### 2019 - 2020 Major Map

**Sustainability, BS**

**School/College:** School of Sustainability  
**Location:** Polytechnic campus, Tempe campus

**SUSUSTBS**

<table>
<thead>
<tr>
<th>Term 1 0 - 14 Credit Hours</th>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOS 101: Introduction to Applied Mathematics for the Life and Social Sciences (MA)</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 191: Introduction to ASU and SOS for Freshmen OR SOS 201: Introduction to ASU and Sustainability</td>
<td></td>
<td>1</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 111: Sustainable Cities ((HU or SB) &amp; G)</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Second Language: Requirement satisfied through the following:  
* Completion of language course(s) at the 102 level.

Minimum 2.50 GPA ASU Cumulative.  
Minimum 3.00 GPA in SOS.

Term hours subtotal: 14

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<table>
<thead>
<tr>
<th>Term 2 14 - 30 Credit Hours</th>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 110: Sustainable World (SB)</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 211: Calculus and Probability for the Life and Social Sciences (MA)</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Second Language: Requirement satisfied through the following:  
* Completion of language course(s) at the 102 level.

Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)  
Complete ENG 101 OR ENG 105 OR ENG 107 course(s).  
Complete SOS 110 AND SOS 111 course(s).  
Minimum 2.50 GPA ASU Cumulative.  
Minimum 3.00 GPA in SOS.

Term hours subtotal: 16

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<table>
<thead>
<tr>
<th>Term 3 30 - 46 Credit Hours</th>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOS 220: Systems Thinking</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 212: Systems, Dynamics and Sustainability</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 232: Professional Skills in Sustainability Practice</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Computer/Statistics/Quantitative Applications (CS)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science - Quantitative (SQ)</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Create a first draft resume and start attending sustainability career-related workshops and lectures.
Complete First-Year Composition requirement.
Minimum 2.50 GPA ASU Cumulative.
Minimum 3.00 GPA in SOS.
Complete Mathematics (MA) requirement.

Term hours subtotal: 16

<table>
<thead>
<tr>
<th>Term 4 46 - 63 Credit Hours Critical course signified by ⚫</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOS 320: Society and Sustainability (L or SB) OR SOS 321: Policy and Governance in Sustainable Systems OR SOS 322: International Development and Sustainability OR SOS 323: Sustainable Urban Dynamics OR SOS 324: Sustainable Energy Technology and Systems OR SOS 325: The Economics of Sustainability OR SOS 326: Sustainable Ecosystems OR SOS 327: Sustainable Food and Farms OR SOS 328: Sustainability and Enterprise OR SOS 465: Sustainable Urbanism</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 231: Careers in Sustainability</td>
<td>1</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 310: Equity, Justice and Sustainability</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Upper Division Track Required Course</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (H) AND Historical Awareness (H)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science - Quantitative (SQ) OR Natural Science - General (SG)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complete SOS 211 AND SOS 212 course(s).
Complete SOS 231 AND SOS 232 course(s).
Milestone: Select a track.
Minimum 2.50 GPA ASU Cumulative.
Minimum 3.00 GPA in SOS.

Term hours subtotal: 17

<table>
<thead>
<tr>
<th>Term 5 63 - 78 Credit Hours Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 2 courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOS 320: Society and Sustainability (L or SB) OR SOS 321: Policy and Governance in Sustainable Systems OR SOS 322: International Development and Sustainability OR SOS 323: Sustainable Urban Dynamics OR SOS 324: Sustainable Energy Technology and Systems OR SOS 325: The Economics of Sustainability OR SOS 326: Sustainable Ecosystems OR SOS 327: Sustainable Food and Farms OR SOS 328: Sustainability and Enterprise OR SOS 465: Sustainable Urbanism</td>
<td>6</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 311: Future Thinking and Strategies</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Related Discipline Elective</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
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</tr>
</tbody>
</table>

Minimum 2.50 GPA ASU Cumulative.
Minimum 3.00 GPA in SOS.

Term hours subtotal: 15

<table>
<thead>
<tr>
<th>Term 6 78 - 93 Credit Hours Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track Elective Course</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Related Discipline Elective</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

See track/group notes below for Track elective details.

