# 2019 - 2020 Major Map

**Sustainable Food Systems, BS**

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

**SUSFOSYSBS**

## Term 1 - 14 Credit Hours

<table>
<thead>
<tr>
<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>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>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>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 111: Sustainable Cities ((HU or SB) &amp; G)</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

## Term 2 - 14 - 30 Credit Hours

<table>
<thead>
<tr>
<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>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 110: Sustainable World (SB)</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>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) | 3 |

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

## Term 3 - 30 - 46 Credit Hours

<table>
<thead>
<tr>
<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>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CHM 101: Introductory Chemistry (SQ) OR CHM 113: General Chemistry I (SQ) OR CHM 114: General Chemistry for Engineers (SQ)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFS 215: Fundamentals of U.S. Food and Agriculture</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

* An SAT, ACT, Accuplacer, IELTS or TOEFL score determines placement into first-year composition courses.  
* Mathematics Placement Assessment score determines placement in mathematics course.  
* SOS 191 or college-specific equivalent First-Year Seminar required of all freshman students.  
* SOS 201 required of all Sustainability transfer students.  
* ASU Language Placement: Only true beginners are eligible for 101-level courses. All other students are required to take a placement or proficiency exam, regardless of prior credit earned. CLEP and AP credit are also viable options for fulfilling the second language requirement.  
* ASU Language Placement: Only true beginners are eligible for 101-level courses. All other students are required to take a placement or proficiency exam, regardless of prior credit earned. CLEP and AP credit are also viable options for fulfilling the second language requirement.  
* Complete one sustainability career-related workshop or lecture.  
* Create a first draft resume.  
* Start attending sustainability career-related workshops and lectures.
SOS 212: Systems, Dynamics and Sustainability  
Computer/Statistics/Quantitative Applications (CS)  

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 - 60 Credit Hours</th>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTR 241: Human Nutrition</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SFS 216: Subsectors of U.S. Food and Agriculture</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 182: Water Planet (SQ)</td>
<td></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 231: Careers in Sustainability</td>
<td></td>
<td>1</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU) AND Historical Awareness (H)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complete SFS 215 AND SFS 216 course(s).  
Complete SOS 211 AND SOS 212 course(s).  
Minimum 2.50 GPA ASU Cumulative.  
Minimum 3.00 GPA in SOS.  

Term hours subtotal: 14

<table>
<thead>
<tr>
<th>Term 5 60 - 75 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOS 310: Equity, Justice and Sustainability</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 311: Future Thinking and Strategies</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 326: Sustainable Ecosystems</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SOS 327: Sustainable Food and Farms</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Skills Elective</td>
<td></td>
<td>3</td>
<td>C</td>
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</tbody>
</table>

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

Term hours subtotal: 15

<table>
<thead>
<tr>
<th>Term 6 75 - 90 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Upper Division Focus Area Course</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Focus Area Course</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Skills Elective</td>
<td></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy and Critical Inquiry (L)</td>
<td></td>
<td>3</td>
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</tbody>
</table>

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

Term hours subtotal: 15

Students will select one focus area and complete 12 credits of courses from that area. Students may also talk with their academic advisor to craft a unique focus area.  
Meet with the School of Sustainability Career Advisor to review your resume.  
Begin exploring internship opportunities and meet with the School of Sustainability Internship and Experiential Education Specialist to discuss your interests.
### Term 7 90 - 105 Credit Hours

<table>
<thead>
<tr>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFS 484: Internship</td>
<td>4</td>
<td>B-</td>
</tr>
<tr>
<td>Upper Division Focus Area Course</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Minimum 2.50 GPA ASU Cumulative.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum 3.00 GPA in SOS.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 15

**Notes**
- Students will select one focus area and complete 12 credits of courses from that area.
- Students may also talk with their academic advisor to craft a unique focus area.
- Meet with the School of Sustainability Career Advisor to discuss and refine your career search process.

### Term 8 105 - 120 Credit Hours

<table>
<thead>
<tr>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFS 498: Pro-Seminar (L)</td>
<td>3</td>
<td>B-</td>
</tr>
<tr>
<td>Upper Division Focus Area Course</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>Complete 3 courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Minimum 2.50 GPA ASU Cumulative.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum 3.00 GPA in SOS.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 15

**Notes**
- Students will select one focus area and complete 12 credits of courses from that area.
- Students may also talk with their academic advisor to craft a unique focus area.

