

## Advising Road Map

Major:	BS      Software Engineering
Concentration in:	_____
Total Units to Degree:	120
Academic Year:	2015

The following road map is an advising tool that outlines a path of courses a student can take to complete requirements for graduation. This roadmap should be used in consultation with the catalog and your department to identify additional requirements for completing the major (for example course grade minimums). Students must have 60+ units in order to take SJSU Studies courses.

Fall Semester- Year 1	
Course or Requirement	Units
CS 46A, Introduction to Programming	4
Engr 10, Introduction to Engineering (GE Area E)	3
Math 30, Calculus I	3
Communications (GE Area A1)	3
English 1A, Composition (GE Area A2)	3
Total Semester Units:	16

Spring Semester- Year 1	
Course or Requirement	Units
CS 46B, Introduction to Data Structures	4
Math 42, Discrete Math	3
Physics 50, Mechanics	4
English 1B, Composition II (GE Area C2)	3
Total Semester Units:	14

Fall Semester- Year 2	
Course or Requirement	Units
Math 31, Calculus II	4
Biol 10, The Living World	3
CmpE 131, Software Engineering I	3
American Studies 1A (GE Areas C1, D2)	6
Total Semester Units:	16

Spring Semester- Year 2	
Course or Requirement	Units
Phys 51, Electricity and Magnetism	4
Math 32, Calculus III	3
CS 146, Data Structures and Algorithms	3
American Studies 1B (GE Areas C2, D3)	6
Total Semester Units:	16

Fall Semester- Year 3	
Course or Requirement	Units
CmpE 120, Computer Org and Architecture	3
CmpE 133, Software Engineering II	3
CS 151, Object-Oriented Design	3
CS 157A, Introduction to Database	3
Math 161A/ISE 130, Applied Statistics I	3
Total Semester Units:	15

Spring Semester- Year 3	
Course or Requirement	Units
Math 123 Differential Equations & Linear Algebra	3
CmpE 148, Computer Networks I	3
CS 149, Operating Systems	3
CmpE 102, Fundamentals of Embedded Systems	3
Engr 100W, Engineering Report (GE Areas R, Z)	3
Total Semester Units:	15

Fall Semester- Year 4	
Course or Requirement	Units
CmpE 172, Enterprise Software Overview	3
CS 166, Information Security	3
CmpE 187, Software Quality Testing	3
CmpE 165, Software Engr. Process Management	3
CmpE 195A, Senior Design Project I	2
Engr 195A (GE Areas S, V)	1
Total Semester Units:	15

Spring Semester- Year 4	
Course or Requirement	Units
ISE 164, Computer and Human Interaction	3
Technical Elective	3
Technical Elective	3
CmpE 195B, Senior Design Project II	3
Engr 195B (GE Areas S, V)	1
Total Semester Units:	13

NOTES: a) A minimum 2.0 GPA in all REQUIRED COURSES and TECHNICAL ELECTIVES taken at SJSU has been achieved; b) A minimum "C" in Math 030, Math 031 and Phys 050 has been achieved; c) A minimum "C-" in the remaining courses in preparation for the major as well as in all courses in requirements of the major has been achieved; d) A minimum "C" in CmpE 195 A/B and Engr 195 A/B has been achieved.