# Environmental & Spatial Sciences, B.S.

## Major in Environmental & Spatial Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED CORE GEOGRAPHY</strong></td>
<td></td>
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</tr>
<tr>
<td>GEOG 130</td>
<td>Intro to Environmental Science</td>
<td>3</td>
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<tr>
<td>GEOG 120</td>
<td>Human Geography</td>
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<tr>
<td>Physical Geography or Geomorphology - Choose 1 of the following:</td>
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<tr>
<td>GEOG 230</td>
<td>Physical Geography</td>
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</tr>
<tr>
<td>ESCI 225</td>
<td>Geomorphology</td>
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<tr>
<td>GEOG 289</td>
<td>Field and Research Methods in Geography</td>
<td>3</td>
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<tr>
<td>GEOG 408</td>
<td>Sustainable Development</td>
<td>3</td>
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<tr>
<td><strong>REQUIRED SPATIAL SCIENCE</strong></td>
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<tr>
<td>GEOG 281</td>
<td>Maps and GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 292</td>
<td>Quantitative and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 295</td>
<td>GIS I: Vector Data Analysis</td>
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</tr>
<tr>
<td>GEOG 296</td>
<td>GIS II: Raster Data Analysis</td>
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<td><strong>SPATIAL SCIENCE ELECTIVES</strong></td>
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<td>Choose 2 of the following:</td>
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<tr>
<td>GEOG 395</td>
<td>GIS for Web Development</td>
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<tr>
<td>GEOG 384</td>
<td>Cartography</td>
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<tr>
<td>GEOG 396</td>
<td>GIS Modeling</td>
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<tr>
<td>GEOG 397</td>
<td>GIS Data Management</td>
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<td><strong>ENVIRONMENTAL STUDIES ELECTIVES</strong></td>
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<td>Choose 3 of the following:</td>
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<tr>
<td>GEOG 304</td>
<td>Water Resources Management</td>
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<tr>
<td>GEOG 305</td>
<td>Energy Sustainability</td>
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<tr>
<td>GEOG 306</td>
<td>Environmental Impact Assessment</td>
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<td>GEOG 307</td>
<td>US Environmental Policy</td>
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<tr>
<td>GEOG 333</td>
<td>Biogeography</td>
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</tr>
<tr>
<td>GEOG 336</td>
<td>Climate And Society</td>
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<tr>
<td>GEOG 407</td>
<td>Glob Envrnmt Policy/Negotiatn</td>
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<tr>
<td><strong>REQUIRED CAPSTONE</strong></td>
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<td>Choose 1 of the following:</td>
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<tr>
<td>GEOG 300</td>
<td>Co-Op Ed Experience in Geog</td>
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<tr>
<td>GEOG 488</td>
<td>Senior Thesis</td>
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<tr>
<td>GEOG 489</td>
<td>Honors Thesis</td>
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<td><strong>Total Hours</strong></td>
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## Req Related for Environmental & Spatial Sciences

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>REQUIRED RELATED ENVIRONMENTAL SCIENCE</strong></td>
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<tr>
<td>BIOL 100</td>
<td>General Biology</td>
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<tr>
<td>CHEM 111</td>
<td>Introductory Chemistry 1</td>
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<tr>
<td>CHEM 112</td>
<td>Introductory Chemistry 2</td>
<td>4</td>
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<td>Physical Geology or Intro to Oceanography - Choose 1 of the following:</td>
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<tr>
<td>ESCI 221</td>
<td>Physical Geology</td>
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<tr>
<td>ESCI 261</td>
<td>Introduction to Oceanography</td>
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<tr>
<td>MATH 161</td>
<td>Calculus 1</td>
<td>4</td>
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## Environmental Science Req Related Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 211</td>
<td>Concepts of Zoology</td>
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<td>BIOL 221</td>
<td>Concepts of Botany</td>
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<td>BIOL 340</td>
<td>Prspctv in Environm Awareness</td>
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<tr>
<td>BIOL 343</td>
<td>Principles of Ecology &amp; Evolution</td>
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<tr>
<td>CHEM 235</td>
<td>Organic Chemistry</td>
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<tr>
<td>CHEM 265</td>
<td>Quantitative Analysis</td>
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<tr>
<td>CHEM 375</td>
<td>Environmental Chemistry</td>
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<td>CHEM 476</td>
<td>Environmental Chemistry 2</td>
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<tr>
<td>ESCI 226</td>
<td>Geology of Earth and Energy Resources</td>
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<tr>
<td>ESCI 241</td>
<td>Meteorology</td>
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<td>ESCI 245</td>
<td>Environmental Meteorology</td>
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<td>ESCI 322</td>
<td>Environmental Hydrology</td>
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<tr>
<td>ESCI 326</td>
<td>Sedimentation and Stratigraphy</td>
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<tr>
<td>ESCI 329</td>
<td>Aqueous Geochemistry</td>
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<tr>
<td>ESCI 366</td>
<td>Marine Resources and Policy</td>
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<tr>
<td>ESCI 385</td>
<td>Global Climate Change: Sci &amp; Policy</td>
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<tr>
<td>ESCI 422</td>
<td>Geological Field Mapping</td>
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<tr>
<td>ESCI 426</td>
<td>Groundwater Resources and Contamination</td>
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<tr>
<td>ESCI 466</td>
<td>Environmental Oceanography</td>
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<tr>
<td>OSEH 435</td>
<td>Environmental Health</td>
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<tr>
<td>PHYS 132</td>
<td>Physics 2 with Algebra</td>
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<tr>
<td>PHYS 232</td>
<td>Physics 2 with Calculus</td>
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**Total Hours**: 29-30