# Engineering

## Transfer

### AS Degree in Engineering

**Engineering Program**
- Counseling and Advising: (530) 895-2378
- Transfer Counseling Center: (530) 895-2264
- Transfer Information: [www.assist.org](http://www.assist.org)
- Department Office: TE 132, (530) 679-6106
- Michael Panunto, Chair (530) 895-2229

### About the Program

The transfer major listed here partially reflects requirements for CSU, Chico. Students planning to transfer should contact a counselor for more information on program and transfer requirements.

To obtain an Associate's degree, students must complete both the major requirements and the graduation requirements listed in this catalog.

Note that some courses have a prerequisite (P), corequisite (C), or both (P/C). Prerequisites and corequisites are listed within each course description in this catalog.

Transfer majors designated as AA-T or AS-T are designed for transfer to a similar major at an unspecified CSU. Transfer majors designated as AA or AS are designed for transfer to the corresponding major at a specific CSU and are based on articulation. See a counselor for more information. Read about the difference between these types of degrees at the beginning of the Transfer section of this catalog.

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### AS Degree in Engineering 60 Units Minimum

#### Student Learning Outcomes

Upon successful completion of this program, the student will be able to:

- Use the tools of Mathematics and Physics to solve engineering problems.
- Demonstrate an ability to develop engineering judgment in the solution of engineering problems by breaking problems down, solving each part, checking each solution and reassembling the problem for a final solution.
- Safely use and accurately interpret the output of standard measuring devices.
- Demonstrate knowledge of the general methods of problem solving using data gathered in the field.
- Demonstrate the ability to write comprehensive reports to communicate the analysis of various materials.

#### Required courses for the major: 44 - 53 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 17</td>
<td>Electrical Circuits and Devices</td>
<td>4</td>
</tr>
<tr>
<td>MATH 30</td>
<td>Analytic Geometry and Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 31</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 32</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 40</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 41</td>
<td>Physics for Scientists and Engineers I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 42</td>
<td>Physics for Scientists and Engineers II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 43</td>
<td>Physics for Scientists and Engineers III</td>
<td>4</td>
</tr>
</tbody>
</table>

**Civil Engineering Option at CSU, Chico**
- ENGR 3 Plane Surveying I (P) 3
- ENGR 4 Plane Surveying II (P) 3
- ENGR 8 Statics (P) 3
- ENGR 45 Materials Science (P) 3
- DFT 12 Beginning AutoCAD Drafting 3

**Computer Engineering Option at CSU, Chico**
- CSCI 10 Computer Architecture and Organization 3

**Electrical/Electronic Engineering Option at CSU, Chico**
- CSCI 10 Computer Architecture and Organization 3
- CSCI 20 Programming and Algorithms I 3
- or CSCI 21 Programming and Algorithms II (P) 3

**Mechanical Engineering Option at CSU, Chico**
- DFT 2 Engineering Graphics I 3
- ENGR 8 Statics (P) 3
- ENGR 45 Materials Science (P) 3
- DFT 8 Engineering Graphics II (P) 3

CSU, Chico also offers an option in Mechatronic Engineering. Visit [www.assist.org](http://www.assist.org) for more information.