

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 <b>REQUIRED</b>	
LAB Science I & II				8 hrs. BIOL 1306+1106 & 1307+1107 or CHEM 1311+1111 & 1312+1112 or PHYS 2325+2125 & 2326+2126 <b>Must be taken in the same discipline; CORRESPONDING LABS REQUIRED</b>	
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 <b>REQUIRED</b>	
Computer Science Core – 39 hours		Prerequisites		Grade at Completion	Semester to be Taken
All CS Core Courses require a "C" or higher					
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			
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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.

**Explanation of BS Computer Science 2022-2023**

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

**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.***