

Advising Road Map

Major:	BS Biomedical Engineering
Concentration in:	_____
Total Units to Degree:	120
Academic Year:	2016-17

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
Math 30: Calculus I	3
Chem 1A: General Chemistry	5
Engl 1A: Composition I	3
Engr 10: Intro to Engr	3
Total Semester Units:	14

Spring Semester- Year 1	
Course or Requirement	Units
Math 31: Calculus II	4
Chem 1B: General Chemistry	5
Phys 50: Mechanics	4
Engl 1B: Composition II	3
Total Semester Units:	16

Fall Semester- Year 2	
Course or Requirement	Units
Biol 30: Principles of Biology I	4
Math 32: Calculus III	3
AMS 1A: American Civilization	6
ME 20: Design & Graphics	2
Register to take WST	
Total Semester Units:	15

Spring Semester- Year 2	
Course or Requirement	Units
Chem 8: Organic Chemistry	3
Comm 20: Oral Communications	3
AMS 1B: American Civilization	6
Math 133A: Ordinary Diff Eq or Math 123: Differential Equations and Linear Algebra	3
Total Semester Units:	15

Fall Semester- Year 3	
Course or Requirement	Units
BME 115: Foundations of BME	4
Phys 51: Electricity & Magnetism	4
BME 177: Physiology for Engineers	3
Chem 9: Organic Chemistry Lab	1
BME 130: Computational Methods in Biomedical Engineering	3
Total Semester Units:	15

Spring Semester- Year 3	
Course or Requirement	Units
MatE 25: Intro to Mat Engr	3
Engr 100W: Engineering Reports (Z & R)	3
BME 174: Biomedical Regulatory Requirements	3
BME 117: Biotransport Phenomena	3
CE 95: Theory & Applications of Statics	3
Total Semester Units:	15

Fall Semester- Year 4	
Course or Requirement	Units
BME 198A: Senior Project I (S)	2
Engr 195A: Global/Social Issues	1
BME 147: Quantitative and Statistical Methods for Biomedical Engineers	3
BME 175: Biomaterials	3
One course from Major Electives	3
EE 98: Circuit Analysis	3
Total Semester Units:	15

Spring Semester- Year 4	
Course or Requirement	Units
BME 198B: Senior Project II (V)	2
Engr 195B: Global/Social Issues	1
BME 178: Biomedical Product Realization	3
BME 167: Biomechanics	3
One course from Major Electives	3
One course from Major Electives	3
Total Semester Units:	15

NOTES: **(1)** Lower Division Core (LD core): Math 30*, Math 31*, Math 32*, Phys 50*, Phys 51, Chem 1A*, Chem 1B*, Biol 30*, Engr 10*, ME 20*, CE 95, MatE 25, and EE 98. Those with an asterisk (*) must be completed with a GPA of ≥ 2.0 , & no individual course grade < C- before enrolling in Junior Core classes. The entire Lower Division Core, must be completed, also with a GPA of ≥ 2.0 , & no individual course grade < than C- before enrolling in Senior Core classes. Co-enrollment of EE 98 with BME 198A is permitted. **(2)** Junior Core: Math 133A or Math 123, BME 115, BME 117, BME 130, BME 174, BME 177, and Engr 100W. Must be completed with a GPA ≥ 2.0 , and no individual course grade < C- before enrolling in Senior core classes. **(3)** Senior Core: BME 147, BME 167, BME 175, BME 178, BME 198A, and BME 198B. The entire Senior Core must be completed with a GPA ≥ 2.0 and no individual course grade < C-.