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- Students must select one of the following focus areas:
  - Procurement
  - Ecosystem Science
  - Business & Innovation
  - Educational Leadership
  - Global Engagement
  - Policy & Governance
  - Public Health & Nutrition
- Students must declare a focus area by the end of Term 4.

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**Skills Electives**

<table>
<thead>
<tr>
<th>AME 130: Prototyping Dreams (L)</th>
<th>Procurement</th>
<th>Ecosystem Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 225: Public Speaking (L)</td>
<td>AGB 435: Commodity Futures and Options Markets</td>
<td>ABS 270: Sustainable Biological Systems</td>
</tr>
<tr>
<td>ECN 211: Macroeconomic Principles (SB)</td>
<td>AGB 456: Food Product Innovation and Development</td>
<td>ABS 318: Unseen Life on Earth</td>
</tr>
<tr>
<td>ECN 212: Microeconomic Principles (SB)</td>
<td>AGB 481: Strategic Pricing in Food Markets</td>
<td>ABS 368: Plant Propagation</td>
</tr>
<tr>
<td>ENG 216: Persuasive Writing on Public Issues (L)</td>
<td>NTR 142: Applied Food Principles</td>
<td>ABS 370: Ecology</td>
</tr>
<tr>
<td>FIS 305: Ways of Knowing (L)</td>
<td>NTR 343: Food Service Purchasing</td>
<td>ABS 380: Restoration and Wildlife Plants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ABS 394: Food and Human Health</td>
</tr>
</tbody>
</table>

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**Hide Course List(s)/Track Group(s)**
GIS 205: Geographic Information Science I (CS)

GIS 211: Geographic Information Science II (CS)

MGT 430: Negotiations

NLM 300: Fund Raising and Resource Development

OGL 240: Introduction to Project Management

SOS 232: Professional Skills in Sustainability Practice

SST 220: Introduction to Social Transformation

NTR 344: Nutrition Management and Leadership (L)

NTR 445: Management of Food Service Systems

NTR 455: Retail Food Service Operations

OGL 326: Project Procurement Management

SOS 328: Sustainability and Enterprise

SOS 485: Business and Sustainability II or SCM 485: Business and Sustainability II

SOS 498: Interventions on Sustainable Consumption on Campus (L)

SOS 498: Sustainable Food Economy (L)

TDM 481: Sustainable Food Management in Tourism

BUSINESS & INNOVATION (AT LEAST 2 COURSES MUST BE FROM AGB, BUS, CIS, ECN, ENT, MGT, MKT OR SCM)

AGB 100: Introduction to Agribusiness

AGB 250: Economics of Resource Allocation: Food and Agriculture

AGB 302: International Management and Agribusiness (G)

AGB 321: Agribusiness Marketing

AGB 333: Agribusiness Finance

AGB 366: Agribusiness Production Technologies

AGB 414: Food and Agribusiness Policy Issues (L)

AGB 420: Food Advertising and Promotion

AGB 425: Food Supply Networks

AGB 452: Commercial Applications of Fermentation

AGB 460: Organic Gardening

AGB 464: Desert Horticulture

BIO 100: The Living World (SQ) OR BIO 181: General Biology I (SQ)

BIO 108: Concepts in Plant Biology (SQ)

BIO 130: Introduction to Environmental Science (SQ)

BIO 182: General Biology II (SG)

BIO 304: Plants and Civilization (L)

BIO 320: Fundamentals of Ecology

BIO 322: Conservation of Biodiversity

BIO 386: General Entomology

BIO 418: Soil Ecology

BIO 434: People and Nature: Ecosystem Services

CEE 181: Technological, Social, and Sustainable Systems (HU)

PLB 302: Plants and Civilization (L)

SES 106: Habitable Worlds (SQ)

SOS 314: Basic Energy Science

SOS 429: Human Impacts on Ecosystem Functioning or BIO 429: Human Impacts on Ecosystem Functioning

EDUCATIONAL LEADERSHIP

CDE 232: Human Development (SB)

CDE 337: Early Childhood Intervention

ECD 211: The Developing Child: Theory into Practice, Prenatal-Grade 3 (SB)

ECD 220: Introduction to Nutrition, Health and Safety

EDP 310: Children and Poverty (SB)

EDP 310: Developing as a Leader (SB)

EDP 310: Educational Psychology for Non-Teachers (SB)

EDP 310: Motivation (SB)

