial Inc.	supplies for tech class	249.6
	10/7/2012	Lowes	panel board	23.74
	10/13/2012	Wal-Mart	air filters for tech lab ventahood	19.62
	10/19/2012	Wal-Mart	supplies for tech class project	19
	10/26/2012	Quality Council of Ind.	materials for six sigma ASQ exam	255
	10/30/2012	Fastenal Company	screws, bolts, rods	13.91
	12/19/2012	Fastenal Company	materials for tech classes	5.17
	12/20/2012	Wal-Mart	screwdrivers, bits and clamp	35.34
	1/30/2013	Tip Top Sales Co Inc	cutters for milling machine	62.35
	2/6/2013	Grizzly Industrial Inc	gear and transmission gear wide	23.2
	2/9/2013	Wal-mart	shopvac w/d and accy	110.91
	2/9/2013	Lowes	boards, acrylic, speedbor, wrench	307.71
	2/15/2013	Grizzly Industrial Inc	pulley, control knob, retaining ring	16.95
	3/6/2013	Lowes	materials for tech classes	224.61
	3/5/2013	Delvies Plastics	pens with funnel/swivel/buffing cmp	443.21

	3/20/2013	PayPal ECSTORE	replacement keyboard for lab	18.8
	3/20/2013	Lowes	materials for tech classes	95.56
	3/22/2013	Intelitek Inc	switch,plastic for bearing-tech class	23.23
	3/26/2013	Fastenal Company	screws	4.46
	4/1/2013	Fastenal Company	screws	1.41
	4/6/2013	Walmart	jb kwik, super glue, spray paint	34.86
	4/9/2013	Lowes	polyurethane, 1/2 in elbow	4.95
	4/10/2013	Lowes	lenox 1 3/8 in non-arbored	9.18
	4/11/2013	Radioshack	fuse for CIM lab	6.38
	4/24/2013	Teaching Systems, Inc.	supplies for tech classes	44.7
	4/29/2013	Intelitek, Inc.	replacement jaw (set of 3) plt chuck	125.01
			TOTAL SPENT 2012 - 2013	3340.78
2013-2014	9/11/2013	Grizzly Industrial Inc.	supplies for tech lab	200.6
	9/11/2013	Office Max	toner for printer	224.99
	9/24/2013	Lowes	supplies for tech lab	382.56
	9/30/2013	Amazon	supplies for tech lab	41.28
	9/30/2013	Grizzly Industrial Inc.	supplies for tech lab	203.8
	10/4/2013	Holliday Sheet Metal	Supplies for TECH class	90
	10/21/2013	Grizzly Industrial	Supplies for TECH class	143.75
	10/29/2013	Walmart	Supplies for TECH class	5.7
	10/29/2013	Walmart	Supplies for TECH class	126.98
	10/31/2013	Sears Roebuck	Supplies for TECH class	26.66
	11/6/2013	Fastenal Company	Supplies for TECH class	42.37
	11/18/2013	Lowes	Supplies for TECH class	122.65
	12/20/2013	Grizzly Industrial Inc.	Supplies for TECH lab	29.7
	2/4/2014	Industrial Art Supply	Supplies for TECH lab	202.89
	2/12/2014	Tri-Chem Corporation	Supplies for TECH lab	458.95
	3/2/2014	Lowes	Supplies for TECH lab	112.07
	3/12/2014	Tri-Chem Corporation	Supplies for TECH lab	499.92
	3/29/2014	Lowes	Supplies for TECH lab	114.02
	4/10/2014	Fanuc Robotics	Supplies for TECH lab	5.42
	4/16/2014	Fanuc Robotics	Supplies for TECH lab	43
	4/30/2014	Walmart	Supplies for TECH lab	173.19
	5/6/2014	Industrial Arts Supply Co.	LKS-S Sensors for Machines in Tech Lab – Injection Molder	76
			TOTAL 2013 - 2014	3326.5
2014 - 2015	9/5/2014	Lowes	30x36" Acrylic, hanger kit	76
Tech	9/12/2014	Home Depot	13 pc SAE Long Arm Hex Set	9.97
Department	9/12/2014	Lowes	32 x44" Acrylic, Drill bits, sockets	39.12
Split from	9/14/2014	Paypal Little Machine Shop.com	5 keys various sizes	6.31
HRD	9/22/2014	Lowes	Machine parts	18.62

	9/29/2014	Lowe's	Machine parts	231.23
	10/8/2014	Grizzly Industries	Tech Lab items for students use	192.25
	10/16/2014	Grizzly Industries	Tech Lab items for students use	9.97
	10/21/2014	Teaching Systems, Inc.	Tech Lab items for students use	39.12
	11/3/2014	Fastenal Company	Tech Lab items for students use	46.31
	11/9/2014	Lowe's	Tech Lab items for students use	77.3
	11/16/2014	Lowe's	Tech Lab items for students use	129.32
	11/25/2014	Grizzly Industries	Tech Lab items for students use	774
	11/26/2014	Fastenal Company	Tech Lab items for students use	1.96
	11/26/2014	Holliday Sheet Metal	Tech Lab items for students use	30
	12/9/2014	Promodel Corporation	Items for TECH Lab	662.28
	12/17/2014	Paypal Grizzly Industries	Items for TECH Lab	774
	1/18/2015	Lowe's	Items for TECH Lab	241.1
	1/23/2015	Industrial Arts Supply	Items for TECH Lab	206.68
	1/25/2015	Lowe's	Items for TECH Lab	35.64
	1/25/2015	Walmart Supercenter	Items for TECH Lab	7.52
	2/10/2015	Lowe's	Items for TECH Lab	51.62
	2/11/2015	Reality Works Inc	Computer Welder Simulator	4973.5
	3/17/2015	Power Technology Inc	Parts for Hydraulics Trainers	162.17
	3/31/2015	Power Technology Inc	Parts for Pneumatics Trainers	4979.6
	3/31/2015	Walmart	Tech Lab Computer & Supplies to run 3D Printer	253.48
	4/8/2015	Stratasys Inc.	3d Printer Supplies for Lab	872.52
	4/12/2015	Lowe's	Tech Lab Supplies	21
	4/14/2015	Teaching Systems, Inc.	Parts for CNC Benchtop Mill and Turning Center	6,799
	4/23/2015	Technical Laboratory Systems	Elearn Renewal -Tech labs -60	6,000
	4/26/2015	Office Depot	Office Supplies	108.17
	5/7/2015	Stratasys Inc.	3d Printer Supplies for Lab	872.54
	7/1/2015	Paypal Grizzly Industries	Mini Metal Lathe	574
	7/1/2015	Paypal Grizzly Industries	Mini Milling Machine, Vise, Turning Tools	214.44
	7/6/2015	Paypal Grizzly Industries	Mini Metal Lathe	549
	7/6/2015	Paypal Grizzly Industries	Mini Milling Machine	689
	7/6/2015	Walmart	Tape	4.87
	7/21/2015	Encore Multimedia	Supplies for LUC	127.5
	8/13/2015	Ables-Land	Office Furniture, New Faculty	3,259.79
			TOTAL SPENT 2014 - 2015	34,120.9
2015 - 2016	9/7/2015	Lowe's	Wood for class projects	180.97
	9/11/2015	Pitsco	Balsawood for class projects	60
	9/13/2015	Walmart	Lab Supplies	17.76
	9/22/2015	Kinkos Federal Express	Class Handouts	11.97
	9/29/2015	Walmart	Lab Supplies	4.2
	10/11/2015	Norther Tool Equipment	Micrometers & rulers for lab	47.96
	10/11/2015	Lowe's	Tools for use by students in lab	100.28

	10/12/2015	Lowes	Lab supplies	39.2
	10/13/2015	Walmart	Lab supplies	85.19
	10/14/2015	Paypal Grizzly	Supplies for Lab Equipment	428.69
	10/19/2015	Fastenal	Supplies for Lab Equipment	6.54
	10/20/2015	Paypal Grizzly	Lathe supplies	42.49
	10/20/2015	Lowes	Lab supplies	43.26
	10/20/2015	Holliday Sheet Metal	Galvanized Metal	69
	10/20/2015	Sears	Router bits and belt cleaner	23.97
	10/22/2015	Walmart	Lab supplies	54.53
	10/27/2015	Walmart	Lab supplies	1.11
	11/7/2015	Lowes	Industrial Tech Lab Supplies	144.3
	11/27/2015	Fastenal	Industrial Tech Lab Supplies	4.33
	11/27/2015	Fastenal	Industrial Tech Lab Supplies	25.72
	12/1/2015	Lowes	Industrial Tech Lab Supplies	59.22
	1/15/2016	PAYPAL GRIZZLYINDU	Eqpmt for LUC lab	940.79
	1/20/2016	AMAZON MKTPLACE PMTS	Capacitor to Repair Belt Sander	11.99
	1/24/2016	LOWES #00463	Supplies for Polymer Course	263.2
	1/26/2016	AMAZON MKTPLACE PMTS	Milling Cutters	40.7
	1/26/2016	PAYPAL SPARKTECH	Flute Carbide Endmills	36.21
	1/27/2016	BEST BUY 00002469	Donaldson Printer, Lab Printer	351.98
	2/3/2016	Sears and Roebuck	Woodworking Equipment for lab	1092.49
	2/10/2016	Grizzly	Dust collecting components for lab	106.46
	2/10/2016	Walmart	Tools for tool cabinet at LUC & Parts to hang dust collecting system	191.88
	2/14/2016	Lowes	Components to make a tool cabinet for LUC lab	79.36
	2/16/2016	Office Depot	Toner	175.08
	2/19/2016	Grizzly	Dust collecting components for lab	62.17
	2/25/2016	Elctronix Express	Student Projects for Lab	399
	3/29/2016	Technical Laboratory Systems	Elearn Renewal -Tech labs -60	6,000
	4/8/2016	INDUSTRIAL ARTS SUPPLY	Injection Molding Mach, Blow Molding Mach., Bottle & Cap Mold	4422.5
	4/9/2016	HARBOR FREIGHT TOOLS 5	Sanding belt for lab machine - Main	2.39
	4/9/2016	THE HOME DEPOT 6514	Locks for cabinets – Main	18.36
	4/20/2016	LOWES #00463	Supplies for Lab classes	141.06
	4/21/2016	WM SUPERCENTER #398	Supplies for LUC lab	129.67
	5/5/2016	ENCO	LUC Lab Equipment	69.95
	5/5/2016	ENCO	LUC Lab Equipment	119.95
	5/5/2016	ENCO	LUC Lab Equipment	874.95
	5/10/2016	LOWES #00519	LUC Lab Equipment	23.96
	5/20/2016	ROBERT BOSCH TOOL CORP	LUC Lab Equipment	1299
	6/10/2016	ROY BREWER	Laser Engraver and Cutter for LUC	
	6/15/2016	Lowes	3D Printer Supplies	168.78
	6/15/2016	Industrial Arts Supply	Injection Molding Machine, Vac, Supplies	2799.89
	7/29/2016	Engraving Company	LUC Lab Equipment	14,995
			TOTAL 2015 - 2016	36,267.46

2016 - 2017	8/18/2016	HARBOR FREIGHT TOOLS 6	Drill Presses for LUC	187.87
	8/18/2016	LOWES #00519	Lab Supplies for LUC	42.98
	8/18/2016	LOWES #00519	Lab Supplies for LUC	16.86
	9/6/2016	PAYPAL GRIZZLYINDU		1440.74
	9/6/2016	PAYPAL GRIZZLYINDU		1448
	9/12/2016	PAYPAL GRIZZLYINDU		1198.54
	9/14/2016	WAL-MART #1044		31.61
	9/16/2016	LOWES #00463		291.02
	9/19/2016	PAYPAL GRIZZLYINDU		413.79
	9/19/2016	TRI-CHEM CORPORATION		704.33
	9/21/2016	HP	5 Laptop Computers for Tech faculty	3,918
	9/22/2016	PAYPAL EREPLACEMEN		13.15
	9/30/2016	HOLLIDAY SHEET METAL C		103.5
	10/2/2016	LOWES #00463		40.47
	10/4/2016	THE HOME DEPOT #6514	LUC Laboratory Supplies for students	25.91
	10/5/2016	LOWES #00519	Supplies for Lab	180.69
	10/9/2016	THE HOME DEPOT #6514	Drill bits	61.79
	10/9/2016	HARBOR FREIGHT TOOLS 5	Tools for lab	150.97
	10/10/2016	PAYPAL INDCONCEPTS	Refunded from 327.90 (below)	-27.95
	10/10/2016	PAYPAL RIZNO INC	Shop coats for lab assistants	56.97
	10/10/2016	CNC SPECIALTY STORE LL	PLC Trainer	322.69
	10/10/2016	PAYPAL INDCONCEPTS	PLC Trainer	327.9
	10/18/2016	WM SUPERCENTER #1044	Miscellaneous tools for lab	70.43
	10/20/2016	WAL-MART #0398	Iron, for lab	6.94
	10/20/2016	LOWES #00519	Miscellaneous tools for lab	246.91
	10/24/2016	WAL-MART #0398	1st Aid Kit for LUC	7.97
	10/26/2016	LOWES #00463	Supplies for TECH 3311	48.7
	11/1/2016	FASTENAL COMPANY01	Screws for projects made in TECH 3311	4
	11/9/2016	LOWES #00463	Paint for student projects	143.42
	11/10/2016	HARBOR FREIGHT TOOLS 6	Lab supplies to be used by students	186.77
	11/14/2016	LOWES #00519	Lab supplies to be used by students	69.78
	11/15/2016	FASTENAL COMPANY01	Lab supplies to be used by students	13
	11/21/2016	Fanuc	Robot for LUC	64145
	11/21/2016	PAYPAL GRIZZLYINDU	Lab supplies to be used by students	142.3
	11/26/2016	LOWES #00463	Lab supplies to be used by students	11.88
	11/29/2016	HARBOR FREIGHT TOOLS 5	Lab supplies to be used by students	219.08
	12/2/2016	LOWES #00519	Lab supplies to be sued by students	6.72
	12/9/2016	PAYPAL GRIZZLYINDU	Lab supplies to be used by students	78.59
	1/1/2017	PAYPAL INDCONCEPTS	Lab supplies to be used by students	1499.75
	5/11/2017	Technical Laboratory System INC	CERT OPTion 1.6.15 Additional Touch Screen iPendant	4650
	5/11/2017	Technical Laboratory System INC	CERT Option 1.6.16 1.5M iPendant PC Conversion Kit with power supply	495

	5/11/2017	Technical Laboratory System INC	CERT Option 1.6.20 Roboguide Renewal	100
	8/25/2017	Teaching System INC	CNC Motion 30 Seat License	1995
	8/25/2017	Teaching System INC	License Key for RoboCell ACL S	1995
	8/25/2017	Teaching System INC	SpectraCAM Milling, 30 Seat Li	1995
	4/7/2017	Technical Laboratory System INC	Roboguide Renewal-58	5800
	7/12/2017	Technical Laboratory System INC	Fanuc - OiF Simulator-2	5960
	7/12/2017	Technical Laboratory System INC	Machining Center Programming	120
	7/12/2017	Technical Laboratory System INC	Machining Center Workbook	34.95
	7/12/2017	Technical Laboratory System INC	Learning to Operate a FANUC CN- 2	158
	7/12/2017	Technical Laboratory System INC	Turning Center Programming, Se	120
	7/12/2017	Technical Laboratory System INC	Turning Center Workbook- \$34.95	34.95
	7/12/2017	Technical Laboratory System INC	Turning Center Answer Book - \$34.95	34.95
	7/12/2017	Technical Laboratory System INC	Parametric Programming w/FANUC- \$120.00	120
			TOTAL 2016 -2017	82,848.36
2017-2018	4/19/2018	Technical Laboratory System INC	FANUC elearning Renewal-46	4600
	8/4/2018	Sobol Welders Supply C	907614 Millermatic 211 (w/MVP)-13	14040
	8/21/2018	Texas Southwest Machinery INC	Scotchman Cold Saw	5665.5
	8/21/2018	Texas Southwest Machinery INC	#433000 - 12" Brake Complete	1595
	8/21/2018	Texas Southwest Machinery INC	#440000 - Rectangle Notcher (2 -	925
	8/21/2018	Texas Southwest Machinery INC	#024700/024720 – Weld Coupon B	1795
	8/21/2018	Texas Southwest Machinery INC	Scotchman Ironworker Porta-Fab	5931
	8/21/2018	Texas Southwest Machinery INC	#002507 - Deluxe #20 Punch & D	1095
	8/23/2018	Sobol Welders Supply C	Miller 907710001 Maxstar 161 S -10qty	14500
	3/31/2018	Texas Southwest Machinery INC	D2000 Hydraulic Training System -2	4863.6
	8/29/2017	Lowes	Wood for class projects	241.65
	9/25/2017	Holliday Sheet MEtal	3 sheets of 24 GA Galv 3x10 for metal labs	103.5
	10/6/2017	Paypal Woodward EQ	Testing equipemtn for lab TECH 3311	614.56
	10/28/2017	The Home Depot	Lab supplies for TECH 3311	49.82
	10/5/2017	Amazon.com	Arduino A000067 Mega 2560, Rev 3, 1.5"- for robotics lab	38.5
	10/5/2017	Robotshop.com	3 items for robotics lab	76.95
	10/5/2017	Amazon Mktplace pmts	5 items for robotics lab	100.44
	10/20/2017	HobbyTown	Robotics lab	134.99
	11/7/2017	Paypal Grizzly ind	Live center -2, Profile Turning toolholder -4	172.69
	11/9/2017	Walmart	Lab supplies, vacuum bags	32.67
	11/11/2017	Sharmans Sewing center	Batting for projects	31.97
	11/11/2017	Lowes	Dowel rods, wood	89.2

	11/30/2017	Fastenal	Tool bits for lab	16.2
	2/19/2018	Lowes	Industrial Tech Supplies for lab	57.46
	3/2/2018	Lowes	Industrial Tech Supplies for LUC lab	284.89
	3/20/2018	Lowes	Industrial Tech Supplies for LUC lab	41.82
	7/14/2018	Paypal Weldsuppico	Welding supplies for welding lab	3837
	7/21/2018	Sobol Welders Supply C	Welding supplies for welding lab	1699
			TOTAL 2017- 2018	62,633.41
2018-2019				
	8/7/2018	Harbor Freight Tools	Welding lab supplies Tech 4343	55.17
	8/12/2018	Harbor Freight Tools	Welding lab supplies Tech 4343	500.51
	8/19/2018	Harbor Freight Tools	Return	-159.98
	8/29/2018	Walmart	Lab supplies	34.88
	9/2/2018	Lowes	Lab Supplies Tech1320	48.21
	10/2/2018	The Home Depot #6514	Lab Supplies	311.43
	10/3/2018	The Home Depot #6514	return	-59.85
	10/3/2018	The Home Depot #6514	Lab Supplies	146.49
	10/5/2018	Fastenal	Lab Supplies	8.32
	10/6/2018	Lowes	Lab Supplies	55.92
	10/8/2018	Walmart	Lab Supplies	7.88
	10/8/2018	Walmart	Lab Supplies -iron	23.4
	10/9/2018	Lowes	Lab Supplies	203.1
	10/13/2018	The Home Depot #6514	Lab Supplies	137.73
	10/17/2018	Walmart	Lab Supplies	42.52
	10/20/2018	Walmart	Lab Supplies	47.6
	10/25/2018	Harbor Freight Tools	Welding lab supplies	421.73
	10/27/2018	The Home Depot #6514	Lab supplies- security cable	31.84
	10/26/2018	Lowes	Woods lab supplies-student projects	191.37
	10/30/2018	Walmart	Lab Supplies- Cables	20.15
	11/12/2018	The Home Depot #6514	lab supplies- Woods lab	78.86
	11/4/2018	Walmart #5920	lab supplies- Woods lab	33.75
	11/14/2018	PAYPAL GRIZZLYINDU	Metal labs supplies	760.04
	11/19/2018	Eastwood Company	Eastwood Plasma cutting Table	172.36
	11/19/2018	PAYPAL GRIZZLYINDU	Hybrid table saw with riving knife, polar bear series 10"	1110
	11/19/2018	PAYPAL GRIZZLYINDU	industrial dust collection straight pipe	41.95
	11/19/2018	PAYPAL GRIZZLYINDU	Live center- MT2 with taper bearings- 4	189.76
	11/19/2018	PAYPAL GRIZZLYINDU	6"x26" Vertical Mill with LED worklight	2949
	11/19/2018	PAYPAL GRIZZLYINDU	4"x20" Hose	33.95
	11/19/2018	PAYPAL GRIZZLYINDU	HandWheel w/ handle plastic V2.07.08 -2	61.5
	11/25/2018	Lowes #0463	Metal labs supplies	103.85
	11/24/2018	The Home Depot #6514	Lab supplies- cables	47.97
	11/25/2018	Harbor Freight Tools	Lab supplies - Welding hoods, sanding belt	427.8
	11/25/2018	Walmart #2720	Office supplies- display boards	36.26

	11/28/2018	Walmart #5261	Office supplies- display boards	8.58
	11/28/2018	The Home Depot #6514	Woods lab supplies-student projects	192.23
	12/1/2019	Harbor Freight Tools	Lab Supplies - welders leather, wire rope, plugs	196.2
	11/29/2018	PAYPAL GRIZZLYINDU	Gulp dust hood mini and big	41.89
	12/1/2019	Harbor Freight Tools	Welding hoods	279.92
	12/2/2019	Lowes #0463	Lab supplies-hex bolt, zinc flat, zinc hex n	1.94
	12/13/2019	T.S Enterprise Associates Inc.	PLC Trainer, MicroLogix 1100 with Case- 3	9,093.00
	12/13/2019	T.S Enterprise Associates Inc.	RS Logix Micro 587552 3245-A0 3	393
	12/13/2019	T.S Enterprise Associates Inc.	Traffic Light Application 582532 8075-	1,161.00
	12/13/2019	T.S Enterprise Associates Inc.	Electro-Pneumatic Application 588682 8075	3,111
	12/13/2019	T.S Enterprise Associates Inc.	Signal Tower 587869 5924-C0	879
	12/20/2019	T.S Enterprise Associates Inc.	PLC Trainer, MicroLogix 1100 with Case 588462 3240-D0-3	9,093
	12/20/2019	T.S Enterprise Associates Inc.	RS Logix Micro 587552 3245-A0 -3	393
	12/20/2019	T.S Enterprise Associates Inc.	Bottling Process 588684 8075-70	5,122
	1/8/2019	T.S Enterprise Associates Inc.	Electro-Mechanical System (DC Motor)	3,377
	1/8/2019	T.S Enterprise Associates Inc.	Electro-Mechanical System (Stepper Motor)	4,145
	1/21/2019	Chaney Electronics	TECH 2311 Project kits for labs	758
	2/8/2019	Technical laboratory systems	Elearn Renewal -Tech labs -20	2,000
			TOTAL 2018- Feb 2019	48,361.23
			Total for 2012-2019	270,898.64

Furthermore in Appendix G, department expenditures for new capital equipment and some minor supplies is listed by the previous accreditation period as opposed to this accreditation period to show the increased support for the program.

Standard 12 - Program/Option Operation: Evidence shall be presented showing the adequacy of instruction including:

12.1 - Scheduling of instruction

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 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.

12.2 - 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://apps.utttyler.edu/courseevals/HomePage.aspx>.

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 I.

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.

12.3 - Observance of safety standards

All students are required to be present for a PowerPoint presentation on safety and the pass a quiz on safety before being allowed to work in a laboratory. In addition, the university safety director has attached her safety PowerPoint presentation to each course's Canvas site in which the student must watch and then pass a quiz on it as well. Students are also required to wear safety glasses at all times in the labs. Any student who does not follow the proper safety rules is asked to sit down or leave class for the day if the behavior continues. Students who continue to not follow the rules are expelled from the laboratories and will fail that portion of the course. Students must also fill out and sign a Laboratory Safety form where they agree to follow the safety rules in the laboratory. This form is available in Appendix J.

12.4 - Availability of resource materials

The mission of the Robert R. Muntz Library is to support and enhance the University's instructional, research, and service activities by providing high quality information services for students, faculty, and staff as well as the University's community at large.

The Robert R. Muntz Library houses an array of materials to support the various degree programs offered by the University of Texas at Tyler. In addition to nearly 157,000 hardbound volumes and 495 journal subscriptions, the Library provides access to over 252,000 ebooks and 196 electronic databases. Holdings include numerous materials, online and in print, as well as videos, DVDs, CDs, and other audiovisual materials. Specific Library resources supporting Industrial Technology include online databases such as Wiley Online Library, Science Direct, SpringerLink, Academic Search Complete, Business Source Complete, Lexis Nexis Academic Universe, IEEE Explore, Digital Dissertations, ASME Digital Library, and the BNA Safety Library (accessible through the BNA Human Resources Library). Various print and online journal resources are available on topics such as occupational health and safety, manufacturing engineering, chemical health and safety, industrial safety, environmental safety, mechanical engineering, and other relevant subject areas.

The Library staff consists of ten professional librarians (including the Director of the Library) and thirteen classified staff. All librarians report directly to the Director of the Library. The librarians share the responsibility of providing reference services and are available to assist students directly and online via chat or web-conferencing services. Each librarian is assigned liaison responsibilities for specific Colleges at UT Tyler, and the librarian assigned to the College of Business and Technology is also responsible for providing research instruction services and meeting collection development needs. The Library supports additional small collections at the Palestine and Longview campuses. Faculty, staff, and students at these sites can access the catalog and electronic resources via the campus network and can request delivery of materials from the Tyler library if needed. Full Interlibrary loan services are available to faculty, staff, and students at the Palestine and Longview campuses.

In order to enhance the information resources available to patrons, the Library participates in several resource sharing and cooperative agreements with other institutions. The Library's Interlibrary Services department provides qualified patrons with access to academic and public library collections worldwide. The Library's participation in cooperative or consortial agreements such as AMIGOS and TexShare enhances access to and delivery of materials from other Texas libraries via interlibrary loan agreements and courier service. UTT students, faculty, and staff can personally check out items from any participating library with a TexShare card. The University of Texas at Tyler's participation in consortial database purchases via The University of Texas System Digital Libraries program (UTSDL) allows for more affordable access to a wide variety of electronic resources that would not be possible for UT Tyler to purchase on an individual basis.

In addition to the availability of the Muntz Library materials, reference materials and periodicals are maintained in the Department of Technology commons area and in the Department resource room/Conference room. Faculty maintain individual libraries in their offices relative to the courses they teach as well.

The Department Chair appoints a faculty member to be the liaison to the university library. This person annually polls the Department faculty for their library needs and allocates available funds for materials.

12.5 - Teaching and measurement of competencies (specific measurable competencies shall be identified for each course along with the assessment measures used to determine student mastery of the competencies)

Completion of the Master of Science in Industrial Management degree implies the expected development of competencies 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.

These competencies not only serve the Department of Technology but are also part of the core competencies identified by the College of Business.

Faculty participate in an annual assessment of program level student learning outcomes. Results are analyzed and used to plan for continuing improvement of the curriculum. The individual instructor then establishes course goals for each course. Those course goals 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.

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.

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. Ethical Issues in Decision Making & Behavior
6. Personal Accountability for Achievement
7. 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.

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 Certified Lean Six Sigma 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 11: Assessment Method for Core, Technology, & Management Competencies

Competency Assessment Method Key	
1. Journal Review	6. Student Work
2. Term Paper/ Project	7. Class/National Exam
3. In-class Presentation	8. Field Trip, Mfg. Project or Internship
4. Class Participation	9. Not Addressed in this Class
5. Software Application	

Table 12: Program Core Competencies Mapped with Courses

Courses	Core Competencies																	
	1a	1b	1c	1d	1e	2a	2b	3a	3b	3c	4a	4b	4c	4d	5	6	7a	7b
TECH 5302: Applied Research Methods	1, 2, 6	2	3	2	1, 2	1, 2, 3	1, 2	3, 4	3, 4	3, 4	4, 6	1, 2, 6	2, 5, 7	2, 3	4	4, 6	9	9
TECH 5303: Research Techniques in HRD/Techn.	1, 2, 6	2	3	2	1, 2	1, 2, 3	1, 2	3, 4	3, 4	3, 4	4, 6	1, 2, 6	2, 5, 7	2, 3	4	4, 6	9	9
TECH 5306: Logistics Management	1, 2, 6,	5, 6	2	9	2, 6	2, 4, 5, 6	2, 3	3	3	3	6	2, 6	9	2, 4	9	2, 7	2	9
TECH 5308: Strategic Sourcing	2, 4	2, 4, 6	9	6	5, 6	2, 4, 6	9	2	2	2	2, 4, 6	2, 4	9	2, 4, 6	2	2, 6, 7	2, 7	9
TECH 5309: Ind Processes & Materials	2, 6	9	9	9	9	2	6	9	9	9	8	2, 8	6	8	2	2, 6, 8	7, 8	8
TECH 5310: Six Sigma Quality	1, 6	9	9	5, 6	1, 2	1, 6	9	3, 4, 6	3, 4, 6	3, 4, 6	6	6	5, 6	1, 5, 6	9	7	4, 5, 6, 7	8
TECH 5312: Total Prod. Maintenance	2, 6	9	9	9	2	2, 4, 6	9	2	2	2	1, 2, 7	2, 6	2, 4, 6	2, 4	2, 6	2, 6	2, 7	8
TECH 5317: Comp. Integr. Manufacturing	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	9	4, 7	7, 8	8
TECH 5320: 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	9	7	4, 5, 6,	8

																	7	
TECH 5329: Research Trends in Ind.	1, 2, 6	2	3	2	1, 2	1, 2, 3	1, 2	3, 4	3, 4	3, 4	4, 6	1, 2, 6	2, 5, 7	2, 3	4	4, 6	1, 2	9
TECH 5331: Project Management	1, 2, 3	9	3	4, 6	2, 6	1, 2, 6	2, 4	3, 6	4	3	2, 3	2, 3, 7	2, 3	2, 3	4, 6	2, 3, 6	7	9
TECH 5335: Lean Management	2	9	2	2, 6	9	2, 6	9	2, 3	2, 8	3, 8	2, 4, 6	2, 4, 6	2	2	2	2, 4, 7	7	8
TECH 5336: Lean Healthcare	2, 3, 4	9	9	9	2	1, 2, 6	9	9	9	9	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	7	7	9
TECH 5346: Environmental Management	2, 4, 6	2	3	4, 6	2, 4, 6	2, 4, 6	3	3	3	3	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	7	7	8
TECH 5348: Warehousing	2	2	9	9	2, 6	2, 4, 6	9	2	9	9	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	9	2, 4	7	9
TECH 5366: Value Stream Management	2	9	9	2, 4, 6	9	2, 4, 6	9	9	9	9	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	4	2, 4, 6	7	8
TECH 5371: Research Internship in Technology	1, 2	4, 6	8	8	2, 8	2, 6	8	8	8	8	1, 2, 8	1, 2, 8	1, 2, 8	1, 2, 8	1, 2	1, 2, 6	8	8
TECH 5380: Mgmt. of Nanomaterial	1, 2, 4, 6	9	3	9	2, 4, 6	2, 4, 6	3	3	3	3	2, 4, 6	2, 4, 6	2, 4, 6	2, 4, 6	7	7	7, 8	9
TECH 5390: Adv. Lean Six Sigma Black Belt Techniques	1, 2, 3	2, 4, 5, 6	2, 4, 5, 6	2, 4, 5, 6	2, 4, 5, 6	2, 4, 5, 6	3	3	3	3	2, 4, 5, 6	2, 4, 5, 6	2, 4, 5, 6	2, 4, 5, 6	2, 7	4, 6, 7	7	8

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 advisory committee members on an annual basis and courses are revised and/or new courses are added and omitted to keep the program current to the needs of employers. In addition, competencies listed in the ATMAE Certified Lean Six Sigma Exam are used as a guide since these competencies are derived from a list of competencies common to all of the ATMAE accredited institutions with Industrial Management or similar programs.

12.6 - 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://apps.uttyler.edu/courseevals/homepage.aspx>

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 D.

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.

12.7 - Placement services available to graduates

The university offers the following career placement services to include career counseling, career advising, computerized job search aids, job search assistance, Patriot Jobs (on-line database), Wetfeet Online Career Library, and career fairs. Job listings placed through the Office of Career Success and Alumni Engagement in UC 2150 and are available to students through the following links: <https://www.uttyler.edu/careersuccess/career-resource-links.php>. The Office of Career Success and Alumni Engagement at UT Tyler periodically schedules special events such as "Resume and Cover Letter Writing", schedules on-campus business & industry employment interviews, "Etiquette Dinner", and Career Fairs. Their website is: <https://www.uttyler.edu/careersuccess/>.

The Office of Career Success and Alumni Engagement no longer conducts a graduation survey. This information is gathered through the Graduation Exit Survey conducted by the Office of Assessment & Institutional Effectiveness. The results can be found here: <https://www.uttyler.edu/aie/graduation.php>. If you need more assistance with the results, please contact Sue Gossett from the Office of Assessment and Institutional Effectiveness.

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.

12.8 - Management and/or technical course syllabi must clearly describe appropriate course objectives and student competencies.

The University of Texas at Tyler requires that the instructor of each course provide students with an updated syllabus at the beginning of each course and submitted to the department's administrative assistant at least a week before classes begin.

Faculty are required to provide updated copies of the syllabi used for each course taught each semester that are kept on file in the Department of Technology's main office and upon request a copy is forwarded to the dean's office. A sample syllabus can be found in Appendix A. In addition, all syllabi are now easily assessable online at:

<https://www.uttyler.edu/cbt/technology/syllabi.php>. University requirements for a syllabus are located online at:

<https://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdf>

Course Syllabi, which clearly describe appropriate course objectives, content, references utilized, student competencies, student activities, evaluation criteria, and a range of examples of students' graded work shall be available for inspection.

The most current course syllabi in the approved format are on file and are listed in Appendix A. Examples of student work are available for review during the site visit.

12.9 Each student learning competency shall be mapped to the program learning outcomes established for the program.

Table 13 illustrates how each specific student learning core competency is mapped to the general program outcomes as defined by the Department of Technology. Again, all this is done through a review of the literature, reviewing

curriculum from other similar programs, advice from the advisory committee and following the content of a current textbook.

Table 13. Mapping of Student learning Core Competencies to Program Outcomes

MASTER OF SCIENCE in INDUSTRIAL MANAGEMENT	PROGRAM OUTCOMES	1. Lean Philosophies	2. Quality & Continuous Improvement	3. Conducting Research	4. Project Management Theory and Practice	5. Knowledge of Supply Chains and Logistics
STUDENT LEARNING CORE COMPETENCIES						
1. Instill confidence with computer software, database, and internet search skills		x	x	x	x	x
2. Cultivate effective oral and written communication skills		x	x	x	x	x
3. Promote team-based skills including leadership and conflict resolution abilities		x	x	x	x	
4. Stimulate critical thinking		x	x	x	x	x
5. Encourage ethics in decision making and behavior		x	x	x	x	
6. Foster personal accountability for achievement		x	x	x	x	x
7. Provide competence in basic technology skills and principles		x	x	x	x	x

12.10 - Courses delivered by distance. Appropriate criteria are in place to assure the adequacy of distance and/or non-traditional instruction.

All faculty teaching online courses must go through training which is monitored by the Vice Provost and Dean of the Graduate School. In addition, the faculty member must be trained on how to use the LMS Canvas adequately. Faculty cannot access Canvas or their online class unless this training has been completed. Furthermore, faculty who are not doing a good job teaching online are contacted by their department chair and asked to improve. If no improvement is shown, then faculty are no longer allowed to teach online.

Standard 13 - Graduate Satisfaction with Program/Option: Graduate evaluations of the program/option shall be made on a regular basis (two to five years). These evaluations shall include attitudes related to the program learning outcomes identified

for the program/option. Summary data shall be available for the graduate evaluations of the program/option.

Graduate Satisfaction surveys were conducted by the department from the year 2000 until 2013. At that time, the departments were notified by the university that there were far too many surveys for graduating students to fill out and that attributed to a low response rate for the information they were trying to collect. The survey instrument responses in Appendix D, will illustrate that the response rate increased from 12% to 45% in just three years and has increase every year thereafter. The surveying of graduating seniors is shepherded by the Office of Assessment and Institutional Effectiveness and the annual surveys reviewed were from the years 2014-2015, 2016-2017, and 2017-2018. The survey instrument asks a multitude of questions and is interested in not only if students were satisfied with their program, but if they were satisfied with a host of other supplemental services that the university provides. Although the survey does not ask specifically how the students felt about each program outcome, it does ask the following pertinent information that was used to improve the Industrial Managemet program:

1. Please provide information about your employer.
2. Have you successfully obtained a job in your discipline?
3. In your opinion, how well has UT Tyler prepared you to work in your career field?
4. Please provide the following information if you plan to continue your education: University name, city, state, intended degree.
5. How you felt about your advising?
6. Rate how well UT Tyler helped you to develop the abilities:
communication skills, mathematical concepts, understanding how values, beliefs, and culture affect human experiences, work effectively as a team, global awareness, locate and organize information, etc.
7. If you could start over again, would you attend UT Tyler?
8. What will be your principal activity with the first year of graduation?
9. What was your primary reason to attend UT Tyler: desired program, national recognition of degree, quality of faculty, size, location, cost, diversity, other.
10. Comment section for praise, constructive criticism or even to recommend improvements.

Some of the best information from all the surveys was given in the comments section. The major concerns that were addressed were: lack of available computers, speed and age of the computers, the size of the laboratories, lack of equipment, insufficient lab activities, unavailability of classes in the major, and some thought the program was mediocre. All have been addressed in Table B Outcomes Measures Used to Improve Program.

Standard 14 - Employment of Graduates: Placement, job titles, and salaries of graduates shall be tracked on a regular basis (two to five years) including the degree to which jobs held by graduates are consistent with program learning outcomes. Summary data shall be available for the employment of graduates.

In the beginning of the Spring 2017, a graduate survey was sent out to alumni of the Industrial Management program who had graduated in the year 2015. This included the Spring, Summer, and Fall semesters. A total of 61 majors graduated in 2015. It should be noted that the last survey that was sent out by the department queried the graduates from the year 2012. After the initial email, two more follow up emails were sent to gather data from the alumni from the program. A total of 25 surveys were filled out of the 61 students who were contacted. The response rate to the survey was 41% which was probably as good as can be expected with the limitation of only being privy to the graduates UT Tyler Patriots email. Provisions for collecting a student's personal email account was not anticipated, however, the following year such data became available using OBIEE software. At any rate the salary and job titles of the graduates is listed in the tables that follow.

Another survey was sent out the following year in the summer of 2018. This survey only focused on Spring 2018 graduates to see if there would be a better response rate if the survey was sent out while students were still familiar with the program and had not moved several times making them more difficult to track. This method did not provide better results with only three graduates responding out of the 11 that had graduated for a 27% response rate. The graduates were contacted three times as had been done the previous time with the 2015 graduates. It was interesting to see that the average salary for the graduates had increased approximately \$20,000 to \$95,000 in three years. However, with only two valid salaries to average in the year 2018 versus 25 in the year 2015, it was hard to make a valid conclusion. Salaries ranged from \$40,000 to over \$110,000 from the 2015 year graduates while the Spring 2018 group ranged from \$80,000 to \$110,000. In any case, it was good to see that the average salaries of the graduate program were at least \$15,000 more than the undergraduate program.

Table 14: Salary Ranges for Graduates of 2018

	Frequency N = 3	Frequency N = 25
Salary Ranges	Spring 2018 Grads	FY 2015 Grads
\$30,001-\$40,000		
\$40,001-\$50,000		1
\$50,001-\$60,000		3
\$60,001-\$70,000		10
\$70,001-\$80,000		1
\$80,001-\$90,000	1	5
\$90,001-\$100,000		1
\$100,001-\$110,000	1	2

More than \$110,000		1
Average Salary	\$95,000	\$75,000
*NOTE: One graduate chose to stay home to help an elderly parent.		

There was a variety of job titles for the graduates; however, most of the graduates reported that their employment/occupation was related to their degree. Approximately 20% of the graduates noted that it was somewhat related and less than 10% said it did not apply to their degree. It can be deduced that the majority of the graduates obtained employment related to their education provided by the Industrial Management program.

It was also noted in the survey that only four students of the combined 28 graduates who replied to the two graduate surveys were still seeking employment. Therefore, there was an 86% placement rate for graduates of the Industrial Management (22 of 25 for the 2015 year graduates & 2 of 3 for the 2018 Spring semester graduates).

Table 15: Job Titles of Graduates

Senior Engineer	Safety and Facilities Manager
Supply Chain Manager	Quality Assurance Manager
Inventory Manager	Engineering Designer
Process Improvement Analyst	Senior Purchasing Agent
Mfg. Software Developer	Operations Foreman
Systems Analyst	Operations Excellence Coach

Overall, the graduates were satisfied with the degree they had earned and the quality of teaching in the Technology department had been adequate. The data from the surveys are located in Appendix D.

If you review the job titles in the table above, it can be noted that of the 12 graduates who listed their job title, all of them are related to their education as listed in the previous table.

Standard 15 - Job Advancement of Graduates: The advancement of graduates within organizations shall be tracked on a regular basis (two to five years) including promotions to positions of increasing responsibility. Summary data shall be available for the job advancement of graduates.

Determining job advancement for graduates was virtually impossible. Only a handful of the graduates returned the emails sent by the Department of Technology and of those, there were just a few replies from their employers. Due to this problem, it was determined that the best course of action would be to review graduates on Linked-in because all of students are recommended to

become a member during their final semester to assist them in obtaining gainful employment. Fortunately, many of the graduates had been updating their Linked-in accounts.

The Industrial Management graduates from the Fall 2015 semester were chosen so there would have been enough time for some type of promotion. It was interesting to see how all of the graduates were either promoted or left for a better paying positions at other companies. This information is listed below. Only first full names and last name initials were used to protect the graduates' identity unless there were similar names.

1. Everett T.: Maintenance Manager in the US Airforce now a Receiving & Materials Supervisor at Trane AC/Ingersol Rand in Tyler, TX (over 28 personnel and in charge of over 350 million in materials that feeds all the assembly lines).
2. Praveen V.: Product Design Intern at Tyler Pipe now a Project Engineer at Abott Laboratories in Minneapolis, MN.
3. Aditya Pottipally: Salesforce Consultant at CGI in Greenville, SC now a Salesforce Technical Analyst at Michelin Tire North American Headquarters in Greenville, SC.
4. Brendon R.: Process Improvement Analyst at Brookshire Grocery Company in Tyler, TX now a Logistics Analyst at John Soules Food in Tyler, TX.
5. Aditya Putta: System Engineer at Cerner Corp. in Kansas City, MO now a AWS certified Service Reliability Engineer at Yahoo, Inc in Lockport, NY.
6. Joseph W.: Shop Supervisor at Vulcraft Group in Grapeland, TX now a Manufacturing Engineer at Lockheed Martin in Grand Prairie, TX.
7. Mirza B.: Never employed in a professional position now a Senior Business Analyst for Flight Operations and Pilot Crew Technology at American Airlines in the DFW area.
8. Sunny B.: Never employed in the US now a Data Management Analyst at KPMG in Montvale, NJ.
9. Arquind D.: Never employed in the US now a Technical Software Developer for Morgan Stanley in NYC, NY.
10. Sriram, K.: Never professionally employed in the US now a Manufacturing Engineer at AAON, Inc in Longview, TX.
11. Matthew K.: Fleet Supervisor for the Tyler Police Department in Tyler, TX now a Process Manager at P & S Transportation in Birmingham, AL.
12. Vivek C.: Never employed in the US now a APS Manufacturing Scheduling Software Developer at Demand Management in Atlanta, GA.
13. Deepchand P.: Never employed in the US now a SCCM Engineer for NY Life in Chicago, IL.

Standard 16 - Employer Satisfaction with Job Performance: Employer satisfaction with the job performance of graduates shall be tracked on a regular basis (two to five years) including employer attitudes related to the importance of the specific program

learning outcomes for the program. Summary data shall be available showing employer satisfaction with the job performance of graduates.

About a quarter of the graduates gave the name of their immediate supervisor from the survey they completed. From that list, only three employers replied to the survey regarding the satisfaction they had with the graduates of the Industrial Management program. The graduates immediate supervisors were contacted a second time, however, no further replies from the employers were received. With that said, all of the supervisors were pleased with the graduates and did not list any deficiencies or areas in which the graduate's education could be improved. Furthermore, on the university graduate survey, all the students noted that there employers were satisfied with their graduate education. The various surveys are listed in Appendix D.

Standard 17 - Advisory Committee Approval of Overall Program: A functioning industrial advisory committee shall exist for each program/option. If more than one program of study or program option is available, then appropriately qualified industrial representatives shall be added to the committee or more than one committee shall be maintained.

The Advisory Committee for the Industrial Management program provides advice, guidance, and support for its continuing development so it can prepare well-educated graduates from The University of Texas at Tyler.

Fifty percent of the committee is composed of representatives of business and industry while the balance is composed of representatives from government, non-profit enterprises, and graduates. In the Fall of 2016, most of the advisory committee members were replaced since many of them had served two consecutive three year terms. This was done in order to receive fresh and new ideas to improve the program. In addition, the committee had been expanded to include most of the program directors from area community colleges that have 2+2 articulation agreements with the program. Furthermore, additional industrial representatives were added who either hired our graduates from our MS in Industrial Management program or had graduated from it. The members of the committee are listed below and the By-laws are listed in Appendix H for further clarification.

17.1 - Policies for the advisory committee shall exist that include: (a) criteria for member selection; (b) procedures for selecting members; (c) length of member appointment; (d) committee responsibilities; (e) frequency of meetings (at least one per year); and (f) methods of conducting business.

(a) 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).

(b) 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.

(c) 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.

(d) 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, and
- aid in identifying and securing needed resources

(e) 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.

(f) Methods of Conducting Business:

- 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.

