The courses listed will lead to the Associate of Science in Applied Geographic Information Systems. The degree prepares students for either technician or analyst careers using GIS in the fields of civil engineering, biology, public safety, planning and landscape architecture, public health, social sciences, and public administration. Completion of this program is designed to prepare students to transfer into a bachelor’s degree program.

To acquire the **Associate of Science Degree in Applied Geographic Information Systems**, students must complete the required major courses below with a grade of “C” or better along with one of the following:

- RHC GE and Proficiency requirements
- CSU GE (California State University General Education Breadth)
- IGETC (Intersegmental General Education Transfer Curriculum)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
<th>N</th>
<th>IP</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td><strong>GIS 120</strong> Introduction to Geographic Information Systems and Spatial Analysis</td>
<td>4</td>
<td></td>
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<tr>
<td><strong>GIS 220</strong> <em>GIS Applications</em>*</td>
<td>4</td>
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<tr>
<td><strong>GIS 221</strong> *Cartography Design and Geographic Information Systems</td>
<td>4</td>
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<tr>
<td><strong>GIS 280</strong> *Geospatial Programming and Web Services</td>
<td>4</td>
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<tr>
<td><strong>GIS 290</strong> Cooperative Work Experience/Internship for GIS Related Fields</td>
<td>1-4</td>
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</tbody>
</table>

**Choose two courses from one of the following Specialization tracks:**

**Civil Engineering Specialization Track**

- **ENGT 150** AutoCAD for Basic CADD Applications or **ENGT 170** MicroStation for Basic CADD Applications | 4     |   |    |   |
- **GIS 130** *Field Data Applications for GIS** | 4     |   |    |   |
- **CIV 142** Introduction to Land Surveying and GPS | 4     |   |    |   |

**Environmental Specialization Track**

- **GIS 230** *Geographic Information Systems (GIS) in Environmental Technology** | 3     |   |    |   |
- **GIS 130** *Field Data Applications for GIS** | 4     |   |    |   |

**Data Analyst Specialization Track**

- **GIS 281** Crime Mapping and Analysis | 4     |   |    |   |
- **PSY 190** *Statistics for the Behavioral Sciences** | 4     |   |    |   |

**Total major units needed for Associate of Science** | **24-25** |   |    |   |

Units Completed

*Prerequisite/Corequisite