ENGINEERING - ASSOCIATE IN ARTS

Evergreen Valley College offers a two-year lower-division Engineering Program that allows students to transfer to any four-year California College or University offering a degree in Engineering. 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. The Associate in Arts and the Associate in Science Degrees are available for Engineering students. The engineering degree programs consist of the Engineering Core courses plus General Education courses that satisfy graduation requirements. It is recommended that students complete as much of their General Education requirements as possible. A grade of “C” or better in each major course is required for this degree.

Program Learning Outcomes

- Design and conduct experiments as well as analyze and interpret data
- Design a system, component, or process as per customer specifications
- Identify potential changes in behavior and properties of materials as they are altered and influenced by manufacturing processes and loading conditions
- Assess the safety and environmental consequences of a proposed design
- Demonstrate an awareness of the human and social ramifications of technological solutions in a global and societal context
- Work and communicate effectively, either independently or in a team, to solve technical problems using engineering principles
- Demonstrate an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Major Requirements

Course	Title	Units
CHEM 001A	General Chemistry	5
ENGR 010	Engineering Processes and Tools	3
ENGR 018	Engineering Design and Graphics	3
ENGR 050	Introduction to Computing	4
ENGR 066	Properties of Materials	3
ENGR 069	Statics	3
ENGR 071	Introduction to Circuit Analysis	4
MATH 071	Calculus I With Analytic Geometry	4-5
or MATH 066	Calculus I Late Transcendentals for STEM	
MATH 072	Calculus II With Analytic Geometry	4-5
or MATH 067	Calculus II Late Transcendentals for STEM	
MATH 073	Multivariable Calculus	5
MATH 078	Differential Equations	4
PHYS 004A	General Physics	4-5
or PHYS 007A	Calculus-Based General Physics for Scientists and Engineers - I	
PHYS 004B	General Physics	4-5
or PHYS 007B	Calculus-Based General Physics for Scientists and Engineers - II	
PHYS 004C	General Physics	4-5
or PHYS 007C	Calculus-Based General Physics for Scientists and Engineers - III	

Total Requirements

Course	Title	Units
Major Requirements		54-59
General Education Requirements [1]		39
Total Units		**86-91**

[1] *Some GE courses may be double-counted within the major and reduce the total number of units.*