Engineering Department

DEGREES

Engineering (AS)

COURSES:

ENGR (Engineering)

CONTACT INFORMATION:

School of Mathematics and Sciences

Building: 2700 Room 2719B
Phone Number: (707) 864-7110
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Dean: Joseph Ryan
Administrative Assistants:

Mathematics: Kayla Kaywood
Sciences: Kelsi Mundell

Faculty Contact: Melanie Lutz

P.A.C.E. - **SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS** - A PATHWAY FOR ACADEMIC AND CAREER EXCELLENCE AT SOLANO COMMUNITY COLLEGE

ARE YOU THE KIND OF PERSON WHO...

- ...desires to observe, learn, analyze, evaluate, or solve problems?
- ...enjoys to question and explore physical or biological happenings?
- ...likes to work hands-on with objects, machines, tools, plants, or animals?
- ...is interested in math and/or thinking analytically to solve complex problems?

Engineering

Associate in Science

Program Description

Solano Community College offers a two-year lower division Engineering Program that is designed to prepare students to transfer to a four-year university. The lower division Engineering Core Courses recommended by the Engineering Liaison Committee of the State of California have been coordinated between community colleges and the four-year colleges and universities throughout California. As part of our Engineering Program, an Associate in Science in Engineering is available. Although most engineering students transfer to a four-year university, those with an AS degree can also be employed in entry-level jobs that require two years of college-level science and math.

The Associate in Science can be obtained by completing the 43-46-unit major, General Education, and electives as needed to complete a minimum of 60 units. All courses for the major must be completed with a minimum grade of C or a grade of P if the course is taken on a Pass/No Pass basis.

Program Outcomes

1. Demonstrate analytical problem solving skills in Math, Physics, Chemistry and Engineering.
2. Conduct experiments and critically assess the data.
3. Write professional laboratory reports and/or give oral presentations.

REQUIRED COURSES	**Units**
CHEM 001 General Chemistry I	5
MATH 020 Analytic Geometry and Calculus I	5
MATH 021 Analytic Geometry and Calculus II	5
MATH 022 Analytic Geometry and Calculus III	4
MATH 023 Differential Equations	4
PHYS 006 Physics for Science and Engineering	5
PHYS 007 Physics for Science and Engineering	5
Three courses from List A	10-13
Required Major Total Units	**43-46**

List A: (select three courses)	**Units**
CIS 022 Introduction to Programming	3
DRFT 045 Introduction to Computer-Aided Drafting (CAD)	4
or	
DRFT 058 Solid Modeling with Solidworks	3
ENGR 017 Introduction to Electrical Engineering	5
ENGR 030 Engineering Mechanics: Statics	4
ENGR 045 Properties of Materials	4
ENGR 026 Mathematics and Engineering Problem Solving Using Matlab	4
or	
MATH 026 Mathematics and Engineering Problem Solving Using Matlab	4