Hours Remaining: 120
*Approx. number of hours remaining
*Includes currently enrolled courses

THE UNIVERSITY OF TEXAS AT TYLER

Soules College of Business
Undergraduate Advising 903-566-7363

Computer Science
2022-2023
Good through Summer 2023

STUDENT: _____ **ID:** _____

PHONE: _____ **ADVISOR:** _____ **DATE:** _____

Suggested University Core for BSCS students (see catalog) **46 hours** Core complete on transcript from another Texas public institution prior to attending UT Tyler equates to core complete at UT Tyler.				
Core Category	**Satisfied**	**Grade I**	**Grade II**	**Required Course Prefix & Number** (All Core Courses require a "C" or higher) (Course numbers are listed according to UTT; transfer numbers may vary)
Communication				**6 hrs.** ENGL 1301, 1302, 2311; CMST 1315; *HNRS 1352
Math				**4 hrs.** MATH 2413 **REQUIRED**
LAB Science I & II				**8 hrs.** BIOL 1306+1106 & 1307+1107 **or** CHEM 1311+1111 & 1312+1112 **or** PHYS 2325+2125 & 2326+2126 **Must be taken in the same discipline; CORRESPONDING LABS REQUIRED**
Language, Philosophy & Culture				**3 hrs.** ENGL 2322, 2323, 2350, 2362, 2363, 2370; HIST 2321, 2322; PHIL 1301, 1304, 2303, 2306, 2331; *HNRS 1351, *(PHIL 2306 preferred)*
Creative Arts				**3 hrs.** ART 1301, 1306, 2303 2304; MUSI 1306, 2301, 2308; THTR 1301, 1356; *HNRS 2352
History				**6 hrs.** HIST 1301, HIST 1302, HIST 1303
Political Science				**6 hrs.** POLS 2305, POLS 2306
Social Sciences				**3 hrs.** ECON 2301 or 2302 recommended (or ANTH 2346, ECON 1301, GEOG 1313, PSYC 1301, SOCI 1301, CRIJ 1301)
Human Expression				**3 hrs.** ENGL 1301, 1302, 2322, 2323, 2350, 2362, 2363, 2370; MCOM 2307; PHIL 2331; CMST 1311; *HNRS 1351, *HNRS 2351
STEM				**4 hrs.** MATH 2414 **REQUIRED**

Computer Science Core – 39 hours **All CS Core Courses require a "C" or higher**		**Prerequisites**	**Grade at Completion**	**Semester to be Taken**
COSC 1336	Programming Fundamentals	None		
COSC 1337	Object Oriented Paradigm	COSC 1336		
COSC 2336	Data Structures and Algorithms	COSC 1337 & MATH 2413		
COSC 2315	Computer Organization	COSC 1336 & Any MATH		
COSC 3325	Algorithm Analysis & Foundations	COSC 2336 & MATH 2330		**FALL**
COSC 3345	Computer Architecture	COSC 2315		**FALL**
COSC 3355	Operating Systems	COSC 2315 & COSC 2336		**SPRING**
COSC 4315	Info Knowledge and Management	COSC 1337		**SPRING**
COSC 4385	Database Management Concepts	COSC 2336		**SPRING**
COSC 3315	Social and Professional Issues	COSC 1337		
COSC 4336	Software Development	COSC 2336		**FALL**
COSC 4360	Net-Centric Computing	COSC 2315 & COSC 2336		**FALL**
COSC 4395	Capstone Project	All UD COSC (Except 3355)		
Specified Support Courses – 35 hours		**Prerequisites**	**Grade at Completion**	**Semester to be Taken**
MATH 2330	Discrete Structures	MATH 2413		
MATH 3351	Prob. & Stats for Engineers & Scientists	MATH 2414		
MATH 3203	Matrix Methods	MATH 2413		
MANA 3370	Bus. Writing and Oral Presentations	None		
4 hr. LAB Science III		See Catalog for Prerequisites		
3 hr. LD/UD Science or UD MATH		See Catalog for Prerequisites		
3 hr. COSC UD Elective		See Catalog for Prerequisites		
3 hr. COSC UD Elective		See Catalog for Prerequisites		
3 hr. COSC UD Elective		See Catalog for Prerequisites		
3 hr. COSC UD Elective		See Catalog for Prerequisites		
3 hr. UD Elective		See Catalog for Prerequisites		
2 hrs. General Elective (UD or LD) to reach 120: MATH 2312		Prerequisite for MATH 2413		
(Must complete at least 24 of the last 30 Upper-Division credit hours in residence at UT Tyler)				

