ENGINEERING, ASSOCIATE IN ARTS OR SCIENCE (AA/AS)

Requirements

Associate Degree Graduation Requirements

Complete all of the following:

1. All Department Requirements listed below with a "C" or better or "P" in each course (at least 20% of the department requirements must be completed through SBCC).
2. One of the following three General Education options:
    a. OPTION 1: A minimum of 18 units of SBCC General Education Requirements (https://catalog.sbcc.edu/degrees-certificates-awards/#associatedegreestext) (Areas A-D) and Institutional Requirements (Area E) and Information Competency Requirement (Area F) OR
    b. OPTION 2: IGETC (https://catalog.sbcc.edu/transfer-curricula/#igetctext) Pattern OR
    c. OPTION 3: CSU GE Breadth (https://catalog.sbcc.edu/transfer-curricula/#csugebtext) Pattern
3. A total of 60 degree-applicable units (SBCC courses numbered 100 and higher).
4. Maintain a cumulative GPA of 2.0 or better in all units attempted at SBCC.
5. Maintain a cumulative GPA of 2.0 or better in all college units attempted.
6. A minimum of 12 units through SBCC.

Code	Title	Units
Department Requirements		
CHEM 155	General Chemistry I	5
ENGR 101	Introduction To Engineering	2
MATH 150	Calculus with Analytic Geometry I	5
MATH 160	Calculus with Analytic Geometry II	5
MATH 200	Multivariable Calculus [1]	4
MATH 210	Linear Algebra [1]	4
PHYS 121	Mechanics Of Solids And Fluids	5
PHYS 122	Electricity and Magnetism	5
Select one course from the following:		4
ENGR 115	Statics And Strength Of Materials [2]	
ENGR 117 & 117L	Electronic Circuits and Electronic Circuits Laboratory [2,3]	
Select at least 3 additional courses from the following:		9-15
CHEM 156	General Chemistry II	
CS 105	Theory and Practice I	
CS 107	Computer Architecture and Organization	
CS 137	C Programming	
DRFT 130	Computer-Assisted Drafting And Design I	
ENGR 105	Engineering Graphics	
ENGR 115	Statics And Strength Of Materials [2]	
ENGR 116	Dynamics	
ENGR 117 & 117L	Electronic Circuits and Electronic Circuits Laboratory [2,3]	
MATH 220	Differential Equations [4]	
PHYS 123	Heat, Light and Modern Physics	
Total Units		**48.00-54.00**

1 MATH 250 satisfies this requirement.

2 A course may not be used to satisfy more than one requirement (double counting not allowed).

3 ENGR 140 will also satisfy this requirement. Students who completed ENGR 141 in addition to ENGR 140 can also use this course to satisfy an additional elective requirement.

4 MATH 260 may also count toward the elective requirement.

Learning Outcomes

1. Knowledge of the engineering profession, and the engineering analysis and design process.
2. Utilize mathematical analysis and graphical methods to solve engineering problems.
3. Demonstrate proficiency in the application and use of engineering software and laboratory equipment.
4. Develop teamwork and technical writing skills to be successful on an engineering design team.

Recommended Sequence

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (http://www.sbcc.edu/starfish/howtos/starfish_appt_how_to.pdf).