17.2 - A roster of advisory committee members and minutes of advisory committee meetings shall be made available to the visiting team.

Annual meeting Advisory Committee meeting minutes are listed in Appendix H.

2018-2019 Advisory Committee for Department of Technology

Mr. Luis Ibarra, Sr. Generalist
Human Resources
Komatsu Mining Corp.
Longview, TX 75606
TEL: 903-237-7591
luis.ibarra@komatsu.com

Mr. John Connolly II
Solar Turbines, A Caterpillar Company
904 Solar Turbine Way
Mabank, TX 75147
TEL: 805-458-4987
John.connolly@solarturbines.com

Dr. Shirl Donaldson
Department of Technology
The University of Texas at Tyler
3900 University Blvd
Tyler, TX 75799
TEL: 903-566-7211
sdonaldson@uttyler.edu

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

Mr. Peter Kuczkowski, P.E.
Process Improvement Leader
Six Sigma - Master Black Belt
Trane Residential Solutions
6200 Troup Highway
Tyler, TX 75707
TEL: 903-581-3238
FAX: 903-581-9170
Peter.Kuczkowski@irco.com

Mr. Eric Ayanegui, CPMM, CRL
Director
Operations Engineering Solutions
Cintas Corporation, 7355 Denny St.
Houston, TX 77040
TEL: 713-300-3088
CEL: 281-787-6982
FAX: 281-582-7691
AyaneguiE@cintas.com

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

Dr. Heshium Lawrence
 Department of Technology
 The University of Texas at Tyler
 3900 University Blvd.
 Tyler, TX 75799
 TEL: 903-566-7331
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

Mr. Dane Clark
 Ops. Excellence Mgr.–Black Belt Program
 Cardinal Health
 200 McKnight Street
 Jacksonville, TX 75766
timmy.clark@cardinalhealth.com

Mr. Fred Gulley
 Operations Manager
 Walmart Distribution Center
 1001 E. Angelina St.
 Palestine, TX 75801
Fred.Gulley@walmart.com

Mr. Daniel Lee
 Industrial Engineer
 Ingersol Rand, Trane
 6200 Troup Hwy.
 Tyler, TX 75707
 Tel: (903) 730-4000
danielclee@irco.com

Dr. Roger Lirely, Dean
 Soules College of Business
 The University of Texas at Tyler
 3900 University Blvd.
 Tyler, TX 75799
 TEL: 903-566-7360
rlirely@uttyler.edu

Mr. Eric Boettcher, Coordinator
 Engrg. Design Technology
 Tyler Junior College
 P.O. Box 9020, T304
 Tyler, TX 75711-9020
 TEL: 903-510-3184
eboe@tjc.edu

Mr. Wayne Dillon
 Division Director
 Design, Mfg., & Transportation
 TSTC Marshall
 Marshall, TX
 Tel: 903-923-3303
wayne.dillon@marshall.tstc.edu

Mr. Scott Reily
 Senior VP, Logistics
 Brookshires Grocery Company
 1600 W. Southwest Loop 323
 Tyler, TX 75701
scottreily@brookshires.com

Mr. Tom Mullins
 President & CEO
 Tyler Economic Dev. Council, Inc.
 315 N. Broadway Ave.
 Tyler, TX 75702
tmullins@tylertexas.com

Ms. Kenya Ray
 Instructor
 Corrosion Technology
 Kilgore College
 Kilgore, TX 75662
 Tel: 903-988-3721
kray@kilgore.edu

Mr. Michael Rostis
 Human Resources Director
 John Soules Food, Inc.
 10150 FM14
 Tyler, TX 75706
mrostis@jsfoods.com

Mr. Kelly Kaemmerling
 Industrial Management Coordinator
 Kilgore College
 300 South High Street
 Longview, TX 75601
kkaemmerling@kilgore.edu

17.3 - Evidence shall exist showing the advisory committee participates in program outcome and program learning outcomes validation and the evaluation of overall program success.

Every three years the Department of Technology provides advisory committee members from the community a survey to rank the importance of the specific Industrial Management program outcomes. The average rating for each outcome is shared with the committee and changes are made accordingly as reflected in the minutes.

Standard 18 - Outcome Measures Used to Improve Program: Evidence shall be presented showing how both direct and indirect outcome measures have been used to improve the overall program/option*. Evidence that program stakeholders participate in this process must be demonstrated. Outcome measures (standards 14-16) and advisory Board input (standard 17) must be used to improve the program. Measures must include a combination of the following:

- Graduate Satisfaction with Program/Option
- Employment of Graduates
- Job Advancement of Graduates
- Employer Satisfaction with Job Performance of Graduates
- Graduate Success in Advanced Programs
- Student Success in Passing Certification Exams
- Course-based Direct Measures
- Other criteria established by the institution's Regional Accreditation activities.
- Evidence must exist showing how the Advisory Committee Approval of Program have been used to improve the overall program/option based on data collected and analyzed.

(NOTE: (please use the attached Table B in addressing this standard).

The faculty from the 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 F). 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 F) 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(see Appendix D)
2. The University Graduation Survey (see Appendix D)
3. The Department Alumni Survey (see Appendix D)
4. ATMAE Certified Manufacturing Specialist Exam (see Appendix D)
5. Feedback from Industrial Advisory Committee members at annual meetings (refer to Appendix H).
6. Various outside sources (Journals, research, review of literature)

UT Tyler's Student Course EvaluationDescription:

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 SurveyDescription:

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 SurveyDescription:

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

Description:

The purpose of the ATMAE Lean Six Sigma Exam is 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 completes a Program Recommendation Action Form to show what action was taken in program/course improvement.

All assessment methods and continuous improvement results are located in Appendix D.

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 D using TracDat software.

TABLE B: Outcomes Measures Used to Improve Program

 The Association of Technology, Management, and Applied Engineering		Program Improvements	
Program Improvements for the MS in Industrial Management The University of Texas at Tyler			
Why it was Done		A variety of course work to select from allowed students the freedom to take course work that better suited their career goals.	
What was Done		In 2012, the degree plan was modified to allow students to select from a list of courses which they would like to take for their Technical Core section. Students were no longer required to take a prescribed offering of courses.	
Supporting Evidence		Refer to Curriculum Changes From 2013-2019 and the university catalog.	
Program Improvements for the MS in Industrial Management The University of Texas at Tyler			
Why it was Done		The incoming dean felt that industrial management majors should at least have two management courses in their degree plan. In addition, he felt it would open up more interdisciplinary efforts within the college and allow MBA majors the freedom to take Technology courses as well for their electives.	
What was Done		In 2012, two management courses were required in lieu of a history of technology and a research course.	
Supporting Evidence		Refer to Curriculum Changes From 2013-2019 and the university catalog.	
Program Improvements for the MS in Industrial Management The University of Texas at Tyler			
Why it was Done		This would assist students with enough course work to better prepare them for the Lean Six Sigma Black Belt certification.	
What was Done		The course TECH 5366 Value Stream Management was added to as a choice to the Industrial Management Technical Core section.	
Supporting Evidence		Refer to Curriculum Changes From 2013-2019 and the university catalog. Advisory Committee meeting minutes from 2013.	

Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Minimum requirements for the ATMAE accreditation standards for graduate programs.
What was Done	Research Core was added to the degree.
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 and the university catalog. Advisory Committee meeting minutes from 2013.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Course would better prepare students for the external LSSBB certification exam.
What was Done	TECH 5390 Advanced Lean Six Sigm Black Belt Techniques was added to the LSSBB certification
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 in Appendix D and approved by Advisory Committee in 2013 meeting minutes.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Advisory committee highly recommended that students partake in internships so this would allow that as well as the requirement for a research course. Moreover, advisory members noted that they could have students conduct research projects that they do not have the time to implement.
What was Done	TECH 5371 Internship in Technology changed its title to Research Internship in Technology.
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 in Appendix D and approved by Advisory Committee in 2014 meeting minutes.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Recommendation of Advisory Committee members.
What was Done	ACCT 5320 Accounting for Management Control was added as an option for MANA 5350 so students wanting to earn a Supply Chain Management certification could do so without taking additional course work.
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 in Appendix D and approved by Advisory Committee in 2014 meeting minutes.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Enrollment in the Industrial Technology and Industrial Management programs has increased so

	dramatically that there were not enough faculty to cover the courses. There were more adjuncts than full time faculty.
What was Done	A faculty member was added in 2016.
Supporting Evidence	Table 10: Industrial Technology Enrollment and the addition of Dr. Ali.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	The second floor location of laboratories without adequate ventilation was a safety hazard as well as the limited space around equipment.
What was Done	The Department of Technology finally moved into a new building to house adequate facilities for the Industrial Technology and Industrial Management programs.
Supporting Evidence	The brand new Soules College of Business Building that opened this past Fall 2018 semester.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Students will have more choices for the Research Core of the degree.
What was Done	TECH 5329 Trends in Industry was retitled Research Trends in Industry
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 in Appendix D and approved by Advisory Committee in 2015 meeting minutes.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	The course was more geared for the research that is conducted by industrial managers.
What was Done	TECH 5302 Applied Research Methods was added to the choices for the Research Core.
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 in Appendix D and approved by Advisory Committee in 2015 meeting minutes.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Course was added on the suggestions of the advisory committee so students had a better familiarity of warehouse operations.
What was Done	TECH 5348 Warehousing was added to the degree.
Supporting Evidence	Refer to Curriculum Changes From 2013-2019 in Appendix D and approved by Advisory Committee in 2017 meeting minutes.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	The exam is inexpensive and can be proctored by

	faculty at any time with just a few days notice.
What was Done	Department adopted the ATMAE LSS certification exam as the final exit exam for students earning a Lean Six Sigma Black certification.
Supporting Evidence	ATMAE Certified Lean Six Sigma Exam results in Appendix D.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	An overwhelming number of students each semester complained about a faculty member's lack of teaching and found it detrimental to the program. Many of the local industries informed the chair of the department that their employees were learning nothing and that they will no longer send anyone to enroll in our graduate program. A search is now being conducted with more requirements to ensure that the same problem does not reoccur.
What was Done	Did not renew a contract of a faculty member.
Supporting Evidence	A new replacement search is currently being conducted and is listed on the HR website.
Program Improvements for the MS in Industrial Management The University of Texas at Tyler	
Why it was Done	Students complained that they did not have enough time in class to finish their laboratory activities so student workers were hired to assist students with projects after class and to maintain open lab hours when faculty are not available.
What was Done	Hiring of graduate assistants and student workers.
Supporting Evidence	Department budget expenditures have student workers listed in Appendix G. Ask student workers during site visit.

Standard 19 - Program Responsibility to Provide Information to the Public: The program must make available to the public via website, information on student performance and achievement as may be determined appropriate by the institution and/or the program. Information on student performance and achievement may also be provided in hard-copy forms as may be determined appropriate by the institution and/or the program. Sources of potential information include, but are not limited to: student graduation rates from the program; average starting salaries; mean grade point averages; promotions achieved; time to secure first position; average years to complete the degree; and student awards/scholarships received. Institutions are required to provide the hyperlink of where this information located.

The Departmental website has web pages and links to the latest accreditation self-study report, titles of graduates, average salaries of graduates, placement

rate of graduates, syllabi of courses, average GPAs, and more. The link to the main department web page is: <https://www.uttyler.edu/cbt/technology/tech/>

Figure 2: The University of Texas at Tyler - Campus Map



Appendix A: Course Sample Syllabus



The University of Texas at Tyler
College of Business and Technology



Department of Technology **Lean Management Course Syllabus**

Course: TECH 5335
 Title: Lean Management
 Section: 060
 Semester: **FALL 2018**
 Class Time: Online

Instructor: Dr. Shirl Donaldson
 Office: COB 226.07
 Office Hours: MWF 8-10:30 a.m.
 Other Availability: By appointment
 Phone #: 903-566-7310
 Email: sdonaldson@uttyler.edu

Course Description:

An overview of how the lean production system can be implemented into an organization or company to improve profitability by reducing waste. Key concepts such as, visual management, Five S, TPM, Kaizen, kanban, jidoka, hoshin planning, and PDCA will be covered.

Course Objectives:

- 1) Recognize the lean tools used to eliminate waste in an organization or company.
- 2) Understand the importance and need for lean management.
- 3) Learn to work effectively in teams and obtain buy-in for lean thinking in an organization or company.
- 4) Determine the proper lean tools required to eliminate waste in specific applications.

Student Learning Outcomes:

At the end of this course, participants will be able to:

- 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.
- 2) prepare and successfully present an in depth report on a key component of lean and how it effects their current employment.
- 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.

- 4) complete a lean project at home or work to the desired specifications of the required assignment.

Course Competencies

1. Computer-Based Skills – the student will complete written assignments using the word processor.
2. Communication Skills – the student will exhibit a mastery of both written and oral skills in completion and presentation of the assigned projects.
3. Interpersonal Skills – the student will interact in class discussion to clarify the key lean concepts.
4. Problem Solving (Critical Thinking) – the student will use conceptual thinking to analyze and make determinations regarding the implementation of lean.
5. Ethical Issues in Decision Making and Behavior- the student will gain an appreciation of the ethics when creating a lean environment.
6. Personal Accountability for Achievement – the student will complete the projects at the time designated by the instructor and will enter into class discussion.
7. Competence in Technology Principles
 - a. the student will have a thorough understanding of lean concepts to improve efficiency.
 - b. Exposure to and appreciation for industrial experiences such as industrial tours, work-study options and cooperative education, senior seminars – Students will discuss and review videos of companies implementing lean.

Grading Policy and Criteria to Determine Final Course Grade:

Daily Quizzes	200
Assignments	100
Projects	200
Midterm exam	200
Class Participation/Attendance	100
Final Exam	200
TOTAL POINTS = 1000	

Grade Scale Breakdown:

A=90 - 100%

B=80 - 89%

C=70 - 79%

D=60 - 69%

F=BELOW 60%

Note: 89.9999999999999999 is still a B.

Date of Final Exam: M-F, December 10-14, ONLINE

Date to Withdraw without Penalty: Friday, October 24, 2018.

Course Content & Tentative Calendar/Schedule:

August

Administrative concerns, about the course, assignments
Introduction to Lean
History and growth of Lean; Muda
Stability and Standardized Work

September

Just-In-Time
Kanban
Push and Pull Systems
Midterm Exam
September 17 at 6:30 pm meeting at Brookshires Warehouse on Loop 323

October

Jidoka
Poka-yoke
Kaizen

November

Hoshin Planning
Value Stream Mapping
Case Studies
Presentations

December

Presentations; Review for final
FINAL EXAM: Dec 10-14, online

Attendance and Make-Up Policy:

Attendance is mandatory and will be taken at every scheduled class and laboratory period. No make-ups unless:

1. Organized university trip.
2. Illness or death in **immediate** family (mother, father, brother and/or sister).
3. Illness of student.

Each one of these will require either a **doctor's statement** or a **signed** statement from the individual in charge of the trip.

A student will lose a letter grade in the course each time s/he is absent or late 3 times. Any student entering the classroom 1 second after the scheduled starting time will be considered late unless accompanied with a valid excuse.

Late Work:

All work not turned in on time will have an automatic reduction in value to 50% of its full value. **Work that is not turned in by the next class will NOT be accepted.**

Exceptions to this will be as per University Policy concerning absences from class. If you know an assignment will be late for a valid reason, inform your instructor in advance to avoid unnecessary penalty.

Required Textbooks, Materials, and Supplies:

Dennis, Pascal. 2012 (3rd Edition). Lean production simplified: A plain-language guide to the world's most powerful production system. New York, NY: Productivity Press. ISBN: 9781563273568

A copy of the **lecture notes** is required and can be purchased at the university book store.

(903) 566-7070. Open 8am-5 pm.

Required Activities Scheduled Outside of Regularly-Scheduled Class time (fees, tickets, procedures and/or forms required):

Read textbook, review notes, and prepare PowerPoint presentations.

Department Website: <http://www.uttyler.edu/cbt/hrd/tech/ms.php>

Commencement: Saturday, December 15, 2018 at 10:00 am, be there by 9:30 am at the latest.

Holidays: Labor Day – September 3, 2018 Thanksgiving – November 22-25, 2018

Students Rights and Responsibilities

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:

<http://www2.uttyler.edu/wellness/rightsresponsibilities.php>

Grade Replacement/Forgiveness and Census Date Policies

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract. The Census Date is the deadline for many forms and enrollment actions that students need to be aware of.

These include:

- ☐ Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- ☐ Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)

- ☐ Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- ☐ Being reinstated or re-enrolled in classes after being dropped for non-payment
- ☐ Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Disability Services

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu.

Student Absence due to Religious Observance

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement:

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g.,

via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

Emergency Exits and Evacuation:

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services

Rev. 06/2018

EXPECTED CLASSROOM ETIQUETTE

The University of Texas at Tyler is committed to promoting a level of classroom etiquette that is conducive to maximum teaching and learning. Therefore, the following etiquette is expected of students:

1. Attend class each time the class meets.
2. Be on time for class and remain for the entire period. Students are inconsiderate of their classmates when they arrive late and leave early.
3. Refrain from talking while the teacher or another student is lecturing. Idle chattering and giggling are disruptive to the class and disrespectful to the teacher and classmates.
4. Without prior approval from the instructor, students are not allowed to use cell-phones, devices with earphones or any other electronic device (including laptops) in class.
5. Be attentive and participate in class.
6. Refrain from eating and drinking in the classroom.

Academic Dishonesty: The University of Texas at Tyler has a "zero tolerance policy" on plagiarism. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give an unfair advantage to a student or the attempt to commit such acts. For purposes of this class, scholastic dishonesty occurs if you:

- Quote or paraphrase a source without properly citing it.
- Misquote or misrepresent an outside source.
- Pass off any portion of an outside source as your own.
- Turn in for credit any paper that has been purchased through the internet, copied from the internet, or cut and paste a source from the internet.
- Turn in a paper written by someone else.

The penalties for academic dishonesty vary, ranging from an F on an assignment, an F in the course, or expulsion from the university, depending on the severity of the incident.

The Office of Student Affairs keeps records of any suspected case of scholastic dishonesty, and instructors are required to alert them if we believe a student has plagiarized or cheated in any way.

Writing Assistance: Each student is entitled to free writing assistance in the Writing Center. Students who take advantage of this service will receive five extra points on essay grades if they take their drafts to the Writing Center. The student must provide documentation that he or she received assistance in the Center. An appointment is strongly advised.

Late Work:

All work not turned in on time will have an automatic reduction in value to 50% of its full value. **Work that is not turned in by the next class will NOT be accepted.**

Exceptions to this will be as per University Policy concerning absences from class. If you know an assignment will be late for a valid reason, inform your instructor in advance to avoid unnecessary penalty.

Format for Reports:

Each laboratory report will be placed in a folder, arranged in such that the reader can easily examine the contents. Any materials that are hard to read or require special handling to get at will not be graded (do not place each page in a clear cover where the paper cannot be written on). The cover must contain the following:

1. Assignment Title
2. Your Name
3. Your I.D Number
4. Course Name and Number
5. The Date
6. Instructor's name (i.e., Submitted to Dr. Shirl Donaldson)

Your grade will reflect the quality of the presentation. All of the report must be typed and stapled together.

Cell Phones:

Cell phones are not to be seen nor heard. Make sure you turn off your cell phone during class or turn it to the vibrator mode. A ringing cell phone is a distraction and is inappropriate for the classroom. Allowing your cell phone to ring and then answering it is very rude. It is not fair to your fellow classmates who have paid for this course.

Please be considerate and make sure your cell phone is turned off during any of your classes. Students will be asked to leave for the day if this behavior continues. Absolutely no texting or looking at your cell phone during class.

Discrimination:

The policy of this department is to make your college experience as pleasant as possible. However, if at any time you feel that you are being discriminated against, belittled, or not treated appropriately, please notify the instructor either anonymously or in-person **immediately** after class. It is not the intention of any of the faculty in this

department to make your college experience an unpleasant one. Remember, the first step in the process is to inform the instructor so s/he can be made aware of the problem and take corrective action. If the problem continues to persist, please inform the chair of the department. The dean can then be notified if the problem continues to exist after a few days. A grievance can then be filed in the Office of Student Services if there has still been no change in the instructor's behavior. **It should be noted that filing a grievance is a serious act and should NOT be done so just because you received a bad grade on an exam or in the course. Communication is an effective tool to solve problems and is rarely used enough. Most people are not deliberately trying to upset you, they are just not aware of your vantage point.**

Talking:

While the instructor is talking, it is understood that no one should be talking. Students talking in class prevent other students from hearing the instructor and learning the material that is required to pass the course. If you are caught talking then you will **earn a zero on your daily quiz** grade. On the second offense, **you will be asked to leave**. This behavior is rude and disruptive and most students who talk in class typically earn lower grades. It should be noted, that students who have been granted permission to talk by the instructor should not be interrupted as well.

Offensive Language:

Any type of offensive language will not be tolerated in the classroom or laboratory. How you speak to your friends outside the classroom is your business, however, when you are in the classroom you must follow The University of Texas rules of conduct. **You will be asked to leave if your language or conduct is offensive.**

Lecture Materials:

Students will be required to provide the following:

- | | | | |
|----|--------------------------------------------------------------------------------------|----|----------------|
| 1. | 3 - Scantrons (Exam type) #882-ES | 4. | Pen and pencil |
| 2. | Notebook and paper to take notes | 5. | Textbook |
| 3. | Lecture notes packet (available at university book store) M-F 8:00 a.m. to 5:00 p.m. | | |

Appendix B: Course Sequencing

*Degree plans are available online or with the Soules College of Business Graduate Advising Center.

MASTER OF SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT RECOMMENDED CURRICULUM

THE UNIVERSITY OF TEXAS AT TYLER						
Master of Science - Industrial Management 2018-2019						
Soules College of Business Masters Advising: 903-565-5836						
Date	Personal email		UTT Email			
Name	Address			ID#		
Telephone	(Cell)	(H)/(W)	Advison:			
Note:						
MANAGEMENT CORE - 12 HRS						
COURSE TITLE AND NUMBER			ENROLL PLAN	COMMENTS/COURSE EQUIVALENT	Semester Completed	GRADE
MANA	5350	Human Resources Management OR				
TECH	5348	Warehousing				
MANA	5305	Decision Making in Operations Mgmt				
TECH	5306	Logistics Management				
TECH	5331	Project Management				
RESEARCH CORE -6 HRS (Select 2 of the following)			ENROLL PLAN	COMMENTS/COURSE EQUIVALENT	Semester Completed	GRADE
TECH	5302	Applied Research Methods				
TECH	5303	Research Techniques in HRD/TECH				
TECH	5329	Research Trends in Industry				
TECH	5371	Research Internship in Technology				
CONTINUOUS IMPROVEMENT CORE - 12 HRS						
COURSE TITLE AND NUMBER			ENROLL PLAN	COMMENTS/COURSE EQUIVALENT	Semester Completed	GRADE
TECH	5310	Six Sigma Quality*				
TECH	5335	Lean Management*				
TECH	5366	Value Stream Management*				
TECH	5390	Advanced Lean SSBB Techniques*				
ELECTIVES - 6 HRS ANY GRADUATE COURSES						
COURSE TITLE AND NUMBER			ENROLL PLAN	COMMENTS/COURSE EQUIVALENT	Semester Completed	GRADE
ELEC 1						
ELEC 2						
Student:				Anticipated graduation date:		
Graduate Coordinator:				Date:		

Appendix C: Tenure and Promotion Policy

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 ORIGINALLY APPROVED: 12/01/2001 LAST AMENDED: 03/20/2009

PAGE: Page 1 of 9

TENURE

A. Purpose

The purpose of this policy is to specify the procedures for recommending tenure and for implementing policies as set forth in The University of Texas System Board of Regents' *Rules and Regulations, Rule 31007*.

B. Persons Affected

Tenure track faculty, Faculty, Department chairs, Deans, Provost, President

C. Definitions

Not applicable.

D. Policy and Procedures

A. The Concept of Tenure

Tenure is a faculty status that assures faculty they will be able to perform their professional institutional responsibilities without fear of arbitrary dismissal. Academic freedom and professional security, the products of tenure, are needed to assure the success of an institution in fulfilling its obligations. To ensure academic freedom, tenured faculty shall remain tenured until retirement or resignation unless terminated because of:

1. abandonment of academic programs or positions (Regents' *Rules and Regulations*, Rule 31003, Section 2)
2. financial exigency (Regents' *Rules and Regulations*, Rule 31003, Section 3), or
3. good cause in accordance with Regents' *Rules and Regulations*, Rule 31008, Section 1

B. Regulations Governing the Award of Tenure

1. Recommendations regarding tenure of all tenure-track faculty, including administrators holding faculty status, shall be made through consistent application of established procedures set forth in this document with final approval by the Board of Regents
2. A tenure-track appointment is one in which the appointee's principal responsibilities are teaching, professional achievement and professional service.
3. Tenure-track appointments are non-tenured full-time appointments to the faculty. Upon hiring, the tenure-track appointee shall be placed into one of three ranks:
 - i. Professor
 - ii. Associate Professor
 - iii. Assistant Professor

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 2 of 9

TENURE

4. Tenure is not granted below the rank of Associate Professor.

C. Tenure

1. Regents' *Rules*

University of Texas System rules regarding tenure, promotion and termination of employment may be found in *Regents' Rules and Regulations*, Series 30000.

2. Importance of Tenure to U.T. Tyler and Faculty

Decisions to grant tenure are the most critical in the professional life of the faculty member as well as U.T. Tyler. The granting of tenure not only denotes a status of continuing appointment, but is also a statement of confidence in the future achievements of the individual. The decision to grant tenure depends in part on what the candidate has achieved in teaching, research/creative activity, and service, and to a greater degree, on a pattern of performance indicative of a lifetime of continued accomplishment and productivity. Thus, the decision to grant tenure requires careful and deliberate planning by each faculty member who expects to be considered for such action, as well as responsible, objective and informed consideration by all who are involved in review and recommendations. While tenure criteria should be viewed as guidelines for faculty development, more importantly, they are standards for a summative judgment about the individual's lifelong commitment to U.T. Tyler and to the academic life. The recommendation to grant tenure is an acknowledgment by peers that the candidate is accepted as a life-long member of the academic community. Therefore, the tenure process is a collegial one, and the judgment of faculty colleagues and responsible administrators is required. All recommendations on tenure shall begin at the lowest level of organization in which the candidate resides (department, school, or college), and pass sequentially through the recommending levels. However, in colleges that are organized without departments or schools, nothing in this document shall be construed as requiring a review at a level lower than the college. For purposes of this document, department chair is synonymous with school director.

3. Department/School/College Policies

Because the needs and goals of each program vary widely, the level of faculty involvement in teaching, research/scholarship/creative activity, and service may also vary from program to program. To this end, each department/school and/or college shall develop written tenure policies of their own. The tenure policies developed by each department/school and/or college shall be consistent with the provisions described here and shall include:

TENURE

- a. Definitions and criteria of excellence in teaching, research/scholarship/creative endeavor, and service;
- b. Qualitative and/or quantitative standards by which such activities and achievements shall be judged; and
- c. A listing of activities and achievements properly associated with tenure, promotion to Associate Professor, and promotion to Professor.

In the development of the criteria and policies for tenure, the tenured and tenure-track faculty within that department/school and/or college shall be consulted. Such policies, both at the departmental and college level, should be reviewed at least once every five years to ensure that they are consistent with U.T. Tyler's and each respective college's expectations and reflect the variance in the responsibilities and assignments of individual faculty members. All tenure policies must be in compliance with University of Texas System and UT Tyler rules and be approved by the Provost and Vice President for Academic Affairs and the President.

4. Performance Standards for the Granting of Tenure

- a. There can be no simple list of accomplishments that, when achieved, guarantee that a faculty member will obtain tenure. Tenure is not a right to which a faculty member is entitled, nor is tenure granted simply as a result of a record of satisfactory annual evaluations.

b. To be tenured, faculty must achieve a strong record in 1) teaching and 2) research/scholarship/ creative activity. The faculty member further is expected to demonstrate outstanding achievement in one of these areas. The faculty member is also expected to have a satisfactory record of service to the University, profession, and/or community. In addition to demonstrating quality in these traditional areas, the candidate for tenure must also demonstrate professional collegiality. i. *Teaching*. To qualify for tenure, faculty members must have a consistent pattern of effectiveness in teaching. Tenure will not be granted unless the candidate is deemed to be a strong teacher and demonstrates a commitment to lifelong improvement of his or her teaching skills. Thus it is vital that information concerning teaching effectiveness, gathered from multiple and flexible assessment methods, be part of the tenure review.

ii. *Research/Scholarship/Creative Activity*. The purpose of research/scholarship/creative activity is to make a substantive contribution to the body of knowledge and understanding in one's discipline. For tenure to be granted, a faculty member must have established a strong, consistent, and progressive program of research/scholarship/creative activity and must

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 4 of 9

TENURE

evidence a commitment to continue making contributions throughout his or her career.

iii. *Service.* To qualify for tenure, the candidate must display evidence of commitment to service to the University and to the profession and/or the civic community.

iv. *Collegiality.* U.T. Tyler defends the concept of academic freedom, which assures each faculty member the freedom to criticize and advocate changes in existing theories, beliefs, programs, and policies, and guarantees faculty the right to support any colleague whose academic freedom is threatened. Collegiality is a professional, not personal, criterion relating to the performance of duties within a department. Collegiality should not be confused with sociability, likeability or conformity to certain views. Instead collegiality addresses such issues as the faculty member'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 on a professional and personal level.

The University subscribes to the following description of collegiality from the American Association of University Professors (AAUP) statement on professional ethics:

As colleagues, professors have obligations that derive from common membership in the community of scholars. Professors do not discriminate against or harass colleagues. They respect and defend the free inquiry of associates. In the exchange of criticism and ideas, professors show due respect for the opinions of others. Professors acknowledge academic debt and strive to be objective in their professional judgment of colleagues. Professors accept their share of faculty responsibilities for the governance of their institution.

5. Appointment and Promotion

The weight of the decision to grant tenure rests on a pattern of performance indicative of a lifetime of continued accomplishment and productivity. The recommendation of tenure for an assistant professor normally shall be concurrent with the recommendation for promotion to associate professor. However, a recommendation for promotion does not require a recommendation for tenure. Recommendation for promotion and tenure must be voted separately.

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 5 of 9

TENURE

6. External Letters of Review

External letters of review from peers outside the University will be required for tenure-track faculty members applying for Associate Professor and/or tenure who began their tenure-earning service at U. T. Tyler on or after August 1, 2007. All departmental/school and college tenure and promotion policies must adhere to this same implementation date.

A recommendation for tenure must include supporting evidence that the individual's contributions have had an impact on the discipline; that is, the research/scholarship/creative activity should have made a significant contribution to candidate's discipline and be recognized by professional colleagues. To that end, the dossier for tenure of all candidates after the implementation dates described above must include a minimum of three (3) outside review letters, with a minimum of one (1) letter from the candidate's list of external reviewers.

Letters of review should be solicited from disinterested scholars of appropriate rank or stature not affiliated with UT Tyler who serve in the faculty member's field of training, specialty, or a closely related field. Individuals who may have a bias or perceived bias, such as dissertation committee members, co-authors, classmates, former students, research collaborators, departmental colleagues, and friends should not serve as external reviewers.

Reviewers will be nominated by the department chair and the candidate. The candidate should provide the department chair with the names of at least five (5) potential reviewers as well as a statement of their credentials and clarifying the nature of any prior contact the candidate has had with any suggested reviewer. The department chair will likewise compile a list of at least five (5) additional qualified reviewers. Chairs will also disclose their relationships with potential reviewers to the dean of the college. The final selection will be made by the dean of the college. The dean will select three (3) potential reviewers from each list (candidate and chair), resulting in a total of six (6) potential reviewers. Understanding that not all reviewers will agree to participate or that reviews will not arrive in a timely manner, the final list will contain no fewer than five names. At least two (2) reviewers must be from the candidate's list. The final list of names of external reviewers is to be kept confidential from the candidate.

The department chair shall contact the external reviewers to request their willingness to participate in the external review process. If the reviewers agree to participate, the department chair shall prepare and mail letters requesting outside reviews. Letters shall follow the standard template approved by the University. In the case where an insufficient number of reviewers are unable to participate, alternate reviewers may be selected by the dean.

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 6 of 9

TENURE

Reviewers will be provided with the candidate's c.v., appropriate reprints and other representations of the candidate's scholarship, and a summary of the candidate's teaching and service responsibilities since arriving at UT Tyler. The contents of all outside review letters will be kept confidential to the extent permitted by law and University regulations. Candidates will be informed when reviews are received and may have access to them. The department chair will place all reviews into the candidate's dossier before the departmental committee begins its review. Outside letters received after the departmental committee begins its deliberations will not be included in the review process without the approval of the dean.

The department chair shall prepare a summary of the outside review process that will be included in the candidate's dossier. This summary shall list the name, position, and organization of each person from whom evaluations were requested. For those whose letters are included in the dossier, the summary shall include relevant information about the reviewers' professional/academic qualifications for evaluating the candidate for tenure and/or promotion.

7. Consideration of Tenure

Because the tenure process is a collegial one, the judgment of both faculty colleagues and responsible administrators is required. There should be no recommendation regarding tenure without formal consultation with the tenured faculty of the department/school and/or college in which the faculty member will hold rank. To that end, each department/school and/or college shall adopt procedures governing the consideration of faculty member seeking tenure. At minimum, such procedures shall include the following:

- a. All cases for tenure shall pass sequentially through the recommendation levels as described below.
- b. Faculty eligible to vote are those with tenure in the case of a faculty member being considered for tenure. Where 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.
- c. The tenured faculty of the department shall vote by secret ballot on the tenure of the faculty member being considered. The outcome of the vote and the vote count shall be recorded.
- d. A college committee of tenured faculty shall vote by secret ballot on the tenure of a faculty member being considered. The outcome of the vote and the vote count shall be recorded.

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 7 of 9

TENURE

- e. The appropriate administrator at each level of review shall inform the faculty member in writing of the vote or recommendation before the file is sent forward to the next level.
- f. No person shall serve as a voting member of any tenure committee during an academic year in which he or she is under consideration for tenure, nor shall any individual make a vote or recommendation on his or her tenure nomination.
- g. Voting members shall leave the room during deliberations on a faculty member with whom they share a significant personal or professional relationship and shall abstain from voting or making a recommendation concerning that faculty member.

8. Tenure Process

The institutional tenure decision-making process begins with the faculty member being considered and ends with the President. A faculty member should consult the dean regarding the timetable for the process.

a. *Request for Early Decision*

Faculty members may request consideration of an early tenure decision by presenting a written request to the department chair by June 1, prior to the academic year during which the tenure decision is to be made. If the Department chair makes a positive recommendation to the dean for early tenure, it must be justified with evidence that the candidate meets the written criteria established for those who apply for tenure during their sixth year of service. If the Department chair denies the faculty member's request for early tenure, the faculty member may request that the dean review the department's decision. The dean will not recommend early tenure unless the evidence of accomplishment meets the written criteria established for those who apply for tenure during their sixth year of service. There is no appeal beyond the College dean. A denial of early tenure shall not prejudice action on tenure at the completion of the usual probationary period.

b. *Faculty Responsibility*

It is the responsibility of all faculty to be aware of departmental, college, U. T. Tyler and U. T. System rules and regulations regarding tenure. The faculty member who is to be considered begins compiling his or her files in the summer. The documentation of professional accomplishments shall be submitted in accordance with the criteria, standards and guidelines established by the department and/or college.

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 8 of 9

TENURE

At no time after the deadline for submission of the materials may additional materials to be used in the review process be placed into or withdrawn from the file without the permission of the dean. A faculty member being reviewed may withdraw from further consideration for tenure promotion at any point in the process by submitting to the dean a written request for withdrawal. Withdrawal from consideration of tenure in the sixth year of the probation period may be done only by formal resignation, which is effective no later than the end of the subsequent, or seventh, year.

c. *Departmental Recommendation*

The departmental recommendation for or against tenure is the responsibility of the tenured faculty. For all cases of tenure that are reviewed at the departmental level, there shall be a recommendation and a record of votes of faculty qualified to participate. That recommendation and vote shall be forwarded to the department chair.

d. *Department Chair*

The vote of the qualified faculty in the department is advisory to the department chair. After making an independent judgment on the tenure, the chair shall submit his or her recommendation and written summary to the chair of the college committee. The department chair will notify the affected faculty member if his or her recommendation differs from that of the department faculty. In cases where the chair's recommendation and that of a departmental faculty differ, the faculty may submit a dissenting report to the college committee.

e. *College Committee*

Committee members shall individually review the file of the faculty member being reviewed, taking into consideration the departmental criteria and guidelines for tenure. The recommendation of the members and a vote count are recorded and forwarded by the committee chair to the dean along with the file of the faculty member and the department chair's recommendation and summary.

Committee members shall leave the room during deliberations on a faculty member with whom they share a significant personal or professional relationship and shall abstain from voting on or making a recommendation concerning that faculty member.

f. *Dean*

The dean, after review of the faculty member's file and, if appropriate, consultation with the department faculty, department chair and college committee, prepares his or her recommendation. Before submitting the recommendation to

HANDBOOK OF OPERATING PROCEDURES

SECTION: 3.3.4 **ORIGINALLY APPROVED:** 12/01/2001 **LAST AMENDED:** 03/20/2009

PAGE: Page 9 of 9

TENURE

the Provost and Vice President for Academic Affairs, the dean will notify the affected faculty member of his or her recommendation and provide him or her a copy of the college committee's recommendations.

g. Provost and Vice President for Academic Affairs

After review of all materials and consultation with the dean and any other appropriate individuals or groups, the Provost and Vice President for Academic Affairs will prepare his or her recommendation regarding tenure. The Provost and Vice President for Academic Affairs will notify the candidate of his or her recommendation. The Provost and Vice President for Academic Affairs' recommendation, along with all previous recommendations, shall be forwarded to the President.

h. President

After review of all recommendations, the President will prepare his or her recommendation regarding tenure. The President will notify the affected faculty member of his or her recommendation and provide the candidate an opportunity, within two weeks of notice, to discuss the recommendation. Recommendations for tenure are then forwarded to the U. T. System for appropriate review and required action.

E. Responsibilities

Not applicable.

F. Review

The Divisional Head for this policy is the Provost and Vice President for Academic Affairs. This policy shall be reviewed every five years or sooner if necessary by the Provost and Vice President for Academic Affairs, the Faculty Senate President, the Council of Academic Deans, and a committee of faculty members designated by the Faculty Senate.

Appendix D: Assessment Forms and Feedback

- Assessment Unit Four Column – Industrial Management MS
- College of Business and Technology Performance Evaluation Guidelines
- Soules College of Business Annual Faculty Performance Evaluation
- Student Course Evaluation
- University Graduation Survey
- Alumni Graduation Survey
- Employer Satisfaction with Job Performance of Graduates
- Employer Survey from Internships
- ATMAE Certified Lean Six Sigma Exam Results
- Curriculum Changes from 2013 - 2019
- Program Goals Status Form

Assessment: Assessment Unit Four Column



Program (Soules CoB) - Industrial Management - MS

Program Mission Statement: The Master of Science in Industrial Management provides students with the latest philosophies and technical expertise deemed necessary for pursuing successful leadership positions. Our high quality program offers courses online and face-to-face, thereby enabling students the flexibility to earn a degree that fits their schedule. Students will explore research opportunities with nationally recognized faculty with expertise in various technologies. Furthermore, students can earn several certifications while completing their degree.

