BS in Computer Science Degree Map

Required Semester Credit Hours (SCH): 120

This program requieres the selection of a concentration.
Refer to the University Catalog for all degree requirements at https://catalog.utep.edu
Many core curriculum courses are also offered in the summer (Su). Students are encouraged to register early and check Goldmine for course availability.
The flowchart below may not reflect all student schedules; courses can be shifted to different semesters where applicable.

Catalog Year 2025-2026
Sample Degree Plan

*C or better required.
Arrow indicates a prerequisite.
F/Sp/Su indicates the semesters Fall/Spring/Summer.

Freshman Year Entering Semester (7 SCH)	Freshman Year First Semester (14 SCH)	Freshman Year Second Semester (15 SCH)	Sophomore Year First Semester (16 SCH)	Sophomore Year Second Semester (15 SCH)	Junior Year First Semester (16 SCH)	Junior Year Second Semester (12 SCH)	Senior Year First Semester (15 SCH)	Senior Year Second Semester (13 SCH)
Designated Core								
MATH 1508* (3SCH) (F/Sp)	CS 1310* Intro-Computational Thinking (3SCH) (F/Sp)	UNIV 1301* Seminar/Critical Inquiry (3SCH) (F/Sp/Su)		PHYS 2320/2120* (3SCH) (F/Sp/Su)				
	RWS 1301* Rhetoric and Composition I (3SCH) (F/Sp/Su)	RWS 1302* Rhetoric and Composition 2 (3SCH) (F/Sp/Su)						
	MATH 1411* Calculus I (4SCH) (F/Sp/Su)							
University Core Curriculum								
		HIST 1301* History of U.S. to 1865 (3SCH) (F/Sp/Su)	HIST 1302* History of U.S. Since 1865 (3SCH) (F/Sp/Su)	Creative Arts* (3SCH) (F/Sp)	POLS 2311* American Gover and Politics (3SCH) (F/Sp/Su)	Life and Physical Science* (2SCH) (F/Sp)		
			Social and Behavioral Sciences* (3SCH) (F/Sp)	Language, Philosophy, Culture* (3SCH) (F/Sp)				
				POLS 2310* Introduction to Politics (3SCH) (F/Sp/Su)				
Foundational Math Courses								
			MATH 1312* Calculus II (3SCH) (F/Sp/Su)		MATH 3323* Matrix Algebra (3SCH) (F/Sp/Su)		EE 3384, STAT 3320 or 3330* (3SCH) (F/Sp)	
Computer Science Major								
	CS 1301/1101* (3SCH) (F/Sp)	CS 2401* Elem. Data Struct./Algorithms (4SCH) (F/Sp)	CS 2302* Data Structures (RQ:CS 2401) (3SCH) (F/Sp/Su)	CS 3350* Automata/Computabi /Formal Lang (3SCH) (F/Sp)	CS 3331* Adv. Object-Oriented Programng (RQ:CS 2302) (3SCH) (F/Sp/Su)	CS 3195* Junior Professionl Orientation (RQ:CS 2401,CS 2302) (1SCH) (F/Sp)	CS 4310* Software Eng: Requirements Eng (RQ:CS 3331) (3SCH) (F/Sp)	CS 4311* Software Eng: Design and Implmnt (RQ:CS 4310) (3SCH) (F/Sp)
	CS 2101* (1SCH) (F/Sp)	CS 2202* (2SCH) (F/Sp)	EE 2369/2169* (3SCH) (F/Sp/Su)		CS 3432* Computer Organization (RQ:EE 2369/2169) (4SCH) (F/Sp/Su)	CS 4375* Operating Systems Concepts (RQ:CS 3432) (3SCH) (F/Sp)	CS 4342* Database Systems (RQ:CS 2302) (3SCH) (F/Sp)	CS 4387* Software Integration and VandV (RQ:CS 3331) (3SCH) (Sp)
							CS 3360* Programming Language Concepts (RQ:CS 2302) (3SCH) (F/Sp)	CS 4175* Parallel Computing (RQ:CS 3331,CS 3432) (1SCH) (F/Sp)
							CS 4374* Software Construction (RQ:CS 2302,CS 3331) (3SCH) (F)	
Electives								
					MATH or SCI Option (3SCH) (F/Sp)	Technical Elective (3SCH) (F/Sp)		Open Elective (3SCH) (F/Sp)
						Technical Elective - CS (3SCH) (F/Sp)		Technical Elective (3SCH) (F/Sp)