EDP 310: Multicultural Issues (SB)

EXW 102: Principles and Foundations of Health Education and Health Promotion

GLOBAL ENGAGEMENT

AGB 302: International Management and Agribusiness (G)

AGB 452: Global Food and Agricultural Trade

AIS 180: Introduction to American Indian Studies (C)

AIS 320: American Indian Philosophies and World Views (HU & C)

AIS 480: Actualizing Decolonization (HU & C & G)

ASB 305: Poverty and Global Health (L or SB) & G

GCU 121: World Geography (SB & G)

GCU 432: Geography of China (SB & G)
AGB 435: Commodity Futures and Options Markets
AGB 445: Food Retailing
AGB 452: Global Food and Agricultural Trade
AGB 456: Food Product Innovation and Development
AGB 481: Strategic Pricing in Food Markets
BUS 424: Sales and Negotiations
BUS 434: Business Risk Management
ENT 305: Principles of Entrepreneurship
ENT 340: Creativity and Innovation (L or HU)
ENT 360: Entrepreneurship and Value Creation
FIS 308: Politics, Markets and Innovation (SB)
MKT 300: Marketing and Business Performance
MKT 390: Essentials of Marketing
MKT 391: Essentials of Selling
MKT 395: Essentials of Advertising and Marketing Communication
MKT 435: Entrepreneurial Marketing
NTR 343: Food Service Purchasing
NTR 345: Retail Food Service Operations
SOS 328: Sustainability and Enterprise
SOS 385: Business and Sustainability I or SCM 385: Business and Sustainability I
SOS 485: Business and Sustainability II or SCM 485: Business and Sustainability II
STS 329: Technology in Developing Countries (SB & G)
TDM 481: Sustainable Food Management in Tourism
TEM 455: Global Impact Entrepreneurship

Policy & Governance
AGB 414: Food and Agribusiness Policy Issues (L)
AGB 452: Global Food and Agricultural Trade

Public Health & Nutrition
AGB 414: Food and Agribusiness Policy Issues (L)
AGB 420: Food Advertising and Promotion
AGB 425: Food Supply Networks
JUS 214: The Pursuit of Justice in the 21st Century (SB)

PAF 201: Economics and Public Policy (SB)

PAF 420: Public Leadership

POS 216: State and Local Government (SB)

POS 230: Current Issues in National Politics (L or SB)

POS 310: American National Government (SB)

POS 313: The Congress (SB)

POS 325: Public Policy Development (SB)

POS 333: Interest Groups (SB)

POS 417: Arizona Politics (SB)

POS 471: Constitutional Law I (SB)

POS 472: Constitutional Law II (SB)

POS 480: Global Justice (G)

SOS 321: Policy and Governance in Sustainable Systems

SOS 322: International Development and Sustainability

SOS 456: Human Rights and Sustainability (L or SB & G)

ASB 100: Introduction to Global Health (SB & G)

ASB 301: Global History of Health (SB & G & H) or SSH 301: Global History of Health (SB & G & H) or HST 301: Global History of Health (SB & G & H)

ASB 305: Poverty and Global Health ((L or SB) & G)

ASB 443: Cross-Cultural Studies in Global Health ((L or SB) & G) or SSH 403: Cross-Cultural Studies in Global Health ((L or SB) & G)

BIO 100: The Living World (SQ) or BIO 181: General Biology I (SQ)

BIO 182: General Biology II (SG)

HCI 311: Health Innovation: Foundational Concepts

HCR 230: Culture and Health (C & G)

NTR 142: Applied Food Principles

NTR 300: History of Human Nutrition

NTR 343: Food Service Purchasing

NTR 344: Nutrition Management and Leadership (L)

NTR 348: Cultural Aspects of Food (SB & C & G)

NTR 351: Nutrition Communication (L)

NTR 353: Perspectives on the Western Diet: Food, Health and Sustainability

NTR 355: Eating for Lifelong Health (SB)

NTR 445: Management of Food Service Systems

NTR 448: Community Nutrition (L)

NTR 450: Nutrition in the Life Cycle (SB)

NTR 455: Retail Food Service Operations

PBH 422: Health Disparities and Access to Health

POP 100: Introduction to Population Health

SOS 370: Ethics of Eating (L or SB)

Total Hours: 120

Upper Division Hours: 45 minimum

Major GPA: 2.00 minimum

Cumulative GPA: 2.00 minimum

General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
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.