Outcomes	Assessment Methods	Results	Analysis & Planning
<p>Lean Knowledge - 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).</p> <p>Outcome Status: Currently Being Assessed</p> <p>Outcome Type: Student Learning</p> <p>Start Date: 08/20/2012</p>	<p>Course Embedded Assessment - Student will complete a comprehensive exam at the end of TECH 5335.</p> <p>Criterion: At least 90% of students will pass the comprehensive exam.</p> <p>Schedule: Every other fall semester.</p>	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>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. (11/27/2016)</p> <p>Assessment Cycle: 2015-2016</p> <p>Related Documents:</p> <p>2015-FALL-TECH-5335.060.xlsx</p> <p>2017 FALL TECH 5335 LEAN MGMT GRADES v2.xlsx</p>	<p>Analysis & Planning: A final review will be given to assist students will learning the content. (11/27/2016)</p> <p>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</p>

Outcomes	Assessment Methods	Results	Analysis & Planning
			Lean Six Sigma Black Belt exam. Therefore, the criterion will be changed to a more universally recognized achievement level (from 90% to 80%). (01/10/2018)
<p>Six Sigma Quality Skills - The student will be able to score higher on the Six Sigma quality sections of the ATMAE Lean Six Sigma Certification than the national norm.</p> <p>Outcome Status: Currently Being Assessed</p> <p>Outcome Type: Student Learning</p> <p>Start Date: 04/30/2015</p> <p>End Date: 11/30/2015</p>	<p>Licensing Exams - 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.</p> <p>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.</p> <p>Schedule: Every other Spring semester.</p> <p>Related Documents: Study Guide LSS Exam</p>	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Partially Met</p> <p>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. (08/06/2016)</p> <p>Assessment Cycle: 2016-2017</p> <p>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.</p> <p>Related Documents: 2016 APRIL 29 LSS EXAM RESULTS - 1 GREEN, 2 YELLOW for SACS.docx</p> <p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>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. (11/29/2015)</p> <p>Notes: NOTE: UT Tyler Industrial Mgmt. majors are highlighted in orange and the national norm is in yellow.</p> <p>Related Documents: 2015 APRIL 30 ATMAE LSS CERTIFICATION EXAM RESULTS.docx</p>	<p>Analysis & Planning: More emphasis will be placed on the categories students scored below the national average in the course TECH 5310 Six Sigma Quality. (09/05/2016)</p> <p>Closing The Loop: A new review session is now available and will be tested in December of 2016 (11/27/2016)</p> <p>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). (11/29/2015)</p> <p>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</p>

Outcomes	Assessment Methods	Results	Analysis & Planning
			Management Institute). (11/29/2015)
<p>Rapid Prototyping - The student will demonstrate a thorough understanding of rapid prototyping by designing a part with Autodesk Inventor and then creating a scale model using a rapid prototyping machine i.e., 3D printer ATMAE 2009 Accreditation Handbook standard 6.3.5 - technical).</p> <p>Outcome Status: Currently Being Assessed</p> <p>Outcome Type: Student Learning</p> <p>Start Date: 04/09/2009</p>	<p>Course Embedded Assessment - Faculty assess students using a scale working prototype of a toy truck with a solid model design created in TECH 5317. The student demonstrates a thorough understanding of rapid prototyping by turning in a working model prototype of a toy truck with an accompanying solid model drawing created in Autodesk Inventor.</p> <p>Criterion: 80% of students complete a successful prototype with a minimum score of 80%.</p> <p>Schedule: Collect and analyze assessment results every other Spring semester.</p>	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>26 of 27 students (96%) earned a 80% or higher on their toy truck prototype in TECH 5317 Computer Aided Manufacturing. (08/06/2016)</p> <p>Assessment Cycle: 2015-2016</p> <p>Notes: Grades for the assignment are highlighted in yellow on the related document: 2016-SPRING-TECH-5317 SACS.xlsx</p> <p>Related Documents: 2016-SPRING-TECH-5317 SACS.xlsx</p> <hr/> <p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>All the students in TECH 5317 Computer Integrated Manufacturing accept one (18 of 19 or 95%) were able to make a small scale rapid prototype of a big rig truck and earned a grade of 80% or higher in the spring 2014 semester. (07/25/2014)</p> <p>Notes: A demonstration of how to draw and manufacture a rapid prototype was created on a Tegrity session and posted on Blackboard for students to watch along with the inclass demonstration. The grades on the assignment are highlighted in yellow.</p> <p>Related Documents: Copy of 2014 SPRING TECH 5317.xlsx</p> <hr/> <p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>All but one student (13 out of 14 or 93%) completed a solid model drawing in Autodesk Inventor and made a working rapid prototype using the Dimension BST1200 3D printer. (05/10/2013)</p> <p>Notes: The one student who did not complete the project had health issues and elected to lose one letter grade than put in the additional work to complete the project.</p> <p>Related Documents:</p>	<p>Analysis & Planning: Because students are continually earning a 80% or higher on their rapid prototype project, the assessment criteria has been raised to 85%. (09/05/2016)</p> <p>Closing The Loop: Nothing will be done at this time until their is an issue, however, this outcome will continually be monitored. (01/17/2018)</p> <hr/> <p>Analysis & Planning: Although the students did well on the assignment the previous year, the addition of the step-by-step Tegrity session on Blackboard demonstrating how to manufacture the rapid prototyping project assisted all the students to create better projects in less time. (07/25/2014)</p> <p>Closing The Loop: Tegrity video sessions will be attached to every Blackboard/Canvas LMS for the class for students to review. (01/17/2018)</p> <hr/> <p>Analysis & Planning: Based on results, 14 out of 16 students earned higher than an 80% on their rapid prototyping project which equates to 87.5%. It seems like most students understand this concept. (10/27/2013)</p> <p>Closing The Loop: Nothing will be done at this time, but the outcome will be monitored.</p>

Outcomes	Assessment Methods	Results	Analysis & Planning
		SYLLABUS for TECH 5317 COMPUTER INTEGRATED MANUFACTURING SPRING 2009.doc RAPID PROTOTYPING PROJECT GRADES.doc RAPID PROTOTYPING EXAMPLES.pdf TECH 5317 SPRING 2013 FOR SACS.xls	<p>(01/17/2018)</p> <p>Analysis & Planning: All of the students who did not have health issues did well with this task, however, students will be required to turn in detailed drawings of the rapid prototype the next time the course is taught so it will be easier to tell if projects were created within specifications. (05/14/2009)</p> <p>Closing The Loop: A more detailed project assignment will be developed as well as a grading rubric so students can be more accurately assessed. (05/29/2009)</p> <p>Closing The Loop: A new syllabus is being developed to reflect the latest trends in industry. The syllabus will be completed in December. (11/17/2008)</p>
<p>Industrial Research - 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).</p> <p>Outcome Status: Currently Being Assessed</p> <p>Outcome Type: Student Learning</p> <p>Start Date: 08/18/2010</p>	<p>Capstone Courses & Projects - Effective 2014-15: Students in TECH 5329 Trends in Industry are assessed on a Final research project related to industrial management that includes a paper and class oral presentation.</p> <p>Criterion: 80% or more of the students earn at least an 80% on their research presentation/paper that culminates their educational experience in industrial management.</p> <p>Schedule: Data collected at the conclusion of the course is collected each time the course is offered and analyzed annually.</p> <p>Related Documents: ATMAE Outcomes Assessment</p>	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>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. (12/01/2016)</p> <p>Assessment Cycle: 2015-2016</p> <p>Related Documents: TECH 5329 SUMMER 2015 GRADES.xlsx</p> <p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>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. (11/30/2015)</p> <p>Related Documents:</p>	<p>Analysis & Planning: Continually monitor the success of students in this course. (01/18/2018)</p> <p>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. (01/18/2018)</p> <p>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. (11/30/2015)</p> <p>Closing The Loop: A more rigorous</p>

Outcomes	Assessment Methods	Results	Analysis & Planning
	Handbook	TECH 5329 Trends in Industry final project grades.docx	final project has now been incorporated to the course TECH 5329 by Dr. Lawrence. (01/17/2018)
		<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Not Met</p> <p>13-14: No data could be collected for this outcome so a new course will be used to collect the data. (01/23/2015)</p> <p>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.</p>	<p>Analysis & Planning: TECH 5329 Trends in Industry was offered in the summer of 2015 to meet the research requirements of ATMAE accreditation. (11/29/2015)</p> <p>Closing The Loop: The newly revised course TECH 5329, now called Research Trends in Industry was approved by the Provost. (01/17/2018)</p>
		<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Partially Met</p> <p>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. (12/12/2010)</p> <p>Notes: Data will be collected in December of 2014 from the course TECH 5303 Research Methods in HRD & Technology</p>	<p>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. (01/23/2015)</p> <p>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. (01/17/2018)</p>
Project Management - Students demonstrate both breadth and depth in their understanding of current Project Management theory, concepts, methodology, terminology	Course Embedded Assessment - Final project written assignment that incorporates project management theory, concepts, terminology, and practices. PMI CAPM Certification.	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>There were two sections of TECH 5331, 040 (38 students) and 041 (3 students). Of the combined 41 students, 31 earned 80% or higher on their final project. (01/23/2015)</p>	<p>Analysis & Planning: The 10 students that did not earn 80% or higher were told that the reason they earned less than 80% (approx. 72 points out of a total of</p>

<i>Outcomes</i>	<i>Assessment Methods</i>	<i>Results</i>	<i>Analysis & Planning</i>
and practices. Outcome Status: Currently Being Assessed Outcome Type: Student Learning Start Date: 09/01/2011	TECH 5331. Criterion: 70% of the students will earn an 80% or higher on their final project management assignment. Schedule: Every other fall semester.	Notes: The grades on the spreadsheet are highlighted in yellow for this project. Related Documents: 2014 PROJECT MANAGEMENT GRADES.xlsx	90) was due to their clutter of information and too much information per slide. This was a group final project format. They were informed them that they should, in the future, put 3-5 bullets per slide and clearly explain the slide. (01/23/2015) Closing The Loop: Additional information on the instructions for the final project regarding bullets per PowerPoint is now provided to the students. (01/23/2015)
		Follow-Up Status: In-Progress Result Type: Criterion Met In the Spring semest of 2013, 29 of 35 students (83%) earned a grade of 80% or higher on their final project. (07/01/2013) Notes: Final project grades are highlighted in yellow on the related document. Related Documents: Copy of TracDat TECH 5331 Spr 13 Grades.xlsx	Analysis & Planning: After reviewing the results, it was noted that the only students who did not earn an 80% or higher on their final project did not ask for feedback from the instructor during the project. A final feedback session will be a required grade to force students to work with the instructor. (07/25/2014) Closing The Loop: The instructor of TECH 5331 Project Management has allowed additional time for feedback and review of student projects. (01/18/2018)
		Follow-Up Status: Completed, closing MOA Result Type: Criterion Met 50 of 57 students (88%) in the Project Management course earned an 80% or higher on their final Project Management assignment. (06/29/2012) Notes: The assignment was worth 60 points, therefore, the students had to earn a 48 or higher (which is 80% of 60). The final assignment grades on the related document are	Analysis & Planning: Based on results, since the criterion was to have at least 70% of the students earn an 80% or higher on their final assignment and 88% of the students met this goal, the criterion has been planned to be increased to 80% the next time

Outcomes	Assessment Methods	Results	Analysis & Planning
		<p>bolded in red. Students earning less than a 48 (79% or lower) are highlighted in yellow with blue numbers.</p> <p>Related Documents:</p> <p>TECH 5331 PROJECT MGMT GRADES</p> <p>PROJECT MGMT 2012 Sp Tech 5331 grades.xlsx</p>	<p>the course is offered. (10/04/2012)</p> <p>Closing The Loop: According to the feedback, 50 of 56 (89.2%) students earned an 80% or higher on their final project so only a small amount of time will be allotted to improve the results. Hopefully, 90% of the students can achieve this goal the next time the course is taught. (10/30/2013)</p> <p>Closing The Loop: The outcome was closed during 2012-13 AY because we determined that the original SLOs provided better assessment information to continually improve the programs. (07/11/2013)</p>
<p>Supply Chain/Logistics - The student will demonstrate a thorough understanding of supply chain and logistics principles.</p> <p>Outcome Status: Currently Being Assessed</p> <p>Outcome Type: Student Learning</p> <p>Start Date: 09/01/2016</p>	<p>Course Embedded Assessment - University Supply Chain Management Certification. TECH 5306.</p> <p>Criterion: At least 70% of the students will earn a 70% (140 out of 200 points) or higher on their final project.</p> <p>Schedule: Every other spring semester.</p>	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Criterion Met</p> <p>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. (11/27/2016)</p> <p>Assessment Cycle: 2016-2017</p> <p>Notes: More requirements will be listed so there will be a better distribution of grades.</p> <p>Related Documents:</p> <p>Copy of TECH 5306 (SPRING 2016).xlsx</p>	<p>Analysis & Planning: A more detailed grading rubric will be devised to create a better distribution of grades. (11/27/2016)</p> <p>Closing The Loop: Dr. Fazarro has created a more detailed rubric so there will be no more ambiguity and issues regarding student grading. (01/18/2018)</p>
<p>Program Outcome - The UT Tyler Industrial Management graduate program evaluates viability, impact and effectiveness with regard to currency of the curriculum and student achievement.</p> <p>Outcome Status: Currently Being Assessed</p> <p>Outcome Type: Program Outcome</p> <p>Start Date: 09/01/2013</p>	<p>External Program Review - 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</p>	<p>Follow-Up Status: In-Progress</p> <p>Result Type: Inconclusive</p> <p>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. (05/07/2012)</p> <p>Related Documents:</p> <p>2012 ATMAE Self-study FEB 24 2012(2).pdf</p>	<p>Analysis & Planning: Additional faculty are being hired to meet the demands of the ATMAE accreditation standards and to meet the accelerated growth in enrollment. (11/29/2015)</p> <p>Closing The Loop: Dr. Ali was hired added to the faculty in the Fall of 2016. (01/18/2018)</p>

Outcomes	Assessment Methods	Results	Analysis & Planning
	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	Follow-Up Status: In-Progress Result Type: Criterion Met 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 (07/24/2018) Assessment Cycle: 2017-2018 Related Documents: G 17-18 Results SCoB Industrial Management.docx	
	Surveys - (Effective 2013-14) 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. Items include: Satisfaction with preparation for career field and Overall Satisfaction with entire educational experience at UT Tyler. Criterion: Effective 2017-18: 90% Agree department/faculty advisor was easy to contact, achieve graduation timeline, accurate degree plan information; 90% Agree degree emphasized marketable skill for future career plans and 90% Satisfied with Entire Education Experience. (Formerly: 90% of survey responders indicate Excellent or Adequate Preparation for Career Field. 90% Very Satisfied/Satisfied	Follow-Up Status: In-Progress Result Type: Criterion Partially Met 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. (07/24/2017) Assessment Cycle: 2016-2017 Related Documents: 16-17 CBT M Industrial Management.docx	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

Outcomes	Assessment Methods	Results	Analysis & Planning
	with Overall Educational Experience.) 2015-16: 90% Strongly Agree/Agree they were satisfied on each of the Academic Advising items specific to the department advising. Schedule: Collect results annually and analyze every other year on odd numbered years. Related Documents: Overview of UT Tyler Graduation Exit Survey	Follow-Up Status: In-Progress Result Type: Criterion Partially Met 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. (09/13/2016) Related Documents: Industrial Management G.docx	questions by students. (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. (01/18/2018)
		Follow-Up Status: In-Progress Result Type: Criterion Met 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%)	Analysis & Planning: Refine 2018 survey items on student perception of career and grad school or professional school preparation for accuracy. (2017 Survey already launched). (09/12/2016) Closing The Loop: Changed the verbiage to "My degree emphasized marketable skill for my future career plans." (07/24/2017)
			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. (09/15/2015) Closing The Loop: Nothing was done since there was a 100%

Outcomes	Assessment Methods	Results	Analysis & Planning
		Excellent/Adequate; Overall Satisfaction with Entire Educational Experience: 20 of 20 students (100%) Very Satisfied/Satisfied. (09/15/2015) Related Documents: Masters 2013-2014 2014_15 Grad Exit Survey Master.pdf 13-14 Industrial Management Industrial Management	score on all the outcomes. (01/18/2018)
Safety - The students will be able to successfully classify and determine corrective actions of environmental hazards as noted by the Code of Federal Regulations (CFR) listed by the United States Environment Protection Agency. Outcome Status: No Longer an Outcome Outcome Type: Student Learning Start Date: 09/01/2007 End Date: 01/01/2018	Course Embedded Assessment - Final exam developed from the laws and regulations established by the U.S. Environmental Protection Agency. Students classify and determine corrective actions on selected hazardous conditions based on U.S. Environmental Protection Agency CFR list. Criterion: Effective 2013: the success criterion was raised to 80% of students. Formerly: 70% of the students successfully classify and determine corrective actions with 70% accuracy. Schedule: Final Exam scheduled the last week of the course each time it is offered and analyzed annually. Related Documents: U.S. EPA	Follow-Up Status: In-Progress Result Type: Criterion Met All the students scored an 80% or higher on their final exam for TECH 5346 Environment Management. The related document illustrates this fact. (08/08/2016) Related Documents: 2016 environmental management final exam grades.docx Follow-Up Status: In-Progress Result Type: Criterion Met All the students except for one (34 out of 35 or 97%) in the course TECH 5346 Environmental Management earned an 80% or higher on the final exam. (01/01/2014) Notes: The student who did not earn an 80% or higher on the final exam missed several classes and did not make up his work. Related Documents: Copy of Fall 2013 Environmental Mgt.xlsx Follow-Up Status: In-Progress Result Type: Criterion Met All of the students earned a 70% or better on their final project. (08/09/2013) Notes: Students now complete a final project that incorporates all the classifications of environmental hazards and corrective actions. These projects are developed from actual work related scenarios or case studies provided by the instructor. Related Documents: TECH 5346 Env Mgmt Syllabus 2008.doc ENVIRONMENTAL MGMT TECH 5346 (SUMM I 2012).xlsx	Analysis & Planning: Because students seem to be doing well with this assessment, the success criterion will be raised to 85%. (09/05/2016) Analysis & Planning: Since everyone did well in the course except for those who missed courses, no further improvements will be made in this area at this time. (01/25/2014) Analysis & Planning: Because this is a graduate course, the achievement percentage will be increased by 10% to read: 80% or better. (08/29/2013)

Outcomes	Assessment Methods	Results	Analysis & Planning
<p>Critical Thinking - Students will be able to solve problems in conceptual thinking, gathering and analyzing data, quantitative/statistical skills, and creativity and innovation (ATMAE 2009 Accreditation Handbook standard 6.6.1).</p> <p>Outcome Status: No Longer an Outcome</p> <p>Start Date: 09/01/2007</p>			
<p>Technological Competence 1 - Students will be able to use six sigma quality tools (ATMAE Accreditation Standard 6.3.5).</p> <p>Outcome Status: No Longer an Outcome</p> <p>Start Date: 09/01/2011</p> <p>End Date: 09/01/2012</p>			
	<p>Course Embedded Assessment - Six Sigma Project</p> <p>Criterion: 80% of students will earn an 80 or higher on their final project that incorporates most of the six sigma tools that were covered in the course.</p> <p>Related Documents:</p> <p>TECH_5310_syllabus six sigma.doc</p> <p>SIX SIGMA COMPUTER PROJECT GRADES.doc</p>		
<p>Professional Proficiency 2 - Students analyze and critique their personal change leadership styles.</p> <p>Outcome Status: No Longer an Outcome</p> <p>Start Date: 09/01/2010</p> <p>End Date: 09/01/2012</p>			
	<p>Course Embedded Assessment - Students complete a self-assessment survey published in Anne Gilley's "The Manager as Change Leader" that measures their change leadership attributes. Students are identified as either Average Managers, Average Change Managers, Change Agents, or Change Leaders.</p> <p>Criterion: Measurement of leadership style among MSIM students should result in a normal distribution among the four identifications.</p> <p>Related Documents:</p> <p>Leadership Questionnaire.docx</p>		

<i>Outcomes</i>	<i>Assessment Methods</i>	<i>Results</i>	<i>Analysis & Planning</i>
Technological Competence 2 - Students will be able to successfully demonstrate a thorough understanding of Lean Philosophies (ATMAE Accreditation Standard 6.3.5). Outcome Status: No Longer an Outcome Start Date: 09/01/2011 End Date: 09/01/2012	Course Embedded Assessment - Oral PowerPoint presentation on Lean concepts. Criterion: 80% or more of the students demonstrate their knowledge of Lean concepts by earning a 70% or better on a PowerPoint presentation pertaining to Lean Philosophies. Related Documents: FINAL PROJECT RUBRIC FOR LEAN MFG TECH 5335.doc TECH 5335 LEAN MANUFACTURING Fall 2008.doc		
Global Awareness 1 - Students demonstrate awareness of global issues and perspectives. Outcome Status: No Longer an Outcome Start Date: 09/01/2010 End Date: 09/01/2012	Standardized Exams - External - Students take the Global Awareness Profile (GAP) test administered in and student scores are compared to global averages. Criterion: 60% of UT Tyler students score above the global average in the first 7 categories. Related Documents: Global Awareness Profile Website		
Global Awareness 2 - Students can assess and critique alternative sets of actions in a global context. Outcome Status: No Longer an Outcome Start Date: 09/01/2010 End Date: 09/01/2012	Standardized Exams - External - Students take the Global Awareness Profile (GAP) test administered in and student scores are compared to global averages. Criterion: 75% of students make a "C" (meets expectations) or better on each of two case analyses. Schedule: The data is collected during designated semesters. The simulation is given during the middle of the term and data analysis is performed early in the following semester.		

<i>Outcomes</i>	<i>Assessment Methods</i>	<i>Results</i>	<i>Analysis & Planning</i>
Social Responsibility 1 - Students demonstrate knowledge of and can apply various Corporate Social Responsibility concepts. Outcome Status: No Longer an Outcome Start Date: 09/01/2010 End Date: 09/01/2012	Course Embedded Assessment - Students complete the Corporate Social Responsibility Module in TECH 5346. Criterion: 90% of questions are answered correctly. Related Documents: CSR Module Preview Test.docx		
Social Responsibility 2 - Students demonstrate good citizenship by engaging in a service activity. Outcome Status: No Longer an Outcome Start Date: 09/01/2010 End Date: 09/01/2012	Surveys - Verification of service activity by Director of Masters Programs Criterion: 100% of students participate in Community Service during their master's study Related Documents: Community Service Survey - Graduate.docx	Follow-Up Status: Completed, closing MOA Result Type: Criterion Not Met 0 out of 10 MSIM students (0%) who graduated between December 2012 and Spring 2013 participated in some form of community service during their master's study. (05/31/2013) Notes: This was an assessment that would not work with the Industrial Mgmt. program and has since been dropped. Too difficult to obtain valid data. Related Documents: SR2 - Community Service - Graduate - 2012-2013 - Graduate Advising.xlsx	Analysis & Planning: Community service is NOT a requirement for the graduate degree in Industrial Management so this assessment method will no longer be used. (07/25/2014)
Ethical Courage 1 - Students analyze and critique ethical behavior. Outcome Status: No Longer an Outcome Start Date: 09/01/2011 End Date: 09/01/2012	Course Embedded Assessment - Students make decisions in each of two discipline-based graduate-level ethics cases administered in TECH 5320. Criterion: 100% of students make the best ethical decision on each of the two-case analysis. Related Documents: Ethics Game Description		
Ethical Courage 2 - Students compare ethical codes and make ethical decisions Outcome Status: No Longer an Outcome Start Date: 09/01/2011	Course Embedded Assessment - Students make decisions in each of two discipline-based graduate-level ethics cases administered in TECH 5320. Criterion: 75% of students make a "C" (meets expectations) or better on each of two case analyses.	Follow-Up Status: Completed, closing MOA Result Type: Criterion Not Met 6 out of 11 MSIM students (55%) made a "C" or better on the first of the two-case analyses. While, 8 out of 11 MSIM student (73%) made a "C" or better on the second of the two-case analyses. (05/31/2013) Related Documents: EC1&2 - Ethics Game - MSIM - Spring 2013 - TECH 5320.pdf	Analysis & Planning: This assessment method was not properly administered and is no longer available to students of the Industrial Management program. (07/25/2014)

<i>Outcomes</i>	<i>Assessment Methods</i>	<i>Results</i>	<i>Analysis & Planning</i>
-----------------	---------------------------	----------------	--------------------------------

Related Documents:[Ethics Game Description](#)

Approved September 2009 1 Revised August 2014 Revised March 2015

COLLEGE OF BUSINESS AND TECHNOLOGY PERFORMANCE EVALUATION GUIDELINES

Preamble

The College of Business and Technology (CBT) faculty believe that a fair and systematic performance evaluation system is a necessary condition for guiding an individual faculty member's professional development and is a critical element of efforts to implement the mission and improve the quality and reputation of the CBT. Based on the policies defined in the university *Handbook of Operating Procedures* (HOP), the performance evaluation system specified in this document describes shared beliefs about the activities, behaviors, and outcomes that will help the CBT remain competitive.

The philosophy guiding the performance evaluation system incorporates the following six basic beliefs:

- ☐ The ongoing review and improvement of the performance evaluation system will help continually examine the activities, behaviors, and outcomes necessary to achieve the mission and goals of the departments and the CBT.
- ☐ A well-defined performance evaluation system will serve as a guide for new and existing faculty to improve job performance and professional development. This document helps specify the activities, behaviors, and outcomes that are valued.
- ☐ The performance evaluation system explicitly recognizes that individual faculty members can make a significant contribution to the CBT in many different ways. Thus, it is recognized that different weightings of the evaluation criteria are appropriate for different faculty members and that alternative sets of activities, behaviors, and outcomes may result in the same level of overall performance.
- ☐ There are many different forms of scholarly activities that are important to the profession and to various stakeholders. Each of these diverse forms of scholarship is valued. Consequently, one or more scholarly activities must be explicitly incorporated in each dimension of performance.
- ☐ The annual performance evaluation process should provide consistent and accurate feedback about job performance. The job performance and formative feedback history documented in the annual review process constitute only one piece of information that will be incorporated in promotion, tenure, and post-tenure review decisions. **Receiving a “meets or exceeds expectations” does not guarantee promotion or tenure.**
- ☐ We recognize that professional performance is very complex and cannot be accurately and reliably measured on simple interval scales. Thus, great confidence is placed in the professional judgment and integrity of the Department Chairs/Coordinator, and the Dean. These individuals are charged with insuring that the performance evaluation process is conducted in a fair and impartial manner.

Purpose

The performance review is designed to provide both summative and formative information. The summative information will provide input into decisions about annual merit pay increases, contract renewals, and faculty workloads. In most cases, these summative decisions will be based on the

performance review conducted by the Department Chair/Coordinator. The formative information generated during the performance review process is expected to play an important role in the ongoing career development of each faculty member. It is the responsibility of the Department Chair/Coordinator to provide each faculty member with ongoing professional development feedback and guidance.

The annual performance evaluation does not replace the role of the cumulative review processes in the department. Thus, in addition to the annual performance reviews, untenured faculty members will receive a 3rd year review prior to being reviewed for tenure, and post-tenure reviews following tenure. Faculty members are expected to include copies of each annual review in the materials submitted for cumulative reviews.

Process and Timetable

1. The Performance Evaluation Guidelines can be found on the CBT shared computer drive.

2. All faculty members will receive an annual performance review each year. The *approximate* timeline follows:

a. March 20 (one week after return from Spring Break). **Faculty information must be complete in FAC 180.**

b. April 15 completed faculty evaluations due to the Dean for review.

c. April 20 – May 7 Chair/Coordinator meets with faculty individually to discuss evaluation.

Chairs/Coordinator provide each faculty member a copy of their evaluation and a copy is provided to the Dean's Office.

d. May 31 all evaluations complete and certified to Provost's Office.

3. The results of the Annual Performance Review by the Chairs/Coordinators will be summarized on the Performance Evaluation form. Each faculty member will be rated on the dimensions of Teaching, Research, Service, and Collegiality.

On each dimension, a faculty member will be evaluated on a four-point scale:

1 – Unsatisfactory

2 – Does not meet expectations

3 – Meets expectations

4 – Exceeds expectations

An individual faculty member need not demonstrate each of the activities in a category to achieve the corresponding level of performance, and exhibiting a single activity, behavior or outcome in a category does not automatically place the faculty member's performance in that category. The professional judgment of the Department Chair/Coordinator and Dean are relied upon to fairly and accurately evaluate the performance of each faculty member.

4. The score on the Teaching, Research, and Service dimensions will be weighted by the appropriate percentage of effort for the faculty member on that dimension. For example, if a faculty member is to spend 50% of his/her effort on research, the score for research is weighted by 50%. See Workload policy for appropriate distribution of effort scenarios.

The weighted scores plus the Collegiality score will be averaged into a single number that is used for summative purposes.

The Chair/Coordinator must also provide an overall rating. This is a holistic evaluation and not merely a function of the summary score. However, large differences between the weighted average of the individual dimensions and the overall evaluation requires justification.

5. At the discretion of the Chair/Coordinator and the Dean, a rating of unsatisfactory on any performance dimension may trigger a professional development process for the faculty member. This plan is developed in consultation with the Department Chair/Coordinator and provides specific actions that the faculty member will take to improve his or her performance on the appropriate dimension(s). The initial draft of the professional development plan will be submitted to the Department Chair/Coordinator by May 15, and the final version approved by the Chair/Coordinator will be submitted to the Dean by May 31. Failure to submit and implement a professional development plan may be cause for termination.
6. Repeated performance evaluations of unsatisfactory on any single dimension or as the overall performance rating may be cause for termination.

TEACHING DIMENSION OF PERFORMANCE

Teaching is a core activity for all members of the faculty and the primary revenue generating activity for the College of Business and Technology. As such, it is imperative that all members of the faculty contribute to the continuing improvement and integration of the curriculum, instructional delivery, and collective learning environment. Despite the importance of teaching, mechanisms for evaluating teaching effectiveness are underdeveloped. No single instrument, method, or data source has been demonstrated to provide a valid and reliable approach to evaluate teaching performance. Thus, teaching performance in the CBT will draw on multiple sources of information including those provided by the faculty member, students, peers, and administrators.

The *minimum* documentation required for evaluating teaching performance includes copies of the student teaching evaluations for each class, a syllabus for each class, and a clear statement of learning objectives for each class. Faculty members will submit via FAC 180. Materials that cannot be submitted on FAC 180 may be submitted directly to the Chair/Coordinator.

Performance Criteria for Teaching

1 – Unsatisfactory

Below are the activities expected of each faculty. **Failure** to meet these expectations will result in the score of “1” – Unsatisfactory.

- ☐ Regularly meets classes as scheduled and holds appropriate office hours
- ☐ Ensures that course content is consistent with the CBT curriculum
- ☐ Ensures that course materials are current and relevant
- ☐ Provides students with a current course syllabus
- ☐ Maintains a current and relevant Blackboard page for each course
- ☐ Cooperates with activities to support both the CBT Assurance of Learning program and SACS assessment.
- ☐ Typically receives student teaching evaluations above 3.5 on a scale of 5.0

2 – Below Expectations

A faculty member who *only meets the expected activities* noted below will be evaluated as “2” - Below Expectations.

- ☐ Regularly meets classes as scheduled and holds appropriate office hours
- ☐ Ensures that course content is consistent with the CBT curriculum
- ☐ Ensures that course materials are current and relevant
- ☐ Provides students with a current course syllabus
- ☐ Maintains a current and relevant Blackboard page for each course
- ☐ Cooperates with activities to support both the CBT Assurance of Learning program and SACS assessment.
- ☐ Typically receives student teaching evaluations above 3.5 on a scale of 5.0

3 – Meets Expectations

In addition to performing the activities necessary to earn a “2” or “Below Expectations” rating, a faculty member evaluated as “Meets Expectations” will **provide evidence that they have achieved several of the following outcomes** during the previous year:

- ☐ Creates updated course materials on a yearly basis
- ☐ Integrates his or hers current research with the course content when appropriate
- ☐ Creates an active learning environment through the appropriate use of exercises and assignments, lectures, and other instructional strategies and techniques
- ☐ Participates in or coordinates multiple section courses in the core

- ☐ Remains competent in and instructs multiple different courses
- ☐ Typically receives student teaching evaluations above 4.0 on a scale of 5.0

4 – Exceeds Expectations

In addition to performing the activities necessary to earn a “3” or “Meets Expectations” performance rating, a faculty member evaluated as “Exceeds Expectations: will *provide evidence that they have achieved several of the following outcomes* during the previous year:

- ☐ Engages in new course development or significant revisions to existing courses
- ☐ Engages in significant efforts to initiate program revisions within the CBT
- ☐ Publishes a case in widely used text book
- ☐ Publishes pedagogical materials in refereed outlets
- ☐ Publishes multiple pedagogical articles in refereed outlets
- ☐ Publishes a textbook or casebook that is widely used
- ☐ Receives a teaching award from the College, the University, or a professional association
- ☐ Typically receives teaching evaluations above 4.25 on a scale of 5.0

RESEARCH DIMENSION OF PERFORMANCE

(Tenured and Tenure-Track Faculty)

Research activities are the primary mechanism through which faculty members make intellectual contributions to the College of Business and Technology and to their respective professions. Typically, the evaluation of research will focus on the creation of new knowledge (basic scholarship) and the application, transfer, and interpretation of knowledge to advance the practice of management (applied scholarship) that is disseminated through refereed scholarly journals, scholarly books, and high quality practitioner journals. Other types of scholarly activities, such as instructional development, business cases, consulting activities, and publications in trade journals are explicitly incorporated in other areas of the annual performance review document and thus do not contribute to the research dimension of performance.

The research dimension only will incorporate a 3-year moving evaluation period to allow for uneven publication cycles. Special consideration will be given to faculty with less than 3 years of service. Research for the performance evaluation will only be considered **when published** not when accepted and, thus, should be presented with full citation. **Documentation required to evaluate research performance will be submitted via FAC 180.**

An ongoing pattern of unsatisfactory ratings on the research dimension may constitute unsatisfactory cumulative performance.

Performance Criteria for Research

1 – Unsatisfactory

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved **only** the following during the previous 3-year period:

- ☐ Created a substantial draft of a new paper for submission to an academic conference or journal
- ☐ Created a substantial draft of a new scholarly book chapter
- ☐ Gathered new data for an ongoing research project
- ☐ Made significant revisions that demonstrate progress on existing working paper(s)
- ☐ Renewed IRB approval to continue research on prior research study
- ☐ Submitted at least one scholarly paper to an academic conference
- ☐ Presented at least one intellectual contribution at a regional academic conference
- ☐ Submitted at least one scholarly paper to an academic journal for blind peer review
- ☐ Responded to at least one “revise and resubmit” editor letter by revising and resubmitting a scholarly paper to an academic journal
- ☐ Presented research at a department, college, professional, or academic seminar
- ☐ Published research or a position paper in practitioner outlets

2 – Below Expectations

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved several of the following outcomes during the previous 3-years:

- ☐ Engaged in significant ongoing research activities
- ☐ Submitted manuscript(s) or manuscript revisions to academic journal(s)
- ☐ Presented at national or regional conference appropriate for discipline
- ☐ Provided evidence of work under review at journals on the CBT journal list
- ☐ Published chapters in scholarly or professional books
- ☐ Completed technical reports to funding sources
- ☐ Applied for research or grant funding

3 – Meets Expectations

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved several of the following outcomes during the previous 3-years:

- ☐ Published one or more manuscripts in a journal on the CBT journal list
- ☐ Obtained internal (college or university) research funding
- ☐ Applied for significant external research funding
- ☐ Received external research funding
- ☐ Supervised doctoral students in ongoing research activities
- ☐ Received a best paper or best track award
- ☐ Received a research award from a department, the CBT, or UT Tyler or a professional/academic association
- ☐ Published/Presented multiple papers at national conferences

4 – Exceeds Expectations

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved several of the following outcomes during the previous 3-years:

- ☐ Published multiple blind peer review articles in journals that are ranked as “A” or “B” on one of the CBT departmental journal lists
- ☐ Published a paper in a journal that is ranked “A+” on one of the CBT departmental journal lists
- ☐ Received significant external research funding
- ☐ Received a research award from a regional or national professional organization
- ☐ Published or edits scholarly book or textbook
- ☐ Received a patent for intellectual property
- ☐ Served as Editor or Associate Editor for a journal on the CBT journal list

RESEARCH DIMENSION OF PERFORMANCE

(Lecturers and Senior Lecturers)

Generally, Lecturers/Senior Lecturers with the faculty status of IP are not considered to have any research expectations (workload would be 0% for research). However, the requirements to obtain/maintain the faculty status of SP *may* include a research component. The workload distribution for research may be greater than 0% with concurrence of the Chair/Coordinator and the faculty member. When that is the case, the performance criteria shown below will be used for the research dimension.

Research activities are one mechanism through which lecturers and senior lecturers maintain appropriate SP faculty status. Typically, the evaluation of research will focus on activities that demonstrate currency and relevancy in the field of teaching. The set of activities encompass peer reviewed journal articles, publications and presentations at professional meetings, among others.

Documentation required to evaluate scholarship and professional activities will be submitted via FAC 180.

It should be noted that an ongoing pattern of unsatisfactory scholarship and professional activities is not sufficient for a given faculty member to maintain his or her status as being considered AACSB Qualified. An ongoing pattern of unsatisfactory ratings on the scholarship and professional activities dimension constitutes unsatisfactory cumulative performance.

Performance Criteria for Research

1 – Unsatisfactory

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved **none** of the following outcomes during the previous year:

- ☐ Attended regional professional meeting in discipline
- ☐ Submitted at least one manuscript to a regional conference
- ☐ Presented research at a “brown bag” seminar
- ☐ Participated in select AACSB seminars and workshops

2 – Below Expectations

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved several of the following outcomes during the previous year:

- ☐ Attended regional professional meeting in discipline
- ☐ Submitted at least one manuscript to a regional conference
- ☐ Presented research at a “brown bag” seminar
- ☐ Participated in select AACSB seminars and workshops

3 – Meets Expectations

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved several of the following outcomes during the previous year:

- ☐ Submitted manuscript(s) to journal(s)
- ☐ Presented at national or regional conference appropriate for discipline
- ☐ Applied for research funding
- ☐ Published materials in academic or professional outlet

4 – Exceeds Expectations

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved several of the following outcomes during the previous year:

- ☐ Published in peer reviewed journals
- ☐ Submitted manuscripts to national conferences appropriate for discipline
- ☐ Obtained internal or external research funding
- ☐ Presented paper at regional or national conference
- ☐ Received a research award from a regional or national professional organization
- ☐ Published scholarly book(s) (as author or editor)

SERVICE DIMENSION OF PERFORMANCE

Service is an important and valued activity that is a key responsibility for each faculty member. Each member of the faculty is expected to provide significant service to the department, college, and university. In addition, faculty members are expected to engage in other service activities to the broader community including service to professional organizations, business organizations, government organizations, and/or community organizations.

Given the large assortment of service options, a large variation in the service of individual faculty members is expected. No single type of service is preferred, and many different types of service are valued. It is also expected that the amount and type of service contributions to vary with an individual's career stage. Junior faculty members often have lower service requirements and are likely to focus more on internal service activities. More senior faculty members are expected to make greater overall service contributions and are likely to focus on more external service activities. Thus, the Department Chair/Coordinator and the Dean may shift the behavioral descriptions somewhat to adjust for the career position of the individual faculty member.

Documentation required to evaluate service performance will be submitted via FAC 180.

Performance Criteria for Service

1 – Unsatisfactory

Faculty members will earn this performance rating when their annual evaluation materials clearly provide evidence that they have achieved **none** of the following outcomes during the previous year:

- ☐ Regularly attended department and CBT faculty meetings
- ☐ Provided service to department
- ☐ Conducted consulting activities that benefit the department or college
- ☐ Provided oversight to student groups when asked
- ☐ Was regularly present in office and meetings
- ☐ Attended graduation convocations when possible

2 – Below Expectations

In addition to performing the activities noted above, a person will earn this rating when their evaluation materials clearly provide evidence that they have achieved multiple outcomes from the following during the previous year:

- ☐ Regularly attended department and CBT faculty meetings
- ☐ Provided service to department
- ☐ Conducted consulting activities that benefit the department or college
- ☐ Provided oversight to student groups when asked
- ☐ Was regularly present in office and meetings
- ☐ Attended graduation convocations when possible

3 – Meets Expectations

In addition to performing the activities noted above, a person evaluated as “Meets Expectations” will provide evidence that they have also achieved several of the following outcomes during the previous year:

- ☐ Actively served on at least one CBT committee or taskforce
- ☐ Served as faculty sponsor of a student organization
- ☐ Served on Faculty Senate
- ☐ Actively participated in departmental efforts
- ☐ Supervised doctoral students if applicable

- ☐ Conducted significant consulting activities that benefit the CBT, department, University, community or national professional organization
- ☐ Conducted significant review for scholarly journals in their discipline
- ☐ Actively participated in professional associations
- ☐ Served as coordinator for one or more of the multiple section core or interdisciplinary courses
- ☐ Edited and/or reviewed papers for colleagues
- ☐ Reviewed papers for proceedings and journals
- ☐ Served on major University and CBT and department committees
- ☐ Provided support to colleagues by attending their presentations
- ☐ Served on an editorial board for a major journal
- ☐ Directed CBT Center
- ☐ Represented CBT at University and Community events*

4 – Exceeds Expectations

In addition to performing the activities noted in the above categories, a person evaluated as “Exceeds Expectations” will provide evidence that they have also achieved several of the following outcomes during the previous year:

- ☐ Actively participated on multiple CBT of University committees
- ☐ Chaired a Faculty Senate Committee
- ☐ Was an active reviewer for two or more journals on the CBT journal list
- ☐ Chaired (or co-chaired) a major CBT committee or taskforce
- ☐ Helped with Development and Alumni Relations
- ☐ Served as an active mentor for junior faculty members
- ☐ Provided economic development activities
- ☐ Served as an officer or program chair in a professional association
- ☐ Held an officer position in a regional or national professional organization
- ☐ Demonstrated significant Center activities
- ☐ Delivered significant executive education activities

*Examples of these events include:

University

Distinguished Alumni

Dedication/Open Houses

Patriots Day

College/Departmental

Business Expo booth

Meetings sponsored by CBT

Community

Better Business Bureau Awards

Chamber of Commerce activities

SOULES COLLEGE OF BUSINESS ANNUAL FACULTY PERFORMANCE EVALUATION

Faculty Member: Example Evaluation Year: 2017-2018

Current Rank: _____

Rating Scale:

- 1 = Unsatisfactory
2 = Does not meet expectations
3 = Meets expectations
4 = Exceeds expectations

	Rating	x Weight*	= Score
Teaching	<u>4</u>	<u>.2</u>	= <u>.8</u>
Research	<u>4</u>	<u>.2</u>	= <u>.8</u>
Service	<u>4</u>	<u>.1</u>	= <u>.4</u>
Administration	<u>4</u>	<u>.5</u>	= <u>2</u>
Average Score			<u>4</u>

*Distribution of effort percent

Meeting appropriate faculty qualification status?

- ☒ Yes Check Status: ☐ SP ☐ IP ☐ SA ☐ PA
☐ No *Explain on Page 2*

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) 4

OVERALL EVALUATION (1-4 scale) 4

Is a professional development plan required?

- ☒ No
☐ Yes For which dimension(s) _____

Distribution of effort for next academic year (complete goals for each area on reverse):

Teaching 20 %
Research 20 %
Service 10 %
Administration 50 %

Chair/Coordinator: _____

Date: 11/30/18

I have read and received a copy of this evaluation:

Faculty Member: _____

Date: 11/30/18

Dean: _____

Date: _____

SOULES COLLEGE OF BUSINESS ANNUAL FACULTY PERFORMANCE EVALUATION

If not meeting appropriate faculty qualification status, why:

N/A

Progress toward Tenure/Promotion. Receiving a “meets or exceeds expectations” does not guarantee promotion/tenure:

Areas of strength:

N/A

Areas requiring work:

Progress toward Promotion:

Areas of strength:

N/A

Areas requiring work:

N/A

Summarize goals for next year in each area:

Teaching:

Continue to revise courses and upgrading technology in the labs as noted by industry and our professional journals.

Research:

Continue to publish textbooks and articles in the discipline.

Service:

Continue to maintain ATMAE accreditation for both the graduate and undergraduate programs. Improve the quality of all the HRD programs and improve their image throughout the profession. Grow the enrollments in all the programs and especially at the LUC.

Student Course Evaluation Form

Sample of New Online Format

Students can select from a scale of 1 to 5. A grade of 5 being the best and 1 being the worst.

All instructors can be accessed at: <https://apps.utttyler.edu/courseevals/homepage.aspx>

THE UNIVERSITY OF TEXAS AT TYLER

Search Professor by:

Professor Department Course

Professor Name : Search

Professor Name: **Mark Miller**

Department: **Technology**

TECH 4323.001-FALL 2018 LEAN PRODUCTION

The instructor clearly defined and explained the course objectives and expectations: 4.56/5.0 (18 reviews)

The instructor was prepared for each instructional activity: 4.56/5.0 (18 reviews)

The instructor communicated information effectively: 4.39/5.0 (18 reviews)

The instructor encouraged me to take an active role in my own learning: 4.5/5.0 (18 reviews)

The instructor was available to students either electronically or in person: 4.67/5.0 (18 reviews)

TECH 5366.060-SUMMER 2018 VALUE STREAM MANAGEMENT

The instructor clearly defined and explained the course objectives and expectations: 4.33/5.0 (15 reviews)

The instructor was prepared for each instructional activity: 4.27/5.0 (15 reviews)

The instructor communicated information effectively: 4.13/5.0 (15 reviews)

The instructor encouraged me to take an active role in my own learning: 4.13/5.0 (15 reviews)

The instructor was available to students either electronically or in person: 4.33/5.0 (15 reviews)

TECH 4317.001-SPRING 2018 COMPUTER INTEGRATED MANUF

The instructor clearly defined and explained the course objectives and expectations: 4.71/5.0 (7 reviews)

The instructor was prepared for each instructional activity: 4.71/5.0 (7 reviews)

The instructor communicated information effectively: 4.86/5.0 (7 reviews)

Faculty and chairs are also provided a lot more information including comments from the students which are very helpful in order to continuously improve the courses. An example is listed below.

Example John Doe

Subject	Question	Comments 1
TECH 3310.060	Please identify area(s) where you think the course could be improved.	Everything was good.
		It's great as it is.
		Nothing
		Nothing comes to mind. Great professor that was prepared from the beginning and always communicated effectively of 10. Would take again.
TECH 5336.060	Please identify area(s) where you think the course could be improved.	For the future, it would be nice if all of the assignments were posted beforehand just so that students have an idea of assignments are going to be due in the future for planning purposes. On a positive note, I really did like the 5S assignment with the numbers. More assignments like that would be beneficial, in my opinion.
		I think the only recommendations I'd like to make is that 1) each week have a question list like the question lists we have and answer and submit for credit this semester. We didn't do them every week, but I found them helpful for retaining information, and 2) that the items for use on projects be streamlined into a phase based filing system using Box, Dropbox, or some other Canvas compatible application, so that each week's listings isn't such a jumble.
		Dr D was a great instructor this semester. I enjoyed his class and the assignments kept me engaged in the course. I would definitely take another course by Dr. D if applicable!
		Very insightful learning experience from this course and the professor as well. Strong work Dr. D.

