

2022 - 2023

Engineering: Computer or Software Associate in Science Degree

Complete the following program of study (Major C.3013.AS). Major requirements (45 units minimum).

A student earning one of these degrees will have completed the lower division coursework necessary to transfer into a bachelor's degree program in Computer Engineering or Software engineering. In addition, a student earning this degree will be prepared for engineering internship opportunities.

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_ Date: \_\_\_\_\_

Course Overview and Selection

Required Engineering Core:

Course	Course Description	Units	Completed	In Progress	Planned
<b>ENGR 10</b>	Introduction to Engineering	<b>2</b>			
<b>MATH 5A</b>	Math Analysis I	<b>5</b>			
<b>MATH 5B</b>	Math Analysis II	<b>4</b>			
<b>MATH 6</b>	Math Analysis III	<b>5</b>			
<b>MATH 17</b>	Differential Equations & Linear Algebra	<b>5</b>			
<b>PHYS 4A</b>	Physics for Scientists and Engineers I	<b>4</b>			
<b>PHYS 4B</b>	Physics for Scientists and Engineers II	<b>4</b>			

Courses Specific to Computer or Software Engineering Transfer

\*Select a minimum of four courses:

Course	Course Description	Units	Completed	In Progress	Planned
<b>ENGR 6</b>	Electric Circuit Analysis with Lab	<b>4</b>			
<b>**CSCI 40</b> or <b>**ENGR 40</b>	Programming Concepts & Methodology I or Programming for Scientists and Engineers	<b>4</b> or <b>4</b>			
<b>CSCI 41</b>	Programming Concepts & Methodology II	<b>4</b>			
<b>***CHEM 3A</b> or <b>***CHEM 1A</b>	Introductory General Chemistry or General Chemistry	<b>4</b> or <b>5</b>			
<b>PHYS 4C</b>	Physics for Scientists and Engineers III	<b>4</b>			

Notes:

\*Students should carefully plan which of these courses to take based on their specific major and intended transfer institution(s). Some Transfer institutions will have minimum requirements for transfer that will necessitate choosing more than four courses from this section.

\*\*Students should complete the programming courses specifically required by his or her transfer institution choice. The choices are: ENGR 40 Programming for Scientists and Engineers (4 units) and CSCI 40 Programming Concepts and Methodology I (4 units).

\*\*\*Students should check the minimum chemistry transfer requirements for his or her intended transfer institution.

Program Learning Outcomes:

1. Apply knowledge of mathematics, science, and engineering fundamentals to solve engineering problems.
2. Conduct laboratory experiments. Analyze and interpret the data resulting from these experiments.
3. Make basic design decisions concerning appropriate level engineering problems.
4. Communicate solutions to engineering problems using effective oral, written, and graphical methods.
5. Understand the impact of engineering solutions in a global and societal context.
6. Use the techniques, skills, and software tools of modern engineering practice.

Comments:

Faculty Advisor(s): C Glaves