

# Bachelor of Science – Computer Science

## Degree Plan (checklist)

2023

Catalog: 2022-23

Expires: 08/01/2029

Last Name \_\_\_\_\_

First Name \_\_\_\_\_ M.I. \_\_\_\_\_

UTEP ID \_\_\_\_\_

**NOTE: Overall GPA ≥ 2.0 AND In-Major GPA ≥ 2.0 REQUIRED for graduation**

A Core Curriculum (45 SCH) (minimum of *C* grade required)		Semester Completed	Final Grade	SCH	Sub #
1 Communication (6 credit hours required)					
RWS 1301*	Rhetoric and Composition I				
RWS 1302*	Rhetoric and Composition II				
2 Mathematics (4)					
MATH 1411*	Calculus I				
3 Life and Physical Sciences (8) *** Select and circle one					
PHYS 2320*	Introductory Mechanics				
PHYS 2120*	Introductory Mechanics Lab				
ASTR 1307* + 1107*, BIOL 1305* + 1107*, CHEM 1305* + 1105*, GEOL 1313* + 1103*, PHYS 2321* & PHYS 2121*					
4 Language, Philosophy, and Culture (3) Select and circle one					
AFST 2300*, CHIC 2302*, ENGL 2311*, 2312*, 2313*, 2314*, 2318*, FREN 2322*, HIST 2301*, 2302*, PHIL 1301*, 2306*, RS 1301*, SPAN 2340*, WS 2300*, 2350*					
5 Creative Arts (3) Select and circle one					
ART 1300*, ARTH 1305*, 1306*, CHIC 1311*, DANC 1304*, FILM 1390*, MUSL 1324*, 1327*, 2321*, THEA 1313*					
6 American History (6)					
HIST 1301*	History of the U.S. to 1865				
HIST 1302*	History of the U.S. since 1865				
7 Government/Political Science (6) -- all 6 SCH must be completed at the same institution					
POLS 2310*	Introduction to Politics				
POLS 2311*	American Govt. & Politics				
8 Social and Behavioral Sciences (3) Select and circle one					
ANTH 1301*, 1302*, 1310*, 2320*, COMM 2350*, 2372*, ECON 2303*, 2304*, EDPC 1301*, EDU 1342*, ENGL 2320*, GEOG 1310*, LING 2320*, PSYC 1301*, SOC 1301*, 1310*, CE 2326*					
9 Component Area Option (6) Take CS 1320 and choose one of the second options					
COMM 1301*, COMM 1302*, CS 1310*, CS 1320*, EL 1301*, LEAD 1300*, SCI 1301*, UNIV 1301*					
B Foundational Math & Science (12 SCH)		Semester Completed	Final Grade	SCH	Sub #
MATH 1312*	Calculus II				
MATH 2300 <sup>as</sup>	Discrete Mathematics				
MATH 3323*	Matrix Algebra				
C Statistics (3 SCH) Select and circle one					
STAT 3320, EE 3384, STAT 3330					

C Major: Required Lower Division Courses (15 SCH)		Semester Completed	Final Grade	SCH	Sub #
CS 1301*	Introduction to Computer Science				
CS 1101*	Introduction to Computer Science Lab				
CS 2401*	Elementary Data Structures and Algorithms				
EE 2369*	Digital Systems Design I				
EE 2169*	Digital Systems Design I Lab				
CS 2302*	Data Structures				
D Major: Required Upper Division Courses (27 SCH)		Semester Completed	Final Grade	SCH	Sub #
CS 3195	Junior Professional Orientation				
CS 3331*	Advanced Object-Oriented Programming				
CS 3350	Automata, Computability, and Formal Languages				
CS 3360	Design and Implementation of Prog. Languages				
CS 3432*	Computer Architecture I: Basic Comp. Org. & Design				
CS 4175	Parallel Computing				
CS 4310*	Software Engineering: Requirements Engineering				
CS 4311	Software Engineering: Design and Implementation				
CS 4342	Database Management				
CS 4375	Theory of Operating Systems				
E Technical Electives (15 SCH)****		Semester Completed	Final Grade	SCH	Sub #
F Free Elective (3 SCH) -- any college-level courses offered by the colleges of Liberal Arts, Business, Science, or Engineering		Semester Completed	Final Grade	SCH	Sub #
G Additional Mathematics or Science Option (3 SCH) ***** Choose one course from Option A or B		Semester Completed	Final Grade	SCH	Sub #

**NOTES:**

a -- CS 2101 AND CS 2202 are equivalent to MATH 2300

\* C or better required

\*\*\* Official substitution form available <https://forms.utep.edu/form.aspx?pid=303bd7c4-e334-4570-af66-867e2a2fad48&formid=f86bb681-14ea-4576-96eb-6d6246236e95>

\*\*\* Students must complete PHYS 2320 and 2120 (in the Life and Physical Science Section)

\*\*\*\* CS 1110, CS 1120, CS 1190, CS 1290, CS 2210, CS 3000 or any CS 4000 level course. No more than six credit hours of CS 1xxxx,

CS 2xxx, CS 4390, CS 4181, CS 4371, CS 4X73, CS 4392 and/or CS 4393 (in any combination) can count for technical electives

\*\*\*\*\* **Option A:** Math-MATH 2313, MATH 2325, MATH 2326, MATH 3320, MATH 3325, MATH 4329, STAT 4380, STAT 4385

**Option B:** Science-Any Science in the core block

**BSCS Total Hours      120**

SUBSTITUTIONS**				
Sub #	Course on degree plan to substitute	Institution where course was taken	Name of Course as it appears on UTEP Transcript	Course as it appears on UTEP Transcript
1				
2				
3				
4				

APPROVALS:	
ADVISOR	DATE
CHAIR	DATE