University Graduation Surveys

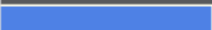


Industrial Management

Graduation Exit Survey 2013-2014 (Graduate)
(n=15) Response Rate 40%


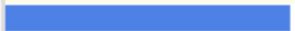
1. Please select your major

Answer	Response
Industrial Management	6



2. Indicate the term you will be graduating

Answer		Response	%
Fall 2013		3	50%
Spring 2014		2	33%
Summer 2014		1	17%
Total		6	100%

3. Were 50% or more of your courses in the program:

Answer		Response	%
Hybrid (Online + Traditional Class Setting)		2	33%
Online		4	67%
Traditional Class Setting		0	0%
Total		6	100%

4. What will be your principal activity within the first year of graduation?

Answer		Response	%
Doctoral Program		1	17%
Employment, full-time		5	83%
Employment, part-time		0	0%
Military		0	0%
Volunteer Service (e.g., Peace Corps)		0	0%
Other (please specify)		0	0%
Total		6	100%

Other (please specify)

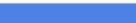

5. If you plan on continuing your education, please complete the following:

University	City/State	Intended Degree
The University of Texas at Tyler	Tyler, Texas	M.S Industrial Management
Undecided		
University of Texas at Tyler	Tyler, TX	MS
UT Tyler	Texas	PH.D

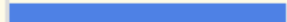
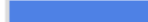
6. Please provide information about your employer:

Job Title	Employer	Employer Address
Supply chain manager	Aaon coil products	203 gum springs road Longview Texas
Process Improvement Analyst	Brookshire Grocery Company	1600 Loop 323, Tyler Tx
n/a	n/a	n/a
n/a	n/a	n/a
HSE Coordinator	Tervita LLC	10613 W Sam Houston Pkwy N Houston TX 77064

7. Have you successfully obtained a job in your discipline?

Answer		Response	%
Yes		2	33%
No		4	67%
Total		6	100%

8. In your opinion, how well has UT Tyler prepared you to work in your career field?

Answer		Response	%
Excellent preparation		4	67%
Adequate preparation		2	33%
Inadequate preparation		0	0%
Total		6	100%

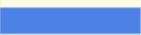






9. Did you self-advise?

Answer		Response	%
Yes		4	67%
No		2	33%
Total		6	100%

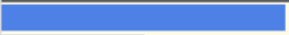
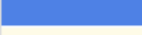
10. Select the appropriate level of agreement with your academic advisor for your graduate program

Question	Strongly Agree	Agree	Disagree	Strongly Disagree	Total Responses
Was easy to contact	0	2	0	0	2
Contributed to the timely completion of your degree	0	2	0	0	2
Helped you create an effective/accurate degree plan	0	2	0	0	2

11. What was your primary reason to attend UT Tyler? (Select all that apply)

Answer		Response	%
Desired degree program		2	33%
National recognition of degree programs		1	17%
Quality of Faculty		1	17%
Research Opportunities		0	0%
Size		1	17%
Diversity		1	17%
Location		5	83%
Cost		1	17%
Other		0	0%

12. Was UT Tyler your

Answer		Response	%
First Choice		4	67%
Second Choice		2	33%
Third Choice		0	0%
Total		6	100%

13. Rate the following aspect of your academic degree program:

Question	Excellent	Above Average	Average	Below Average	Poor	Total Responses
Opportunity to stretch your knowledge, skills and attitudes	2	3	1	0	0	6
Structures to ensure student engagement in research	0	5	1	0	0	6
Provided appropriate professional practice and training experiences	0	3	3	0	0	6
Progressively more advanced in academic content than your undergraduate program	0	3	3	0	0	6
Prepared you to be a leader in your profession or community	2	3	1	0	0	6

14. Rate how well UT Tyler helped you develop the following abilities:

Question	Significant development	Some development	Little or no development	Total Responses
Locate and organize information	4	2	0	6
Critically evaluate information for decision making	3	3	0	6
Awareness of global issues and events	2	2	2	6
Work effectively with a team	2	4	0	6
Appreciation of cultures or groups other than your own	3	2	1	6
Clarify your own values and ethical standards	4	2	0	6

15. Select the appropriate level of satisfaction with each of these following academic support services:

Question	I used this service and was satisfied	I used this service and was not satisfied	I know about this service but did not need it	I did not know about this service	Total Responses
Graduate Studies Workshop Series	1	0	1	4	6
Library	1	0	5	0	6

16. Select the appropriate level of your satisfaction with these services:

Question	I used this service and was satisfied	I used this service and was not satisfied	I know about this service but did not need it	I did not know about this service	Total Responses
Cashiers Office	5	0	1	0	6
Enrollment Service Center (One Stop Shop)	4	0	2	0	6
Financial Aid & Scholarships	4	1	1	0	6
Graduate Admissions Office	6	0	0	0	6
myUTTyler	6	0	0	0	6
P2Card System	3	0	2	1	6
Registrars Office	4	0	2	0	6

17. Select the appropriate level of your satisfaction with each of the following student services for students:

Question	I used this service and was satisfied	I used this service and was not satisfied	I know about this service but did not need it	I did not know about this service	Total Responses
Campus Security	1	1	3	1	6
Career Services	3	0	2	1	6
Student Accessibility & Resources	0	0	4	2	6
Student Complaint Process	0	0	4	2	6
Student Counseling	1	0	4	1	6
Student Money Management	1	0	3	2	6
Veterans Resource Center	0	0	3	3	6

18. Select the appropriate level of your satisfaction with each of the following auxiliary operation services:

Question	I used this service and was satisfied	I used this service and was not satisfied	I know about this service but did not need it	I did not know about this service	Total Responses
Campus Food Service	2	0	3	1	6
Patriot Printing Copy Services	1	0	2	3	6
Student Health Clinic	2	0	2	2	6
University Bookstore	5	1	0	0	6

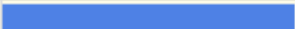

19. Select the appropriate level of your satisfaction with each of the following technology services:

Question	I used this service and was satisfied	I used this service and was not satisfied	I know about this service but did not need it	I did not know about this service	Total Responses
Blackboard	6	0	0	0	6
Blackboard Support (Help Desk)	2	1	2	1	6
Classroom Technology (AV, ITV, etc.)	5	0	0	1	6
Computer Labs (BUS 101)	3	0	3	0	6
Emergency Campus Closing Communication	4	0	1	1	6

20. Indicate your level of agreement with the following statements:

Question	Strongly Agree	Agree	Disagree	Strongly Disagree	Total Responses
University print materials are clear and accurate	50%	50%	0%	0%	6
The University website is easy to use and well organized	83%	17%	0%	0%	6
I am satisfied with the overall quality of academic advising	83%	17%	0%	0%	6
I am satisfied with my entire education experience	67%	33%	0%	0%	6

21. If you could start over again, would you attend UT Tyler?

Answer		Response	%
Definitely yes		4	67%
Probably yes		2	33%
Probably No		0	0%
Definitely No		0	0%
Total		6	100%

Industrial Management

Graduation Exit Survey 2014-2015 (Graduate)

(n=40) Response Rate 45%

1. Please select your major

Answer	Response
Industrial Management	18

2. Indicate the term you will be graduating

Answer	Response	%
Fall 2014	4	22%
Spring 2015	7	39%
Summer 2015	7	39%

3. Select the appropriate level of agreement with your Department or Faculty Advisor

Question	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Total Responses
Was easy to contact	1	0	0	2	7	8	18
Helped me complete my degree in a timely manner	1	0	1	2	6	8	18
Helped me create an accurate degree plan	1	0	1	1	5	10	18

4. Overall, how satisfied are you with the quality of your academic advising?

Answer	Response	%
Very Dissatisfied	0	0%
Dissatisfied	0	0%
Somewhat Dissatisfied	0	0%
Somewhat Satisfied	1	6%
Satisfied	7	39%
Very Satisfied	10	56%

5. What will be your principal activity within the first year of graduation?

Answer	Response	%
Employment, full-time in my discipline	13	72%
Employment, part-time in my discipline	0	0%
Doctoral Program	1	6%
Military	0	0%
Volunteer Service (e.g., Peace Corps)	1	6%
Other (please specify)	0	0%
Employment, full-time not in my discipline	2	11%
Employment part-time not in my discipline	1	6%

Other (please specify)

6. Please provide information about your employer

Job Title	Employer	Employer Address
process improvement analyst	Brookshires	Brookshires warehouse tyler tx
Engineer in Training - Intern	Hayes Engineering	joey@hayesengineering.net
Account Manager	Joy Global	Longview, Texas
Not yet employed	Na	Na
Na	Na	Na
NA	NA	NA
none	none	none
none	none	none
Project Manager	Norwex	800 W Bethel Rd
not yet	not yet	not yet
Software Developer	Pending	Pending
Planner	Zachry @ INEOS	Alvin, Texas

7. Please provide information about your Doctoral program

University	City/State	Intended Degree
University of Texas Rio Grande Valley	Edinburg	PhD in Management

8. How well has UT Tyler prepared you for your doctoral program?

Answer	Response	%
Excellent preparation	1	100%
Adequate preparation	0	0%
Inadequate preparation	0	0%

9. How well has UT Tyler prepared you to work in your career field?

Answer	Response	%
Excellent preparation	9	75%
Adequate preparation	3	25%
Inadequate preparation	0	0%

10. What was your primary reason to attend UT Tyler?

Answer	Response	%
Desired degree program	9	64%
National recognition of degree programs	1	7%
Quality of Faculty	1	7%
Research Opportunities	1	7%
Size	0	0%
Sports Venues	0	0%
Diversity	0	0%
Location	1	7%
Cost	1	7%
Other	0	0%

11. Rate the following aspects of your degree program:

Question	Well below expectations	Did not meet expectations	Met expectations	Exceeded Expectations	Total Responses
Provided research opportunities	0	1	11	2	14
Provided appropriate professional practice and training experiences	0	0	9	5	14
Progressively more advanced in academic content compared with undergraduate program	0	0	10	4	14
Prepared you to be a leader in your profession	0	0	10	4	14
Emphasized global topics relevant to your profession	0	0	8	6	14

12. Were 50% or more of your courses in your degree?

Answer	Response	%
Face-to-Face Only	7	50%
Online Only	5	36%
Combination of Online/Face-to-Face	2	14%

13. Select the appropriate level of satisfaction with these services offered through the Enrollment Services Center

Question	N/A	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Total Responses
Admissions Counseling	0	0	0	0	0	5	4	9
Cashiers Office	0	0	0	0	0	6	3	9
Financial Aid & Scholarships Counseling	0	0	0	0	1	4	4	9
myUTTyler	0	0	0	0	0	4	5	9
P2 Card System	0	0	0	0	1	4	4	9
Registrars Office	0	0	0	0	0	4	5	9
One-Stop Shop	1	0	0	0	0	4	4	9

14. Select your level of satisfaction with the following

Question	N/A	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Total Responses
Campus Security	0	0	0	0	1	3	5	9
Career Services	0	0	1	0	2	2	4	9
Facilities	0	0	0	0	2	2	5	9
Library Resources	1	0	1	1	0	2	4	9
Office of International Programs	0	0	0	2	2	2	3	9
Student Accessibility & Resources	1	0	0	1	1	2	4	9
Student Counseling Center	1	0	0	0	2	2	4	9
Student Government Association	2	0	0	0	1	2	4	9
Veteran's Resource Center	2	0	0	0	1	2	4	9
Writing Center	1	0	0	0	1	3	4	9

15. Select the appropriate level of satisfaction with each of the following technology services

Question	N/A	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Total Responses
Blackboard	0	0	0	0	1	2	6	9
Blackboard Support (Help Desk)	1	0	0	0	0	2	6	9
Classroom Technology (AV, ITV, etc.)	0	0	0	0	1	2	6	9
Computer Labs (BUS 101)	0	0	0	1	1	2	5	9

16. Select the appropriate level of satisfaction with these services

Question	N/A	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Total Responses
Blackboard	0	0	0	0	1	3	1	5
Blackboard Support (Help Desk)	2	0	0	1	0	2	0	5
Career Services	3	0	0	1	1	0	0	5
Financial Aid & Scholarships	2	0	0	1	2	0	0	5
Counseling								
Graduate Admissions Office	0	0	0	0	0	2	3	5
Library								
Online Resources & Support	1	0	0	0	1	2	1	5
myUTTyler	0	0	0	0	1	2	2	5
Office of International Programs	3	0	0	0	1	1	0	5
Student Accessibility & Resources	3	0	0	0	1	1	0	5
Student Counseling Center	4	0	0	0	1	0	0	5
Student Government Association	4	0	0	0	1	0	0	5
Student Health & Wellness	2	0	0	0	1	1	1	5
Veteran's Resource Center	4	0	0	0	1	0	0	5
Writing Center	4	0	0	0	1	0	0	5

17. Indicate the level of agreement with the following statements

Question	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Total Responses
University print materials are clear and accurate	0	0	0	2	5	7	14
The University website is easy to use and well organized	0	0	0	2	5	7	14

18. Indicate the level of satisfaction with your entire education experience at UT Tyler

Answer	Response	%
Very Dissatisfied	0	0%
Dissatisfied	0	0%
Somewhat Dissatisfied	0	0%
Somewhat Satisfied	0	0%
Satisfied	6	43%
Very Satisfied	8	57%
Total	14	100%

19. If you could start over again, would you attend UT Tyler?

Answer	Response	%
Definitely no	0	0%
Probably no	0	0%
Probably yes	5	36%
Definitely yes	9	64%

20. Comments:

Text Response

UT Tyler is the best university/campus I have been to in my life. Thank you
Very helpful for international students.

College of Business and Technology

Industrial Management

2016-2017 Graduate Graduation Survey

Q1.1 - Please select your degree and program:

Answer	%	Count
Masters	100.00%	67
Total	100%	67

Answer	%	Count
Industrial Management	100.00%	67
Total	100%	67

Q2.1 - Indicate the term you will be graduating:

Answer	%	Count
Summer 2016	24.14%	14
Fall 2016	46.55%	27
Spring 2017	17.24%	10
Summer 2017	12.07%	7
Total	100%	58

Q2.2 - Drag each item below indicating your level of agreement. My Faculty Advisor:

Group	N/A		Disagree		Agree		Total
Was easy to contact	5%	3	0%	0	95%	55	58
Helped me complete my degree in a timely manner	9%	5	0%	0	91%	53	58
Helped me create an accurate degree plan	10%	6	3%	2	86%	50	58

Q2.3 - Overall, how satisfied are you with the quality of your academic advising?

Answer	%	Count
N/A	3.45%	2
Dissatisfied	0.00%	0
Satisfied	96.55%	56
Total	100%	58

Q2.4 - What will be your principal activity within the first year of graduation?

Answer	%	Count
Doctoral Program	3.45%	2
Professional Program	3.45%	2
Employment, full-time in my discipline	82.76%	48
Employment, full-time not in my discipline	3.45%	2
Employment, part-time in my discipline	3.45%	2
Employment part-time not in my discipline	0.00%	0
Military	0.00%	0
Volunteer Service (e.g., Peace Corps)	0.00%	0
Other (please specify)	3.45%	2
Total	100%	58

Other (please specify)

Professor

Q2.5 - Please provide information about your employer:

Job Title	Employer	Employer Address
maintenance mechanic	eastman chemical longview tx	n/a
Senior Engineer	Solar Turbines Inc	904 Solar Turbines Way, HWY 90, Mabank Texas 75147
Systems Analyst	Tata Consultancy Services	3010 Lyndon B Johnson Fwy #400, Dallas, TX 75234
Compensation Manager	Brookshire Grocery Company	1600 WSW Loop 323 Tyler, TX 75701
Inventory Management	Tyler C Store Wholesale	911 SSE LOOP 323 TYLER, TX 75702
Quality Assurance Specialist	Department of Defense	200 Hensley Ave Bldg1675 Fort Worth, TX 76127
Systems Controls Technican	JBT AeroTech	18885 Colonel Fischer Rd. Houston, TX 77032
Operations Foreman	Brookshire Grocery Company	1600 W SW Loop 323 Tyler , Tx 75701
Operation Foreman	Brookshires Grocery Company	1600 W SW Loop 323, Tyler, TX 75701
Production Analyst	John Soules Food	po box 4579 Tyler Tx 75712
Logistics Intern	Brookshires Grocery Company	Tyler
Designer	General Dynamics	Kilgore, Texas
Engineering Designer	Legacy Measurement Solutions	8521 FM 850 Tyler TX
Senior Buyer	Westlake Chemical	N/A
Engineering Designer	Legacy Measurement Solutions	8521 FM 850, Tyler TX 75705
Safety and Facilities Manager	Performance POP	2929 N Stemmons Frwy, Dallas, TX 75247
Quality Analyst	Not Applicable	Not Applicable
Supply Chain Manager	Stemco LP	300 Industrial Dr., Longview, TX 75602
Opex MDI Coach	Trane	6200 Troup Hwy, Tyler, TX 75707
Production Manager	Monsanto	St. Louis, MO
Director of Environmental Health and Safety	Tyler Junior College	1327 South Baxter Tyler, Texas 75701
Operations Analyst	John Soules Foods	10150 FM 14 Tyler TX 75706

Q2.6 - Please provide information about your doctoral or professional program:

University	City/State	Intended Degree
University of Texas Tyler	Texas	Masters
University of Texas	Arlington	Phd in Industrial Management

Q2.7 - How well has UT Tyler prepared you for your doctoral or professional program?

Answer	%	Count
Excellent preparation	100.00%	1
Adequate preparation	0.00%	0
Inadequate preparation	0.00%	0
Total	100%	1

Q2.8 - How well has UT Tyler prepared you to work in your career field?

Answer	%	Count
Excellent preparation	42.50%	17
Adequate preparation	55.00%	22
Inadequate preparation	2.50%	1
Total	100%	40

Q2.9 - What was your primary reason to attend UT Tyler?

Answer	%	Count
Desired degree program	55.81%	24
National recognition of degree programs	0.00%	0
Quality of Faculty	0.00%	0
Research Opportunities	0.00%	0
Size	0.00%	0
Diversity	4.65%	2

Location	23.26%	10
Cost	13.95%	6
Other	2.33%	1
Total	100%	43

Q2.10 - Drag each item below indicating your level of expectation based on the following aspects of your degree program:

Group	Well below expectations		Did not meet expectations		Met expectations		Exceeded Expectations		Total
Knowledge of the discipline literature	2.33%	1	9.30%	4	74.42%	32	13.95%	6	43
Research opportunities	4.65%	2	18.60%	8	65.12%	28	11.63%	5	43
Appropriate professional practice and/or training experiences	2.33%	1	16.28%	7	67.44%	29	13.95%	6	43
Emphasized global issues relevant to your profession	9.30%	4	6.98%	3	62.79%	27	20.93%	9	43

Q2.11 - Were 50% or more of your courses in your degree?

Answer	%	Count
Face-to-Face Only	25.58%	11
Online Only	25.58%	11
Combination of Online/Face-to-Face	48.84%	21
Total	100%	43

Q2.12 - Drag each item below indicating your level of satisfaction based on the following aspects of the Enrollment Services Center:

Group	N/A		Dissatisfied		Satisfied		Total
Admissions Counseling	17.24%	5	3.45%	1	79.31%	23	29
Cashiers Office	13.79%	4	6.90%	2	79.31%	23	29
Financial Aid	10.34%	3	13.79%	4	75.86%	22	29

myUTTyler	3.45%	1	6.90%	2	89.66%	26	29
One-Stop Shop	27.59%	8	6.90%	2	65.52%	19	29
P2 Card System	20.69%	6	6.90%	2	72.41%	21	29
Registrar's Office	24.14%	7	3.45%	1	72.41%	21	29

Q2.13 - Drag each item below indicating your level of satisfaction:

Group	N/A		Dissatisfied		Satisfied		Total
Campus Security	10.34%	3	0.00%	0	89.66%	26	29
Career Services	24.14%	7	13.79%	4	62.07%	18	29
Facilities Quality	10.34%	3	3.45%	1	86.21%	25	29
Library Resources	6.90%	2	17.24%	5	75.86%	22	29
Office of International Programs Advising Services	27.59%	8	0.00%	0	72.41%	21	29
Student Accessibility & Resources	24.14%	7	0.00%	0	75.86%	22	29
Student Counseling Center	41.38%	12	3.45%	1	55.17%	16	29
Student Government Association	48.28%	14	13.79%	4	37.93%	11	29
Student Health & Wellness	34.48%	10	6.90%	2	58.62%	17	29
Veteran's Resource Center	68.97%	20	0.00%	0	31.03%	9	29
Writing Center	51.72%	15	0.00%	0	48.28%	14	29

Q2.14 - Drag each item below indicating your level of satisfaction based on the following aspects of technology services:

Group	N/A		Dissatisfied		Satisfied		Total
Blackboard	0.00%	0	0.00%	0	100.00%	29	29
Blackboard Support (Help Desk)	27.59%	8	3.45%	1	68.97%	20	29
Classroom Technology (AV, ITV, etc.)	3.45%	1	3.45%	1	93.10%	27	29
Computer Labs (BUS 101)	20.69%	6	0.00%	0	79.31%	23	29

Q2.15 - Drag each item below indicating your level of satisfaction based on the following aspects of online services:

Group	N/A		Dissatisfied		Satisfied		Total
Blackboard	9.09%	1	9.09%	1	81.82%	9	11
Blackboard Support (Help Desk)	18.18%	2	9.09%	1	72.73%	8	11
Career Services	63.64%	7	0.00%	0	36.36%	4	11
Financial Aid	45.45%	5	0.00%	0	54.55%	6	11
Graduate Admissions Office	27.27%	3	0.00%	0	72.73%	8	11
Library Online Resources & Support	36.36%	4	0.00%	0	63.64%	7	11
myUTTyler	9.09%	1	0.00%	0	90.91%	10	11
Office of International Programs Advising Services	54.55%	6	0.00%	0	45.45%	5	11
Student Accessibility & Resources	45.45%	5	0.00%	0	54.55%	6	11
Student Counseling Center	63.64%	7	0.00%	0	36.36%	4	11
Student Government Association	63.64%	7	0.00%	0	36.36%	4	11
Student Health & Wellness	45.45%	5	0.00%	0	54.55%	6	11
Veteran's Resource Center	54.55%	6	0.00%	0	45.45%	5	11
Writing Center	72.73%	8	0.00%	0	27.27%	3	11

Q2.16 - Drag each item below indicating your level of agreement with the following statements:

Group	Disagree		Agree		Total
University print materials are clear and accurate	10.00%	4	90.00%	36	40
The University website is easy to use and well organized	25.00%	10	75.00%	30	40

Q2.17 - Indicate the level of satisfaction with your entire education experience at UT Tyler:

Answer	%	Count
Satisfied	95.00%	38
Dissatisfied	5.00%	2

Total	100%	40
-------	------	----

Q2.18 - If you could start over again, would you attend UT Tyler?

Answer	%	Count
No	22.50%	9
Yes	77.50%	31
Total	100%	40

Q2.19 - Comments:

In view of the cost perspective, UT Tyler is good.

We can Increase the career fairs and bring for companies.

The Graduate Level Courses are not up to date according to the current scenarios. Need more latest curriculum in the degree plan. Other than that, I loved studying here, the campus and people are very good.

The University of Texas at Tyler
Soules College of Business
Industrial Management

2017-2018 Graduate Graduation Exit Survey

Q1.1 - Have you applied for graduation in previous semesters for the same degree?

Answer	%	Count
Yes	0.00%	0
No	100.00%	26
Total	100%	26

Q1.2 - What semester did you apply for the same degree?

Answer	%	Count
2017 Fall	0.00%	0
2018 Spring	0.00%	0
2018 Summer	0.00%	0
Other	0.00%	0
Total	100%	0

Q1.3 - Please select your major:

Answer	%	Count
Industrial Management MS	100.00%	43
Total	100%	43

Q1.4 - At which location did you complete the majority of your courses?

Answer	%	Count
Tyler	87.80%	36
Houston	0.00%	0
Longview	0.00%	0
Palestine	0.00%	0
Online only	12.20%	5
Total	100%	41

Q1.5 - Indicate your level of agreement about your Academic Advisor:

Question	Agree		Disagree		Total
Was easy to contact	97.67%	42	2.33%	1	43
Provided guidance to achieve my graduation timeline	97.67%	42	2.33%	1	43
Helped me create an accurate degree plan	95.35%	41	4.65%	2	43

Q1.6 - Identify the average number of hours per week you worked for pay on or off campus while attending UT Tyler:

Answer	%	Count
0 hours	4.88%	2
1-10 hours	9.76%	4
11-19 hours	48.78%	20
20-29 hours	7.32%	3
30+ hours	29.27%	12
Total	100%	41

Q1.7 - What are your primary plans in the first year following graduation? (Select all that apply)

Answer	%	Count
Doctoral Program	12.28%	7
Professional Program	0.00%	0
Employment, full-time in my discipline	70.18%	40
Employment, full-time not in my discipline	7.02%	4
Employment, part-time in my discipline	3.51%	2
Employment part-time not in my discipline	3.51%	2
Military	1.75%	1
Volunteer Service (e.g., Peace Corps)	1.75%	1
Other (please specify)	0.00%	0
Total	100%	57

Q1.8 - If known, identify your employer following graduation:

Employer	Employer Address	Job Title
City of Tyler	212 N. Bonner Ave.	Performance Excellence Manager
Closure Systems International	1010 Energy Drive, Kilgore, TX 75662	Quality Systems Engineer
Delek	Tyler	Systems Chemist
Delek US Holdings, Inc.	425 McMurrey Dr.	Systems Chemist
Hyster-Yale Group	4912 Hightech Dr., Tyler, TX 75703	Project Manager
Management and Training Corporation	500 N Marketplace Dr # 100, Centerville, UT 84014	Information System
Management and Training Corporation	900 Industrial Drive, Henderson TX	IT
MTC	900 Industrial Drive, Henderson TX	Information Technology
MTC	500 N Marketplace Dr # 100, Centerville, UT 84014	Information Technology
Texas Instruments	DMOS 5 fab in Dallas	Process Engineering Technician
Valdez Building Systems	13206 fm rd 3271 Tyler, TX 75704	Sales/Project Manager
Westlake Chemical	PO Box 8388 Longview, Texas 75607	Training Specialist

Q1.9 - Identify the program where you have been accepted:

University

Q1.10 - My degree emphasized marketable skills for my future career plans.

Answer	%	Count
Agree	97.67%	42
Disagree	2.33%	1
Total	100%	43

Q1.11 - Indicate your level of expectation based on the following aspects of your degree program:

Question	Exceeded Expectations		Met Expectations		Did not meet Expectations		Well Below Expectations		Total
Research opportunities	39.53%	17	51.16%	22	6.98%	3	2.33%	1	43
Progressively more advanced in academic content compared with undergraduate program	46.51%	20	44.19%	19	6.98%	3	2.33%	1	43
Knowledge of the discipline literature	51.16%	22	44.19%	19	4.65%	2	0.00%	0	43
Emphasized global issues relevant to your profession	44.19%	19	48.84%	21	4.65%	2	2.33%	1	43
Appropriate professional practice and/or training experiences	34.88%	15	60.47%	26	0.00%	0	4.65%	2	43

Q1.12 - Indicate your level of satisfaction with the following academic learning services and programs:

Question	Did Not Use		Satisfied		Dissatisfied		Total
Graduate Admissions Office	4.65%	2	93.02%	40	2.33%	1	43
Library Resources	25.58%	11	72.09%	31	2.33%	1	43
Writing Center	58.14%	25	41.86%	18	0.00%	0	43

Q1.13 - Indicate your level of satisfaction with the following student services and programs:

Question	Did Not Use		Satisfied		Dissatisfied		Total
Center for Students in Recovery	83.72%	36	16.28%	7	0.00%	0	43
Veterans Resource Center	81.40%	35	18.60%	8	0.00%	0	43
Testing Center	79.07%	34	20.93%	9	0.00%	0	43
Student Counseling Center	74.42%	32	25.58%	11	0.00%	0	43
Swoop-In Bystander Intervention	69.77%	30	30.23%	13	0.00%	0	43
Students Accessibility and Resources	65.12%	28	34.88%	15	0.00%	0	43

Q1.14 - Indicate your level of satisfaction with the following Student Affairs services and programs:

Question	Did Not Use		Satisfied		Dissatisfied		Total
Campus Activities	44.19%	19	55.81%	24	0.00%	0	43
Career Services	44.19%	19	55.81%	24	0.00%	0	43
Dining Services	51.16%	22	41.86%	18	6.98%	3	43
Greek Life	81.40%	35	18.60%	8	0.00%	0	43
Leadership and Services	44.19%	19	55.81%	24	0.00%	0	43
Office of International Programs	34.88%	15	62.79%	27	2.33%	1	43
Recreational Sports	51.16%	22	48.84%	21	0.00%	0	43
Student Government Association	55.81%	24	44.19%	19	0.00%	0	43
Student Money Management	51.16%	22	46.51%	20	2.33%	1	43
Student Organizations	39.53%	17	60.47%	26	0.00%	0	43
University Police	35.71%	15	64.29%	27	0.00%	0	42

Q1.15 - Indicate your level of satisfaction with each of the following:

Question	Did Not Use		Satisfied		Dissatisfied		Total
Admissions Counseling	23.81%	10	76.19%	32	0.00%	0	42
Cashiers Office	2.33%	1	95.35%	41	2.33%	1	43
Financial Aid	13.95%	6	83.72%	36	2.33%	1	43
myUTTyler	0.00%	0	95.24%	40	4.76%	2	42

One-Stop-Shop	48.84%	21	51.16%	22	0.00%	0	43
P2 Card System	27.91%	12	72.09%	31	0.00%	0	43
Registrar's Office	11.63%	5	88.37%	38	0.00%	0	43
Welcome Center	27.91%	12	72.09%	31	0.00%	0	43

Q1.16 - Indicate your level of satisfaction with the following technology services:

Question	Did Not Use		Satisfied		Dissatisfied		Total
Canvas Technology Support	16.28%	7	81.40%	35	2.33%	1	43
Qualtrics Survey Software Support	39.53%	17	58.14%	25	2.33%	1	43
Student Technology Support	30.23%	13	67.44%	29	2.33%	1	43
Classroom Tech Equipment	20.93%	9	76.74%	33	2.33%	1	43
Department Computer Labs	32.56%	14	65.12%	28	2.33%	1	43
Computer Lab (BUS 101)	39.53%	17	58.14%	25	2.33%	1	43
Library ILLiad	41.86%	18	55.81%	24	2.33%	1	43
Campus WiFi	20.93%	9	79.07%	34	0.00%	0	43

Q1.17 - Indicate your level of agreement with the following statements:

Question	Agree		Disagree		Total
Website content for my degree program is current and helpful	97.67%	42	2.33%	1	43
Website content for UT Tyler is current and helpful	93.02%	40	6.98%	3	43
University print materials are clear and accurate	97.67%	42	2.33%	1	43
University website is easy to use and well organized	93.02%	40	6.98%	3	43
I was aware of available services covered by my student fees	93.02%	40	6.98%	3	43
I felt connected with the UT Tyler community during my first semester here	88.37%	38	11.63%	5	43

Q1.18 - Indicate your level of satisfaction with your entire education experience at UT Tyler:

Answer	%	Count
Satisfied	95.35%	41
Dissatisfied	4.65%	2
Total	100%	43

Q1.19 - If you could start over again, would you attend UT Tyler?

Answer	%	Count
Yes	93.02%	40
No	6.98%	3
Total	100%	43

Q1.20 - Overall comments about UT Tyler:

GREAT

Had a good Experience at UT- Tyler

Technology: The computers are very old. The business lab computers situated along the wall would shut down every 30 minutes. I am in there weekly so I can confirm that this occurred daily for over 4 months before the issue was resolved. The simple fix would have been for the personnel to put up a sign that said not to use or set up a timer to count down 30 mins to log out. Instead students suffered the consequences of frequently re-starting assignments after they disappear at unannounced shut down. The Industrial Tech classrooms software typically worked on 75% of the computers. There was never a time the entire class could do an assignment all at once. This is very different from my previous university which was very tech advanced with multiple 3D printers in each lab, mac books and touch screen desk tops. Acknowledgment: Myself and 2 of my fellow graduate friends attained 4.00 GPA's our first semester here enrolled in 1 class over the full time load; neither of us were recognized for our accomplishments. While the homepage of the UT Tyler website explicitly acknowledged undergrads for their full course load 3.5 & 4.0's. This is very unfair, all students should be acknowledged for their above average G.P.A's without prejudice. Scholarship Opportunities: Not only were the undergraduates recognized they were also offered full scholarships for graduate school because of their 4.0. I don't understand why master's level students were not offered the same opportunity to pursue a Doctorate degree or even have their final semester free. There appears to be some prejudice against graduate students, or maybe the school is more interested in undergraduate enrollment levels. The transfer scholarship for graduate students is \$1,000 fellowship while undergrads are offered \$1,500 although graduate tuition is more expensive. Why are the scholarships not equal? OIP: The personnel in the international office are not very knowledgeable of the OPT process. Multiple students have been misled by them, in regard to filing for an internship (CPT versus OPT). The admins encourage you to use your OPT time instead of CPT although the jobs can count towards CPT and not count against your OPT time. I am not sure if this is consistent oversight or unwillingness to better learn their jobs. They should see if UT Austin is willing to train them in certain areas. The program is not very challenging, although, it is time consuming. I think the programs should be better marketed to full time workers. If I could do this again I would not attend this school neither would I recommend UT Tyler for graduate studies to any international students with GPA's above 2.5. However, the undergraduate programs and opportunities are Notable.

Great place to study and live

its good

Awesome

I would like to see more flexibility to take courses on Fall or Spring that currently are only offered only on Summer.

A perfect university for international students to do a Masters degree

I'm very satisfied with the course content. The availability of all of my courses online has been extremely helpful with my full time work schedule. I'm very proud and grateful to be achieving my masters at UT Tyler.

Exceed my expectation

MET MY EXPECTATION

It was a great experience and the university people were very welcoming and helpful in all matters.

Though being a smaller university, UT Tyler shows a world class approach in academics and facilities. Being a part of the world renowned UT system, UT Tyler sure keeps up the quality. I really enjoyed studying here!

I have really enjoyed receiving my undergraduate degree and graduate degree from UT Tyler. It was a great experience and the faculty and staff were wonderful.

It is a great university to study and experience the American culture. For international students it is one of the most affordable and student friendly environment. Being a part of the UT system gives it even more value and a class of its own.

UT Tyler is a place which allowed me to explore my potential. had a best time in my life to learn new things in academics, culture and opportunities.

Very good place to learn and do research. The extra-curricular activities organized by UT Tyler were awesome.

I loved to be a part of UT Tyler, learnt different aspects of life and growth. Also, I learnt to work hard and found a proper path towards my career. University staff is friendly and welcoming. Faculty is easy to approach and resources are readily available. The experience was wonderful being an International Student in The University of Texas at Tyler

mediocre.

Q1.21 - Please provide a non-UT Tyler email that you may be reached in the future for an alumni survey.

Name	UT Tyler student ID	non-UT Tyler email
Nanitha Gubendragunabalan	6001173508	nanithag@ymail.com
Noah Magouirk	5000410247	njmagouirk@yahoo.com
Likhith Chirasani	6001171249	likhi310@gmail.com
Hillary Rukobo	6001100792	hidza00@gmail.com
Nanitha Gubendragunabalan	6001173508	nanithag@ymail.com
Kaylesa Russell	6001181703	1kaylesarussell@gmail.com
Nanitha GubendraGunabalan	6001173508	nanithag@ymail.com
Arnab Sengupta	6001172034	arnabsengupta.admission@gmail.com
Jayendra tej	6001170866	jayendratej@gmail.com
Prasanna Kumar Pusthay	6001106335	prasanna.94pk@gmail.com
Saransh Mahajan	6001170549	saransh60@gmail.com
Karan Sethi	6001171540	karan_sst@yahoo.com
Ituriel Rodriguez	6001104982	irodriguez26@live.com
Leona Caldemeyer	5000118491	llcaldemeyer@yahoo.com

Leona L Caldemeyer	5000118491	llcaldemeyer@yahoo.com
Chad Miller	5000081606	chadblitzit@gmail.com
DAVID CLINTON MANOHARAN	6001111061	fdo.clinton@hotmail.com
Amanda P van Doornik	5000110540	amandavandoornik@gmail.com
Sriram Parvathaneni	6001110396	psriram0007@gmail.com
Sunday Akinwunmi	6001174962	li2le@yahoo.com
Sunday Akinwunmi	6001174962	li2le@yahoo.com
Karan Vema	6001103154	karan.vema1994@gmail.com
SURYA TEJA GANTA	6001089624	REACH.GSURYATEJA@GMAIL.COM
kranthi	kaddanki@patriots.uttlyer.edu	kranthi589@gmail.com
Sudeep Unnikrishnan	6001098235	sudeepunnikrishnan89@gmail.com
Asif Alauddin	aalauddin@patriots.uttlyer.edu	asifalauddin14@gmail.com
David Valdez	500094321	dvaldez111@suddenlink.net
Mays Abufara	6001097019	mays.abufara@gmail.com
Sudeep Unnikrishnan	6001098235	sudeepunnikrishnan89@gmail.com
Farhan Chaudhry	6001102394	farhanchaudhry15@gmail.com
Ravishankar BK	600110916	bkravishankar@gmail.com
Farhan Saleem Chaudhry	6001102394	farhanchaudhry15@gmail.com
MD MAZHARUL HUQ	6001102954	jewelhuq@gmail.com
Prasanna Suryanarayanan	6001172860	prasanna.suryanarayanan@gmail.com
Simmi Aggarwal	6001108906	simmiaggarwal92@gmail.com
robert martin	5000060860	robert_21511@msn.com
Sunday Akinwunmi	6001174962	li2le@yahoo.com
Sunday Akinwunmi	6001174962	li2le@yahoo.com
Joy Harder	5000426932	hellofromjoy@yahoo.com
Kristi Boyett	5163470340009080	kboyett@tylertexas.com

Alumni Graduation Surveys

2015

Department of Technology Graduation Survey- Industrial Management

March 10th 2016, 8:27 pm CDT

Q1 - Please provide us with your name and permanent email address where we may contact you again (We have to conduct periodic follow up surveys after you graduate to see if this degree helped you with your career - ATMAE accreditation requirement).

Please provide us with your name and permanent email address where we may contact you again (We have to conduct periodic follow up surveys after you graduate to see if this degree helped you with your career - ATMAE accreditation requirement).

jconnolly@patriots.utt Tyler.edu

juliandelgadol@hotmail.com

ChackoJoy1@gmail.com

Jason Cupak, Jason.Cupak@yahoo.com

Adeola Dixon areola@bruscan.com

Giortega23@yahoo.com

Lucas Beshara lucasboosh@yahoo.com

Venkata Karthik Macharla. karthik.vr340@gmail.com

Vineel Bala

Jeremy Alexander, jeremy.alexander1973@gmail.com

Joey Scott

Clinton Odom, candjodom@embarqmail.com

umarfmohammad91@gmail.com

aanshul@patriots.utt Tyler.edu Abhishek Anshul

abhishekdatla@gmail.com

Cody broadway. Cubcatch7@aol.com

lakshmikar, lakshmikarmalasani@gmail.com

Amanda Boyle

Shauna Simon - ShaunaSimon@yahoo.com

Aditya Putta aputta@hotmail.com

anuraag

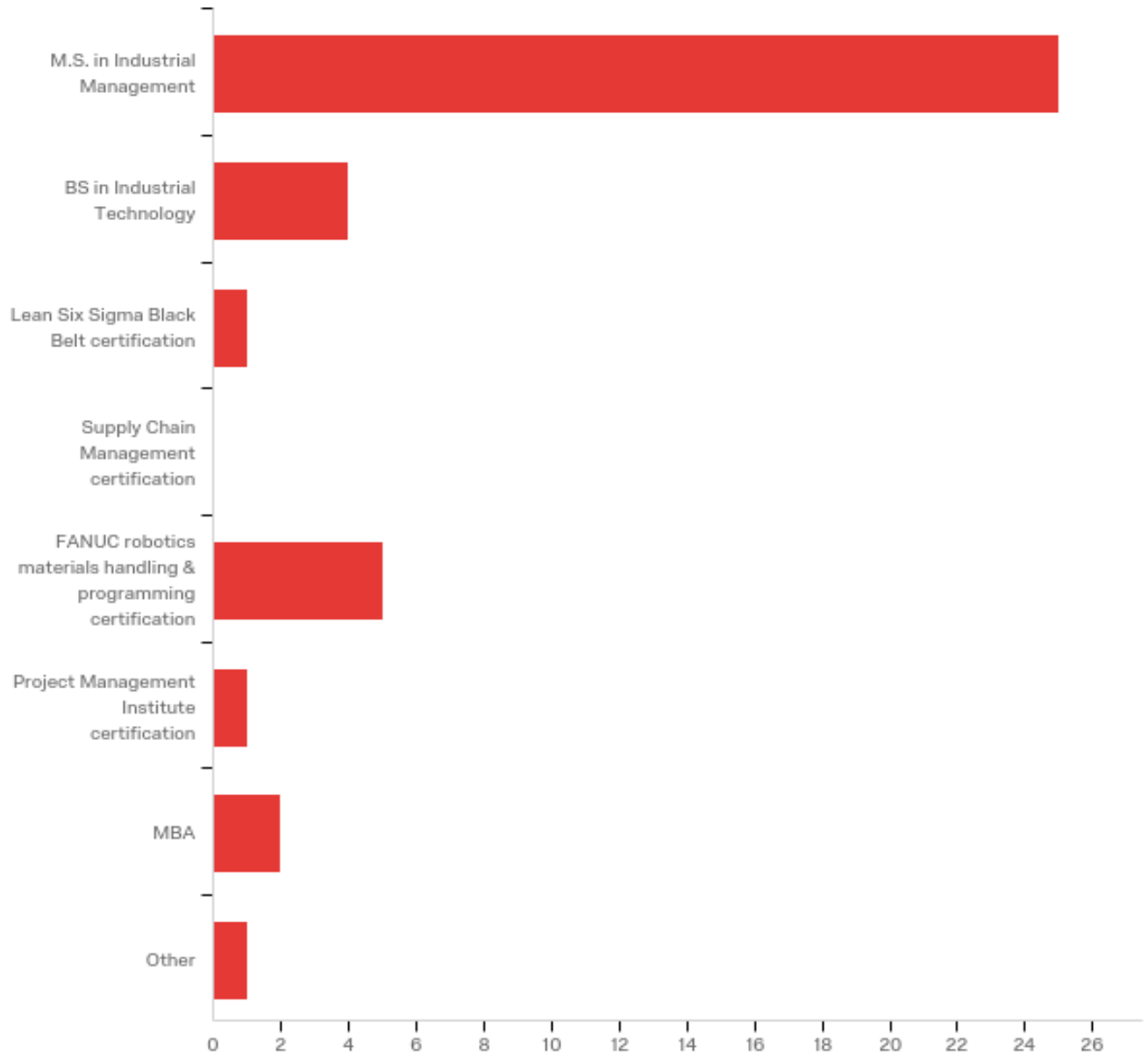
Zafar Habib: za2ar@hotmail.com

Curtis Fielder fielder.curtis@yahoo.com

Samuel Kelly Kaemmerling, kelly.kaemmerling@gmail.com

praveen.991@gmail.com

Q2 - Please list all of the following that you earned at UT Tyler:



#	Answer	%	Count
1	M.S. in Industrial Management	64.10%	25
2	BS in Industrial Technology	10.26%	4
3	Lean Six Sigma Black Belt certification	2.56%	1
4	Supply Chain Management certification	0.00%	0
5	FANUC robotics materials handling & programming	12.82%	5

	certification		
6	Project Management Institute certification	2.56%	1
7	MBA	5.13%	2
8	Other	2.56%	1
	Total	100%	39

Q2_8_TEXT - Other

Other - Text

MS Industrial Management

Q3 - Your date of graduation was/is (example, Fall 2015):

Your date of graduation was/is (example, Fall 2015):

Summer 2015

May 2015

Summer 2015

Spring 2015

Fall 2012 and Fall 2015

2015

Fall 2015

Fall 2015

Summer 2015

Fall 2015

Fall 2015

Spring 2015

summer 2015

Dec 2015

Spring 2015

Spring 2015

spring 2015

Fall 2015

Spring 2015

Fall 2015

summer 2015

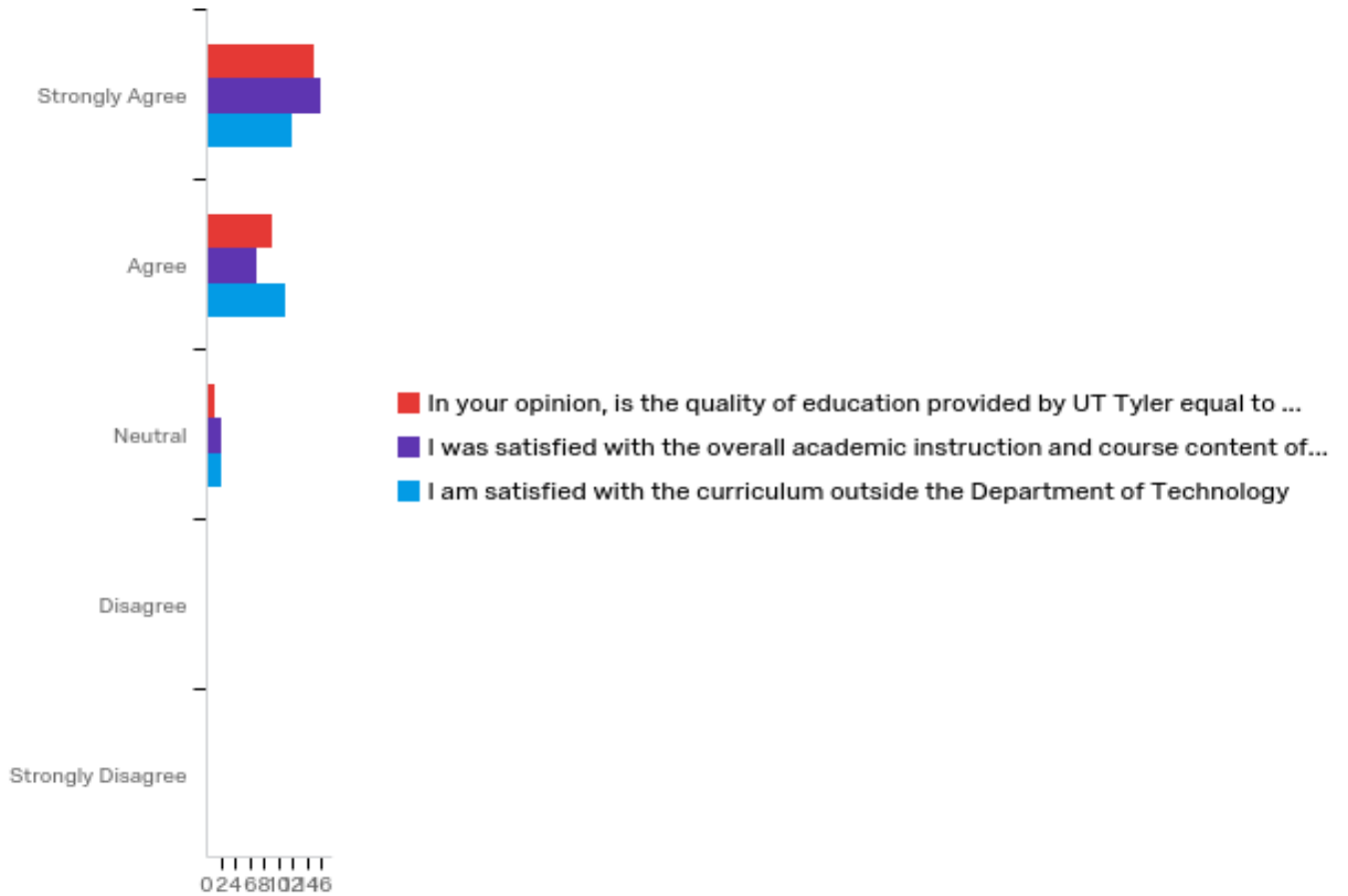
Spring 2015

Fall 2015

August 2015

2015

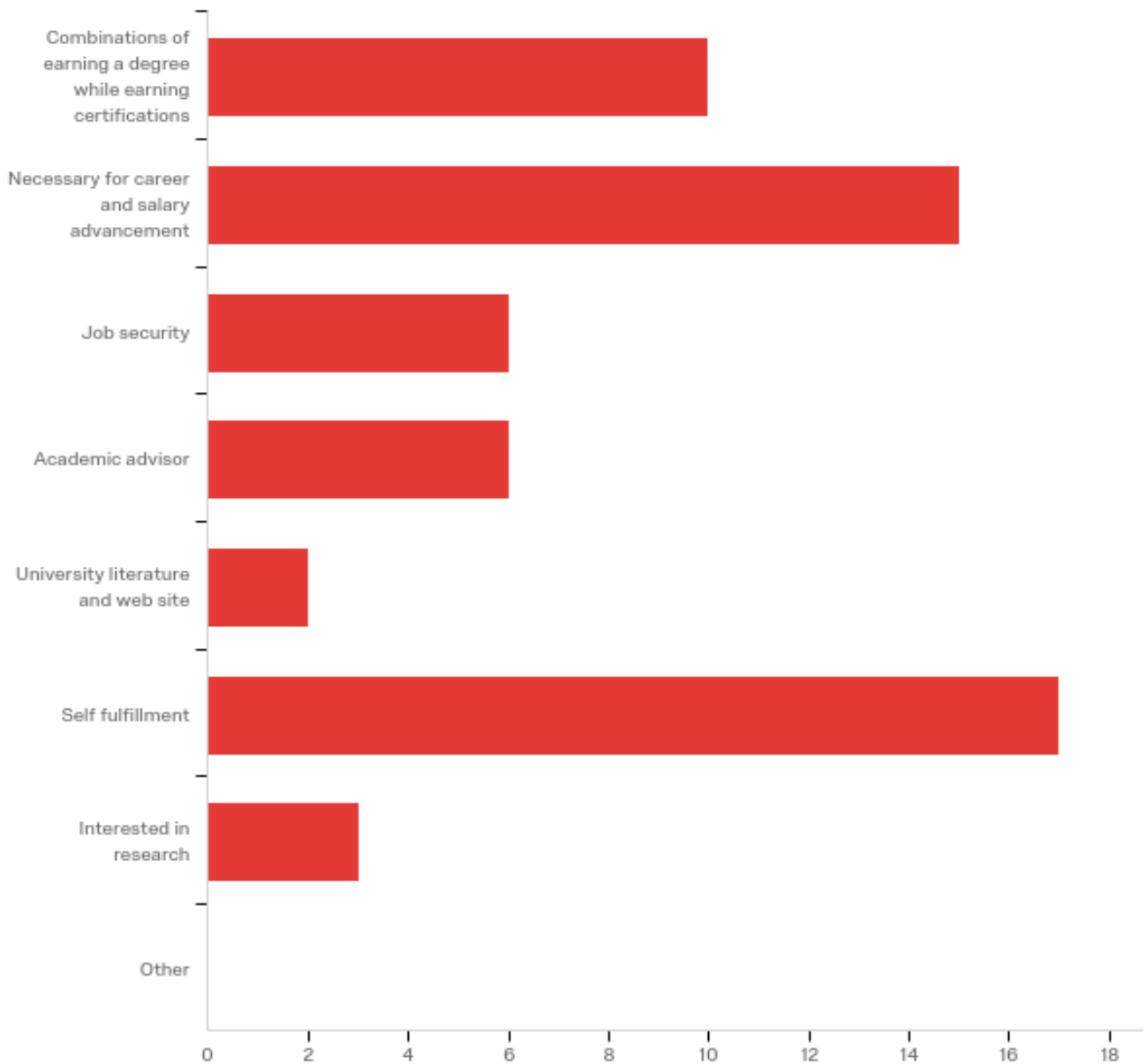
Q4 - Please rate:



#	Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total
1	In your opinion, is the quality of education provided by UT Tyler equal to that of other colleges or universities you attended.	60.00%	15	36.00%	9	4.00%	1	0.00%	0	0.00%	0	25
2	I was satisfied with the	64.00%	16	28.00%	7	8.00%	2	0.00%	0	0.00%	0	25

	overall academic instruction and course content offered in the Department of Technology.											
3	I am satisfied with the curriculum outside the Department of Technology	48.00%	12	44.00%	11	8.00%	2	0.00%	0	0.00%	0	25

Q5 - Please select any of the factors that influenced you to pursue an advanced degree in the Department of Technology at UT Tyler.