_____ _____

Student Signature **Advisor Signature**

NOTES – Student is seeking a Bachelor of Science (BS) with a major in Computer Science; must have a minimum of 120 hours (42 UD hours and 45 resident hours for honors eligibility) and a UT Tyler GPA of 2.0+ to be eligible for graduation. International students must have all transient classes approved through the Office of International Programs. *Please see your Advisor for an updated list of electives offered each semester.*

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Explanation of BS Computer Science 2021-2022

- 2.0 grade point average in all upper-division computer science courses attempted and a grade of "C" or higher
- 120 TOTAL hours to meet state graduation requirements

Core Requirements: 46 hours

Communication Core Elective: 6 hrs.	ENGL 1302 & SPCM 1315
Mathematics Core Elective: 4 hrs.	**MATH 2413**
LAB Science I &II : Life & Physical Sciences Core Elective: 8 hrs.	**Must be: BIOL 1306,1106 & 1307,1107 or CHEM 1311, 1111 & 1312,1112 or PHYS 2325,2125 & 2326,2126** ***Notes: Must be taken in the same discipline. Corresponding labs are a degree requirement***
Language, Philosophy & Culture Core Elective: 3 hrs.	**PHIL 2306 recommended - See Core list for more options**
Creative Arts Core Elective: 3 hrs.	**See Core list for more options**
American History Core Elective: 6 hrs.	**HIST 1301 & 1302**
Government/Political Science Core Elective: 6 hrs.	**POLS 2305 & 2306**
Social & Behavioral Sciences Core Elective: 3 hrs.	**ECON 2301 or 2302 recommended -See Core list for more options**
Human Expression Core Elective: 3 hrs.	**ENGL 1301**
STEM Core Elective: 4 hrs.	**MATH 2414**

Additional Requirement Information

Lab Science III

- *4 hrs. of PHYS, CHEM, or BIOL Elective with corresponding lab. Does not have to be same discipline as LAB Science I and II.*

Math/Science Elective

- *Lower or upper division science or upper division math elective*

12 hours Computer Science UD Electives:

- *See Advisor to ensure pre-requisites are met*

CS Electives include:

- COSC 4327 Unix Shell Programming
- COSC 4335 Artificial Intelligence
- COSC 4340 Comparative Study of Programming Languages
- COSC 4345 Computer Graphics
- COSC 4352 Data Mining
- COSC 4356 Computer Vision
- COSC 4361 Retail Cyber Security Management
- COSC 4362 Retail Cyber Security
- COSC 4363 Contingency Planning
- COSC 4364 Cyber Risk Analysis
- COSC 4367 Cryptography
- COSC 4370 Undergraduate Internship Program
- COSC 4373 Advanced Database Management Concepts
- COSC 4377 Compiler Techniques
- COSC 4381 Seminar in Computer Science (Can take twice-different topics)
- COSC 4388 Digital Forensics
- COSC 4390 Topics in Computer Science
- COSC 4399 Independent Study
- CSCI 4332 Modern Programming (Can be repeated once)
- CSCI 4350 Machine Learning
- CSCI 4320 Computational Theory
- CSCI 4333 Assembly Language Programming
- CSCI 4362 Ethical Hacking
- CSCI 4363 Malware Reverse Engineering

Please see Advisor for an updated list of electives offered each semester that may not be included in this list.