

## Minimum required: 120 semester credit hours

### General Requirements

- The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (<http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.
- In addition to the general education core curriculum requirements, the Bachelor of Arts degree (<http://mycatalog.txstate.edu/undergraduate/degree-program-information/>) (B.A.) requires three hours of math/science/logic/computer science courses, a minor and six hours of 2000-level modern language courses. Most students will have to complete 1410 and 1420 as prerequisites before attempting 2310.
- For transfer students, 26-32 semester credit hours in computer science (or their equivalents) may be transferred from a Texas public institution of higher education for the Computer Science Field of Study and be applied to the Bachelor of Arts degree with a major in Computer Science at Texas State University. More information about the Field of Study (<http://mycatalog.txstate.edu/undergraduate/general-information/academic-policies/texas-legislative-requirements/>) is available in the Academic Policies section of this catalog. If transferring additional computer science courses please contact the Department of Computer Science for assistance. The transferable Texas Common Course Number (TCCN) is listed below the Texas State University course number in the following course list.

Code	Title	Hours
CS 1319	Fundamentals of Computer Science	3
TCCN: COSC 1336 or 1436 (CS 1319 + 1 hour CS ELNA)		
CS 1428	Foundations of Computer Science I	4
TCCN: COSC 1337 or 1437		
CS 2308	Foundations of Computer Science II	3
TCCN: COSC 2336 or 2436 (CS 2308 + 1 hour CS ELNA)		
CS 2318	Assembly Language	3
TCCN: COSC 2325 or 2425 (CS 2318 + 1 hour CS ELNA)		
MATH 2471	Calculus I	4
TCCN: MATH 2313 or 2413		
MATH 2472	Calculus II	4
TCCN: MATH 2314 or 2414		
PHYS 2325 & PHYS 2125	Mechanics and Mechanics Laboratory	4
TCCN: PHYS 2325 and 2125		
PHYS 2326 & PHYS 2126	Electricity and Magnetism and Electricity and Magnetism Laboratory	4
TCCN: PHYS 2326 and 2126		
Total		26-32

- Students pursuing the B.A. are required to complete an additional 3 hours of English beyond the general education core curriculum. Students may select from the following English courses.

Code	Title	Hours
<b>Choose one from:</b>		
ENG 2310	British Literature before 1785	3
ENG 2320	British Literature since 1785	3
ENG 2330	World Literature before 1600	3
ENG 2340	World Literature since 1600	3
ENG 2359	US Literature before 1865	3
ENG 2360	US Literature since 1865	3
ENG 2371	U.S. Literature: Writing Identities	3

- Computer Science students must complete 37 hours of Computer Science courses, including one CS project course from: CS 4318, CS 4326, CS 4371, CS 4380, or CS 4398.
- No more than 3 hours of credit may be applied to the student's major elective from any combination of the following courses:

Code	Title	Hours
CS 3190	Cooperative Education	1
CS 3290	Advanced Cooperative Education	2
CS 4100	Computer Science Internship	1
CS 4298	Undergraduate Research I	2
CS 4299	Undergraduate Research II	2
CS 4395	Independent Study in Computer Science	3
HON 4390B	Honors Capstone	3
RES 4399	Mentored Research and Creative Expression	3

- Nine hours of writing intensive (WI) courses are required for graduation.
- Students must select a minor from the approved list of Undergraduate Minors (<http://www.mycatalog.txstate.edu/undergraduate/minors/>).
- Students must complete a minimum of 36 advanced hours (3000 or 4000 level courses).
- In addition to satisfying the University graduation requirements, students must earn a grade of "C" or higher in all computer science and mathematics courses used to satisfy the requirements of the computer science major.
- The number of free electives a student will complete varies, depending on the number of hours needed to satisfy the 120 and/or the 36 advanced or 9 hours writing intensive requirements. Students should consult with the academic advisor before enrolling in any free elective courses to ensure that electives are needed.
- Students entering Texas State with fewer than 16 credit hours completed after high school graduation will be required to take US 1100. All others will be exempt from taking this course. Students may be required to earn an additional elective to reach the 120 minimum total credit hour requirement for the awarding of a degree.

