Engineering is a profession in which knowledge of the mathematical and natural sciences is applied to develop ways to use the materials and forces of nature economically for the benefit of humanity. The Associate in Science Degree in Engineering provides the student the opportunity to complete all the lower division courses required for transfer to a university to pursue a degree in Engineering. Students will be building upon their high school mathematics and physical science background. Recommended high school preparation includes algebra, geometry, trigonometry, chemistry, and physics. Students who wish to transfer may want to consult their counselor to help them determine the best course of action for their goals.

**Important:** To obtain the Associate in Science Degree in Engineering, students must complete the following requirements with a minimum grade point average (GPA) of 2.0:

- The Engineering major requirements below.
- The College of the Siskiyous General Education pattern (COSGE) requirements.
- Any needed electives to reach a total of 60 COS degree applicable units.
- All major courses and any courses noted on the COS check sheet must be completed with a C or better.

### Requirements for the Major

**Complete the following:**

- CHEM 2000- General Chemistry I (5)
- ENGR 2017- Introduction to Circuit Analysis (4)
- ENGR 2035- Mechanics for Engineers- Statics (3)
- MATH 1400- Calculus and Analytic Geometry I (4)
- MATH 1500- Calculus and Analytic Geometry II (4)
- MATH 2400- Calculus and Analytic Geometry III (4)
- MATH 2500- Ordinary Differential Equations (3)
- MATH 2600- Introduction to Linear Algebra (3)
- PHYS 2105- Mech. Physics, Oscillations, & Waves (4.5)
- PHYS 2110- Electrical Physics, Light (4.5)
- PHYS 2115- Heat, Modern, and Quantum Physics (4.5)

**Total Units:**

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43.5