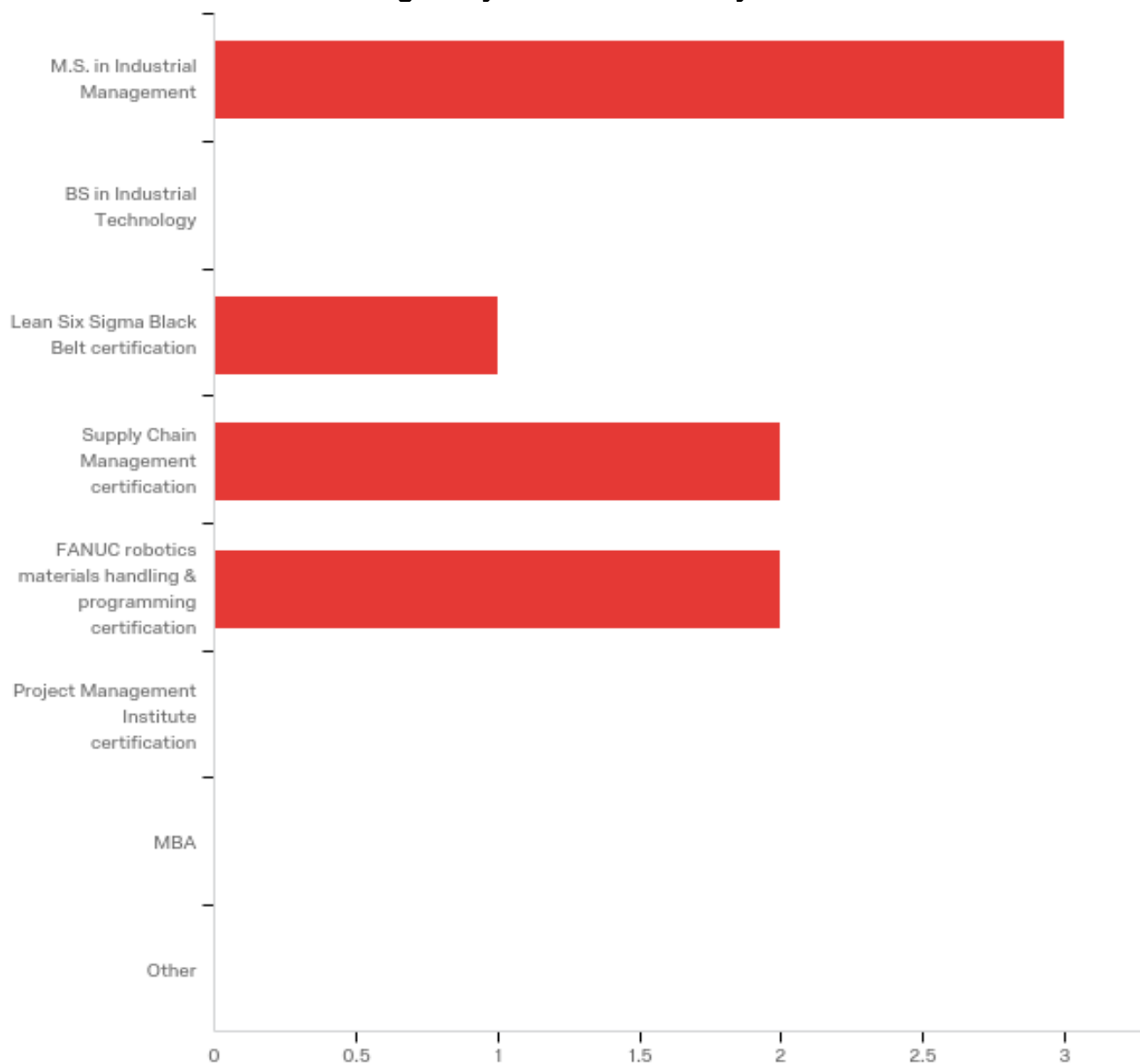
#	Answer	%	Count
1	Combinations of earning a degree while earning certifications	16.95%	10
2	Necessary for career and salary advancement	25.42%	15
3	Job security	10.17%	6
4	Academic advisor	10.17%	6

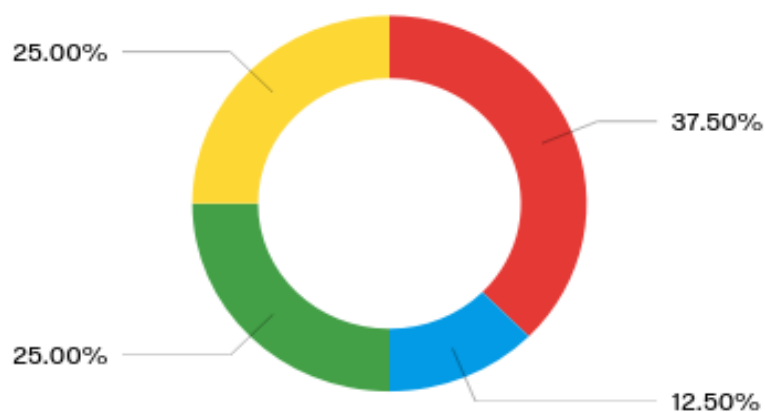
5	University literature and web site	3.39%	2
6	Self fulfillment	28.81%	17
7	Interested in research	5.08%	3
8	Other	0.00%	0
	Total	100%	59

Q5_8_TEXT - Other
Other - Text

2018 INDUSTRIAL MANAGEMENT GRADUATE EXIT SURVEY
August 10th 2018, 9:28 am CDT

2 - Please list all of the following that you earned at UT Tyler:





M.S. in Industrial Management

BS in Industrial Technology

Lean Six Sigma Black Belt certification

Supply Chain Management certification

FANUC robotics materials handling & programming certification

Project Management Institute certification

MBA

Other

Other
Other - Text

1 - Your date of graduation was/is (example, Spring 2018):

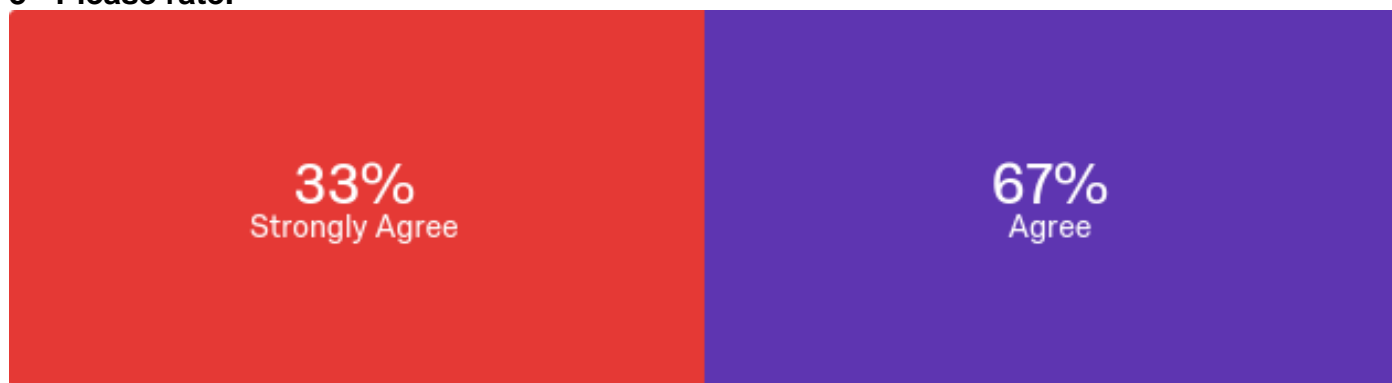
Your date of graduation was/is (example, Spring 2018):

Spring 2018

Spring 2018

Spring 2018

3 - Please rate:

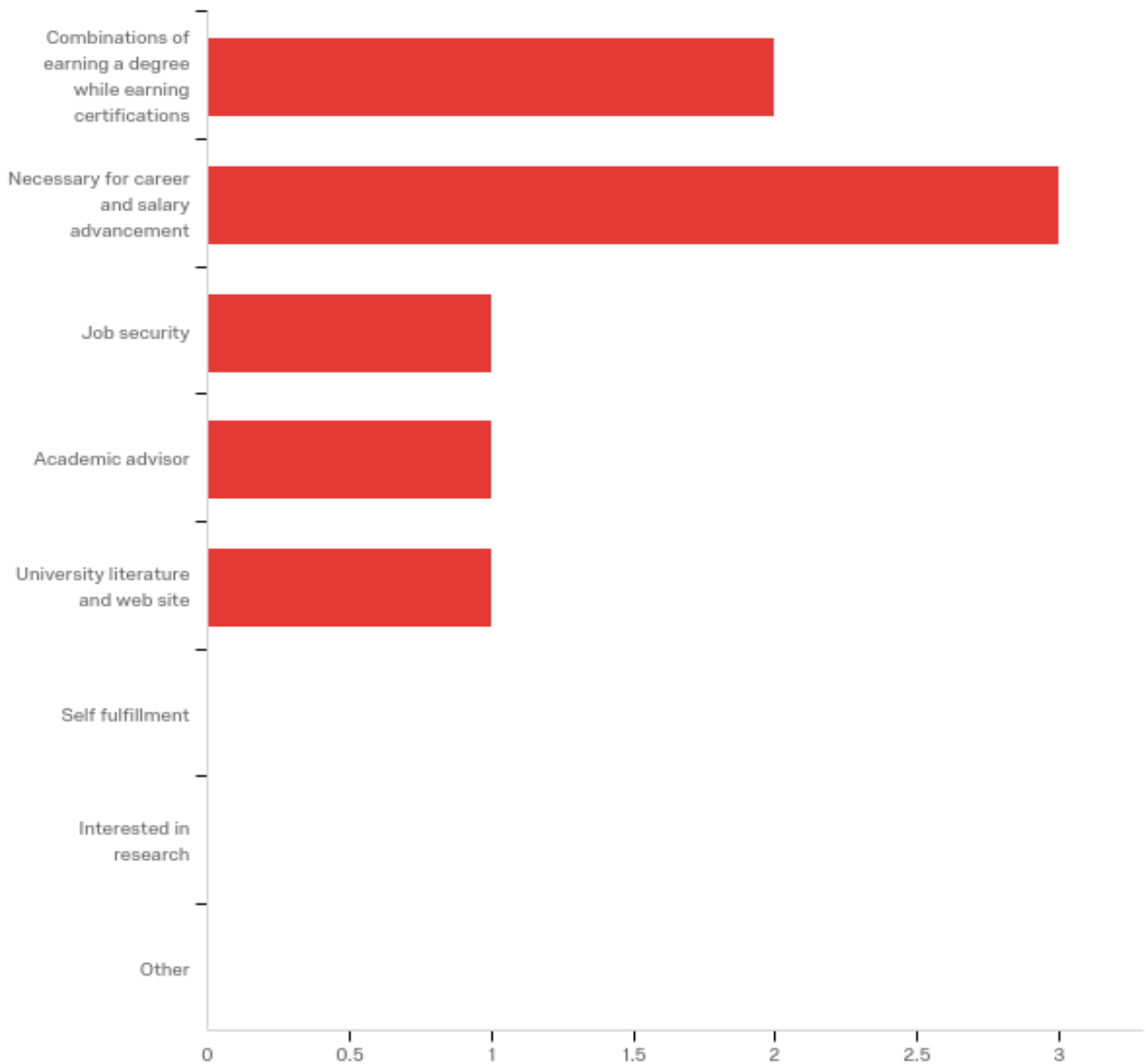


■ Strongly Agree
 ■ Agree
 ■ Neutral
 ■ Disagree
 ■ Strongly Disagree

#	Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total
1	In your opinion, is the quality of education provided by UT Tyler better than other colleges or universities you attended.	33.33%	1	66.67%	2	0.00%	0	0.00%	0	0.00%	0	3
2	I was satisfied with the overall academic instruction and course content offered in the Department of Technology.	66.67%	2	33.33%	1	0.00%	0	0.00%	0	0.00%	0	3
3	I am satisfied	33.33%	1	66.67%	2	0.00%	0	0.00%	0	0.00%	0	3

**with the
curriculum
outside the
Department
of
Technology**

4 - Please select any of the factors that influenced you to pursue an advanced degree in the Department of Technology at UT Tyler.



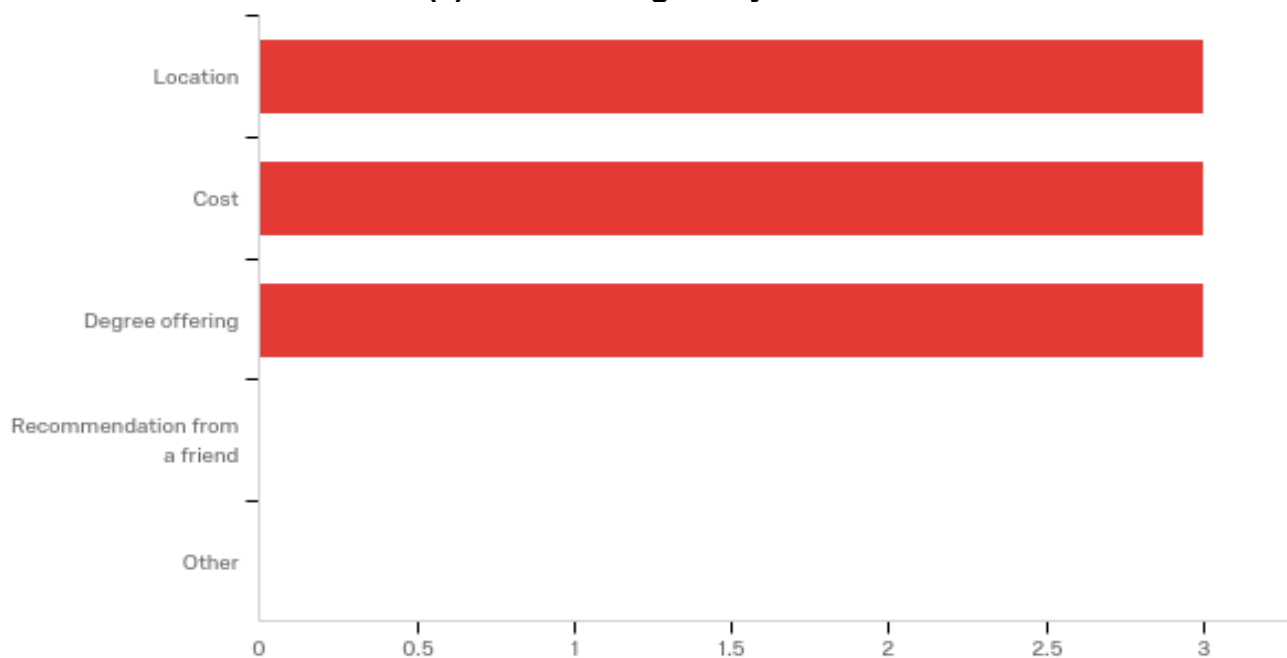
#	Answer	%	Count
1	Combinations of earning a degree while earning certifications	25.00%	2
2	Necessary for career and salary advancement	37.50%	3
3	Job security	12.50%	1
4	Academic advisor	12.50%	1

5	University literature and web site	12.50%	1
6	Self fulfillment	0.00%	0
7	Interested in research	0.00%	0
8	Other	0.00%	0
	Total	100%	8

Other

Other - Text

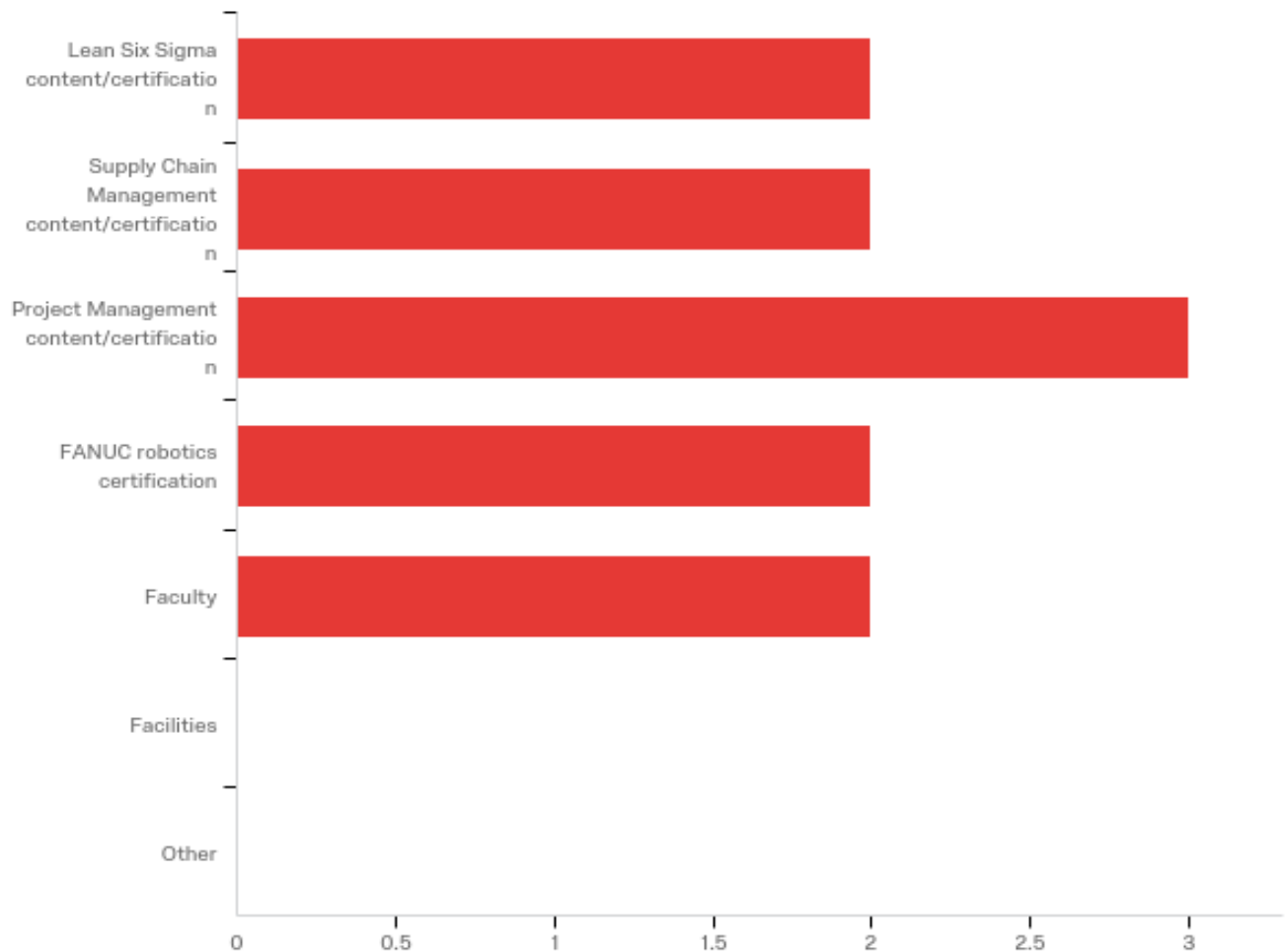
5 - What was/were the reason(s) for attending UT Tyler?



#	Answer	%	Count
1	Location	33.33%	3
2	Cost	33.33%	3
3	Degree offering	33.33%	3
4	Recommendation from a friend	0.00%	0
5	Other	0.00%	0
	Total	100%	9

Other
Other - Text

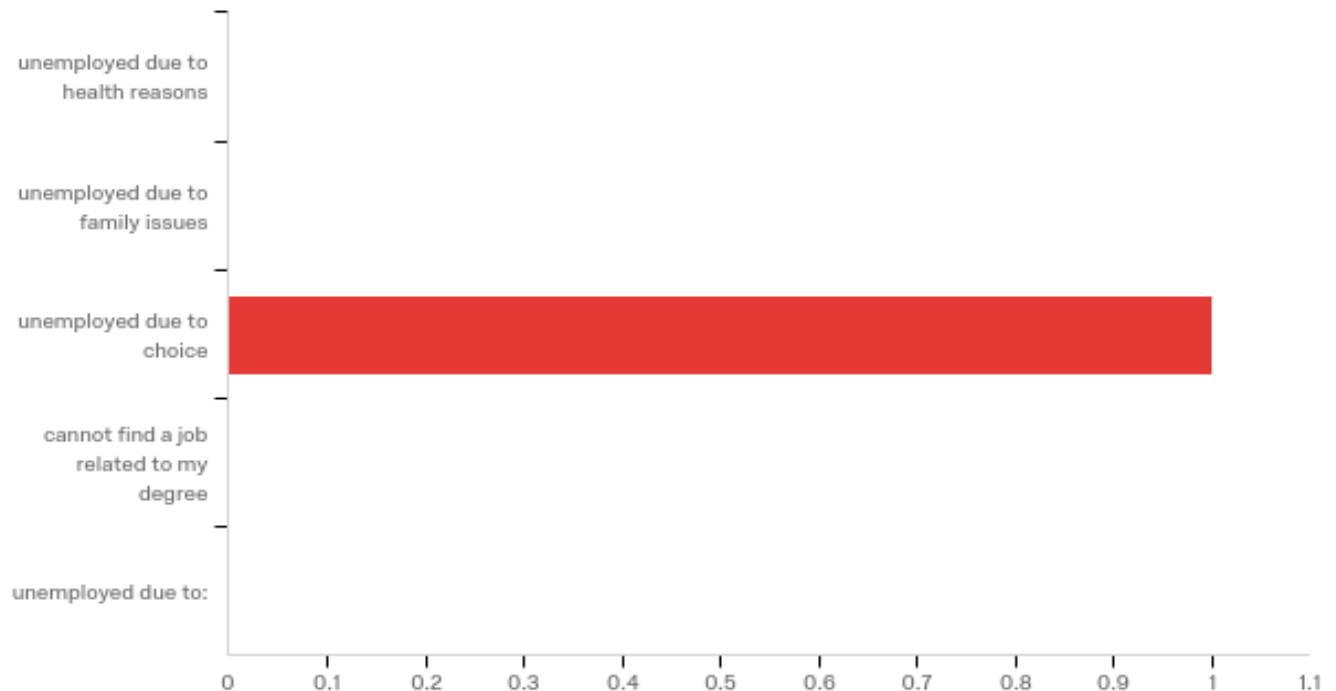
6 - What do you consider to be the major strengths of the Department of Technology? Please select all that apply.



#	Answer	%	Count
1	Lean Six Sigma content/certification	18.18%	2
2	Supply Chain Management content/certification	18.18%	2
3	Project Management content/certification	27.27%	3
4	FANUC robotics certification	18.18%	2
5	Faculty	18.18%	2
6	Facilities	0.00%	0
7	Other	0.00%	0
	Total	100%	11

Other
Other - Text

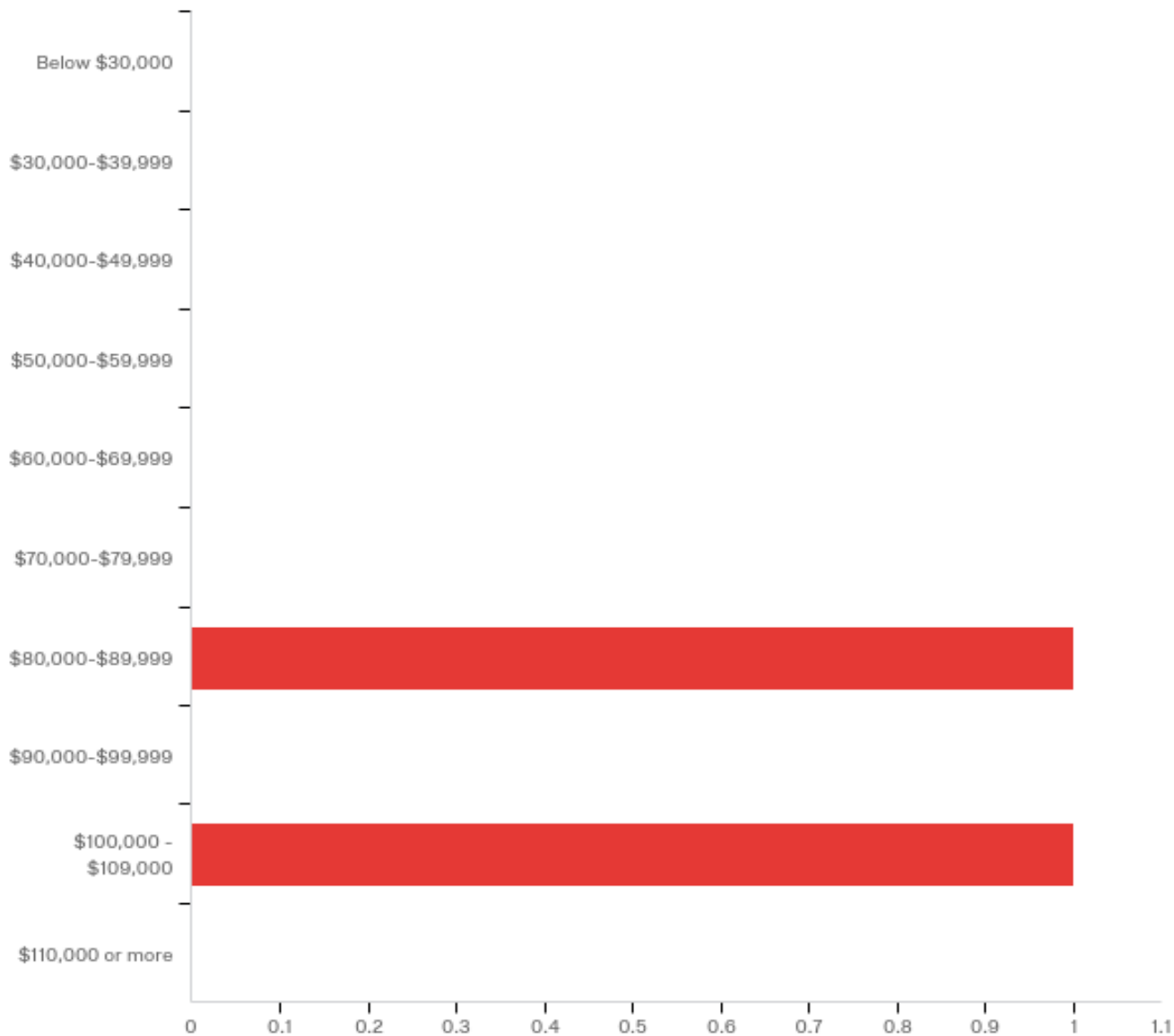
8 - If you are employed, please skip this question and answer the following questions. If you are NOT currently employed, please answer this question and skip the remaining questions.



#	Answer	%	Count
1	unemployed due to health reasons	0.00%	0
2	unemployed due to family issues	0.00%	0
3	unemployed due to choice	100.00%	1
4	cannot find a job related to my degree	0.00%	0
5	unemployed due to:	0.00%	0
	Total	100%	1

unemployed due to:
unemployed due to: - Text

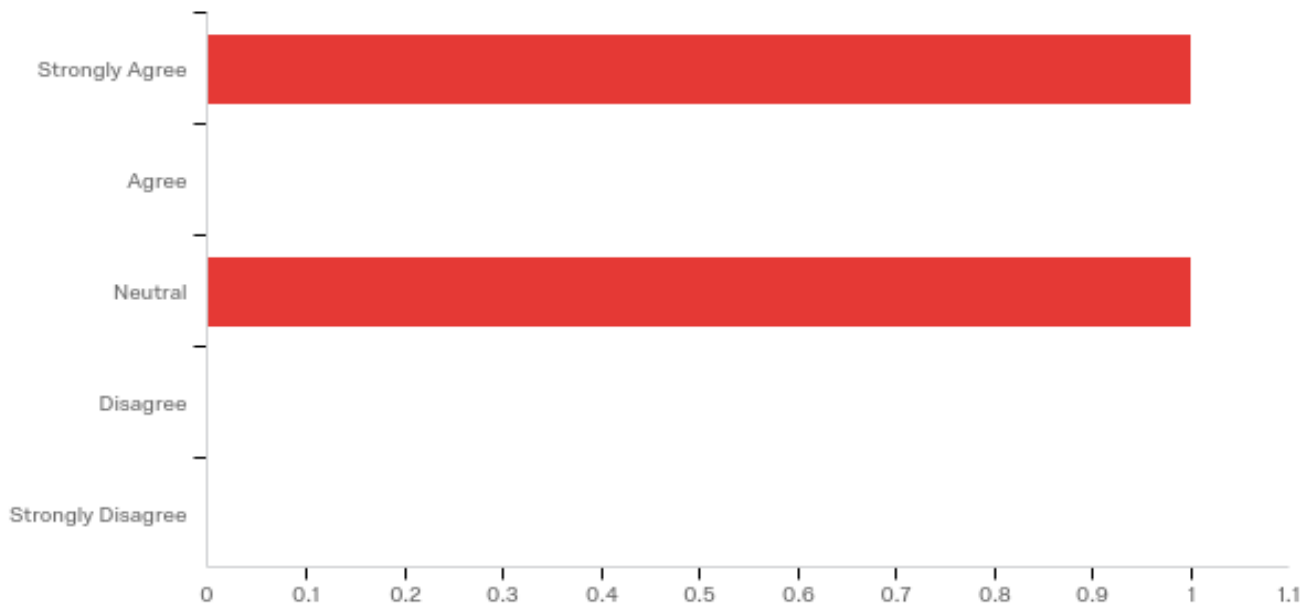
9 - What is your current annual salary range? NOTE: This data will be compiled and your individual salaries will NEVER be revealed to anyone.



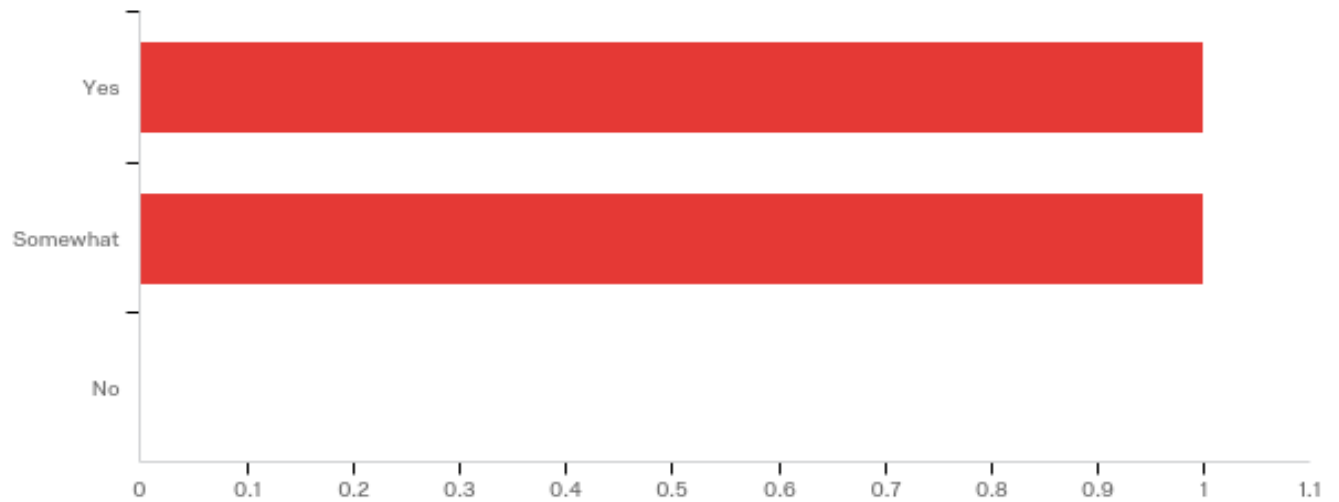
#	Answer	%	Count
1	Below \$30,000	0.00%	0
2	\$30,000-\$39,999	0.00%	0
3	\$40,000-\$49,999	0.00%	0
4	\$50,000-\$59,999	0.00%	0
5	\$60,000-\$69,999	0.00%	0

6	\$70,000-\$79,999	0.00%	0
7	\$80,000-\$89,999	50.00%	1
8	\$90,000-\$99,999	0.00%	0
9	\$100,000 - \$109,000	50.00%	1
10	\$110,000 or more	0.00%	0
	Total	100%	2

10 - My employer is satisfied with my degree preparation and ability to execute assigned job responsibilities and tasks.



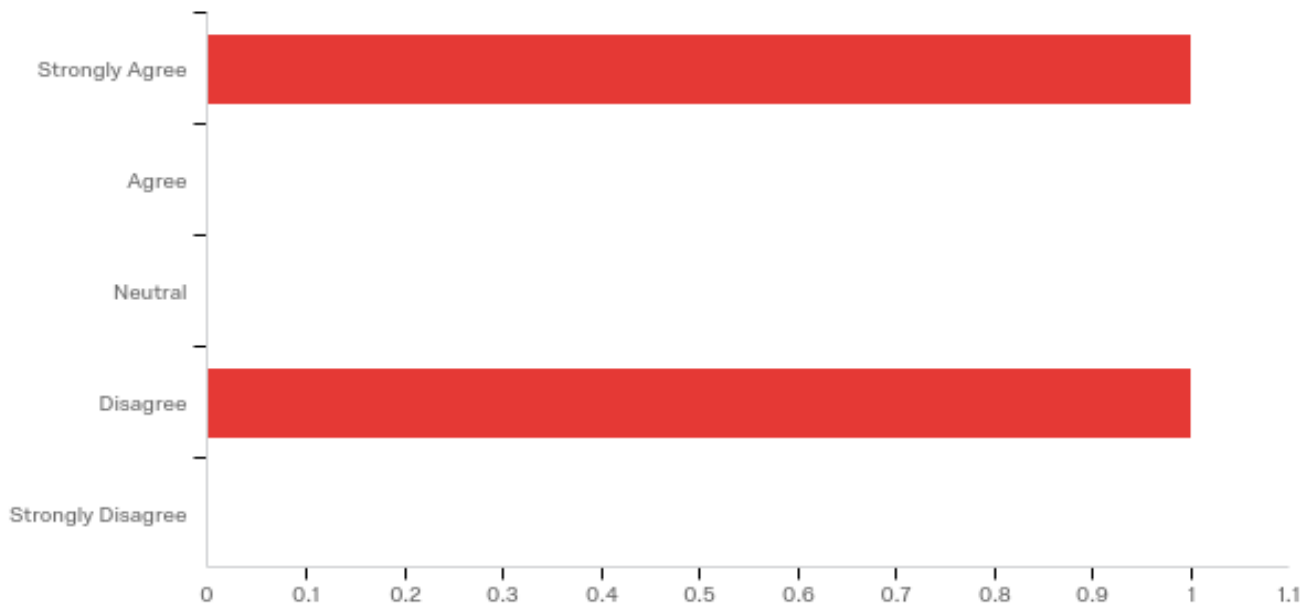
#	Answer	%	Count
1	Strongly Agree	50.00%	1
2	Agree	0.00%	0
3	Neutral	50.00%	1
4	Disagree	0.00%	0
5	Strongly Disagree	0.00%	0
	Total	100%	2

11 - Is your employment/occupation related to your degree?

#	Answer	%	Count
1	Yes	50.00%	1
2	Somewhat	50.00%	1
3	No	0.00%	0
	Total	100%	2

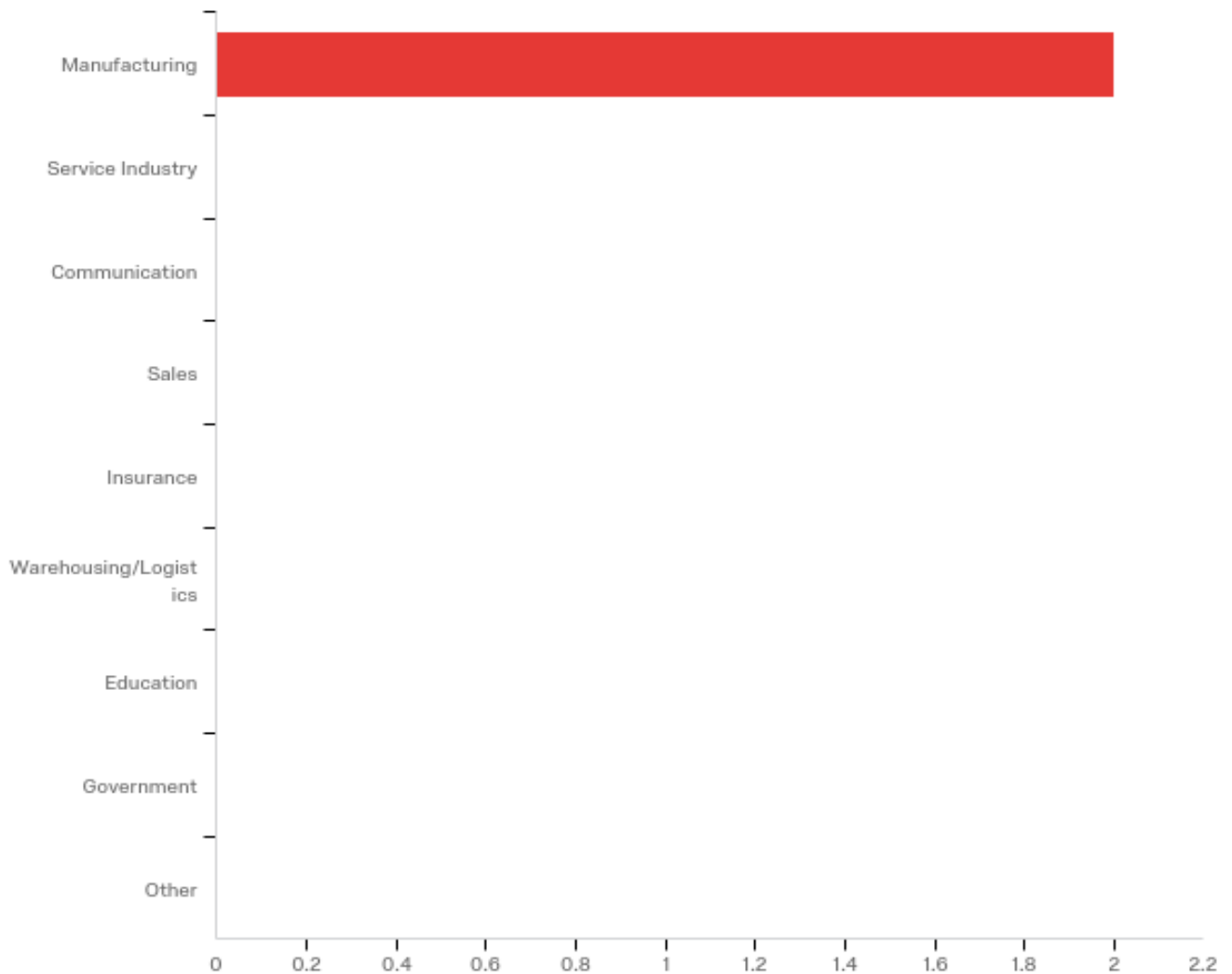
Somewhat
Somewhat - Text
No
No - Text

12 - My employer has given serious consideration to promoting me from my current job position upon completion of my degree.



#	Answer	%	Count
1	Strongly Agree	50.00%	1
2	Agree	0.00%	0
3	Neutral	0.00%	0
4	Disagree	50.00%	1
5	Strongly Disagree	0.00%	0
	Total	100%	2

13 - What is the primary affiliation of your present job and job title (please type job title in box)?



#	Answer	%	Count
1	Manufacturing	100.00%	2
2	Service Industry	0.00%	0
3	Communication	0.00%	0
4	Sales	0.00%	0
5	Insurance	0.00%	0
6	Warehousing/Logistics	0.00%	0
7	Education	0.00%	0

8	Government	0.00%	0
9	Other	0.00%	0
	Total	100%	2

Manufacturing
 Manufacturing - Text
 Service Industry
 Service Industry - Text
 Communication
 Communication - Text
 Sales
 Sales - Text
 Insurance
 Insurance - Text
 Warehousing/Logistics
 Warehousing/Logistics - Text
 Education
 Education - Text
 Government
 Government - Text
 Other
 Other - Text

15 - Please list the name of your current supervisor, his/her title, email address, and organization name so we can see if we need to enhance our curriculum (Very important for ATMAE accreditation). This is the last question. Thank you so much for your help!

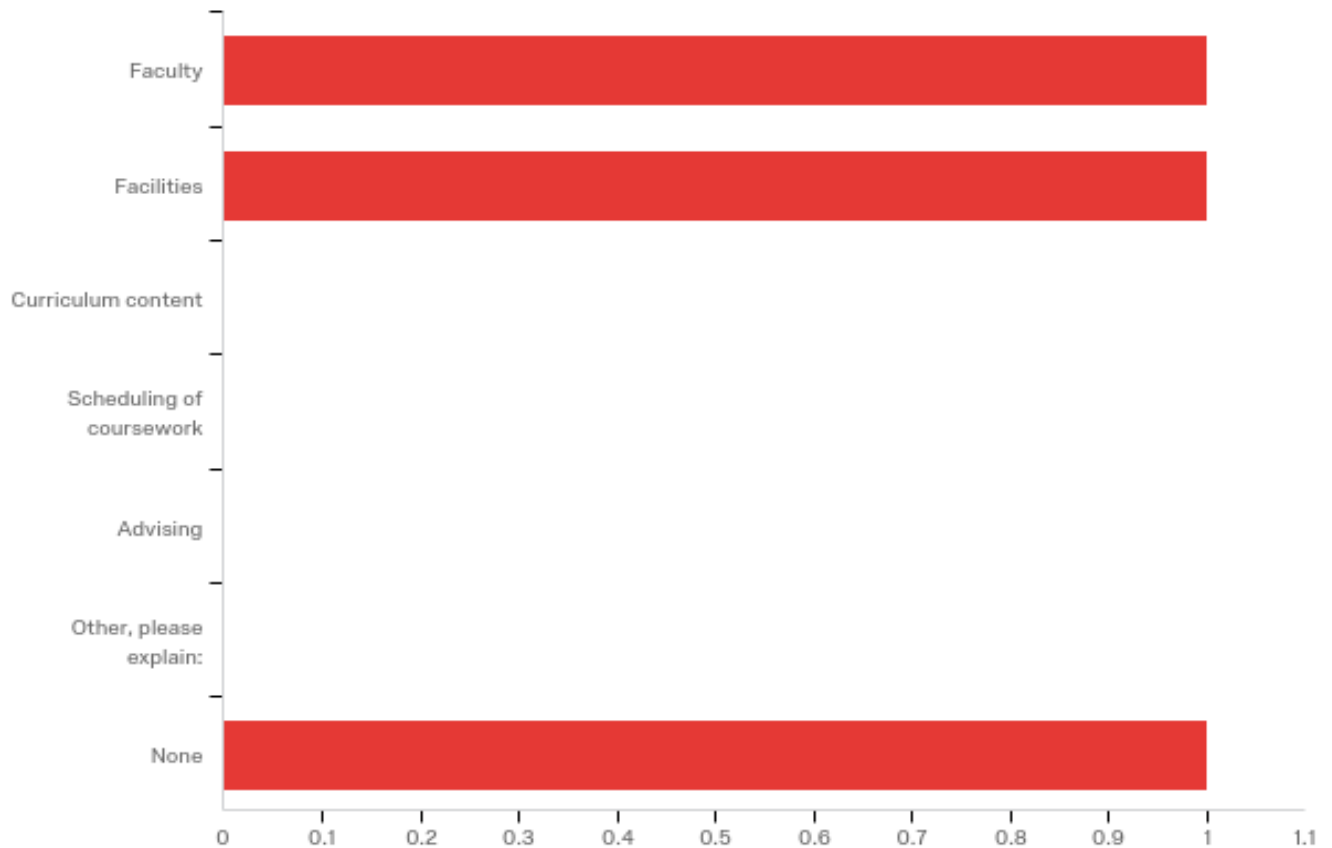
Please list the name of your current supervisor, his/her title, email address, and organization name so we can see if we need to enhance our curriculum (Very important for ATMAE accreditation). This is the last question. Thank you so much for your help!

Really, why would I want you bothering him. He is too busy already.