### Course Requirements

	First Semester Hours	Second Semester Hours	Freshman
CS 1428 (TCCN COSC 1437)	4	CS 2308 (TCCN COSC 2336 or 2436)	3
Mathematics Component Code 020 select one of the following:	3-4	MATH 2358 (BA Computer Science, Logic, Mathematics or science [TCCN MATH 2305 or 2405])	3

MATH 1317 (TCCN MATH 1316)	PHIL 1305 or 1320 (Language, Philosophy, and Culture Component Code 040 [TCCN PHIL 1301 or 2306])	3
MATH 1329 (TCCN MATH 1325)	Social and Behavioral Sciences Component Code 080	3
MATH 2321 (TCCN MATH 2313)	Government/Political Science Component Code 070	3
MATH 2417 (TCCN MATH 2412)		
MATH 2471 (TCCN MATH 2413)		
US 1100	1	
ENG 1310, 1320, or 1321 (Communication Component Code 010)	3	
COMM 1310 (Component Area Option Code 090/091 [TCCN SPCH 1311])	3	
<b>14-15</b>		<b>15</b>

Government/Political Science Component Code 070	3
<b>15</b>	
<b>12</b>	

**Total Hours: 120-121**

- <sup>1</sup> Computer Science students must take eight hours (2 courses) of the Life & Physical Sciences Component Code 030 from: BIO 1330/BIO 1130 & BIO 1331/BIO 1131; PHYS 1315/PHYS 1115 & PHYS 1325/PHYS 1125 [or PHYS 2325/PHYS 2125 & PHYS 2326/PHYS 2126]; CHEM 1341/CHEM 1141, and CHEM 1342/CHEM 1142; or GEOL 1410 & GEOL 1420. The eight hours (2 courses) must be from the same science (BIO, CHEM, GEOL, or PHYS) as listed above. Field of Study requirements of PHYS 1430 and PHYS 2425 will be used to satisfy this requirement.
- <sup>2</sup> Students may take ENG 3313 instead of ENG 3303. If students take ENG 3313, they will need to complete an additional CORE 010 course.
- <sup>3</sup> A grade of C or better is required in ENG 3303 or ENG 3313 to satisfy the graduation requirements for the BA in Computer Science.
- <sup>4</sup> A CS Advanced Elective is a 3000 or 4000 level CS course that is not a required CS course and not being used as the project course for a given student.

Sophomore	
First Semester Hours	Second Semester Hours
CS 2318 (TCCN COSC 2325)	3 CS 2315 3
CS 3358	3 CS 3354 3
MATH 3398	3 Modern Language 1420 4
Life and Physical Sciences Component Code 030 <sup>1</sup>	4 Life and Physical Sciences Component Code 030 <sup>1</sup> 4
Modern Language 1410	4 Component Area Option Codes 090 3
<b>17</b>	
Junior	
First Semester Hours	Second Semester Hours
CS 3339	3 CS Advanced Elective <sup>4</sup> 3
CS 3398	3 Modern Language 2320 3
BA English Literature (TCCN ENGL 2322, 2323, 2332, 2333, 2327 or 2328)	3 Minor 3
Modern Language 2310	3 American History Component Code 060 3
Minor	3 ENG 3303 (Communication Component Code 010) <sup>2,3</sup> 3
<b>15</b>	
Senior	
First Semester Hours	Second Semester Hours
CS Advanced Elective <sup>4</sup>	3 Computer Science Project Course 3
Minor	3 CS Advanced Elective <sup>4</sup> 3
Creative Arts Component Code 050	3 Minor 6
American History Component Code 060	3

**Computer Science Project Course Options**

Code	Title	Hours
<b>Choose one from:</b>		
CS 4318	Compiler Construction	3
CS 4326	Human Factors of Computer Systems	3
CS 4371	Computer System Security	3
CS 4380	Parallel Programming	3
CS 4398	Software Engineering Project	3