

# COMPUTING - BA

## Program Requirements

### First Year

Fall	Semester Credit Hours
CSCE 181 Introduction to Computing <sup>1</sup>	1
ENGL 103 Introduction to Rhetoric and Composition or ENGL 104 or Composition and Rhetoric	3
Select one of the following: <sup>1</sup>	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 <sup>2</sup>	
MATH 147 Calculus I for Biological Sciences	
MATH 151 Engineering Mathematics I	
MATH 171 Calculus I	
University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3

**Semester Credit Hours 14**

### Spring

CSCE 120 Program Design and Concepts <sup>1</sup>	3
Select one of the following:	3
MATH 140 Mathematics for Business and Social Sciences <sup>2</sup>	
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 ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
Concentration elective <sup>4</sup>	3

**Semester Credit Hours 15**

### Second Year

Fall	Semester Credit Hours
CSCE 221 Data Structures and Algorithms <sup>1</sup>	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 ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
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Concentration elective <sup>4</sup>	3
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**Semester Credit Hours 16**

### Spring

CSCE 312 Computer Organization <sup>1</sup>	4
CSCE 314 Programming Languages <sup>1</sup>	3
Select one of the following:	3
COMM 203 Public Speaking	
COMM 205 Communication for Technical Professions	
ENGL 210 Technical and Professional Writing	

University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
Concentration elective <sup>4</sup>	3

**Semester Credit Hours 16**

### Third Year

Fall	Semester Credit Hours
CSCE 313 Introduction to Computer Systems <sup>1</sup>	4
CSCE 331 Foundations of Software Engineering <sup>1</sup>	4
CSCE 481 Seminar <sup>1</sup>	1

University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
Concentration elective <sup>4</sup>	3

**Semester Credit Hours 15**

### Spring

CSCE 411 Design and Analysis of Algorithms <sup>1</sup>	3
University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
Concentration elective <sup>4</sup>	3
Concentration elective <sup>4</sup>	3
Prescribed elective <sup>5</sup>	3

**Semester Credit Hours 15**

### Fourth Year

Fall	Semester Credit Hours
University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3
University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3

Concentration elective <sup>4</sup>	3
Concentration elective <sup>4</sup>	3
Prescribed elective <sup>5</sup>	3

**Semester Credit Hours 15**

### Spring

CSCE 482 Senior Capstone Design <sup>1</sup>	3
University Core Curriculum ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/</a> ) <sup>3</sup>	3

Concentration elective <sup>4</sup>	3
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Concentration elective <sup>4</sup>	2
Prescribed elective <sup>5</sup>	3
<b>Semester Credit Hours</b>	<b>14</b>
<b>Total Semester Credit Hours</b>	<b>120</b>

<sup>1</sup> All CSCE courses (excluding the prescribed electives) require a grade of C or better.

<sup>2</sup> Students who select MATH 140 and MATH 142 as their Math options must take MATH 140 and receive a grade of C or better before taking MATH 142.

<sup>3</sup> 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/>).

<sup>4</sup> To be selected in consultation with major advisor.

<sup>5</sup> Select from CSCE 305, CSCE 310, CSCE 320/STAT 335, CSCE 400#479 (<http://catalog.tamu.edu/undergraduate/course-descriptions/csce/>), CSCE 489.