COMPUTING - BA

The Bachelor of Arts degree with a major in Computing provides students with the opportunity to obtain computing knowledge and skills to be coupled with their non-computing interests in a wide variety of areas such as liberal arts, science, education, business, data science, robotics, etc. The degree allows students to build up strong computational fundamentals that are custom-fit to domains of interest that require such skills. The degree program is designed to provide flexibility in the choice of courses, both in computing and in the students' field of interest, so that students, after graduation, can have a broader range of career options, both in industry and in academia, reflecting the increasing demand for interdisciplinary talent where computing plays a major role.

Program Mission

The mission of the Computing program at Texas A&M University is to prepare intellectual, professional, and ethical graduates with a strong background in computing, who use computing skills to solve multidisciplinary challenges.

Program Requirements

First Year

Fall		**Semester Credit Hours**
CSCE 181	Introduction to Computing [1]	1
ENGL 103 or ENGL 104	Introduction to Rhetoric and Composition or Composition and Rhetoric	3
Select one of the following: [1]		4
CSCE 110	Programming I	
CSCE 111	Introduction to Computer Science Concepts and Programming	
CSCE 206	Structured Programming in C	
Select one of the following:		3
MATH 142	Business Calculus	
MATH 147	Calculus I for Biological Sciences	
MATH 151	Engineering Mathematics I	
MATH 171	Calculus I	
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
	Semester Credit Hours	**14**

Spring

CSCE 120	Program Design and Concepts [1]	3
Select one of the following:		3
MATH 140	Mathematics for Business and Social Sciences	
MATH 148	Calculus II for Biological Sciences	
MATH 152	Engineering Mathematics II	
MATH 168	Finite Mathematics	
MATH 172	Calculus II	
PHIL 240	Introduction to Logic	
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
	Semester Credit Hours	**15**

Second Year

Fall

CSCE 221	Data Structures and Algorithms [1]	4
CSCE 222/ ECEN 222	Discrete Structures for Computing	3
Select one of the following:		3
STAT 211	Principles of Statistics I	
STAT 301	Introduction to Biometry	
STAT 302	Statistical Methods	
STAT 303	Statistical Methods	
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
	Semester Credit Hours	**16**

Spring

CSCE 312	Computer Organization [1]	4
CSCE 314	Programming Languages [1]	3
Select one of the following:		3
COMM 203	Public Speaking	
COMM 205	Communication for Technical Professions	
COMM 243	Argumentation and Debate	
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
	Semester Credit Hours	**16**

Third Year

Fall

CSCE 313	Introduction to Computer Systems [1]	4
CSCE 331	Foundations of Software Engineering [1]	4
CSCE 481	Seminar [1]	1
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
	Semester Credit Hours	**15**

Spring

Select one of the following:		3
ENGL 203	Writing about Literature	
ENGL 210	Technical and Professional Writing	
ENGL 241	Advanced Composition	
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
Concentration elective [3]		3
Prescribed elective [4]		3
	Semester Credit Hours	**15**

Fourth Year		
Fall		
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
Concentration elective [3]		3
Prescribed elective [4]		3
	Semester Credit Hours	**15**
Spring		
CSCE 482	Senior Capstone Design [1]	3
University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) [2]		3
Concentration elective [3]		3
Concentration elective [3]		2
Prescribed elective [4]		3
	Semester Credit Hours	**14**
	Total Semester Credit Hours	**120**

1. All CSCE courses (excluding the prescribed electives) require a grade of C or better.
2. Of the 30 hours shown as University Core Curriculum electives, 9 must be from life and physical sciences, 3 from creative arts, 3 from language, philosophy and culture, 3 from social and behavioral sciences, 6 from American history and 6 from government/political science. The required 3 hours of International and Cultural Diversity and 3 hours of Cultural Discourse may be met by courses also satisfying the creative arts, language, philosophy and culture, social and behavioral sciences and American history requirements if they are also on the approved list of International and Cultural Diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) and Cultural Discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/).
3. To be selected in consultation with major advisor.
4. Select from CSCE 310, CSCE 320/STAT 335, CSCE 400#479 (http://catalog.tamu.edu/undergraduate/course-descriptions/csce/), CSCE 489.