Susan Robertson, Delek US

Evelyn

7 - Please list any weaknesses of the Department of Technology:



#	Answer	%	Count
1	Faculty	33.33%	1
2	Facilities	33.33%	1
3	Curriculum content	0.00%	0
4	Scheduling of coursework	0.00%	0
5	Advising	0.00%	0
6	Other, please explain:	0.00%	0
7	None	33.33%	1
	Total	100%	3

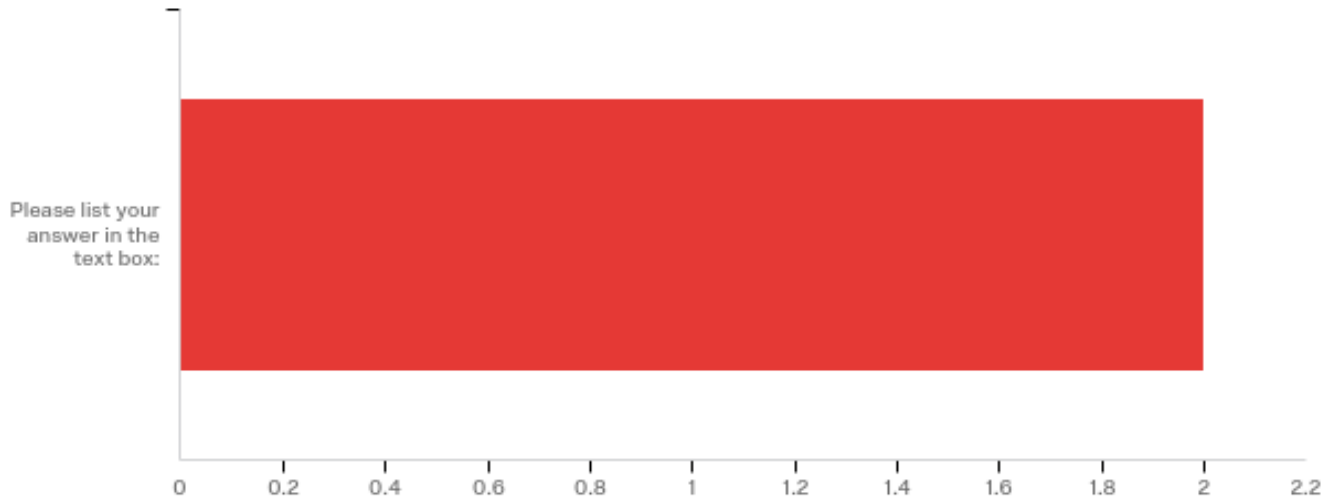
7_1_TEXT - Faculty
Faculty - Text

7_2_TEXT - Facilities**Facilities - Text**

The facilities are a joke, they cannot be legal, and hopefully the new building will be better.

7_3_TEXT - Curriculum content**Curriculum content - Text****7_4_TEXT - Scheduling of coursework****Scheduling of coursework - Text****7_5_TEXT - Advising****Advising - Text****7_6_TEXT - Other, please explain:****Other, please explain: - Text**

14 - Please list anything you may think that would make this degree better.



#	Answer	%	Count
1	Please list your answer in the text box:	100.00%	2
	Total	100%	2

14_1_TEXT - Please list your answer in the text box:

Please list your answer in the text box: - Text

Better facilities, more expensive and bigger equipment like you would see in industry. Courses offered more often. There needs to be more technology faculty.

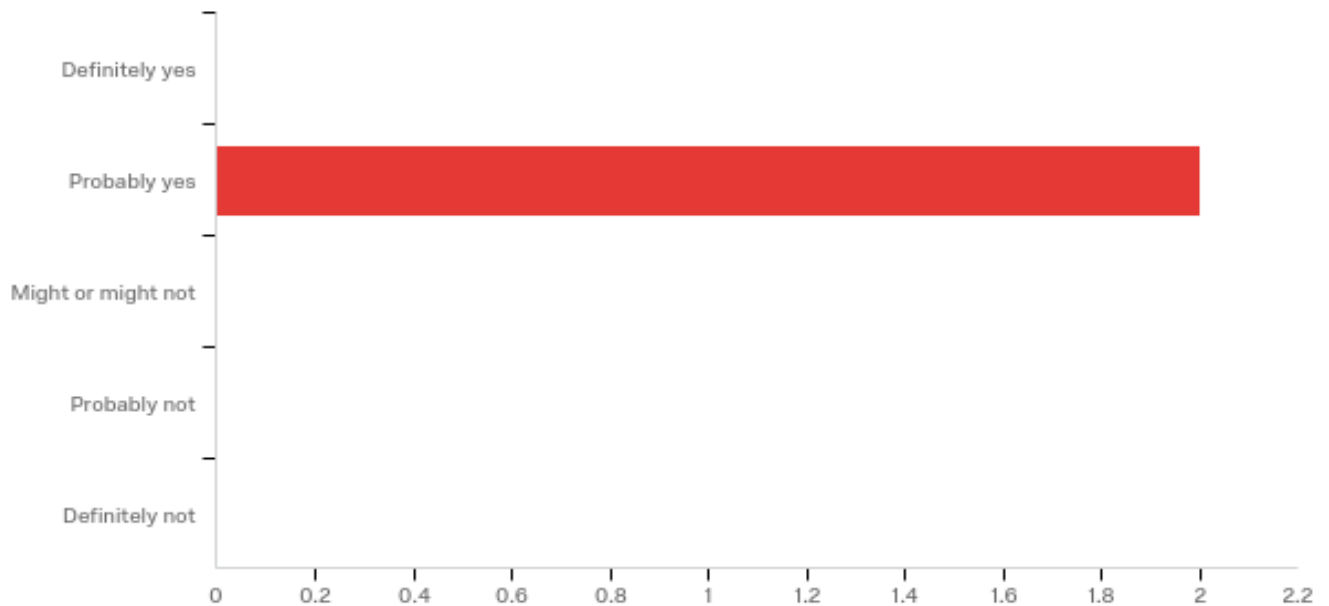
Prepare better for exit exams

Employer Satisfaction with Job Performance of Graduates

EMPLOYER SATISFACTION SURVEY - INDUSTRIAL MANAGEMENT

February 24th 2015, 8:59 pm CST

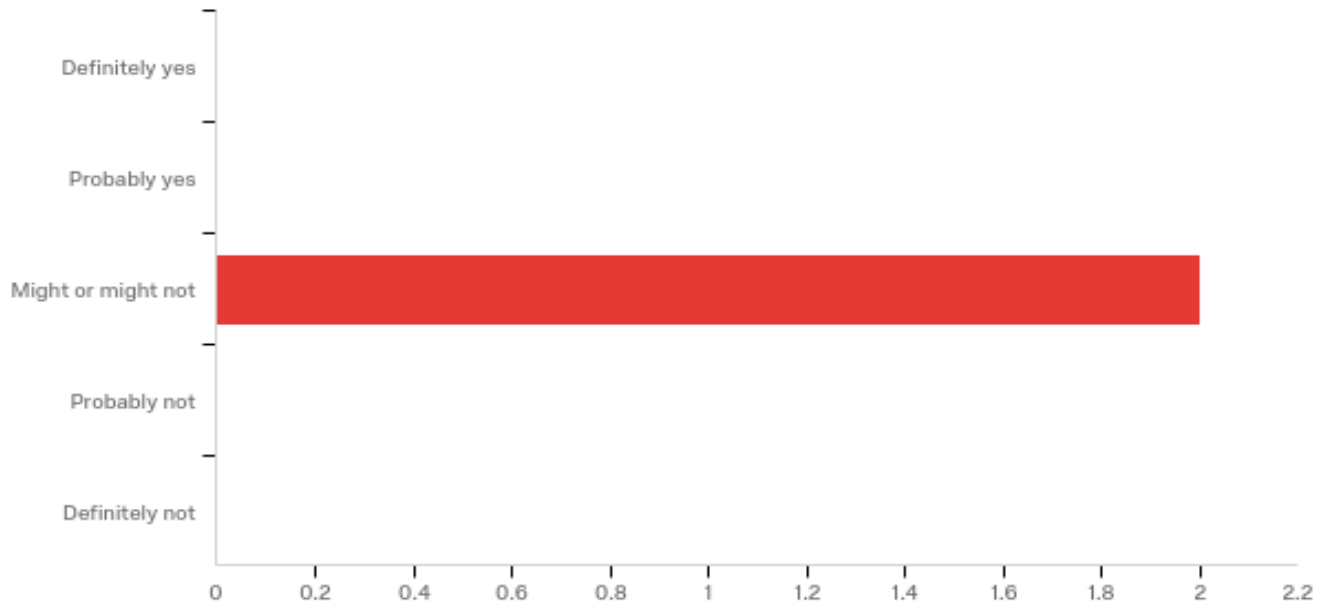
Q1 - Do you feel the Industrial Management program at The University of Texas at Tyler prepared your employee well for his/her position?



#	Answer	%	Count
1	Definitely yes	0.00%	0
2	Probably yes	100.00%	2
3	Might or might not	0.00%	0
4	Probably not	0.00%	0

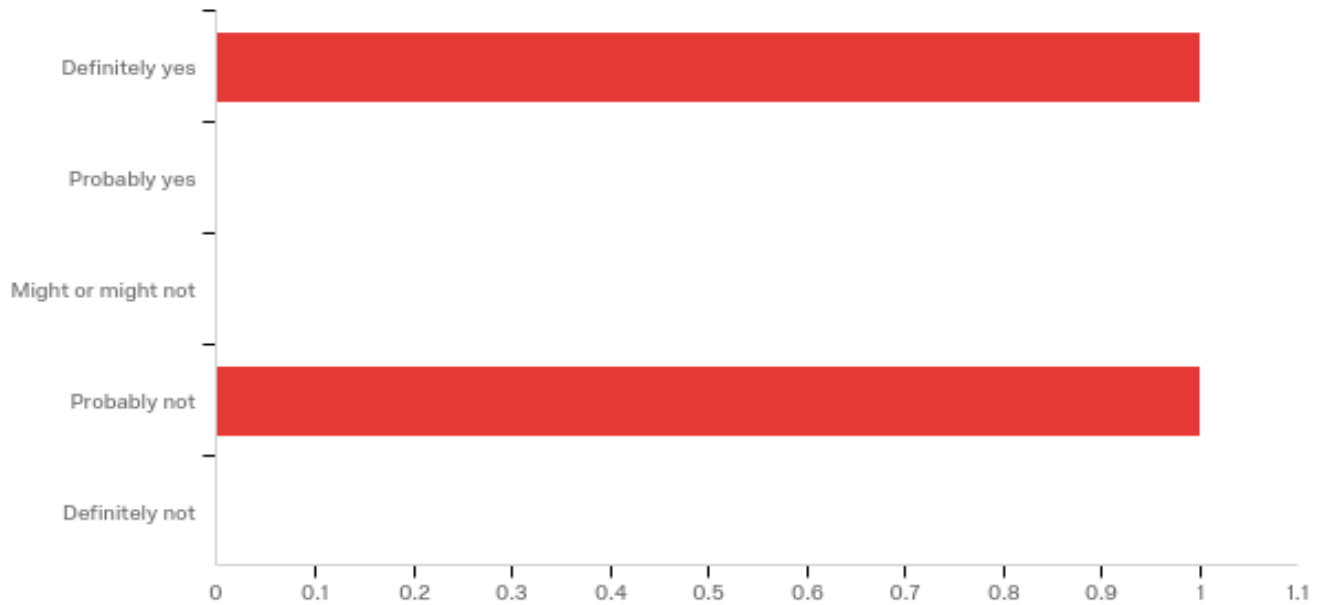
5	Definitely not	0.00%	0
	Total	100%	2

Q2 - Do you feel a lean six sigma black belt certification is of value to your employee?



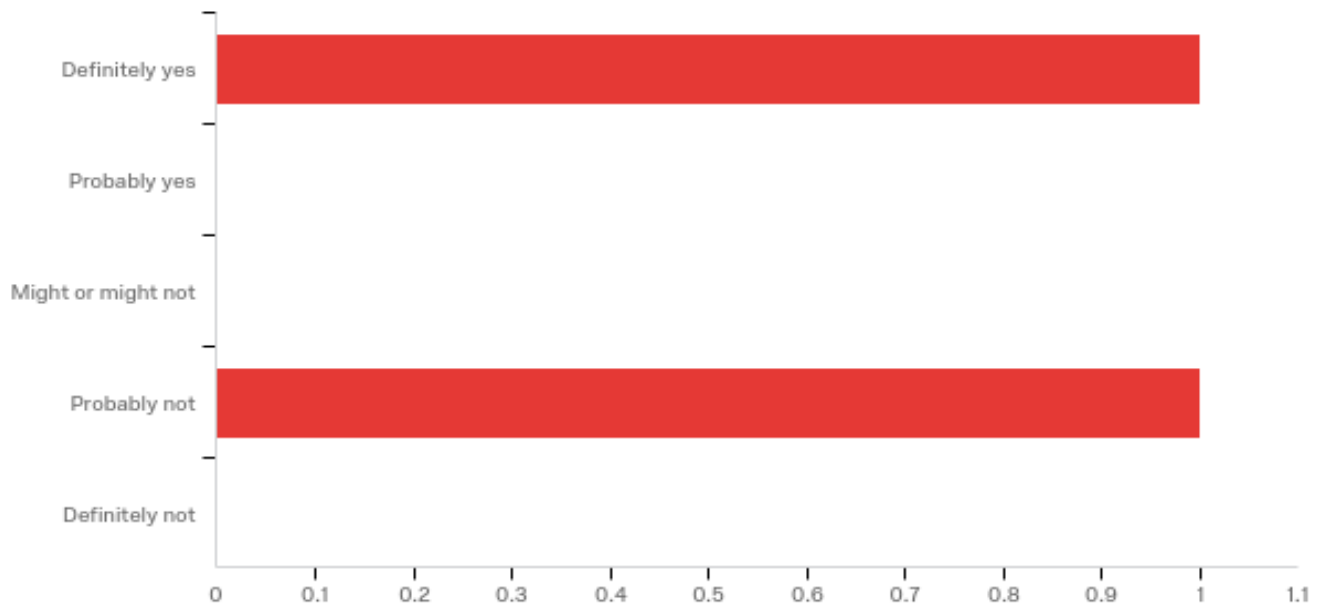
#	Answer	%	Count
1	Definitely yes	0.00%	0
2	Probably yes	0.00%	0
3	Might or might not	100.00%	2
4	Probably not	0.00%	0
5	Definitely not	0.00%	0
	Total	100%	2

Q3 - Do you feel a supply chain management certification is of value to your employee?



#	Answer	%	Count
1	Definitely yes	50.00%	1
2	Probably yes	0.00%	0
3	Might or might not	0.00%	0
4	Probably not	50.00%	1
5	Definitely not	0.00%	0
	Total	100%	2

Q4 - Do you think a project management certification is of value to your employee?



#	Answer	%	Count
1	Definitely yes	50.00%	1
2	Probably yes	0.00%	0
3	Might or might not	0.00%	0
4	Probably not	50.00%	1
5	Definitely not	0.00%	0
	Total	100%	2

Q5 - What do you like about your employee's educational preparation?

Cody is obviously very educated.

Q6 - Is there anything you do NOT like about your employee's educational preparation?

No.

Q7 - Do you have any suggestions on how to improve your employee's educational background?

No.

Employer Survey of Interns:

214

College of Business and Technology Intern Evaluation Form

Intern:

Supervisor:

Instructions: Rate intern on a scale of
1-5(Deficient to Superior). Return
electronically to Faculty Member:

Deficient
1

2

Average
3

4

Superior
5

Insert number below:

1.Oral Communication (*Communicates ideas clearly with proper vocabulary usage*)

Remarks:

2.Written Communication (*Communicates ideas clearly with proper grammatical structure*)

Remarks:

3.Quality of work (*Accuracy, neatness, timeliness*)

Remarks:

4.Quantity of work (*Volume of accurate work not needing correction*) Remarks:

5.Job knowledge (*Understands job requirements and needs minimal assistance*)

Remarks:

6.Attitude (*Positive, willing to learn, accepts direction*)

Remarks:

7.Motivation (*Seeks additional work when assignments completed*)

Remarks:

8.Reliability (*Dependable, gets the job done on time, acts responsibly*)

Remarks:

9.Use of time (*Uses time wisely and does not distract others*) Remarks:

10.Uses good judgment (*Considers actions and possible effects, makes sound decisions*) Remarks:

11.Interpersonal skills (*Cooperative, helps others, listens*)

Remarks:

12.Technological competence (*Familiar with hardware and software required for the job*) Remarks:

13.Professional proficiency (*Dresses appropriately for the job and conveys a professional image to customers/clients*)

Remarks:

Additional Comments:

ATMAE
LEAD • INNOVATE • COLLABORATE

The Association of
Technology,
Management, and
Applied Engineering

Student Score Report
Lean Six Sigma (LSS)
The University of Texas at Tyler
Session 10740 / Held 12/03/2015 7:25 pm to 12/03/2015 9:53 pm
Session Manager: Mark Miller (mmiller@uttyler.edu)
Data Recipient: Mark Miller (mmiller@uttyler.edu)
Student Count: 6
Proctor: MARK MILLER (mmiller@uttyler.edu)

Lean - Value Stream Mapping											Lean - Production									
Examinee ID	First Name	Last Name	Score	Cut-off	Pass	Designation	Major Parts	Purpose and Types	Ions/Symbols	Task, Subtask Diagrams, & Terminators	Current State & Future State Maps	Category Subscore	Production Matrix	Transactional Matrix	Calculating Takt Time	Calculating Pitch	Inventory Types & Calculations	Cycle Time Calculations	Takt Time	Lead Time & Calculations
4892 Jennifer	Adkinson		125	80	Yes	Green Belt	1	3	4	3	0	11	1	1	1	1	2	1	1	9
4893 John	Connolly		148	80	Yes	Green Belt	2	3	2	1	0	8	0	1	1	1	1	1	1	5
4894 Matthew	Killmeyer		128	80	Yes	Green Belt	2	3	4	0	1	10	0	1	1	1	1	1	1	4
4895 Naga Venkata Muneer Var	Sagiraju		125	80	Yes	Green Belt	2	3	4	0	1	11	1	1	1	1	1	1	1	9
4896 Akshay	Dalla		101	80	Yes	Yellow Belt	1	3	2	0	0	8	1	1	1	1	1	1	1	4
4897 Praveen Kumar	Parisipogu		104	80	Yes	Yellow Belt	1	3	3	0	0	9	0	0	1	1	0	1	1	0
Question Count:							2	3	5	3	1	14	1	1	1	1	2	1	1	3
Max Points:							2	3	5	3	1	14	1	1	1	1	2	1	1	9
Session Average:							15	3	3.17	15	0.17	9.33	0.5	0.83	1	1	1	1	1	5.17
Session Standard Deviation:							0.55	0	0.98	1.05	0.41	15.1	0.55	0.41	0	0	0.63	0	3.43	
Test Year Average:							154	2.77	3.77	2	0.54	10.62	0.69	0.77	1	1	1.46	0.92	4.69	
Test Year Standard Deviation:							0.63	0.42	0.97	1.04	0.5	2.31	0.46	0.42	0	0	0.63	0.27	2.87	
Historical Average:							16	2.31	2.63	1.46	0.51	8.51	0.57	0.49	0.86	0.83	1.63	0.91	4.14	
Historical Standard Deviation:							0.55	0.85	1.4	0.94	0.5	2.72	0.49	0.5	0.35	0.38	0.54	0.28	2.79	

Lean Six Sigma (LSS) for sessi

Contact Report for session 107

Question Analysis for sessi

50%

The ATMAE LSS certification exam was offered again in December of 2015 and is typically offered once at the end of every semester. In this instance, the students faired better where four of them earned a green belt and only two earned yellow belts.

Category Breakdown

Lean Six Sigma (LSS)

The University of Texas at Tyler

Session 10812 / Held 04/27/2016 7:03 pm to 04/29/2016 1:30 am

Session Manager: Mark Miller (mmiller@uttyler.edu)

Data Recipient: Mark Miller (mmiller@uttyler.edu)

Student Count: 3



Category	Question Count	Session Average	Session Dev
Lean - Fundamentals	7	4	1
Lean - Production	16	16	6.93
Lean - Stability	14	11.33	2.31
Lean - Standardized Work	3	1.33	1.15
Lean - Value Stream Mapping	14	4.67	2.08
Six Sigma - Analyze Phase Statistics	15	10.67	4.73
Six Sigma - Control Phase Statistics	5	7.33	5.51
Six Sigma - Design Phase Statistics	8	11.33	2.89
Six Sigma - Improve Phase Statistics	5	4.67	2.31
Six Sigma - Measure Phase Statistics	27	41	4.58
Six Sigma - Project Management	7	4.67	2.08
Six Sigma - Team Management	4	2	2


○ Scored lower than the national ATMAE average.

The ATMAE LSS certification exam was offered again in April of 2016 and the faculty reviewed the question breakdown to see why students were not earning a black belt. It should be noted that all three students who took the exam this time earned a green belt. Although the scores were higher, it was a bad reflection on the faculty that they could not properly prepare students to earn a black belt from ATMAE. Drs. Lawrence and Miller taped a review session in Blackboard that would be available to students before the next offering of the exam.

[illegible]

In August, the ATMAE LSS certification exam was offered to students who had taken all four courses required for the UT Tyler LSSBB certification and who had also stated that they had watched the review session that was created by the department faculty. It should be noted that there were now five students who earned a black belt, four who earned a green belt and only one who earned a yellow belt (whom we found out later, quickly glanced over the review session video).

In May of 2017, three students asked if they could take the ATMAE LSS certification exam, however, the review session video was lost when the university transitioned from Blackboard to Canvas so these students were not privy to this material. It was noted that the scores for the exam were considerably lower.


ATMAE
 LEAD • INNOVATE • COLLABORATE

The Association of
 Technology,
 Management, and
 Applied Engineering

Student Score Report
Lean Six Sigma (LSS)
The University of Texas at Tyler
 Session 1111 / Fall 11/20/2018 7:28 pm to 11/20/2018 11:07 pm
 Session Manager: Mark Miller (mmiller@uttyler.edu)
 Data Recipient: Mark Miller (mmiller@uttyler.edu)
 Student Count: 10
 Session Not Proctored

Lean - Value Stream Mapping										Lean - Production																
Major Parts	Purpose and Types	Icons/Symbols	Task, Subtask Diagrams, & Terminators	Current State & Future State Maps	Category Subscore	Production Matrix	Transactional Matrix	Calculating Task Time	Calculating Pitch	Inventories Types & Calculations	Cycle Time Calculations	Takt Time	Lead Time & Calculations	Operators per Process Calculations	Cycle Time	OTD	Operators per Process									
Examinee ID	First Name	Last Name	Score	Cut-off	Pass	Designation																				
8637	Joao Pedro	Correia Kuster Maia	135	80	Yes	Green Belt	0	3	4	1	0	0	8	0	0	0	1	1	2	0	5	0	0	0	4	
8640	Cassidy	Hand	80	80	Yes	Yellow Belt	0	0	1	0	0	1	1	0	0	1	0	2	1	5	0	1	0	0	4	
8643	Christopher	Harris	98	80	Yes	Yellow Belt	2	2	3	1	0	8	1	0	1	1	1	0	5	1	1	0	0	0	4	
8649	Kristin	Plucinski	116	80	Yes	Yellow Belt	1	2	4	1	0	8	0	1	1	1	2	1	4	1	1	4	0	0	0	
8654	Nanitha	Gubendra Gunabalan	132	80	Yes	Green Belt	2	3	3	3	1	12	1	1	1	1	2	1	5	1	1	4	4	4	4	
8656	Ross	Land	83	80	Yes	Yellow Belt	1	2	2	0	0	5	0	1	1	1	1	1	0	0	1	0	0	0	0	
8657	Olga	Zapolska	127	80	Yes	Green Belt	1	1	2	0	1	5	0	0	0	1	2	1	5	1	0	4	4	4	4	
8661	VENKATA VAMSI KRISH	THOTTEMPUDI	125	80	Yes	Green Belt	2	2	5	3	1	13	1	1	1	1	1	1	4	0	0	4	4	4	4	
8663	FNU	Sohail Ilyas	77	80	No		2	1	3	1	0	7	1	1	1	0	2	2	1	4	0	0	0	0	4	
8668	Salar	Jayald	154	80	Yes	Green Belt	2	2	5	1	1	11	1	1	1	1	1	0	5	0	0	4	4	4	4	
Question Count:							2	3	5	3	1	14	1	1	1	1	2	1	3	1	1	2	1	1	1	
Max Points:							2	3	5	3	1	14	1	1	1	1	2	1	3	1	1	2	1	1	1	
Session Average:							13	19	32	11	04	78	05	06	09	08	18	07	42	04	05	2	12	32	2	
Session Standard Deviation:							26.63	0.92	1.92	11	052	3.81	0.53	0.52	0.32	0.42	0.48	1.55	0.52	0.53	2.11	193	169	186	0.82	
Test Year Average:							116	182	318	109	036	782	045	054	091	073	173	073	427	036	055	182	145	327	1	
Test Year Standard Deviation:							25.43	0.77	0.83	119	1	048	3.27	05	048	029	045	045	142	048	05	199	192	154	0.7	
Historical Average:							117	136	203	256	119	038	753	047	068	078	065	153	079	505	033	064	251	163	279	1
Historical Standard Deviation:							27.64	0.77	0.88	128	094	049	2.9	05	047	041	048	059	041	271	047	048	251	197	184	1

Lean Six Sigma (LSS) for sessi

Contact Report for session 111

Question Analysis for s

In November of 2018, students had asked the faculty to offer the ATMAE LSS certification exam and with the move to the building the faculty did not check to see if students had taken all four courses to earn the LSS certification. All the students who did take the course work and were graduating earned a green belt. Four students who had missed a course earned a yellow belt and a student who had only taken one course, but was black belt certified by his employer failed the exam. The faculty thought that with any test, you always need to study and this student did not as he mentioned later. The student also mentioned that he was an MBA student and was going to graduate so he just wanted to try the exam. Furthermore, it was noted by the faculty that another review session video needs to be created and offered to students before they take the exam since scores have never exceeded those of students who took the exam after watching the review session video.

CURRICULUM CHANGES FROM 2013-2019

The following is a list of the official curriculum changes for the program by year. Documentation for these changes is illustrated by clicking on the web link next to the year.

2012-2014 <http://uttyler.cmsiq.com/2012-2014/Catalog/Graduate-College-of-Business-and-Technology/Human-Resource-Development-and-Technology/Industrial-Management-M-S>

1. MANA 5350 Strategic Resources Management was added to the Industrial Management degree plan in lieu of TECH 5301 History and Philosophy of HRD/Technology. The new dean noted that the degree was an industrial “management” degree and needed some management coursework. In addition, there wasn’t enough Technology faculty available to offer all the graduate and undergraduate course work in even a three year rotation.
2. MANA 5305 Decision Making in Operations Management was added to the Industrial Management degree plan in lieu of TECH 5303 Research Techniques in HRD/Technology for the same reason listed above.
3. TECH 5366 Value Stream Mapping was added as a choice for the Technical Core for students who wanted to learn more about Lean Six Sigma.
4. The degree plan Technical Core section was changed in that there was no longer a specified sequence of courses. Students were now allowed to select eight courses from a list of 11. This allowed students to tailor their degree to their career goals.

2014-15 <http://uttyler.cmsiq.com/2014-2015/Catalog/Graduate-College-of-Business-and-Technology/Human-Resource-Development-and-Technology/Industrial-Management-M-S>

1. TECH 5390 Advanced Lean Six Sigma Black Belt Techniques was added to the degree plan to assist students in passing the exam to earn their Lean Six Sigma Black Belt certifications.
2. Added a Research Core section to the degree plan after learning that ATMAE required at least six hours of research course work to accredit a graduate program. The Technical Core section was reduced from selecting eight courses to six.

2015-2016 <http://uttyler.cmsiq.com/2015-2016/Catalog/Graduate-College-of-Business-and-Technology/School-of-Technology/Department-of-Technology/Industrial-Management-M-S>

1. TECH 5371 Internship in Technology title was changed to Research Internship in Technology. It was noted that almost all the students who obtained internships were offered a job. When the research component of the degree plan was added, students did not have enough hours left over in their degree plan to earn certifications. Since the department did not want

to discourage internships, which helped the placement rates, it was decided to allow an internship to be counted as long as the intern was given a project that they had to research to assist employers. The students could not simply perform regular intern job duties.

2. ACCT 5320 Accounting for Management Control was added as a choice of one of the Professional Core courses for students who wanted to obtain the Supply Chain Management certification. Scott Reily, Senior VP of Logistics at Brookshire Grocery Company assisted the department faculty on what constituted a good concentration of course work so graduates were better prepared for careers in Logistics.

2016-2017 <http://uttyler.cmsiq.com/2016-2017/Catalog/Graduate-College-of-Business-and-Technology/School-of-Technology/Department-of-Technology/Industrial-Management-M-S>

1. TECH 5306 Advanced Logistics Management had a title change to merely Logistics Management. Dr. Fazarro, who teaches the course, noted that the students are not required to take a fundamental course in Logistics and therefore this would be the course. Furthermore, he noted that if an additional course were required for the certification then the title should reflect the content versus just naming it an “advanced” course.
2. TECH 5329 Trends in Industry was retitled to Research Trends in Industry so students would have another research course to apply towards their Research Core.

2017-2018 <http://uttyler.cmsiq.com/2017-2018/Catalog/Graduate-College-of-Business-and-Technology/School-of-Technology/Department-of-Technology/Industrial-Management-M-S>

1. A new course TECH 5302 Applied Research Methods was developed to allow students one more research choice for the Research Core section. This course was better suited for the research Industrial Management majors engaged in.
2. The degree plan now offered four courses that the students could select from to earn the six hours required by the Research Core section.

2018-2019 <http://uttyler.cmsiq.com/2018-2019/Catalog/Graduate-Soules-College-of-Business/School-of-Technology/Department-of-Technology/Industrial-Management-M-S>

1. TECH 5348 Warehousing was added to the degree plan in lieu of ACCT 5320 Accounting for Management Control because students had a difficult time registering for the course and because advisory board members noted that students did not have the fundamental knowledge of how a warehouse or fulfillment center operated and they had earned a certification in Supply Chain Management. A humbling moment for the department that required a remedy.

2. After consultation with students and the Graduate Advising Office for the Soules College of Business, it was recommended that the degree plan be tweaked so that students would be able to earn all three certification without having to take additional course work. After reviewing the new ATMAE accreditation standards, it was suggested that the Technical Core section be renamed the Continuous Improvement Core (Problem Solving Core as noted by ATMAE) to ensure that the graduate program could be accredited and that students could now easily obtain multiple certifications without taking additional course work. In addition, if any students were already Lean Six Sigma Black Belt certified, they could then select other Technology courses in lieu of these prescribed core courses.

Program Goals Status Form

2013-2018 Bachelor of Science in Industrial Management Short Range Goals

Short Range Goals

Goal	Status	Comments
The program will seek ATMAE accreditation	O	The Industrial Management program will seek ATMAE accreditation in 2019 by preparing a separate self-study report.
The program will continue to produce graduates that can pass national certification exams	N	Almost all of the graduates taking the ATMAE Lean Six Sigma Certification exam have passed it, however, only half of them are earning green or black belt status.
The program will have state-of-the-art laboratories	M	In July of 2018, the Department of Technology moved into a brand new 52 million dollar building that houses five laboratories for the department. The department was able to triple the size of its laboratories. In addition, the metals and nonmetallic materials processing labs are on the first floor with overhead bay door access. The labs also have the correct ventilation and there is now a welding lab available.
The program will consist of faculty who publish as required by the Soules College of Business Tenure and Promotion policy.	O	The faculty have published over the past six years and this is documented by the full professor passing a post-tenure review, two tenure-track professors earned tenure, however, one new faculty did not pass the third year review process. However, that was mainly due to the teaching component being totally unacceptable.
The program will have at least one research proposal submitted over a three year period.	O	Dr. Fazarro has co-pi for several research proposals dealing with nanotechnology safety. Furthermore, Dr. Donaldson was the co-pi for an internal college grant.
The program will consist of faculty who present at the national level annually.	O	The program's faculty have consistently presented at the ATMAE national conference for the last six years.
The program will consist of faculty who are known for innovative endeavors.	M	Dr. Fazarro is national reknown for his work with nanotechnology. He even started the Nanotechnology Focus Group at ATMAE.
The program will maintain and expand its Advisory Board to provide input to the program so it can	O	Every year the Department of Technology cycles an Advisory Committee member off and replaces them with another. The

produce graduates that are adequately prepared for the workforce in the surrounding areas and beyond.		intent is to keep it fresh and gain insights from other companies in the area that hire the program's graduates. Advisory Committee members' names are listed in the each years meeting minutes.
The program will provide internship opportunities for majors in order to better prepare them for real life careers.	O	Each semester students participate in internships and their papers, journal, evaluations are kept in the main office storage room.
The program will provide opportunities for students to participate in volunteer projects to help the community of East Texas and beyond.	O	Students who join the department's student organizations are provided volunteer opportunities every semester. In fact, this semester the ATMAE Student Chapter assisted with the planting of trees on Arbor day.
The program will create and/or offer a variety of student organizations and honor societies for students to participate in.	O	The program currently has an active ATMAE, SME, and EPT chapter that hold events throughout the year. The ATMAE chapter students attend the national conference as well as participate in volunteer projects. SME chapter members attend the Houstex event and coordinate plant tours throughout the year. The EPT members assist with the annual initiation ceremony.
The program will provide opportunities for students to partake in external field trips to various local, regional, and national events related to the discipline.	O	SME chapter members attend the Houstex event and coordinate plant tours throughout the year. Furthermore, ATMAE chapter members who attended the national conference are able to attend plant tours. Many went on the GM plant tour in Kansas City.
The faculty will provide training sessions to companies throughout the year that will generate revenue for the college and the university.	O	Faculty have hosted events through the Texas Productivity Center on learning how to use six sigma quality techniques, how to make value stream maps, and become a lean champion and/or green belt certified.
Faculty of the program will be encouraged to attend at least one sponsored event by the UT Tyler Center for Excellence in Teaching.	N	Only one faculty member has attended such an event. More encouragement will be provided to make sure every faculty member attends events annually.
Faculty of the program will assist the university held programs to promote career success annually.	O	All the faculty of the program assisted with the Career Success Conferene in September of 2018.
Students of the program will participate in university held	O	Over 80% of the program registered and attended the Career Success Conference

programs to promote career success.		in Septemeber.
Tenure-track faculty will be encouraged to submit research proposals annually for college sponsored research grants.	O	The sole tenure-track faculty member submitted and was awarded a college sponsored research grant.
Faculty of the program will assist with the setup of equipment at the Tyler Innovation Pipeline (TIP) joint venture.	O	Dr. Miller spent a good portion of his summer setting up most of the equipment at the TIP.
Students of the program will assist patrons of the TIP in making innovative projects...	O	The Soules College of Business has provided funds for the program's students to work at the TIP and assist patrons.
Faculty of the program will develop curriculum for summer camps that will recruit new students to the Industrial Technology program.	O	Drs. Ali and Miller developed a Robotics summer camp in 2018.
Faculty of the program will offer summer camps either annually or biennially.	O	A summer camp taught by Dr. Ali was offered at the Longview University Center in June 2018.

Status: M= Met; N = Not Met; O = Ongoing

2013-2019 Bachelor of Science in Industrial Management Long Range Goals
Long Range Goals

Goal	Status	Comments
The program will be known to have the same reputation for quality as the best programs in the country.	M	The program is seeking ATMAE accreditation and now has brand new state-of-the-art facilities.
The program will consist of faculty with excellent scholarly and research records.	M	All the faculty have presented at national conferences over the past six years and have met the minimum publication standards for the college.
The program will provide opportunities for students and faculty to build long term relations with the community of East Texas and beyond.	M	Faculty have taught workshops for local industries and students have interned in a wide variety of industries throughout the last six years.
The program will provide opportunities for students to build long term relations, and camaraderie with peers and faculty to enhance their college experience.	O	Faculty have an open door policy and each of them sponsor a student organization. Dr. Miller – SME, Dr. Lawrence – ATMAE, Dr. Fazarro – EPT, Dr. Donaldson – PMI, Dr. Ali handles all the organizations in Longview.
Encourage and optimize research collaborations between faculty and community business leaders that will result in development of profit centers.	O	Dr. Miller currently runs the Texas Productivity Center that provides workshops and training for local industries.
The faculty of the program will improve their teaching by some means of training.	O	Faculty are encourage and supported to go to training events. Dr. Miller attended FANUC robotics vision training this summer in Union City, CA.
Faculty of the program will engage and encourage students to network with alumni from UT Tyler	O	Students are provided opportunities for internships and conducting mock interviews with alumns.
Tenure-track faculty will be encouraged to conduct research as required in the College's Guidelines for Tenure and Promotion.	O	All faculty have met the publishing standards for the Soules College of Business.
Faculty and students of the program will promote academic partnerships throughout the region.	O	Students of the program are currently working at the TIP. Drs. Miller and Ali are working with school districts in the Longview area to encourage students who graduate from the Advanced Manufacturing Academy to continue to pursue their educational goals.
The Department of Technology will provide events for East Texas youth to promote the Industrial Technology and Industrial Management programs.	O	A summer camp was provided and tours to high schools students are now available. New high school technology events will be offered once the fourth floor is finished in the new building.

Status: M= Met; N = Not Met; O = Ongoing

Appendix E: 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

Interim Chair of the Department of Human Resource Development

EDUCATION

Doctor of Philosophy	Texas A&M University, College Station, Texas (August, 1993). Major: Industrial Education, Dissertation title: <u>Strategies for Developing an Exemplary Program in Manufacturing Engineering Technology.</u>
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

2017 – Present	Interim Department Head of Human Resource Development
2014 – Present	Tenured Professor and Department Head of the Department of Technology at The University of Texas at Tyler.
2005 – 2014	Tenured Professor and Coordinator of Industrial Technology and Industrial Management at The University of Texas at Tyler.

PROFESSIONAL EMPLOYMENT HISTORY *continued*

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.
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 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 Manufacturing,
 TECH 5317 Computer Integrated Manufacturing,
 TECH 5366 Value Stream Management
 TECH 5329 Trends in Industry,
 TECH 4370 & 4371 Internship in Technology,
 and TECH 5370 & 5371 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,
 and ITEN 4335 Senior Projects.

Texas A&M University 1989-1993

ENTC 181 Manufacturing and Assembly Processes I,
 ENTC 403 Fluid Power Technology,
 and INED 302 Technology, Resources, and Society.

Cole Jr.-Sr. High School 1983-1989

Production Systems,
 Engineering Graphics,
 Architectural Graphics,
 Manufacturing Technology,
 and Construction Technology.

INTELLECTUAL CONTRIBUTIONS**TEXTBOOKS:**

Miller, R., Miller, M. R. (2019). Pipefitting Study Guide. New York: McGraw-Hill.

Miller, R., & Miller, M. R. (2018). Plumbing: Licensing Exams Study Guide.
 Homewood, IL: American Technical Publishers.

Miller, R., Miller, M. R. (2018). HVAC Licensing Study Guide (3rd ed.). New York:
 McGraw-Hill.

Miller, R. & Miller, M. R. (2017). Robots and Robotics: Principles, Systems, and
 Industrial Applications. New York: McGraw-Hill.

Miller, M. R. & Miller, R. (2016). Carpentry & construction (6th ed.). New York:
 McGraw-Hill.

TEXTBOOKS continued:

- Miller, R., Miller, M. R. (2014). Industrial electricity and motor controls (2nd ed.). New York: McGraw-Hill.
- Miller, R., Miller, M. R. (2012). HVAC Licensing Study Guide (2nd 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 (5th 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 (7th ed.). Indianapolis: Wiley.
- Miller, M. R., & Miller, R. (2004). Carpenter's and builder's millwork, power tools, & painting (7th ed.). Indianapolis: Wiley.

TEXTBOOKS continued:

Miller, M. R., & Miller, R. (2004). Carpenter's and builder's layout, foundation, & framing (7th ed.). Indianapolis: Wiley.

Miller, M. R., & Miller, R. (2004). Carpenter's and builder's tools, steel square, & joinery (7th ed.). Indianapolis: Wiley.

Miller, R., Miller, M. R. & Leger, E. (2004). Complete building construction (5th ed.). Indianapolis: Wiley.

Miller, R., & Miller, M. R. (2004). Refrigeration: Home and commercial (5th ed.). Indianapolis: Wiley.

Miller, R., & Miller, M. R. (2004). Air conditioning: Home and commercial (5th ed.). Indianapolis: Wiley.

Miller, R., & Miller, M. R. (2004). Pumps and hydraulics (6th ed.). Indianapolis: Wiley.

Miller, R., & Miller, M. R. (2004). Questions and answers for plumbers' examinations (4th ed.). Indianapolis: Wiley

Miller, R., Miller, M. R. & Almond, J. P. (2004). Plumber's pocket manual (10th ed.). Indianapolis: Wiley.

Miller, M. R., Miller, R., & Baker, G. E. (2004). Carpentry & construction (4th ed.). New York: McGraw-Hill.

Miller, R., & Miller, M. R. (2004). Electric motors (6th ed.). Indianapolis: Wiley.

Miller, M.R., & Miller, R. (2002). Electrician's helper (8th 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.

REFEREED JOURNAL ARTICLES:

- 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.
- 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. (2018). The New ATMAE Learning Management System: Streamlining Certification and Training Association of Technology, Management, and Applied Engineering Conference, Kansas City, MO.

REFEREED PROCEEDINGS & PRESENTATIONS: *continued*:

- 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.

REFEREED PROCEEDINGS & PRESENTATIONS *continued*:

- 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.
- 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.

REFEREED PROCEEDINGS & PRESENTATIONS *continued*:

- 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.
- 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.

REFEREED PROCEEDINGS & PRESENTATIONS *continued*:

- 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 38th 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 37th 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.
- 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 34th Annual Convention of the National Association of Industrial Technology, 150-154.

REFEREED PROCEEDINGS & PRESENTATIONS *continued*:

- Miller, M. R., Marsh, B. E., & Heidari, F. (2000). Recruitment and retention: What really works? Proceedings of the 33rd 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 33rd 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 32nd 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 Certification Board. Terms: 2008-Present.

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.

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.

Professional Society Meetings continued:

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)

Chair of the University Undergraduate Council, 2014-present

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.

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.

The University of Texas at Tyler (2005-Present) *continued*:

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.

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

2018 Recipient of the Distinguish Service Member award from Epsilon Pi Tau.

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

2012 Earned Lean Six Sigma Black Belt Certification

2012 Recipient of the Faculty Senate Service Award

Awards and Certifications *continued*:

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 – 63rd 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 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.

OTHER PROFESSIONAL ACTIVITIES NOT COVERED PREVIOUSLY *continued*:

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 until 2018).

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.

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.

OTHER PROFESSIONAL ACTIVITIES NOT COVERED PREVIOUSLY *continued*:

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 Human Resources Development and Technology
The University of Texas at Tyler
Tyler, TX 75799

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 Graduated Cum Laude	Norfolk State University Norfolk, Virginia

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
- Nanotechnology Workforce Education and Development
- Workforce Development
- Evaluation and Assessment

ACADEMIC EXPERIENCE

The University of Texas at Tyler Dept. of Human Resources Development and Technology	August 2010 - present
• Associate Professor	
Sam Houston State University Department of Agricultural and Industrial Sciences Industrial Technology Program	July 2007 - July 2010
• Associate Professor	
University of Arkansas at Pine Bluff Industrial Technology Program Department of Mathematical Sciences and Technology	August 2002 - May 2007
• Associate Professor (promoted in 2007)	
• Assistant Professor	
Longview Community College Applied Sciences Department	August 1997 - May 1998
• Adjunct Drafting Instructor	

Iowa State University

Student Affairs

George Washington Carver Academy

- Assistant Coordinator – Post-Doctoral

August 2001-June 2002

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 21st century workplace.

Programs Developed

Industrial Safety Management, Sam Houston State University, Approved by the Texas Higher Education Coordinating Board, Spring 2009

Courses Developed

- Advanced Statistics in Research, (The University of Texas at Tyler), Ph.D. course
- Principles of Risk Management of Handling Nano Scaled Materials, (The University of Texas at Tyler), Fall 2010
- Innovations in Nanotechnology, (The University of Texas at Tyler), Fall 2010
- Product Design and Development, (Sam Houston State University), Spring 2009
- Leadership Energy and Environmental Development (LEED), (Sam Houston State University), Spring 2009
- Engineering Materials Technology, (Sam Houston State University), Spring 2008
- Advance Design, (The University of Arkansas at Pine Bluff), Fall 2003

Undergraduate Teaching

- | | |
|-----------------------------------------------|--------------------------------------|
| • Behavioral Safety Concepts | • Construction Drafting |
| • Risk Management for Safety & Health | • Civil Drafting |
| • Facility Planning | • Material Handling and Plant Layout |
| • Ergonomics | • Engineering Materials Technology |
| • Topics in Industrial Studies-Nanotechnology | • Product Design and Development |
| • Behavioral Safety Concepts | • Engineering Graphics |
| • Risk Management for Safety & Health | • Manufacturing Process & Assembly |
| • Introduction to Computer Aided-Drafting | • Advanced Design |
| • Engineering Graphics | • Manufacturing Process & Assembly |
| • Advanced Design | |

Graduate Teaching

- | | |
|-------------------------------------------------|-----------------------------------------------------|
| • Industrial Maintenance Management | • Material Handling and Plant Layout |
| • Advanced Logistics | • Application of Statistical and Research Education |
| • Trends in Industrial Studies (Nanotechnology) | • Industrial Maintenance Management |

PUBLICATIONS

Peer-Reviewed Journal Publications

- Fazarro, D., Heshium, L. & McWhorter, R.(2011). Going virtual: Delivering nanotechnology safety education on the web. *Journal of sTEm Teacher Education*, 48(2),
- Pannkuk, T. & Fazarro, D. (2011). Strengthening collaborations with landscaping industry and department of agricultural sciences: Using the structured group interview approach for enhancing the 21st century workforce. *The Online Journal for Workforce Education and Development*, 5(2), 1-15.
- 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.
- 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.
- 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.
- Trybula, W., Fazarro, D. & Kornegay, A. (2009). The emergence of nanotechnology: Establishing the new 21st century workforce. *The Online Journal for Workforce Education and Development*, 4 (3), 1-10.
- 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.
- 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.
- Fazarro, D., Putnam, A. & Steinke, L. (2008). What should engineering technology instructors know about learning styles: Improving the learning environment for diverse students. *Workforce Education Forum*, 35 (2), 21-31.
- 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.
- 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.

