Engineering Department

DEGREES
Engineering (AS)

COURSES:
ENGR (Engineering)

CONTACT INFORMATION:
School of Mathematics and Sciences
Building: 2700  Room 2719B
Phone Number: (707) 864-7110
Fax Number: (707) 646-2054
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