First-Year Course Recommendations – Engineering

Full-time students typically choose a combination of these courses - totaling 12-16 units per semester.

	Course	Course Title	Course Advice	Units	Semester	
					1st	2nd
Major	ENGR 101	Introduction to Engineering	This class is a great introduction to the Engineering profession and transfer options. It may not be a major requirement, but it transfers to CSU's and UC's and is recommended.	2		
	CHEM 155	General Chemistry I	These courses are required for CS majors. Note: CHEM 101 or a year of high school chemistry is perquisite as is MATH 107 or 111 (Intermediate Algebra). Depending on how stro your high school preparation was in Chemistry, taking CHEM 101 might be advised. If you choose not to take CHEM 101, you will need to submit a Prerequisite Challenge Form A to Admissions and Records before you register for CHEM 155.	5		
	CHEM 156	General Chemistry II		5		
	CS 101	Computer Concepts	Engineering courses are often major requirements for Engineering. Check Assist.org to determine which CS courses you might need. Most of SBCC's CS courses recommend CS 101 first.	4		
	PHYS 102	Introduction to Physics	If you didn't successfully pass a trigonometry based physics course in high school, you will ne this course before you will be able to take the required Engineering physics sequence (PHYS 121, 122, and 123). Note: most students take PHYS 121 in their second year since it also requires MATH 150 be completed first.	4		
General Education	English	See: Which English Courses Do I Need?	English is a foundational skill necessary for success in all college courses. Note: most of SBCC courses have Skills Advisories of Eligibility for ENGL 110. Take whichever level of English you assessed into. ENGL 110 is required for admission at all CSU's and UC's.	3-5		
	Math	See: Understanding Your Math Course Placements	Engineering majors require MATH 150 and 160 for calculus and usually Math 200 (Multivariable Calculus), MATH 210 Linear Algebra, and MATH 220 Differential Equations. Check Assist.org to see what your desired school requires. Start with whatever math course yo assessed into and work your way through this sequence.	3-5		
	Arts and Humanities	See: IGETC Area 3A & 3B; SBCC GE Pattern Area C	Often Engineering majors finish these two areas of general education once they transfer, but if you plan to transfer to a UC you will need one course from IGETC Area 3 or Area 4 to meet the admission requirement. Look for a course with Skills Advisories which match your placement levels and that sounds interesting to you.	3		
	Social Sciences	See: IGETC Area 4; SBCC GE Pattern Area B		3		
Electives	PD 100	College Success	These courses help students clarify their academic and career goals. PD 100 also focuses on study skills. PD 110 also focuses job search skills. Note: the UC only gives credit for PD 100 or PD 110 – not both.	3		
	PD 110	Career Planning				
	PE	Physical Education Activities	You can transfer up to 4 units of PE activity courses to the UC system and more to CSU campuses. They can be a great way to manage stress and maintain physical health. Many of these courses are graded.	1		
	Any course of interest		Taking courses you are interested in can be one of the best ways to explore major and career options. SBCC offers many incredible courses in areas outside of major and general education that are still desired by the UC and CSU systems.	1-5		

***Note: CS majors typically take 60+ units of major and general education courses prior to transfer. Depending on your timeline, you might not have time to take electives.**

For additional advice about this major check out this Pathways to Engineering link.