Clovis Community College

2021-2021 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
ENGR 10	Introduction to Engineering	2			
MATH 5A	Math Analysis I	5			
MATH 5B	Math Analysis II	4			
MATH 6	Math Analysis III	5			
MATH 17	Differential Equations & Linear Algebra	5			
PHYS 4A	Physics for Scientists and Engineers	4			
PHYS 4B	Physics for Scientists and Engineers	4			

Courses Specific to Computer or Software Engineering Transfer

*Select a minimum of four courses:

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

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