

## **B.S. Software Engineering: Web and Mobile Concentration**

### **127 Credits**

<i>Course Prefix</i>	<i>Course Title</i>	<i>Credits</i>	<i>Prerequisites</i>
<i>*Remedial Courses</i>			
<b>MATH003</b>	Intermediate Algebra	<b>**3</b>	<b>None</b>
<b>ENG050</b>	Grammar and Composition	<b>**3</b>	<b>None</b>
<i>***Additional Math Courses</i>			
<b>MATH116</b>	Pre-Calculus	<b>***4</b>	Placement Test or MATH003
<i>First Academic Year (Fall, Spring, and Summer)</i>			
<b>ENG100</b>	English Composition	3	Placement Test or ENG050
<b>MATH143</b>	Calculus 1	4	Placement Test or MATH116
<b>SWE100</b>	Introduction to Scripting: Python	3	None
<b>SWE115</b>	Web Programming: HTML5, CSS, JavaScript	3	None
<b>General Education Course</b>	Please see General Education	3	As Required
<b>MATH144</b>	Calculus 2	3	MATH143
<b>SCI145</b>	College Physics 1	4	MATH143
<b>SWE110</b>	C Programming	4	MATH115 or MATH116
<b>SWE125</b>	Introduction to Mobile Programming: iOS	3	None
<b>General Education Course</b>	Please see General Education	3	As Required
<i>Second Academic Year (Fall, Spring, and Summer)</i>			
<b>ENG220</b>	Technical Writing	3	ENG100
<b>MATH245</b>	Calculus 3	3	MATH144
<b>SWE212</b>	Java Programming	4	SWE110
<b>SWE295</b>	Data Structures and Algorithms	4	SWE110 or SWE285
<b>SWE120</b>	Flash Programming: ActionScript	3	None
<b>ENG250</b>	Speech and Oral Communication	3	ENG100
<b>MATH295</b>	Discrete Mathematics	3	MATH144
<b>SWE221</b>	Linux Programming Environment	3	SWE110
<b>SWE285</b>	C++ Programming: Object Oriented Programming	4	SWE100, SWE110, or SWE212
<b>General Education Course</b>	Please see General Education	3	As Required

*\* Remedial classes are required when a placement test is not passed.*

*\*\* Remedial class credits are not counted towards earning a degree.*

<i>Course Prefix</i>	<i>Course Title</i>	<i>Credits</i>	<i>Prerequisites</i>
<b>Third Academic Year (Fall, Spring, and Summer)</b>			
<b>MATH320</b>	Geometry and Transformation	3	MATH144
<b>SCI245</b>	College Physics 2	4	SCI145
<b>SWE351</b>	Computer Architecture	3	SWE295
<b>SWE352</b>	Embedded Software Systems	3	SWE110 and MATH143
<b>General Education Course</b>	Please see General Education	3	As Required
<b>SWE340</b>	Software Engineering Methods and Project 1	3	SWE285
<b>SWE375 or SWE376</b>	Mobile Programming for iOS or Mobile Programming for Android	3	SWE212 or SWE285
<b>SWE445</b>	Advanced C++ Programming	3	SWE285
<b>General Education Course</b>	Please see General Education	3	As Required
<b>General Education Course</b>	Please see General Education	3	As Required
<b>Fourth Academic Year (Fall, Spring, and Summer)</b>			
<b>DMM270</b>	Project Management	3	None
<b>SWE475</b>	Mobile Programming Graphics	3	SWE375 or SWE376
<b>SWE484</b>	Senior Project 1: Planning	3	Senior Level
<b>Elective or INT401</b>	Advisor approved course or Internship 1	3	As Required
<b>General Education Course</b>	Please see General Education	3	As Required
<b>SWE320</b>	Operating Systems Concepts	3	SWE221 and SWE295
<b>SWE485</b>	Senior Project 2: Execution	3	SWE484
<b>Elective or INT401</b>	Any Advisor approved course or Internship 1	3	As required
<b>General Education Course</b>	Please see General Education	3	As Required
<b>General Education Course</b>	Please see General Education	3	As Required

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