* All students must complete 12 hours of approved Related Discipline courses. A Related Discipline is a concentration outside of Sustainability that augments the student's Sustainability education. See advisor for approval.
* Meet with the School of Sustainability Career Advisor to review your resume.
**BS Students must select one of the following challenge area tracks:**
- Energy, Materials, and Technology (SOS 324)
- Economics of Sustainability (SOS 325)
- Sustainable Ecosystems (SOS 326)

**Students must declare a track by the end of Term 4.**

**Students must complete the one required track course for their chosen track.**

**Students must also complete any additional three track courses for a total of four (12 credit hours) track courses. Select from SOS 320, SOS 321, SOS 322, SOS 323, SOS 324, SOS 325, SOS 326, SOS 327, SOS 328, or SOS 465.**

**Students must complete two track elective courses from their chosen track. At least one track elective must be upper division.**

*Example: If the Economics of Sustainability Track is chosen, students must complete SOS 325 and any three additional track courses by the end of Term 5.*

More information on BS Tracks can be found [here](#).
### Economics of Sustainability Track

**Required Course:**
- SOS 325: The Economics of Sustainability

**Electives:**
- ASB 316: Money and Culture (L or SB)
- ECN 211: Macroeconomic Principles (SB)
- ECN 212: Microeconomic Principles (SB)
- ECN 306: Survey of International Economics (SB & G)
- ECN 312: Intermediate Microeconomic Theory (SB)
- ECN 313: Intermediate Macroeconomic Theory (SB)
- ECN 345: Survey of Environmental and Resource Economics
- ECN 360: Economic Development (SB & G)
- ECN 413: Advanced Honors Macroeconomics
- ECN 414: Advanced Honors Microeconomics
- ECN 425: Introduction to Econometrics
- ECN 436: International Trade Theory (SB & G)
- ECN 445: Environmental Economics
- GCU 441: Economic Geography (SB)
- POS 486: International Political Economy (SB & G)
- SGS 330: Globalization and the Environment: Problems and Solutions

### Ecosystems Sustainability Track

**Required Course:**
- SOS 326: Sustainable Ecosystems

**Electives:**
- ABS 364: Urban Forestry
- ABS 430: Watershed Management
- ABS 481: Riparian and Wetland Restoration
- BIO 181: General Biology I (SQ)
- BIO 182: General Biology II (SG)
- BIO 303: Plant Diversity and Evolution (L or SG)
- BIO 304: Plants and Civilization (L) or PLB 302: Plants and Civilization (L)
- BIO 308: Plant Physiology
- BIO 313: The Flora of Arizona
- BIO 322: Conservation of Biodiversity
- BIO 323: Ecosystem Restoration and Management
- BIO 325: Oceanography or GLG 325: Oceanography
- BIO 331: Animal Behavior
- BIO 370: Vertebrate Zoology
- BIO 386: General Entomology
- BIO 410: Techniques in Conservation Biology and Ecology (L)
- BIO 411: Quantitative Methods in Conservation and Ecology
- BIO 412: Conservation in Practice
- BIO 421: Landscape Ecology
- BIO 423: Population and Community Ecology
- BIO 434: People and Nature: Ecosystem Services
- BIO 471: Ornithology
- BIO 472: Mammalogy
- BIO 474: Herpetology
- CHM 302: Environmental Chemistry
- CHM 302: Environmental Chemistry
- GCU 364: Energy in the Global Arena (SB & G)
- GPH 405: Energy and Environment
- GPH 412: Physical Meteorology
- HST 302: Energy Transitions and Sustainability ((HU or SB) & G & H)
- IND 242: Materials and Design
- SOS 181: Technological, Social, and Sustainable Systems (HU)
- SOS 315: Energy Policy
- SOS 435: U.S. Energy: Pathways to Sustainability
- SOS 494: Renewable Energy

### Sustainable Energy, Materials, and Technology Track

**Required Course:**
- SOS 324: Sustainable Energy Technology and Systems

**Electives:**
- ALA 100: Introduction to Environmental Design (HU & H & G)
- ALA 102: Landscapes and Sustainability (HU & G)
- ALT 435: Applied Photovoltaics
- APH 313: History of Architecture I ((L or HU) & H & G)
- CEE 400: Earth Systems Engineering and Management ((L or HU) & H)
- CHM 107: Chemistry and Society (SQ)
- CON 101: Construction and Culture: a Built Environment (HU & H)
- ERM 201: Environmental Management
- ERM 203: Environmental Regulations
- ERM 302: Water and Wastewater Treatment Technology
- ERM 401: Hazardous Waste Management
- ERM 426: Environmental Issues
- ERM 428: International Environmental Management (G)
- GCU 364: Energy in the Global Arena (SB & G)
- GPH 405: Energy and Environment
- GPH 412: Physical Meteorology
- HST 302: Energy Transitions and Sustainability ((HU or SB) & G & H)
- IND 242: Materials and Design
- SOS 181: Technological, Social, and Sustainable Systems (HU)
- SOS 315: Energy Policy
- SOS 435: U.S. Energy: Pathways to Sustainability
- SOS 494: Renewable Energy
General Studies designations listed on the major map are current for the 2019 - 2020 academic year.

**General University Requirements Legend**

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

**General Studies Awareness Requirements:**

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

**First-Year Composition**

General Studies designations listed on the major map are current for the 2019 - 2020 academic year.