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.

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.

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)

Fazarro, D. & Martin, B. (2004). Comparison of learning styles of agriculture, human sciences, and misson students at a historically black university. *Workforce Education Forum*, 31 (2), 17-26.

Fazarro, D. (2003). Tech-Upward bound program: A program to introduce students to world of technology. *TechDirections*, 63 (7), 26-27.

Fazarro, D. (1999). Motivating African-American youth in technology education. *TechDirections*, 59 (1), 25-27.

Peer-Reviewed Proceedings

Fazarro, D. & Trybula, W. (2011). W. 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.

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.

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.

Book Chapters

Fazarro, D. (2010). Chapter 10: *Workforce Education*. In nanotechnology: Education and workforce development. Editors Hornyak, G. & Lightfeather, J. CRC: Press ISBN: 13:9781420053944.

Fazarro, D. Edward W. Deming. *Encyclopedia of the Industrial Revolution 1750-2007*. Editors Sanford, G.M. & Hendrickson III, K.E. Fax on File Publishing (In press).

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 21st century. *IT Insider*, 10(2), 6.

Under Review Peer-Reviewed Journal Publications

Fazarro, D., Newberry, D., & Trybula, W. Introducing a nanotechnology curriculum and considerations for bridging academic/industry relationships for applied technology-oriented programs: The new challenge for ATMAE *Journal of Industrial Technology*

Fazarro, D., McWhorter, R., & Felder, C. Leveraging green computing for increased viability and sustainability. *Journal of Technology Studies*

Work in Progress

Developing the U.S. nanotechnology workforce: Challenges for workforce agencies (Targeted for Workforce Education Forum)

PRESENTATIONS

The presentations listed are divided by my major research areas.

Peer-Reviewed Presentations (Nanotechnology Safety and Education)

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.

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.

Fazarro, D. (2011). Taking the first step: Introducing nanotechnology in high schools. *STEM 2011: Bridging Research and Practice*. Austin, TX, January 19-21, 2011.

Fazarro, D. & Steinke, L. (2010). Creating nanotechnology courses using the DACUM approach: Linking academia and industry to creating programs for the 21st century. *Association of Career and Technical Education (ACTE)*, Las Vegas, NV, December 2-4, 2010.

Fazarro, D. & Trybula, W. (2010). The Evolution of Nanotechnology Education: Lateral diffusion for the 21st Century Workforce. *National Association of Workforce Development Professionals (NAWDP)*, Albuquerque, MN, May 2-5, 2010.

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.

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.

Fazarro, D. (2008). The evolution of nanotechnology education: Lateral diffusion for the 21st century workforce. *NanoTx Conference*, Dallas TX, October 2-3, 2008.

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.

Peer-Reviewed Presentations (Workforce Development)

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.

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.

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.

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.

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

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.

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.

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.

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.

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

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.

Peer-Reviewed (Assessment and Evaluation)

Fazarro, D. & Caso, R. (2008). Empowering faculty to conduct student-learning-centered program evaluation with course-embedded assessment and virtual data room. *9th Annual Texas A&M University Annual Assessment Conference*, College Station, TX, February 21-25, 2008.

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.

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.

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.

Peer-Reviewed (Learning Styles)

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.

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.

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.

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 4th International Conference of Knowledge, Culture, and Change in Organizations*, University of Greenwich, London, England August 3-6, 2004.

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.

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.

Fazarro, D. Motivating African American students in technology at predominately white institutions. *The 1999 National Higher Education Students of Color Conference*, Minneapolis, MN, October, 27-30.

Invited Presentations in Various Research Areas

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.

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.

Fazarro, D. (2009). Future Shock: What would a nanotechnology curriculum look like? *Texas Career Education Conference*, Houston, TX, July 13-16, 2009.

Fazarro D. 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.

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.

Member of Panel Discussions

Nanotechnology Safety and Education. 2008 NanoTx 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.

EXTERNAL DOCTORAL CONSULTANT ACTIVITIES

External Methodological Consultant

- Guided 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 Arkansas Medical School (Marion Evans), Graduated Spring 2010
- Doctoral Committee Member/Methodologist-Sam Houston State University (Edna Kingsley), Graduated Summer 2010
- Doctoral Committee Member/Methodologist-Walden University (Kenya Ament), 2010-Present
- Doctoral Committee Member-University of Central Florida (Wanda Holmes), 2009-Present

Masters

- Masters Committee Chair-Sam Houston State University (Mariana Freties), Graduated Spring 2010

INDUSTRY AND UNIVERSITY ACCREDITATION EXPERIENCE

- 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)
- 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)
- Assistant Researcher (Research Internship)-Kauffman Foundation, Kansas City, MO, (June-August 1995)
- Evaluation Committee Chairperson –university assessment NCA/HLC(UAPB), (2005-2006)
- Directed university-wide data assessment on customer satisfaction survey, (August-December, 2006)

CONSULTING- ASSESSMENT & EVALUATION

- Evaluated the effectiveness of the John Deere Team Scholars Program, (Feb-May 1999)
- Consulted for Edu-Care International (Supplemental Education Service Provider), (July 2004-March 2005)
- Designed a evaluation model for the Teacher Advisement Grant-Savannah School District, (2005)
- Conducted data analyses and developed data bases for the Kiwanis Pfeiffer Camp, (2004-2005)
- 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)
- External Provider-Minnesota Department of Education, (2007)
- Conducted needs assessment at the Alexandria Center's (Department of Youth Services-AR) Education Program, (2007)
- Data analysis and created reports for Pulaski Special County School District's Multiage Program, (2007-Present)
- External Evaluator-NSF-STEM/ HBCU-UP Program/Florida A&M University, (2009-Present)

GRANTS

Funded Applications

- 2002-Co-wrote \$40,000 Title III grant for computer upgrade for AutoCad and student labs for the Industrial Technology Program
- 2003-04UAPB Incentives Grant (Learning Style Research) \$1,200
- 2006-STEM Seed Grant-Investigation of the Learning Preferences of Biology and Chemistry students \$600
- 2008-Texas Parks and Wildlife Department State Park On-Site Visitor Survey Assessments."Submitted Feb. Co-Lead: Lau, Michael, Co-Lead: Marcy Beverly, Kyle Stutts, and Dominick Fazarro, \$19,020
- 2010-Susan Hardwood Grant Training Grant Program (nano-safety), total: \$236,000

Proposals

- 1999-Assisted in writing a proposal for renewing the Alcoa Grant for \$50,000 for recruiting efforts
- 2000-Assisted in writing the Iowa State University Horizons Advanced Computer and Instructional Lab Grant for upgrading hardware and software for the Industrial Education & Technology Graduate Computer Lab\$25,000
- 2004 U.S. Department of Education-Student Learning and Cognition \$471,000
- 2007-Susan Harwood Training Grant Program, \$235,473
- 2008- Enhancement Grant for Research (SHSU) \$ 18,000
- 2008- Nanotechnology Undergraduate Education (NUE) in Engineering: *NUE Nanotechnology Undergraduate Curriculum Addressing Environmental Issues*, NSF, \$500,000
- 2009- Advance Technological Education (ATE) in Engineering: Multi-State Collaboration for Implementing Nanotechnology Safety Education, NSF, \$161,000
- 2010- Nanotechnology Undergraduate Education (NUE) in Engineering: *NUE Nanotechnology Undergraduate Curriculum Addressing Environmental Issues*, NSF, \$200,000
- 2010-Technical Approach and Program Design: Project for Nanosafety Education and Training- Susan Hardwood Grant Training Grant Program, total: \$248,000
- 2011- Nanotechnology Undergraduate Education (NUE) in Engineering: *NUE Nanotechnology Undergraduate Curriculum Addressing Environmental Issues*, NSF, \$200,000

- 2011- Susan Harwood Training Grant: Virtual Reality Safety and Emergency Preparedness Training,\$195,343

PROFESSIONAL AFFILIATIONS

Association of Technology, Management, Applied Engineering (ATMAE)
 Epsilon Pi Tau Honor Society (EPT)
 IEEE: Advancing Technology for Humanity
 National Industry Advisory Council (NIAC)
 The Association of sTEM Teacher Education (ASTE)
 Association for Career and Technical Education (ACTE)
 Association of Career and Technical Education Research (ACTER)
 National Association of Workforce Development Professionals (NAWDP)

SERVICE

National

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 (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-Present)
 Co-founded the Texas State University System Nanotechnology Task Force (2008-10)

University

Faculty Recognition Subcommittee-UT-Tyler (2011)
 COBT Faculty Awards Development Team (2010-Present)
 Undergraduate Education Committee-College of Business and Technology (UT-Tyler) (2010-Present)
 Trustee-Epsilon Pi Tau (Delta Gamma Chapter) UT-Tyler (2010-Present)
 Presenter -2010 University Development Conference UT Touch Conference (UT-Tyler)
 Search Committee Chair -Industrial Technology Program (SHSU) (2009)
 ATMAE 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

Column Editor-IEEE Nanotechnology Magazine (2011)
 Reviewer-Workforce Education Forum (2011)
 Editorial Board-Journal of Workforce Development (2010-Present)
 Editorial Review Board-International Journal of Engineering Research and Innovation (IJERI) (2009-Present)
 Editorial Board -Journal of sTEm Teacher Education (JsTEm) (2008-Present)
 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-Journal of Industrial Technology (JIT) (2003-Present)

Conference Assignments

IEEE Nanotechnology Council Paper Reviewer (2011)
 ATMAE Paper Reviewer (2005-Present)
 ACTER Paper Reviewer (2010-Present)
 ACTE Paper Reviewer (2006-Present)
 International Journal of Engineering Research and Innovation (IJERI) (2009-Present)
 Co-Session Chair-Nanotechnology Education Division of IEEE (2011)

HONORS & AWARDS

2010 Sar Levitan Award Recipient
 2010 ATAME Academic Excellence Award
 The 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
 The 2007 Distinguished Service Award (ACTE)
 The 2006 NAITTE-G. Harold Silvius Outstanding Young Teacher Educator Award
 The 2005 Outstanding Service on the Public Information Committee (ACTE)
 The 2004 Service Award-Technology Education Division/Association for Career and Technical Education (ACTE)
 The 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
 OHSA 30 Hour General Industry
 OSHA 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)

Preliminary application for patent-nano carbon tubes disposal unit

HESHUM LAWRENCE, PH.D.

E-mail: hlawrence@uttyler.edu

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

Specializations:

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

Concentrations:

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

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 Asst.	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), ??
- 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

- 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 2nd 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 Proposal Funded:

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

SU 2013-present	<i>TECH 5390 Adv. LSSBB Techniques (online instruction/hybrid):</i> a graduate course that involves discussions, analysis and application of the DMAIC Six Sigma process as well as Lean concepts.
Spring 2012-Spr. '15	<i>TECH 5331 Project Management (online instruction/ traditional):</i> 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	<i>TECH 5310 Six Sigma Quality (online instruction):</i> 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	<i>TECH 5320 Total Quality Management (traditional/online instruction):</i> 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	<i>TECH 1320 Industrial Materials (traditional/t.v instruction):</i> an undergraduate lab and instructional based course that explores the fundamental make-up and use of metals.
Fall 2011-present	<i>TECH 2311 Mechanical and Fluid Systems (traditional instruction):</i> an undergraduate laboratory based course that introduces students to the fundamentals of mechanical and fluid power systems.
Summer 2011-2013	<i>TECH 2323 Introduction to Computer Applications (traditional instruction):</i> an undergraduate course that addresses technology skills, presentation skills and integration of computer applications into teaching and learning.
Summer 2011	<i>TECH 4350 TPS in Industrial Studies (online instruction):</i> an advanced database course that integrated industrial applications.
Fall 2010-present	<i>TECH 3310 (formerly 4310) Total Quality Management (traditional/t.v. and online instruction):</i> an undergraduate applied computer course that focuses on the analysis and application of total quality management principles.
Fall 2010-Spring 2011	<i>TECH 1330 Fundamentals of Electronics (traditional instruction):</i> 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 2017-2019	Member of CBT Tenure and Promotion Committee
Summer 2013-present	Dissertation Committee member for Ph.D. Candidates
Spring 2011-present	Faculty advisor for Epsilon Pi Tau- Delta Gamma Chapter (Honor society for technology professionals)
Fall 2011-present	Marshall for CBT Commencement Ceremonies
Fall 2010-present	Faculty advisor for the Association of Technology, Management, and Applied Engineering (ATMAE) student chapter
Fall 2018	Reviewer for <i>Journal of Management Development</i>
Fall 2017	Reviewer for <i>Technology Interface International Journal</i>
Fall 2017	Reviewer for <i>Quality Engineering</i>
Fall 2016-2017	Co-chair CBT Undergraduate Curriculum Committee
Sumr 2016/Spring 17	Reviewer for the <i>Journal of Technology, Management, and Applied Engineering</i>
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 <i>Human Resource Development Quarterly</i>
Spring 2014	Reviewer for <i>International Journal of Vocational and Technical Education</i>
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 Summer 2012	Member of the CBT Undergraduate Council (HRD and TECH) Served on the search committee for Student Life & Leadership for the Student Development Specialist I position
Spring 2012	Reviewer for <i>Technology Integration and Foundations for Effective Leadership</i>
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 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 regards to its roots and origins

PROFESSIONAL AND ACADEMIC ASSOCIATIONS

Fall 2018-Fall 2020	Association of Technology, Management, and Applied Engineering (ATMAE) Board of Directors-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

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 2017-Fall 2018	Association of Technology, Management, and Applied Engineering (ATMAE) Board of Directors-Vice Chair
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

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) Warner Professional Practice Award

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

Association for Educational Communications and Technology (AECT)

The Association for Career and Technical Education (ACTE)

American Educational Research Association (AERA)

Association of Technology, Management and Applied Engineering (ATMAE)

Association for sTEm Teacher Education (ASTE)

PROFESSIONAL CONFERENCES/WEBINARS AND WORKSHOPS:

Association of Technology, Management and Applied Engineering (Annually)

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)

Respondus workshop (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)

Illuminate Live workshop (The University of Texas at Tyler)

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
Longview University Center #218
3201 N. Eastman Road, Longview, TX 75605, USA
Phone: (903) 663-8218, 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 on 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 device 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.
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 - present) 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

- ☑ Computer Integrated Manufacturing (CIM)
- ☑ Programmable Logic Controller (PLC)
- ☑ Manufacturing Processes
- ☑ Lean Production
- ☑ Polymer Processing

- ☐ Advanced Manufacturing Processes
- ☐ Total Quality Management
- ☐ Plant Layout and Facilities Planning
- ☐ Advanced Production Management
- ☐ Logistics and Supply Chain Management
- ☐ Advanced Supply Chain Management
- ☐ Materials Testing and Machine Design
- ☐ Production and Inventory Management
- ☐ Statics and Materials Mechanics
- ☐ Hydraulics and Fluid Power, Hydraulic and Pneumatic Module Lab
- ☐ Computer Aided Drafting (AutoCAD, Inventor)
- ☐ Advanced Computer Aided Drafting (SolidWorks, Pro-E)
- ☐ Motion and Time Study
- ☐ Licensing and Certification - ATMAE
- ☐ Introduction to Aerosol Science and Technology

TEACHING EVALUATION BY STUDENTS

Average score of teaching evaluation was 4.78. 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 expectation and 5 represents the highest and most positive impression. Following table summarizes the overall ratings for respective courses.

Course Number and Title Overall Rating (1 to 5 point scale)

Advanced Manufacturing Processes

4.9

Computer Aided Drafting

4.6

Plant Layout and Material Handling

4.9

Materials Testing

4.8

Machine Design

4.9

Mechanics of Materials

4.6

LEAD ORGANIZER OF MIDDLE & HIGH SCHOOL SUMMER CAMPS

Lead Organizer and Instructor, 3D Printing and Robotics summer camp every year since 2018. Twenty attendees ranging from 8th to 11th grade. Activities include a)

industrial plant tour, b) design 3D model 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) program robotic work-cell at virtual factory.

SELECTED AWARDS & HONORS

1. ACA Scholarship Award 2018, awarded by the Epsilon Pi Tau, International Honor Society for Professions in Technology.
2. Best Faculty Award 2012 for Research awarded by College of Science, Engineering and Technology, Jackson State University
3. 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.
4. US Navy Summer Faculty Fellowship Award; Naval Surface Warfare Center, Virginia. (2013-15).
5. US Air Force Summer Faculty Fellowship Award; Tyndall Air Force Base, FL. (2010, 2011).
6. ASME Early Career Technical Conference Presentation Award, (2009, 2010).
7. Biltmore Who's Who Honored in United States of America (July 2009).
8. Research Achievement Award, American Association of Bangladesh Pharmaceutical Scientists. (November 15, 2008).
9. Graduate Student Research Forum Award, University of Arkansas at Little Rock. (2006, 2007).
10. NIEHS Fellowship Award from National Institute of Health. (June 2007).
11. Best Student Research Award, Arkansas Society for Public Health Education. (March 2007).
12. Faculty Inductee, Alpha Epsilon Lambda, Engineering Professional Honor Society. (October 2006).
13. Winner of United States National Collegiate Award, US Achievement Academy. (Sep 2001).
14. Graduate Inductee, Upsilon Pi Epsilon, Computing Professional Honor Society. (May 2001).

LICENSURES & CERTIFICATIONS

☐ Certified Senior Manufacturing Specialist (CSMS), since 2011, Certified by 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, since 2003.

☐ Engineer Intern, 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, 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. Program Evaluator, ATMAE Accreditation Visiting Team (every year since 2016).

2. Exam Commission Member, ATMAE Certified Manufacturing Specialist (every year since 2010).

3. Advisory Board Member, Kilgore College Maintenance and Corrosion Technology Programs, Texas 2017- to date

4. Advisory Council Member, East Texas Advanced Manufacturing Academy, Longview, TX. 2018- To date

5. Chair, Executive Committee of the ASME Mississippi Chapter (2013-2016).

6. Vice Chair, Executive Committee of the ASME Mississippi Chapter (2010-2012).
7. College and Student Relations, Officer of the ASME Mississippi Chapter (2011-2012).
8. 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. (since 2009).
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 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 & 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 – Present). 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: Breanna 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 Manufacturing Division of ATMAE at Annual Conference 2014 and 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.

SCIENTIFIC PUBLICATIONS

Peer Reviewed and Refereed Journals (Selected)

1. 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*, (accepted).

2. Ali, M. (2019). Self-regulated learning pedagogy for teaching applied engineering and technology class. *Journal of Technology, Management and Applied Engineering*, (Jan-March issue).

3. 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.

4. 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.

5. 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.
6. Ali, M. (2014). Engineered aerosol medicine and drug delivery methods for optimal respiratory therapy. *Journal of Respiratory Care*, 59(10), 1608-1610.
7. 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.
8. Ali, M., and Ibrahim, E.A. (2012). Comparative effects of forces acting on swirling annular liquid sheets. *ASME Early Career Technical Journal*, 11(1), 228-235.
9. 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)
10. Ali, M., (2012), Novel method for inhalation control of workplace anthropogenic pollutant particles. *Journal of Particles and Particles Systems Characterization*, 29(4), 311-318.
11. 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.
12. 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).
13. 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.
14. Ali, M. "Application of data mining tools to analyze academic administration information." *Journal of College Student Development*, (under peer-review).
15. 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.
16. 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.

17. Ali, M. (2009/2010). Operating performance comparisons between laser doppler velocimetry and time of flight techniques." *Journal of Management and Engineering Integration*, 2(2), 1-13.
18. Ali, M. (2009). Mechanical tracheobronchial model for human lung inhalation study. *ASME Early Career Technical Journal*, 8(1), 133-139.
19. Ali, M., Mazumder, M. K., Martonen, T. B. (2009). 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.
20. Ali, M., Harnish, D. A., Heimbuch, B. K. et al., Accelerated attenuation of viability of bioaerosols by acquired oxidants. *Journal of Aerosol Science* (in review).
21. 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. Ali, M., Ningning, W., Mary, G. 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.
27. Ali, M., Mark, S. W. (1997). Competitiveness of Bangladeshi ready-made garment. *Journal of Euro-Asian Management*, 3(2), 1-30.

Book Chapter

1. Ali, M. (2009). Pulmonary Drug Delivery. In Handbook of Non-Invasive Drug Delivery Systems, edited by Vitthal Kulkarni, pp. 209-246, Elsevier Inc., Amsterdam, The Netherlands, ISBN: 9780815520252.

Presentations and Peer-reviewed Conference Proceedings (Selected)

1. 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).
2. 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).
3. 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).
4. 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).
5. 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).
6. Ali, M. ATMAE Annual Conference 2016, "Self-regulated learning pedagogy for teaching applied engineering and technology class." Orlando, Florida. (November 2-5, 2016).
7. Davenport, A., Ali, M. Mississippi Academy of Science 80th Annual Conference, "Computational simulation of micro- and nano-particle deposition inside human lung model." Hattiesburg, Mississippi. (February 17-19, 2016).
8. Ali, M., Gutting B.W., and van-Hoek, M.L. 31st Southern Biomedical Engineering Conference, "Multiple
9. path particle dosimetry simulation of respiratory deposition of nanoaerosol in the mouse lung." New Orleans, Louisiana. (April 30–May 3, 2015).
10. 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).

11. Ali, M., Ali, M. Mississippi Academy of Science 78th Annual Conference, "Measurement of particle size and charge distributions of asthma drug particles generated by dry powder inhalers." Hattiesburg, Mississippi. (March 6-7, 2014).

12. 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).

13. 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).

14. Ali, M., Dejene, B., Hubbard, I., Ali, M. Mississippi Academy of Science 77th Annual Conference, "Electrochemical Determination of Aerodynamic Performance of Asthma Drug Particles Generated by Metered Dose Inhalers." Hattiesburg, Mississippi. (February 21-22, 2013).

15. 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).

16. 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).

17. 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).

18. 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).

19. 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).

20. 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).
21. Ali, M., Maddipatla, V. SR IDeA Conference 2011, "Computational investigation of particle settling effects on inhaled submicron bioaerosol deposition in the human lung," Southeast Regional IDeA (SR IDeA), New Orleans, LA. (Sept 22 - 24, 2011).
22. 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).
23. 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).
24. 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).
25. 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).
26. 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).
27. 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).
28. 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).
29. 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).

30. 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).

31. 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).

32. 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).

33. 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).

34. 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).

35. 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).

36. 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).

37. 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).

38. 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).

39. 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).

40. 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).

41. 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), "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).

2. 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).

3. 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).

4. 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).

5. 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).

6. 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).

7. Ali, M. (Conference Travel Grant) JSU Center for University Scholars \$1,250 x 5 = \$6,250, every year since 2010.

8. 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).

9. 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).

10. 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 above three grants are same but each work focused on a particular component of electromechanical deposition mechanisms of submicron and nano particles.

11. 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).

12. 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).

13. 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.

14. Ali, M. (REO Mentor) - Mississippi Functional Genomics Network Summer Research 2008 & 2009 Grant, \$12,000.00.

PENDING & UNFUNDED GRANTS

1. 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).

2. 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).

3. 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)
4. 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)
5. Ali, M. (Principal Investigator, "Increased Enrollment and Retention, and Training for Manufacturing Specialist Certification for African-American Minority Students at Jackson State University, Sponsoed by the U.S. Department of Education, Federal, \$243,000. (Jan 2015 – Dec. 2018). (Unfunded)
6. 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)
7. 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)
8. 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)
9. 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)
10. 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)
11. 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)
12. 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 and Design Technology, Student Advisory Committee. (2007 - 2015).
4. Committee Member, BS and MS Program Assessment Committee. (February 2, 2009 - 2015).
5. Faculty Advisor, Society of Manufacturing Engineers. (September 15, 2007 - 2016).
6. Coordinator, Accreditation by ATMAE (Association of Technology, Management, and Applied Engineering), since 2010.
7. Member, Chair Selection Committee of Technology Department, 2013-2014, JSU.

College Service-----

1. Member, Soules College of Business Faculty Awards & Research Committee (August 2018 – To date).
2. Member, UT Tyler Soules College of Business Awards and Scholarship (August 2017 – To date).
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, SACS Self Study Committee. (December 4, 2008 - 2013).
4. Committee Member, Quality Enhancement Planning (QEP) at JSU, (September 18, 2008 - 2014).

FACULTY TEACHING, RESEARCH & PROFESSIONAL DEVELOPMENTS

1. Workshop, "Advanced Automation, Robotic and Manufacturing Education for 21st Century Workforce Needs." Texas A & M University's Innovative Curriculum for Industrial Automation. Richland College, Dallas, Texas. (July 17, 2018).
2. Training, "FANUC Robots – Handling Tool Operation and Programming." FANUC America Corp. Rochester Hills, Michigan. (May 29 – June 2, 2017).
3. Workshop, "Automatic Identification and Data Capture," University of Memphis, Tennessee. (May 22-27, 2016).
4. Workshop, "ABET Fundamentals of Program Assessment," Dallas, Texas. (October 24, 2015).
5. Training, "Advanced Additive Manufacturing and 3D Scanning," Mississippi Polymer Institute, USM, Hattiesburg, Mississippi. (August 19, 2015).
6. 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)
7. Training, "CAD, CAM, CNC and 3D Additive Manufacturing," TechShop Workforce Development Center, Round Rock-Austin, Texas. (December 9-10, 2014).
8. Workshop, "NSF Major Research Instrumentation Award Proposal Follow-up Workshop," Quality Education for Minorities, Washington, DC. (November 15, 2013).
9. Workshop, "NSF Research Initiation Award Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (April 18 -20, 2013).
10. Continuing Education Program, "ASME Leadership Training Course (LTC)," American Society of Mechanical Engineers. (February 28-March 3, 2013).
11. 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).

12. Workshop, "ATMAE Accreditation Member Training," Association of Technology, Management and Applied Engineering (ATMAE). (Nov 14, 2012).
13. Workshop, "JSU Course Redesign with Blackboard 9," The Center for Distance Learning and Instructional Technology (CDLIT). (July 2, 2012 - August 3, 2012).
14. Continuing Education Program, "ASME Leadership Training Course (LTC)," American Society of Mechanical Engineers. (March 1, 2012 - March 4, 2012).
15. Continuing Education Program, "ASME MS Section National Engineers' Week" Lecture," American Society of Mechanical Engineers. (February 21, 2012).
16. 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).
17. Workshop, "NASA MUREP Proposal Development Workshop," NASA and Marshall Space & Flight Center. (February 23, 2011 - February 24, 2011).
18. Workshop, "NIH Proposal Development Workshop," NIH and the University of Kentucky. (May 13, 2010 - May 19, 2010).
19. Workshop, "NSF Career Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (February 19, 2010 - February 20, 2010).
20. 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
21. 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).
22. Workshop, "MRI Proposal Development Workshop," Quality Education for Minorities, Washington, DC. (October 24, 2008 - October 25, 2008).
23. Workshop, "MARC: Summer Institute In Bioinformatics," NIH (Conducted by Pittsburg Super Computing Center, Carnegie Mellon University). (July 14, 2008 - July 25, 2008).
24. Workshop, "Introducing Science Faculty to Materials Science and Engineering," NSF (Conducted by the University of Alabama, Tuscaloosa). (June 8, 2008 - June 27, 2008).

E. Shirl Donaldson

Assistant Professor
Technology
sdonaldson@uttyler.edu

Degrees

- B.B.A., Business Administration Indiana Wesleyan University 1990
- M.S., Industrial Technology Purdue University 1999
- Ph.D., Technology Purdue University 2012

Work Experience

- Assistant Professor , The University of Texas at Tyler Tyler , Texas 2015-Present
- Clinical Assistant Professor, Purdue University West Lafayette, Indiana 2014-2015
- Post Doctoral Fellow, Purdue University West Lafayette, Indiana 2012-2014

Scholarly Contributions and Creative Productions

- Donaldson, E. S., Marshall, B., & Dixon, T. (2016). Grassroots Mentoring: Graduate Studies and Early-Career Experiences from Three African American in Women in Technology. *Journal of College Student Development*.
- Donaldson, E. S., Williams, H., & Bell, J. (2015). Veterans' transitions to civilian positions and entrepreneurship in STEM fields. *International Journal of Engineering Research and Innovation*.
- Donaldson, E. S., & Scott, R. (2016). Family Businesses and student pathways: A qualitative study focused on the education and career choices of students that were nurtured by entrepreneurial parents. *Journal of Leadership*.
- Donaldson, E. S., & Newton, N. (2016). Is the GRE a barrier to graduate school in technology. *Journal of Technology, Management and Applied Education*.
- Donaldson, E. S. (2016). Building a pipeline of URM faculty in STEM. *Society for Information Technology and Teacher Education*.
- Donaldson, E. S., Scott, R., Croll, R., & Schmidt, E. (2016). Examining sustainability Attitudes and practices among over-the-road logistics companies operating in Indiana. *N/A*.
- Donaldson, E. S., Lucietto, S., & Fazarro, D. (2016). Teaching critical thinking to test takers. *Journal of Scholarship of Teaching and Learning*.

- Donaldson, E. S., & Schmidt, E. (2016, Autumn). *The challenges of instructing international students in supply chain management*. Accepted for ASEE – CIEC Conference.
- Donaldson, E. S., & Favors, R. (2014, September). *The academic impact of majoring in technology on first generation college students*. Proceedings of The 2014 IAJC-IJME International Conference.
- Donaldson, E. S., Kraebber, H., & Hackney, K. (2014, June). *Impact of Ten years of Study Abroad- Ten years to Germany with students*. International Forum of ASEE Annual Conference.
- Donaldson, E. S., & Dixon, T. (2014, June). *Family Businesses: A gift or a burden? A pilot study focused on students that were nurtured by entrepreneurial parents*. Accepted for ASEE National Conference.
- Donaldson, E. S., Marshall, B., & Dixon, T. (2014). *Passing the torch; a mentoring experience of three African American in women in Technology*. ASEE - CIEC Conference.
- Donaldson, E. S., & Duval-Couetil, N. (2013, October). *Student Business Incubators: What do they offer and why?* Midwest Academy of Management Conference. Milwaukee, WI.
- Donaldson, E. S., & Rovira-Figueora, N. (2012, January). *Evaluating the lack of URM graduate students in technology*. Proceedings of the International Educational Conference. Honolulu, HI.
- Donaldson, E. S., & Favors, R. N. (2016). [The Academic Impact of Majoring in Technology for First Generation College Students](#). *He Technology Interface International Journal*.
- Donaldson, E. S., Miller, M. R., Lawrence, H., & Fazarro, D. E. (2016, Autumn). [The unintended consequence resulting from superior preparation of students in technology for industry; Diverting the pipeline away from advanced degrees and academic careers](#). ATMAE Annual Conference. Orlando, Florida: ATMAE.
- Donaldson, E. S., & McPherson, P. B. (2016, November). *The Hidden Value of Tackling the GRE Exam*. ATMAE Annual Conference. Orlando, Florida: ATMAE.
- Donaldson, E. S., & Newton, K. A. (2016, November). *UNDERREPRESENTED MINORITY STUDENTS' PROGRESSION TO GRADUATE SCHOOL IN TECHNOLOGY*. IAJC. Orlando, Florida: IAJC.
- Donaldson, E. S. (2016, November). *Can Lean Six Sigma be implemented in Higher Education while ensuring that all customer needs are being met?* IAJC. Orlando, Florida: IAJC.

- Donaldson, E. S., & Goris, T. (2016, November). *Addressing the challenges of preparing science teachers to introduce engineering to early learners in elementary and middle schools*. IAJC. Orlando, Florida: IAJC.
- Donaldson, E. S., Scott, R. L., & Schmidt, E. K. (2016, March). *Industry perspectives, internships and collaborations*. ASEE - GSW Conference. Fort Worth, Texas: ASEE - GSW.
- Miller, M. R., & Donaldson, E. S. (2016). [Do Certifications Make a Difference with the Recruitment of Graduate Students for Technology-related Programs?](#) In *2016 IAJC-ISAM Joint International Conference*.

Do students think certifications and licensures are important to their future career goals? This paper addresses this issue and by doing so provides the details of how a dying graduate program was revitalized into one that is sought after by students from across the globe. Additional information regarding the selection of curriculum content, enrollment trends, student demographics, and more will be covered as well as a feasible timeline for implementation.

- Lawrence, H., Miller, M. R., Donaldson, S., & Fazarro, D. (2016, November). *The Defined, Measured, Analyzed, and Improved ATMAE Lean Six Sigma Exam: What you need to know for the future*. ATMAE Conference.
- Lawrence, H., Miller, M. R., Donaldson, S., & Fazarro, D. (2016, November). *The Defined, Measured, Analyzed, and Improved ATMAE Lean Six Sigma Exam: What you need to know for the future*. ATMAE Conference.
- Miller, M. R., & Donaldson, E. S. (2016). [Do Certifications Make a Difference with the Recruitment of Graduate Students for Technology-related Programs?](#) In *2016 IAJC-ISAM Joint International Conference*.

http://cd16.iajc.org/wp-content/uploads/2016/10/A_Conference_2016_program_LONG.pdf

- Donaldson, E. S., & Goris, T. (2017). [Introduction of Engineering Concepts to Early Learners in Elementary and Middle Schools: Addressed Challenges for Teachers' Preparation](#). *Technology Interface International Journal*.
- Donaldson, E. S., & McPherson, P. (2017). [Quality for Manufacturing: Integrating a Flipped Classroom Model with a Project Based Approach](#). *Technology Interface International Journal*.
- Donaldson, E. S., McWhorter, R. R., & Fountain, R. (2017). [Utilizing Lean Six Sigma in the treatment of Cardiac Care: Optimizing the response to STEMI events in a rural community](#). *JATMAE*.

- McWhorter, R. R., & Donaldson, E. S. (2017, April). [Documenting online service-learning projects: A collaborative effort to preserve legacies in East Texas](#). *1st Annual Service-Learning Showcase*,. The University of Texas at Tyler.: The University of Texas at Tyler.

This exploratory case study sought to gather the perceptions of current graduate students enrolled in an online HRD course involved in a large-scale regional service-learning project; also, to involve a second graduate course studying project management techniques that applied PM concepts to document the preservation and service-learning the processes by a project management graduate course.

- Donaldson, E. S., McWhorter, R. R., & Fountain, R. (2017). [Utilizing Lean Six Sigma in the treatment of Cardiac Care: Optimizing the response to STEMI events in a rural community](#). *Journal of Technology, Management, and Applied Engineering (JTMAE)*.
- Donaldson, E. S., Miller, M. R., Lawrence, H., & Fazarro, D. E. (2016, Autumn). [The unintended consequence resulting from superior preparation of students in technology for industry; Diverting the pipeline away from advanced degrees and academic careers](#). *ATMAE Annual Conference*. Orlando, Florida: ATMAE.
- Miller, M. R., & Donaldson, E. S. (2016). [Do Certifications Make a Difference with the Recruitment of Graduate Students for Industrial Management Programs?](#) *Technology Interface International Journal*, 17(1), 66–71.
- Miller, M. R., Lawrence, H. R., Donaldson, E. S., & Fazarro, D. E. (2016, November). [The ATMAE Lean Six Sigma Prep Course: Affordable Training Just a Click Away](#). *2016 ATMAE Annual Conference*. Orlando, Florida: ATMAE.

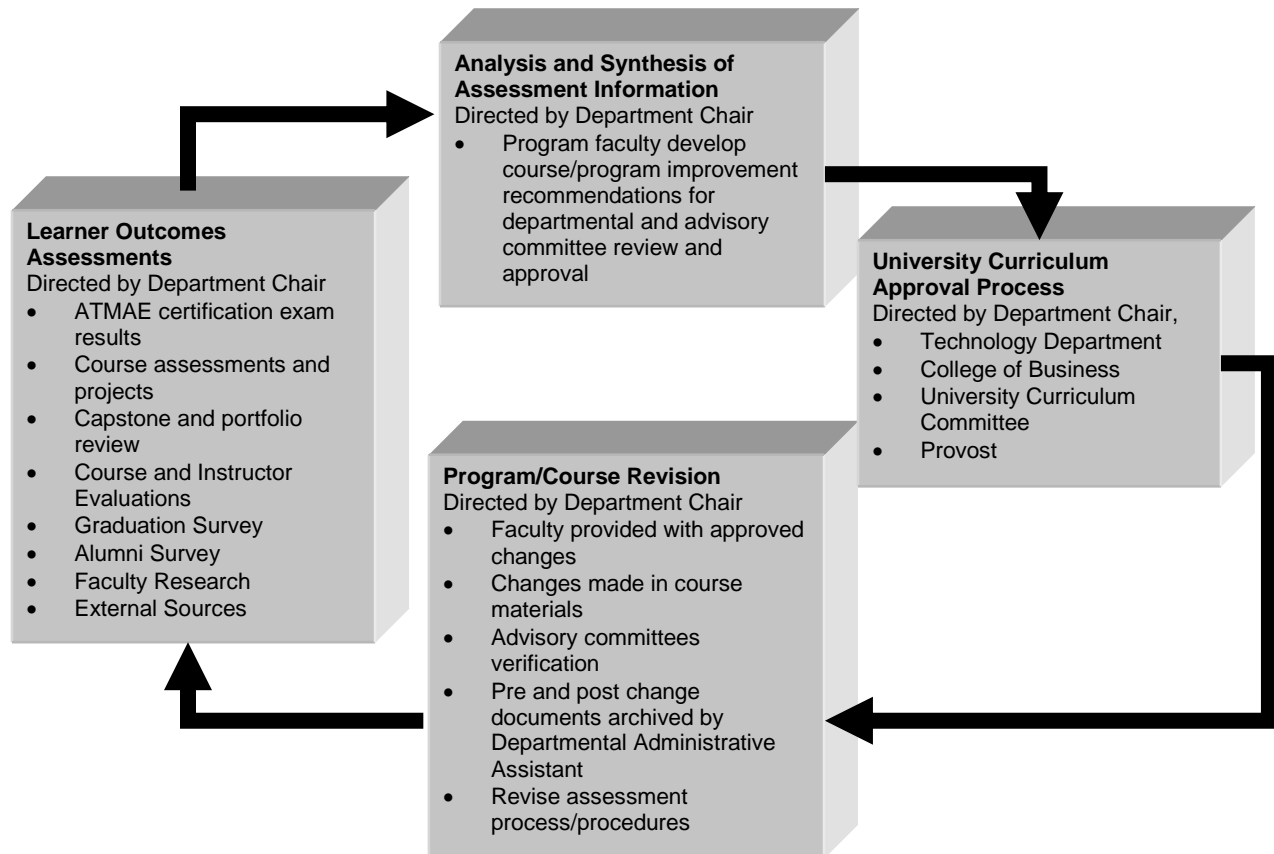
This presentation details the first online training program associated with an ATMAE certification and its impact on improving the pass rate on the ATMAE Lean Six Sigma Exam.

- Miller, M. R., Lawrence, H. R., Donaldson, E. S., & Fazarro, D. E. (2016, November). [The ATMAE Lean Six Sigma Prep Course: Affordable Training Just a Click Away](#). *2016 ATMAE Annual Conference*. Orlando, Florida: ATMAE.

This presentation details the first online training program associated with an ATMAE certification and its impact on improving the pass rate on the ATMAE Lean Six Sigma Exam.

- Lawrence, H., Miller, M. R., Donaldson, S., & Fazarro, D. (2016, November). *The Defined, Measured, Analyzed, and Improved ATMAE Lean Six Sigma Exam: What you need to know for the future*. ATMAE Conference.
- Donaldson, E. S., & Favors, R. N. (2015). [The Academic Impact of Majoring in Technology for First-Generation College Students](#). *TECHNOLOGY INTERFACE INTERNATIONAL JOURNAL*, 16(1), 7–12.
- Donaldson, E. S., & Miller, M. R. (2016). [Do Certifications Make a Difference in the Recruitment of Students in Graduate Programs for Industrial Management Programs?](#) *Technology Interface International Journal*, 17(1), 66 – 71.
- Goris, T., & Donaldson, E. S. (2017). [Introduction of Engineering Concepts to Early Learners in Elementary and Middle Schools: Addressed Challenges for Teachers' Preparation](#). *Technology Interface International Journal*, 17(2), 93 –96.

Appendix F: Course and Program Continuous Improvement Model



Appendix G: Capital Request & Purchases Spreadsheets

CAPITAL REQUESTS BY COURSE FROM 2006-2012				Requests	Purchased
Total				\$235,414.99	\$29,984.77
	Faculty	Course	General Departmental Requests		
1	Miller	TECH 1320	Industrial Materials	\$111,146.05	\$0
2	Lawrence	TECH 1330	Fundamentals of Electronics	\$175.36	\$175.36
3	Lawrence	TECH 2311	Mechanical and Fluid Systems	\$246.50	\$246.50
4	Lawrence	TECH 2323	Intro. to Computer Applications	Software updated by Campus Computing	
5	Lawrence	TECH 3310	Total Quality Management	Now using Microsoft Excel	
6	Miller	TECH 3311	Manufacturing Processes	\$1,482.45	\$1,482.45
7	Fazarro	TECH 3312	Facilities Ops. & Maintenance	No longer offered	N/A
8	Fazarro	TECH 3315	Visual Communication Technology	No longer offered	N/A
9	Fazarro	TECH 3324	Plant Layout & Facilities Planning	Online/ITV	N/A
10	Miller	TECH 3333	Polymer Processing	\$4,772.98	\$4,772.98
11	Fazarro	TECH 3344	Industrial Safety	\$4,709.74	\$0.00
12	Fazarro	TECH 3350	Risk Mgmt for Safety and Health	No longer offered	No safety program
13	Fazarro	TECH 3355	Supply Chain Management	Online course	N/A
14	Sun	TECH 4301	Supervision	Online course	N/A
15	Roberts	TECH 4302	Multiple Technology Systems	\$5,646.96	\$5,646.96
16	Miller	TECH 5317 & 4317	Computer Integrated Mfg.	\$50,450.00	\$15,893.00
17	Roberts	TECH 4320	Job Analysis Techniques	Online course	N/A
18	Miller	TECH 4323	Lean Production	\$56,785	\$0
19	Lawrence	TECH 4327	Electronic Data Communications	Online course	N/A
20	Gilbreath	TECH 4330	Occupational Safety and Health	Online course	N/A
21	Fazarro	TECH 4332	Industrial Environmental Problems	No longer offered	No safety program
22	Fazarro	TECH 4334	Risk Factors in Industrial Hygiene	No longer offered	No safety program
23	Miller	TECH 4343	Adv. Manufacturing Processes	Online/ITV course	N/A
24	Fazarro	TECH 4356	Ergonomics in the Workplace	ITV course	N/A
25	Fazarro	TECH 4358	Environmental Regulations	ITV course	N/A
26	McWhorter	TECH 4372	Capstone Experience	ITV course	N/A
27	McWhorter	TECH 4173	Electronic Portfolio	Online course	N/A

2007-2012 Detailed Capital Equipment Purchases Spreadsheet						303
CAPITAL EQUIPMENT PURCHASED FROM 2007-2011						
	Description	Date	QTY	Cost Each	Vendor	Purchased
		needed			TOTAL =	\$29,984.77
1	Retrofit two broken CNC D&M mills	1/26/2007	2	\$5,449	Forrest Scientific	\$10,898
2	Electricity Learnmate software	10/3/2007	2	\$1,185.50	Intelitek	\$2,373.50
3	Auto Identif. Systms Learnmate Software	9/25/08	1	\$1,273.46	Intelitek	\$1,273.46
4	Machine Vision/Image Proc. Software	5/13/10	2	\$2,000	Intelitek	\$4,000
5	Digital Multimeters	2/7/11	25	\$7	Electronics Express	\$175.36
6	Bench Top Plastics Buffer & Tools	2/11/11	1	\$69.99	Northern Tool	\$84.98
7	10" Compound Miter Saw & Vacuums	2/13/11	1/3	\$119/\$45	Sears	\$256
8	10" Tabletop Drill Press & Drills	2/20/11	2	\$109	Lowes	\$279.93
9	4" x 6" Combination Bench Top Sander	3/1/11	1	\$99	Sears	\$99
10	Router, Router Table & Bits	3/3/11	1	\$160.99	Sears	\$160.99
11	10" Tabletop Drill Presses	3/28/11	2	\$121.12	Lowes	\$242.24
12	Mini Spray Booth	6/24/11	1	\$458.31	Buzz-Line	\$458.31
13	Retrofit broken robot ER- 4u	7/12/11	1	\$4,995	Intelitek	\$4,995
14	Rotational Molding Oven & Molds	7/25/11	1	\$2,119	IASCO	\$2,119
15	¾ ounce Injection Molding Machine	8/5/11	1	\$2,569	IASCO	\$2,569

The previous list of equipment was during the department's last accreditation cycle when the now two separate HRD and Technology Departments were one department. At the time, the Technology faculty would request funds and maybe they would receive some funding for equipment and materials from the HRD Department Head. As of 2015, when the Technology Department became its own separate department again, the Technology faculty would not ask for funding. They were merely given the funding that they should have received from state formula funding and other sources. Separating the two departments was the best thing that ever happened and allowed the department to grow and improve its facilities and programs. As you can see, the funding allocation went from around \$30,000 to over \$200,000 which equated to a seven fold increase.

