

# Computer Science Major

## B.S. in Computer Science - Curriculum Map 2016-2017 Catalog

Freshman			
Fall	Cr.	Spring	Cr.
CS 100 Foundations of Computer Science and Information Assurance	3	CS 140 Programming and Computing	4
EN 101 Composition and Literature I	3	EN 102 Composition and Literature II	3
General Education History	3	MA 121 Calculus I (General Education Math)	4
MA 107 Precalculus Mathematics <sup>1</sup>	4	General Education Arts & Humanities	3
		Free Elective	3
<b>Semester Total Credits</b>	<b>13</b>	<b>Semester Total Credits</b>	<b>17</b>
Sophomore			
Fall	Cr.	Spring	Cr.
CS 228 Introduction to Data Structures	3	CS 240 Database Management	4
EE 215 Fundamentals of Digital Design	4	CS 212 Assembly Language & Reverse Engineering	3
General Education Lab Science	4	General Education Lab Science	4
MA 122 Calculus II (General Education Math)	4	QM 213 Business and Economic Statistics I	3
Free Elective	3	Free Elective	3
<b>Semester Total Credits</b>	<b>18</b>	<b>Semester Total Credits</b>	<b>17</b>
Junior			
Fall	Cr.	Spring	Cr.
CS 301 Software Engineering	3	CS 260 Data Communications and Networks	3
EE 321 Embedded Systems	4	CS 270 Operating Systems & Parallelism	3
MA 306 Discrete Mathematics	3	MA 380 Theory of Computation	3
Technical Elective <sup>2</sup>	3	Technical Elective <sup>2</sup>	3
Free Elective	3	Free Elective	3
<b>Semester Total Credits</b>	<b>16</b>	<b>Semester Total Credits</b>	<b>15</b>
Senior			
Fall	Cr.	Spring	Cr.
CS 420 Computer Science capstone I or 430 Computer Science Undergraduate Thesis I	3	CS 421 Computer Science Capstone II or 431 Computer Science Undergraduate Thesis II	3
General Education Literature	3	General Education Social Science	3
PH 303 Survey of Ethics or 322 Business Ethics (General Education Ethics)	3	Mathematics Elective <sup>3</sup>	3
Technical Elective <sup>2</sup>	3	Technical Elective <sup>2</sup>	3
Free Elective	3	Free Elective	3
<b>Semester Total Credits</b>	<b>15</b>	<b>Semester Total Credits</b>	<b>15</b>
<b>Total Credits For This Major: 126</b>			

- 1 Requires math placement score of 2. Students scoring below 2 must complete the appropriate necessary prerequisite math courses first. Waived with math placement score of 3
- 2 CS 302 or higher, or IA 241 or higher, or DF 241 or higher, or EE 201 or higher
- 3 MA 223, MA 224, MA 240, MA 241, MA 309, MA 318, or MA 421