CAPITAL EQUIPMENT PURCHASED FROM 2015-2019			
Date	Description	Vendor	Purchased
		TOTAL =	\$ 216,466.76
2/11/2015	Realcareer guide weld	Reality Works, Inc	\$ 4,973.50
3/31/2015	D2000 Hydraulic Training System	Power Technology, Inc	\$ 4,973.50

4/14/2015	Mojo 3D Printer Print Pack	Teaching Systems, Inc.	\$ 6,799.00
4/23/2015	Lab Supplies for Tech 4317	Technical Laboratory Systems	\$ 6,000.00
3/29/2016	Lab Supplies for Tech 4317	Technical Laboratory Systems	\$ 6,000.00
4/8/2016	Injection Molding Mach, Blow Molding Mach., Bottle & Cap Mold	INDUSTRIAL ARTS SUPPLY	\$ 4,422.50
11/21/2016	Robot for LUC	FANUC	\$ 64,145.00
5/11/2017	CERT Option 1.6.15 Additional Touch Screen iPendant	Technical Laboratory System	\$ 4,650.00
	CERT Option 1.6.16 1.5M iPendant PC Conversion Kit with power supply	Technical Laboratory System	\$ 495.00
	CERT Option 1.6.20 Roboguide Renewal	Technical Laboratory System	\$ 100.00
8/25/2017	CNC Motion 30 Seat License	Teaching System, INC	\$ 1,995.00
	License Key for RoboCell ACL S	Teaching System, INC	\$ 1,995.00
	SpectraCAM Milling, 30 Seat Li	Teaching System, INC	\$ 1,995.00
4/7/2017	Roboguide Renewal-58	Technical Laboratory System	\$ 5,800.00
7/12/2017	Fanuc - OiF Simulator-2	Technical Laboratory System	\$ 5,960.00
4/19/2018	FANUC elearning Renewal-46	Technical Laboratory System	\$ 4,600.00
8/4/2018	907614 Millermatic 211 (w/MVP)-13	Sobel Welders Supply C	\$ 14,040.00
8/21/2018	Scotchman Cold Saw	Texas Southwest Machinery INC	\$ 5,665.50

	#433000 - 12" Brake Complete	Texas Southwest Machinery	\$ 1,595.00
	#440000 - Rectangle Notcher (2 -	Texas Southwest Machinery	\$ 925.00
	#024700/024720 – Weld Coupon B	Texas Southwest Machinery	\$ 1,795.00
	Scotchman Ironworker Porta-Fab	Texas Southwest Machinery	\$ 5,931.00
	#002507 - Deluxe #20 Punch & D	Texas Southwest Machinery	\$ 1,095.00
8/23/2018	Miller 907710001 Maxstar 161 S - 10qty	Sobol Welders Supply Co.	\$ 14,500.00
3/31/2018	D2000 Hydraulic Training System -2	Texas Southwest Machinery	\$ 4,863.60
11/19/2018	Hybrid table saw with riving knife, polar bear series 10"	PAYPAL GRIZZLYINDU	\$ 1,110.00
	industrial dust collection straight pipe	PAYPAL GRIZZLYINDU	\$ 41.95
	Live center- MT2 with taper bearings- 4	PAYPAL GRIZZLYINDU	\$ 189.76
	6"x26" Vertical Mill with LED worklight	PAYPAL GRIZZLYINDU	\$ 2,949.00
	4"x20" Hose	PAYPAL GRIZZLYINDU	\$ 33.95
	HandWheel w/ handle plastic V2.07.08 -2	PAYPAL GRIZZLYINDU	\$ 61.50
12/13/2019	PLC Trainer, MicroLogix 1100 with Case- 3	T.S Enterprise Associates Inc.	\$ 9,093.00
	RS Logix Micro 587552 3245-A0 3	T.S Enterprise Associates Inc.	\$ 393.00
	Traffic Light Application 582532 8075-	T.S Enterprise Associates Inc.	\$ 1,161.00
	Electro-Pneumatic Application 588682 8075	T.S Enterprise Associates Inc.	\$ 3,111.00
	Signal Tower 587869 5924-C0	T.S Enterprise Associates Inc.	\$ 879.00
	PLC Trainer, MicroLogix 1100 with Case 588462 3240-D0-3	T.S Enterprise Associates Inc.	\$ 9,093.00
	RS Logix Micro 587552 3245-A0 -3	T.S Enterprise Associates Inc.	\$ 393.00

	Bottling Process 588684 8075-70	T.S Enterprise Associates Inc.	\$ 5,122.00
	Electro-Mechanical System (DC Motor)	T.S Enterprise Associates Inc.	\$ 3,377.00
	Electro-Mechanical System (Stepper Motor)	T.S Enterprise Associates Inc.	\$ 4,145.00

Appendix H: Advisory Committee By-Laws & Meeting Minutes

**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: *Our programs at The University of Texas at Tyler provide 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 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.

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.

Department of Technology Advisory Board Meeting Minutes

Soules College of Business, Room 350.55

Friday, November 30, 2018 at 11 a.m.

1. Introductions:

Mark Miller	Department of Technology
Heshium Lawrence	Department of Technology
Randell Farley	Trane
John Connolly II	Caterpillar, Inc.
Eric Ayanegui	Cintas
Luis Ibarra	Komatsu
Eric Boettcher	Tyler Junior College
Mohammed Ali	Department of Technology
Michael Rostis	John Soules Food
Dominick Fazarro	Department of Technology
Scott Reily	Brookshire Grocery Company
Dane Clark	Cardinal Health
Kelly Kaemmerling	Kilgore College
Roger Lirely	Interim Dean
Hannah Isleem	Industrial Technology Student Representative
Raejean Griffin	Industrial Management Student Representative
Brandy Smith	Admin Assistant II

2. Review of previous year's minutes

Dr. Heshium Lawrence motioned to change date to 2017. Dane Clark seconded.

3. Overview of undergraduate degree program changes

Dr. Miller mentioned how they added the Warehouse course that was discussed previously to the graduate Industrial Management program as part of the Supply Chain Management certification.

Dr. Miller added that a chemistry class is now required, he believes it will help with preparing students for the Industrial materials course as noted by the representatives from STEMCO and Kluber from last year's advisory committee meeting.

With the addition of the new building, the department is now offering a welding lab as part of the TECH 4343 Advanced Manufacturing Processes course.

Dr. Miller asked industry leaders for feedback regarding the current course offering, especially regarding gaps that might be filled making UT Tyler graduates more appealing.

Michael Rostis- wanted to know the statistics of how we keep up with the students after graduation.

Eric Ayanegui- suggested we get them an Alumni card, which would give the graduates discounts to different things on campus, and it allows the department to keep up with the student once they have graduated. It was what they were doing at his former alma mater.

Eric Ayanegui – Suggested more projects be mandatory with a company. 1- 3 companies can sponsor or partner so students can do a project with their company – Grad Program service project with company or undergraduate capstone.

Eric Ayanegui – Suggested we offer a preventive maintenance course for graduates working in a company with more equipment.

Scott Reily – Suggested business basics are needed for industry leaders and managers.

Michael Rostis- Suggested more management courses that focus on building soft skills.

Eric Ayanegui- Seconded the idea of soft skills.

4. Discuss changes for ATMAE accreditation of the graduate program.

ATMAE is coming in spring to view the new building and labs as part of their accreditation site visit.

5. Seek input for changes to the program.

Scott Reily- suggested we focus more on the business background, more accounting.

Randell Farley- suggested maybe having more course or certifications that focus on safety, construction, six sigma, and becoming an ISO auditor.

Scott Reily- suggested changing the name of the program to Applied Engineering; he thinks the program applies more to Engineering.

Randell Farley- suggested PhD in Technology.

6. Review of competencies for the Industrial Technology program.

Dr. Miller – Reviewed the survey that he wanted the advisory board members to fill out so we could improve the program to suit their needs.

7. Review of competencies for the Industrial Management program.

Dr. Miller – Reviewed the survey that he wanted the advisory board members to fill out so we could improve the program to suit their needs. Also noted that it was important for ATMAE accreditation.

8. Announce enrollment changes and possible search status.

Most of the Industrial Management students come from other disciplines. Enrollment was down because there are new guidelines to be met before enrolling in the program and less international students are entering the country for an education. Most of the students came from India and are now going to Australia and Canada because of their less stringent immigration policies.

9. Status on 2+2 articulation agreements and input from committee members.

2 Plus 2 agreements with Kilgore and others. Program is growing.

10. Discuss Longview Center affiliation and accomplishments.

Dr. Ali - Longview University Center – Added more courses since last semester. 90% of students are working full time/part time in the industry. They like the hands on.

Enrollment is growing.

East Texas Academy dual credit students enrollment is growing, 40 are enrolled in each class now.

Luis Ibarra- Added Komatsu is a big sponsor of the East TX Academy; he said they have to turn students away because there isn't enough space in the Old Brew Honda dealership.

11. Continually review and validate content for both programs – survey (rate and rank homework) – Solicit advisory board input to better prepare graduates to serve industry.

Eric Ayanegui- Stated the curriculum is sound the way it is now and that if you want to fine tune, so be it.

12. Plant tours, sponsorship of student organization events, internships, student projects, donations of used equipment, even new equipment.

Dr. Miller- If anyone needs interns, the companies can send us a flyer and we can send it to the students.

Dr. Fazarro- Needs a company to volunteer for a plant tour.

Randell Farley offered a tour of Trane.

Luis Ibarra offered a tour of Komatsu.

Dane Clark offered a tour of Cardinal Health.

Michael Rostis offered a tour of JS Food.

Dane Clark- He mentioned that he is looking for an intern.

13. Comments from advisory board on any agenda items, issues, etc.

Dr. Miller – Noted that as the grad school students must complete industrial projects and it would be a great opportunity for plants to have a project that needs attention, but doesn't have the personnel to accomplish it. Better to hire people from the area. UT Tyler is a good resource, better to hire locals. Finding a way to keep in touch with Gradates, to keep them local.

14. Discuss any new business.

PhD program would be beneficial to the university; the rep from Trane said there is at least 5 employees interested.
No other new business was discussed.

15. Adjournment – 1:30 p.m.

The University of Texas at Tyler
Department of Technology
Industrial Advisory Board Meeting Notes
Thursday, December 14, 2017 at 7:00 am

1. Introductions:

Dwight Evans	Kluber
Tom Mullins	Tyler Chamber Of Commerce
Joe Bumgarner	Eastman Chemical
Marco Anaya	Stemco
Mark Miller	Department of Technology
James Lumpkin	College of Business and Technology
Heshium Lawrence	Department of Technology
Dominick Fazarro	Department of Technology
Mohammed Ali	Department of Technology
Peggye Mahfood	Department of Technology

2. Review of previous year's minutes

Dr. Heshium Lawrence motioned to approve old minutes. Dr. Dominick Fazarro seconded.

3. Overview of undergraduate degree program changes

Dr. Lumpkin - New facility will have enough labs and space for the equipment needed. Could be a good opportunity for collaboration with the industrial community.

Dr. Miller asked industry leaders for feedback regarding the current course offering, especially regarding gaps that might be filled making UT Tyler graduates more appealing.

Scott Riley (BGC) previously suggested more courses focused on distribution.

Dr. Fazarro asked about the need for a warehouse course.

Marco Anaya agreed that more warehousing courses would be helpful.

Incorporating flow, layout, and technology integration would be helpful.

Joe Bumgarner – agreed and added that Receiving, RFID, and Supply Chain could be included.

Dr. Lumpkin shared that he has received requests to offer a supply chain emphasis in the MBA .

Joe Bumgarner added that more universities are offering degrees in Supply Chain Management.

Marco Anaya suggested that there be an MBA with procurement emphasis.

Dr. Miller - Majority of Tech students are 18 – 21.

All agreed that a supply chain emphasis should be implemented.

Marco Anaya - suggested incorporating a tool design course.

Joe Bumgarner – suggested a polymer class – could this expand to include chemicals, etc. 70% of the chemical industry is in the US. Would a chemistry class become a requirement?

Would be good for industry to know that our graduates are comfortable with all aspects of their product.

Discussed the finance component – all agreed that Principles of Finance would be preferable of to Personal Finance.

Industry would like to see more students that are taking courses that offer more bang for the buck – coming away with a broader base of understanding.

Dr. Lumpkin – could we create a course like Accounting for technology – what would the list of topics look like?

4. Discuss changes for ATMAE accreditation of the graduate program.

Research component is required for ATMAE accreditation.

5. Seek input for changes to the program.

6. Review of competencies for the Industrial Technology program.

Dr. Lumpkin – Minor in business for the undergrad – what would industry like to see that might be a better fit along with an Accounting/Finance course. HRD 4372? Tech Writing would be a good offering.

Communication course is important.

Joe Bumgarner - interviewing skills is important for TECH students.

7. Review of competencies for the Industrial Management program.

Nine people took the Project Management Certification Exams and seven passed the PMI test. Marco Anaya said that it was important for all students to have a strong knowledge of project management. About 40% of students take the Lean Six Sigma test twice. First time taken, students get feedback. Industrial Management is a broad degree. If students take one more course, they can leave with 4 certifications.

8. Announce enrollment changes and possible search status.

Most of the Industrial Management students come from other disciplines.

9. Status on 2+2 articulation agreements and input from committee members.

2 Plus 2 agreements with Kilgore and others. Program is growing.

10. Discuss Longview Center affiliation and accomplishments.

Dr. Ali - Longview University Center – growing will need more room going forward.

11. Continually review and validate content for both programs – survey (rate and rank homework) – Solicit advisory board input to better prepare graduates to serve industry

12. Plant tours, sponsorship of student organization events, internships, student projects, donations of used equipment, even new equipment.

Joe Bumgarner suggested that a Needs List be produced and shared with industry.

13. Comments from advisory board on any agenda items, issues, etc.

At the grad school students must complete industrial projects and could be a great opportunity for plants to have a project that needs attention but doesn't have the capacity to accomplish it. Better to hire people from the area. UT Tyler is a good resource, better to hire locals.

Dr. Lumpkin – Would like to see more support/involvement with industry (labs, supplies, equipment, etc.) There is a lot of manufacturing in Smith and Gregg County – as new equipment comes in, UT Tyler students need to be able to learn on similar or equal type of equipment.

14. Discuss any new business.

Dr. Miller – will work on curriculum proposal to submit in January.

15. Adjournment – 8:30 am

The University of Texas at Tyler
Department of Technology
Industrial Advisory Board Meeting Minutes
 at
The Longview University Center
December 14, 2016, Noon – 2:00 pm

Present: Dr. Mark Miller, Dr. James Lumpkin, Jake Garland, Dr. Van Patterson, Dr. Dominick Fazarro, Dr. Shirl Donaldson, John Hopkins, Dan Flournoy, Dr. Muhammad Ali, Dr. Heshium Lawrence, and Neely Smith

Minutes taken by Dr. Heshium Lawrence

- Motion to prove the previous minutes from last year by Dr. Lawrence seconded by Dr. Fazarro.
- Dr. Miller noted and upward trend in enrollment and a large increase at the LUC. Over 200.
 - Around 90 in graduate program (33 total students in Longview University Center)
- Dr. Miller explained the reason for offering the Industrial Technology program at Longview due to the results of a Longview Economic Development Corporation (LEDco) survey to see if there was a need; survey was sent to 250 industries, 70% response rate, 80% will hire Industrial Tech majors.
- Dr. Lumpkin commented that there was a rule change that affected our international students, resulting in a drop of international students.
- Dr. Patterson commented on the Roadmap to Success brochure- Articulation agreements with Kilgore College, TSTC, and North East Community College (Industrial tech building)
- A 2+2 articulation agreement was approved with TSTC is good for any TSTC campus offering those programs. Dr. Patterson noted how the Chancellor and UT Tyler President signed the agreements.
- Dr. Lumpkin also provided some additional comments about the process and thanked Dr. Miller.
- Neely approved of the 2+2 adding that they work with the Industrial Maintenance Technology program at TSTC over the past year.
- Course inventory was discussed and we discussed about reactivating some older courses not currently being taught; Industrial Distribution program courses were discussed.
- Dr. Miller noted that 43% of our students are now starting out as freshmen.
- Applied research methods class was discussed and approved by the Undergraduate Curriculum Council.
- Course description for project management was changed due to its vagueness.
- Undergraduate concentration emphasis course for Supply Chain Management:
 - Supply Chain Mgmt., Industrial Distribution, Purchasing and Distribution and Manufacturing, Warehousing

- Dr. Miller is trying to find a niche for our program is the premise for this concentration area.
- Project management is at the graduate level and there was a discussion about creating a course at the undergraduate level. Neely and others thought that was an excellent idea since their production supervisors are always working on projects and have difficulty organizing them.
- Looked at graduate level on page 5 (Research core, Professional core, Technical core)
 - Certifications offered at the graduate level: LSSBB, Supply Chain, Project Management, FANUC
- Dr. Fazarro asked a question concerning an end of the year project with industry at the graduate level
- Neely asked about work experience for Industrial Technology students when they graduate and Dr. Miller responded that the more internships we can obtain for them, the better.
- Dr. Donaldson also noted that the undergraduate students had to take a senior design or capstone experience course.
- Neely would rather hire an undergraduate with industrial experience.
- Dr. Ali pointed out the difference between the thesis or non-thesis routes for the master's program.
- HRD shares courses with the graduate Industrial Maintenance program so courses are often full and difficult to enroll in so the degree plan now allows students to pick two out of the four research courses available. Furthermore, the research component was added to an internship course to promote more internships for students.
- Survey was sent out to rate competencies as either needed or not to the advisory board
 - The website provides the syllabi for each of the courses in case the advisory board wants a clear idea of the courses' content.
- Page 14 was looked at the layout of a possible new Technology building if enrollment continues to increase at the LUC.
- Dr. Fazarro discussed the ATMAE certifications and their advantages at the meeting.
- The Board discussed a date for the next meeting (Late March/early April-possible breakfast meeting).
- The group then toured the Longview University Center campus.
- Adjoined the meeting at 2:02 pm.

The University of Texas at Tyler

Department of Technology Advisory Committee Meeting

Friday, December 4, 2015- 11:30 A.M. – 1 P.M.

Coyote Sam's Restaurant: Banquet Room

- **Introductions-** Dr. Miller called the meeting to order at 11:09 A.M., by welcoming and expressing appreciation to those in attendance.
 - Facilitator- Dr. Mark Miller, Prof. & Chair of Technology Department - UT Tyler
 - Minutes Taker- Drs. Heshium Lawrence and Mark Miller- UT Tyler
 - Dr. James Lumpkin, Dean of the College and Business of Technology- UT Tyler
 - Dr. Shirl Donaldson, Assist. Prof., Industrial Technology & Industrial Management- UT Tyler
 - Dr. Heshium Lawrence, Assist. Prof., Industrial Technology & Industrial Management- UT Tyler
 - Scott Riley, Sr. VP of Logistics at Brookshire Grocery Company
 - Peter Kuczkowski, Process Improvement Leader -Trane
 - Daniel Lee, Production Manager-Trane
 - John Hood, Argon Medical Devices, Inc.
 - Dr. Van Patterson, Director of the Longview University Center
 - Joe Bumgarner, Eastman Chemical

Regrets:

- Samuel Kaemmerling, Chair of the Industrial Maintenance program- Kilgore College Longview
- Kenya Ray, Instructor Corrosion Technology -Kilgore College
- Tim Gill, Chair Comp. Info. Systems & Eng. Tech. at Tyler Junior College
- Wayne Dillon, Division Director of Design, Manufacturing & Transportation- TSTC-Marshall
- Dr. Dominick Fazarro, Associate Professor of Industrial Technology & Industrial Management- UT Tyler

I. Review Previous Year's Meeting Minutes

- At 11:30 a.m. Dr. Miller distributed last year's minutes and called a vote to approve the meeting minutes from the previous meeting on December 15, 2014; Scott Riley motioned to approve the minutes.
- Motion was seconded by Dr. Heshium Lawrence.

- Motion carried unanimously by the Technology Advisory Board Members.

II. Overview of Undergraduate Industrial Technology Program Changes

- It was noted that no new undergraduate courses were created, instead three courses were reactivated which only required the dean of the college's signature (TECH 4305 Industrial Distribution, TECH 4316 Time and Motion Study, and TECH 4348 Warehousing). This would eventually allow students to earn an emphasis in Supply Chain Management with the following courses once enough faculty were hired:

TECH 3355 Supply Chain Management

TECH 4305 Industrial Distribution

TECH 4348 Warehousing

TECH 4325 Purchasing in Distribution and Manufacturing

III. Overview of Graduate Industrial Management Program Changes for ATMAE Accreditation

- Dr. Miller noted that a new course (TECH 5302 Applied Research Methods) would be added to the curriculum to improve our research component of the degree plan. In addition, TECH 5307 Measurement & Evaluation in Industrial Ed. and TECH 5355 Technological Innovation were reactivated for later use as the program expands and hires new faculty. Furthermore, TECH 5306 Advanced Logistics Management was changed to just Logistics Management and TECH 5329 Trends in Industry and TECH 5371 Internship in Technology had the word "research" added to the beginning of the title to expand the research component required by ATMAE accreditation.

IV. Seek Input for Changes to the Programs

- Mr. Hood noted that he was on the school board for Rusk and that it would be great if the Industrial Technology program could offer dual credit courses for the high schools. He noted that it had generated a lot of interest with engineering offerings and that the school board was really interested in establishing those connections with area universities.
- Mr. Bumgarner mentioned that instead of hiring a lot of clerks, Eastman Chemical was hiring baccalaureate graduates because of all there additional educational background. He noted that they were happy with the Industrial Technology majors and had hired several of them. Dr. Miller noted that he had spoken with Pete Lamothe (Learning Services Manager) and that Industrial Technology majors were now listed as an

official degree they accepted and would require much less of their in-house training.

V. Review of Competencies for the Industrial Technology Program

- Dr. Miller reviewed the results of the competency survey that advisory board members completed. Mr. Riley noted that just because a competency was rated lower than others that didn't necessarily mean that it wasn't important. He also noted that he didn't feel that any of the competencies should be omitted. Mr. Riley also noted that SAP familiarity was important for a graduate of the program. Dr. Lumpkin noted that if students took enough business courses, than they could earn an SAP certification. Mr. Riley noted that the SAP module in purchasing was important.

VI. Review of Competencies for the Industrial Management Program

- Another survey was distributed to rate the competencies of the graduate program and none of the advisory board members felt that anything should be changed except that Mr. Kuczkowski noted that students should be familiar with ERP systems.

VII. Announce Enrollment Changes and Search Status.

- Dr. Miller noted that there were now 105 officially enrolled undergraduate Industrial Technology majors and 151 actively enrolled in the last year. That was an increase of only three from the previous year, however, the size of the facilities and number of faculty limited the growth of the program. Plans were to start the program at the Longview University Center as well with a new laboratory equipped similar to the Tyler campus.
- The graduate program increased by almost 20 students from 79 to 98. It was also noted that most of the majors come from engineering, computer science, and business backgrounds and that very few of the Industrial Technology majors come back for an additional degree.
- Because of the large increases in enrollment and students who want to earn minors and certifications, the department asked for at least one new faculty member for the 2016 Fall Semester. Dr. Shirl Donaldson was hired the previous year to assist with the growth of the programs.

VIII. Discuss Longview Center Affiliation

- Dr. Van Patterson explained the decline in enrollment over the years due to the offering of online coursework. In addition, he noted that the nursing program has really seen a lot of growth since it is a “hands-on” type program where most of the coursework cannot be offered online. He noted that another type of hands-on program would also probably flourish there and referred to a LEDCO survey that queried over 250 companies as to the importance of offering an Industrial Technology program in the area. There was a favorable response by 80% of those surveyed.
- Dr. Patterson also noted that a new Industrial Technology laboratory was being set up at the Longview University Center and the Provost welcomed the addition of a new faculty member permanently housed there. He also noted that they were paying for advertising, sent out many press releases, created a “Road Map to Success” brochure with the partnership of Kilgore College. He was also working with NTCC and TSTC.
- Dr. Miller noted that he was visiting Longview on a weekly basis and working with Dr. Patterson on getting the word out to industry, schools, and the public in general.

IX. Discussion of Any New Business

- Dr. Miller noted that the new Texas Productivity Center, previously referred to as the East Texas Lean Consortium, now had Mr. Ron Gewin offering Lean Champion training for them at the university or directly at plant locations pending the number of participants.
- The meeting was adjourned at 1:05 pm.

The University of Texas at Tyler
 Department of Technology Advisory Committee Meeting
 Friday, November 14, 2014- 11:30 A.M. – 1 P.M.
 Coyote Sam's Restaurant: Banquet Room

- **Introductions-** Dr. Miller called the meeting to order at 11:15 A.M., by welcoming and expressing appreciation to those in attendance.
 - Facilitator- Dr. Mark Miller, Prof. & Coordinator of Technology Department - UT Tyler
 - Minutes Taker- LaTonya Morgan, Student Worker HRD and Tech.- UT Tyler
 - Dr. James Lumpkin, Dean of the College and Business of Technology- UT Tyler
 - Dr. Heshium Lawrence, Assist. Prof., Industrial Technology & Industrial Management- UT Tyler
 - Dr. Dominick Fazarro, Associate Professor of Industrial Technology & Industrial Management- UT Tyler
 - Samuel Kaemmerling, Chair of the Industrial Maintenance program- Kilgore College Longview
 - Kenya Ray, Instructor Corrosion Technology -Kilgore College
 - Scott Riley, Sr. VP of Logistics at Brookshire Grocery Company
 - Tim Gill, Chair Comp. Info. Systems & Eng. Tech. at Tyler Junior College
 - Wayne Dillon, Division Director of Design, Manufacturing & Transportation- TSTC-Marshall
 - Peter Kuczkowski, Process Improvement Leader -Trane
 - Daniel Lee, Production Manager-Trane
 - Lauren McGrew, Eastman Chemical
 - Joe Bumgarner, Eastman Chemical

Regrets:

- John Hood, Argon Medical Devices, Inc.
- Gulliarmo Garcia, Lean Sigma Master Black Belt-City of Tyler

V. Review Previous Years Meeting Minutes

- At 11:30 a.m. Dr. Miller distributed last year's minutes and called a vote to approve the meeting minutes from the previous meeting on December 6, 2013; Tim Gill motioned to approve the minutes.
- Motion was seconded by Dr. Heshium Lawrence.
- Motion carried unanimously by the Technology Advisory Board Members.

VI. Overview of Undergraduate Industrial Technology program changes

- Meeting Focus: Building working relationships with area colleges and industry leaders focused on ensuring their programs offer transferrable knowledge, competencies, and practical training that allow students to enter the workforce as valuable assets.
- **2015 B.S. Industrial Technology Minor in Business Administration Degree Plan:**
 - New Course: TECH 2319 Programmable Logic Controllers? Industrial committee members praised the idea of adding the course to the curriculum.
 - Now require an existing course TECH 1303 Engineering Graphics as part of the degree plan as it had been several years prior.

- **Returned to Degree Plan:** TECH 2311 Electronic and Fluid Systems and TECH 1320 Industrial Materials were reinstated last year.
- The department is always working on building working relationships with area colleges and industry leaders focused on ensuring their programs offer transferrable knowledge, competencies and practical training that allows students to enter the workforce as valuable assets. The Industrial Technology (Applied Engineering) Bachelor of Science brochure was distributed to board members for review.

VII. Discuss ATMAE Accreditation for the Graduate Program

- Dr. Miller noted that each program had to be accredited separately so the graduate program was seeking ATMAE accreditation for 2018 and required feedback regarding what competencies were necessary for the program's majors.
- The ATMAE Accreditation is part of UT Tyler's initiative to inspiring excellence following the spring 2012 ATMAE site visit.

VIII. Discuss Industrial Management graduate degree program changes-four certifications, research component. Distribute Brochures for Industrial Management graduate program.

- Dr. Miller noted that the Lean Six Sigma Black Belt (LSSBB) Certification for the graduate program was going well and was thought to help increase enrollment in the Industrial Management program. He noted that it was not meant to replace any existing LSSBB certification programs that may be offered companywide; however, it would save companies a lot of time training new hires and allow them to be more productive much sooner.
- The Supply Chain Management certification was just initiated this year and already had a dozen people enrolled. It was a culmination of efforts
- **FANUC- Robotics Certification**
 1. Robot safety & System components, Power up and jogging robots, Creating frames for programs and Creating and writing a program
Motion instruction & copying and editing programs, and Program Instructions
I/O programming instructions

V. Review of Competencies for the Industrial Technology Program.

- Dr. Miller asked the industrial advisory board members to fill out a survey that rated competencies of the program with a Likert-type scale from 1-4 (with four being most important and a one not required). He noted that this was for ATMAE accreditation so it could show that the program was providing majors with the proper knowledge and skills that would make them competent at the jobs they were trying to obtain.

IX. Review of Competencies for the industrial Management.

- Another survey was distributed to rate the competencies of the graduate program, however, this was done by course because graduate students have a variety of courses to select from. Course descriptions were given under each course.

X. Announce enrollment changes and search status.

- In the 2012 Spring Semester the enrollment in the Industrial Technology program was 54 students and 26 for the graduate Industrial Management program. This 2014 Fall Semester the enrollment jumped to 103 in the Industrial Technology program and 98 in the Industrial Management program.

- Because of the large increases in enrollment and students who want to earn minors and certifications, the department asked for at least one new faculty member for the 2015 Fall Semester.

XI. Status on 2+2 articulation agreement and input from committee members

- The Industrial Technology program has 2+2 articulation agreements with Tyler Junior College, Texas State Technical College, Kilgore College, Trinity Valley Community College, and Panola. The addition of required lower division course work should help strengthen those ties.
- Mr. Tim Gill noted that they could reinstate their pre-Industrial Technology program to assist with the 2+2 program.
- Dr. Miller noted that they welcomed input regarding course work that was transferrable with the 2 year programs.

XII. Discuss Longview Center Affiliation

- The University of Texas at Tyler makes its outstanding academic programs conveniently available to the Longview area residents through the Longview University Center. Students experience cost-saving convenience, greater flexibility in scheduling their classes, and reduced travel expenses and commuting time to Tyler, all while receiving a degree from UT Tyler either Face to Face, Online, or through Hybrid Courses.
- The goal was to offer a standalone Industrial Technology program at Longview. The only way to do this was to require the lower division course work to be taken at Kilgore College – Longview or Kilgore College.
- UT Tyler wanted to partner with Kilgore to make it happen and most of the course work was available in the Industrial Maintenance Technology program.

XIII. Review and validate content for both program- surveys (rate and rank homework)

- Solicit advisory board member input to better prepare graduates to serve you. How well do think our program is working. Competency level of students entering the workforce and can they hit the ground running.
Kenya Ray & Kelly Kaemmerling: Kilgore College:
 - They would like to see a Business Directed Curriculum that allows students to take lower level coursework, earn an Associate's Degree, which would fulfill core and lower level course requirements for students seeking a B.S. in Industrial Technology.
 - At this point, the built-in certifications would be a major selling point.Dr. Lumpkin- CBT Dean UT Tyler-responds and clarifies program intent.
 - Assured those representing learning institutions and local business of plans create a School of Technology at UT Tyler's and later combines the Department of Computer Science.
 - The Productivity Center is UT Tyler and The East Texas Lean Consortium collaborative effort to offer the region with information, resources, and training. (Coordinating Student Internships and use of Ornelas Activity Centers)
 - He will make sure the board received pamphlets that reflect current and upcoming changes.Scott Riley: Brookshire's
 - Approves of the Productivity Center it will provide an opportunity to join efforts.
 - Do course numbers correspond among colleges?

Tim Gill- Tyler Junior College

- Specific degrees (Electronic, HVAC.) do not transfer.
- Willing to revisit the possibility of transferring lower level Industrial Technology courses.
- Expressed a need to communicate in detail to students the benefits of our joined effort.

Wayne Dillon, TSTC

Interested in partnering with UT Tyler to make the FANUC Certification available to their students.

XIV. Plant tours sponsorship of student organizations, events internships, student.

- 6.3.10 Industrial Experience: Each program of study shall include appropriate industrial experiences such as industrial tours, work-study options/cooperative education, and/or senior seminars focusing on problem-solving activities related to industry. These experiences shall be designed to provide an understanding of the industrial environment and what industry expects of students upon employment.
 1. Student work and assignments that verify the inclusion of industrial experiences
 2. Students in the program have opportunities to attend field trips to local and regional business and manufacturing firms.

(Faculty, HRD and Technology UT Tyler, 2012, p. 42)

XV. Future projects, and donations of used equipment, etc.

Texas Productivity Center

- The University of Texas at Tyler College of Business and Technology is actively engaged in community outreach to determine if a center dedicated to enhancing productivity in East Texas industry is needed.

UT Tyler has partnered with the East Texas Lean Consortium to test the prospect of developing a Texas Productivity Center that would serve the region with vital information and resources.

As part of the initiative, a Texas Productivity Summit and Training Sessions have been established to explore techniques for improving productivity.

Dr. Miller shared economic opportunity for business to offer students workers that meet acceptable criteria internships or work study opportunities. Benefits are twofold: reduced labor costs and the students gain valuable workplace skills. Dr. Lumpkin agreed with the benefits and will give the concept consideration.

XVI. Comments from the advisory board on agenda items, issues, etc.

Kelly Kaemmerling: Kilgore College Longview:

- They would like to see a business directed curriculum that allows students to take lower level coursework, earn an associate's degree, which would fulfill core and lower level course requirements for students seeking a B.S. in Industrial Technology.
- Dr. Miller's response, the problem is we are transferring too many unrelated classes and students that enter the program lack basic competencies.

Kenya Ray, Kilgore College

- At this point, the built-in certifications would be a major selling point.
- Increase technical skills levels by making courses hybrid with lecture and quizzes online and labs in class.

- It is difficult to push the idea of transferring to UT Tyler when graduates from Kilgore College's Corrosion Technology program (1 of 2 Programs in the country) starting salaries average \$65,000. Dr. Dominck Fazarro and Scott Riley agreed. Students want to finish school, get to work and pay off their student loans.

Dr. James Lumpkin- CBT Dean UT Tyler-responds and clarifies program intent.

- Assured those representing learning institutions and local business' that there is now a School of Technology at UT Tyler which also includes the Department of Computer Science.
- The Texas Productivity Center at UT Tyler is official now that the President and Provost signed off on it the previous day.
- The CBT has experienced 26% growth.
- He will make sure the board received brochures and other promotional materials that reflect current and upcoming changes.

Scott Riley: Brookshire's

- Approves of the Texas Productivity Center and that it will provide an opportunity to join efforts.
- Concerned those online courses fail in providing necessary technical skills; he can tell the difference via performance among students taking online classes and those who take face-to-face classes. Dr. Dominck Fazarro agreed and added that students miss networking and social opportunities.
- What is the percentage of international students enrolled because they increase global opportunities?
- Dr. Miller response, ¾ due to word of mouth.

Tim Gill, Tyler Junior College

- Specific degrees (Electronic, HVAC) do not fully transfer.
- Concerned that online classes do not offer practical skills.
- Willing to revisit the possibility of transferring lower level Industrial Technology courses.
- Expressed a need to communicate in detail to students the benefits of our joint effort.

Wayne Dillon, TSTC

- Interested in partnering with UT Tyler to make the FANUC Certification available to their students.

Dr. Dominck Fazarro,

- Supports the idea of students completing their first two years at TJC or Kilgore. Their associate's degree should be transferable for those seeking a BS in Industrial Technology at UT Tyler.
- Internship availability is a problem if this is how students gain real life job skills because it is difficult to place 100-200 students.
- Dr. Miller's response- lack of internship availability due to layoffs when the economy is slow, but enrollment is up because more people are laid off. Therefore, it is hard to place all the students in an internship so we cannot require it.

Lauren McGrew, Eastman

- Students are going to SFA or Baylor because they offer dual degrees and certifications.

- In the hiring process, we look for buzzword that provides a hint on competency, not all training and education programs are created equal. After hire, recent graduates have no critical thinking or complex reasoning skills.
- Online classes at UT Tyler are becoming too large. Is it possible to split classes between professors at Longview and Palestine campuses?
- How do students demonstrate their skill set? We need individuals with an understanding of logistics. When asked about planning process or to make an immediate decision they are blindsides and we have not time train that skill.
- Kenya Ray (no more than 35 students) and Wayne Dillon (no more than 15 students) agreed that it is difficult to control learning in large online classes. They keep classes small at their institutions and require hands on activities to ensure learning via projects that demonstrate technical and problem solving skills.
- Dr. Miller's response- we offer support staff at three campuses to support the 100 + B.S. Industrial Technology and 90+ Industrial Management students. We tweak our programs to suit area business needs and we offer four work ready certifications built into our MS Degree. We want companies to know our graduates need minimal training upon hire because UT Tyler means quality. Our Project Management certification is offered through PMI and requires students to pass their exam which costs about \$250.
- Dr. Heshuim Lawrence - The addition of the new PMI certification program has attracted 5-6 new students already with no advertising and has increased the overall number of students enrolled in the course.
- Dr. Dominique Fazarro - Wanted suggestions regarding courses listed on the given degree plan because they could be tweaked to better suit the needs at Eastman?
- Dr. Heshuim Lawrence response, courses on the Industrial Management MS degree plan for the Supply Chain Management certification are:
 MANA 5305 Decision Making in Operations Management
 TECH 5306 Advanced Logistics Management
 TECH 5308 Strategic Sourcing
 ACCT 5320 Accounting for Management Control

XVII. Discuss any new business

Dr. Dominick Fazarro

Invited the educators and business leaders to attend the 2015 ATMAE conference at Pittsburgh, PA. They can get a booth in efforts to expand national presence.

XVIII. Adjournment

Dr. Miller thanked everyone for their feedback and attendance, meeting adjourned

The University of Texas at Tyler
Industrial Technology Advisory Committee Meeting

Friday, December 6, 2013- 11:30 a.m.

Cheng's China Bistro – Private Room

Minutes taken by Peggye Mahfood, Administrative Assistant II

- ❖ Dr. Miller brought the meeting to order at 11:50 am by welcoming everyone in attendance:
 John Hood, Argon Medical Devices, Jacksonville, Texas
 Don Gilbreath, V.P. of Transportation, Brookshire Grocery Company, Tyler, Texas;
 Dane Clark, Cardinal Health, Jacksonville, Texas
 Kelly Kaemmerling, Instructor, Kilgore College
 Kenya Ray, Corrosion Technology Instructor, Kilgore College
 Heshium Lawrence, Professor, UT Tyler;
 Stephanie Long, Academic Advisor, UT Tyler;
 Peggye Mahfood, Administrative Asst., UT Tyler
- ❖ Dr. Miller passed out the minutes from the last meeting on April 2, 2012 for everyone to review. A unanimous vote was made to approve last year's minutes and proceed.
- ❖ Reviewed undergraduate degree program changes – B.S. in Industrial Technology
 - Change to reflect emphasis in Surveying and Mapping on transcript.
 - The Texas Board of Professional Land Surveying requires two years of experience under a Registered Professional Land Surveyor (RPLS) or a B.S. degree in Surveying; or a degree that has an emphasis in surveying.
 - The Industrial Technology Program currently has a degree plan with this emphasis in surveying, but now it will be listed on the transcript as B.S. in Industrial Technology with an emphasis in Surveying and Mapping.
 - Previously removed TECH courses added back into the program. Degree plan essentially remains the same.
 - TECH 1320 Industrial Materials and TECH 2311 Mechanical and Fluid Systems were removed as it was previously assumed that most transfer students had taken these course equivalents via various technical two year programs.
 - Consequently, it has come to light that most, if not all, have not taken such a course.
 - TECH 1320 will be a required course. It is a required course in most ATMAE accredited Industrial Technology programs.
 - Because of the requirement of this TECH course, the optional CBT course to complete the minimum Business Administration minor hours will no longer be optional.
 - An existing TECH course such as TECH 3355 Supply Chain Management will be used.
 - TECH 2311 Mechanical and Fluid Systems will replace one of the six general electives courses that are currently listed on the degree plan.

- Advisory board discussed the importance of these courses.
- These courses will be offered once every two years.
- Advisory council agreed to the importance of these courses and with this decision.
- TECH 2311 Course Change
 - Was Mechanical and Fluid Systems
 - Will be Electrical and Fluid Systems
 - The purpose of this change in some course content is to give Industrial Technology majors an overview of basic electrical systems along with fluid power systems.
 - Discussed the importance that an electricity course plays in almost every ATMAE program. Adding this aspect back into the program will give Industrial Technology majors a better fundamental knowledge of electrical systems.
 - It was decided that to best accommodate transfer students who already have these courses, TECH 1320 and 2311 will not be changed to upper level courses.
- TECH 3304 Introduction to Nanotechnology Safety
 - New course
 - Will provide students with cutting edge knowledge of nano-safety
 - Will provide students an additional skill set that will make them more competitive in the 21st century global market
 - Will expand students critical-thinking skills to problem-solve and apply new concepts for new complex technologies
- ❖ Reviewed graduate degree program changes
 - Industrial Management program and ATMAE accreditation
 - ATMAE requires at least two research courses that the current degree plan does not include
 - ATMAE Accreditation Handbook standard 7.5
Program Structure and Sequencing for Master's Degree
 - Industrial Management program changes
 - Two technical courses will be replaced by these research courses and included in the twelve that students have to choose from.
The two research courses that will be required are existing courses offered by the Department of HRD and Technology: TECH 5303 Research Techniques and TECH 5329 Trends in Industry
 - ATMAE requires two research projects be listed on the degree plan
 - Can include a lean six sigma black belt project for continuous improvement that can be completed during: an Internship (TECH 5371) a formal course (TECH 5329)
 - Discussion of the above: Kelly Kaemmerling asked if students that have taken the above courses would be eligible to take the six sigma exam? Don

Gilbreath, Dane Clark, and John Hood expressed the need for a business course that addresses how to save money through accounting time analysis, perhaps a Cost Accounting course that would give students the tools to determine the cost of labor in the work place.

- ❖ Lean Six Sigma Black Belt Certificate
 - The Industrial Management program currently offers five courses that give students the content needed for them to earn a six sigma black belt certificate. The faculty of the program would like to award certificates to students who successfully complete the five courses with a grade of B or better. In addition, students must pass the comprehensive exam on the content covered in all five courses to become Lean Six Sigma Black Belt certified.
- ❖ FANUK Robotics Accreditation – will be available to students through the program in TECH 4317 and TECH 5317.

Dr. Miller asked for final comments, then concluded the meeting at 1:20 pm.

APPENDIX I – PEER REVIEW OBSERVATION FORM

Peer Observation Processes College of Business and Technology 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 College of Business and Technology 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, visiting faculty, and clinical faculty would be observed annually, and senior lecturers 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.

Revised Sept 15, 2014

<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 College of Business and Technology 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

Revised Sept 15, 2014

Faculty members will submit three peer observers from a list of approved observers. The observer may come from any department within the College of Business and Technology, 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.

Revised Sept 15, 2014

K. 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).

L. 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:** _____

Revised Sept 15, 2014

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 Online Observation: _____

Date of Post-Observation Meeting: _____

Peer Observer's Signature

Instructor's Signature Affirming the Discussions Occurred

Revised Sept 15, 2014

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:

Source: www.albany.edu/teachingandlearning/tir/peer_obs/. Adapted for The University of Texas at Tyler College of Business and Technology

Revised Sept 13, 2014

Appendix J – Safety Policy & Rules

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

Machining Safety Rules

Department of Technology
The University of Texas at Tyler

Laboratory Safety Rules for
TECH 5309 Industrial
Processes and Materials

General Safety Rules

- ▶ 1. Safety glasses, or appropriate goggles / face shields are required in the shop, when lab work has _____.
- ▶ 2. _____ must be worn in any shop area. No one wearing _____ will be allowed to enter any shop area. The minimum footwear must cover the _____.
- ▶ 3. Do not operate any item of equipment unless you are familiar with its _____ and have been _____ to operate it. If you have any questions regarding the use of equipment ask the _____.
- ▶ 4. Never use _____ 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 _____.

General Safety Rules

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

General Safety Rules

- ▶ 11. Never indulge in _____ in the shop areas.
- ▶ 12. All machines must be operated with all required _____ in place.
- ▶ 13. A _____ should be used for removing chips, shavings, etc. from the work area. Never use your _____.
- ▶ 14. Keep all _____ 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 _____ near moving machinery.
- ▶ 15. A _____ hammer should not be used to strike a hardened tool or any machine part. Use a _____ hammer.



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 _____ if you are ever unsure for any reason.
- ▶ 18. Before starting a machine, always check it for correct _____ and always check to see if machine is clear by operating it _____, if possible.



General Safety Rules

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



General Safety Rules

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



MILLING MACHINE SAFETY



Milling Machine Safety

- ▶ 1. Work must be _____ 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 _____ before cutting material.
- ▶ 3. Before running a machine the spindle should be rotated by _____ to make sure it is clear for cutting.
- ▶ 4. Make sure the power is _____ before changing cutters (use the emergency stop button).



Milling Machine Safety

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



Milling Machine Safety


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




LATHE SAFETY




Lathe Safety

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


Lathe Safety


- ▶ 7. Always make sure that the tool (insert) is sharp and has the _____. 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 _____ in place.
 - ▶ 9. Do not grasp or touch chips or turnings with your _____, use the brush on the tool tray.
 - ▶ 10. Turn off the lathe before clearing chips and use a brush. Do NOT _____ the chips because they will clog the _____.
- 

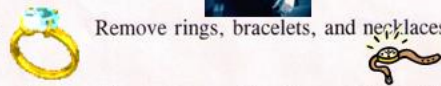
Lathe Safety

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

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.

GENERAL SAFETY

Material inspection: Inspect materials before you process it. Remove tacks, nails, or anything else that might dull a blade. 

Accessories: Select and install properly sharpened blades, bits or abrasive devices.

Shavings & sawdust: Remove wood scraps and sawdust before and after using a machine.

Starting: Allow a machine to come to maximum speed before starting a process.

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.



Keep a vise loose so if you hit the handle you will not hurt yourself. Do NOT tighten the handle all the way.

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.

