

## 2024 - 2025 Major Map

### Sustainable Food Systems, BS

School/College: College of Global Futures  
SUSFOSYSBS

| Term 1 0 - 14 Credit Hours Critical course signified by ⚠  | Hours | Minimum Grade | Notes   |
|--|-------|---------------|---|
| ⚠ SOS 101: Introduction to Applied Mathematics for the Life and Social Sciences (MATH OR MA)   | 3     | C             | <ul style="list-style-type: none"> <li>SOS 191 or college-specific equivalent First-Year Seminar required of all first-year students.</li> <li>SOS 201 required of all Sustainability transfer students.</li> <li>ASU Language Placement: Only true beginners are eligible for 101-level courses. All other students are required to take a <b>placement or proficiency exam</b>, regardless of prior credit earned. <b>CLEP and AP</b> credit are also viable options for fulfilling the second language requirement.</li> </ul> |
| SOS 191: Introduction to ASU & SOS for First Year Students OR  |       |               |   |
| ⚠ SOS 201: Introduction to ASU and School of Sustainability for Transfer Students  | 1     | C             |   |
| ENG 101 or ENG 102: First-Year Composition OR  |       |               |   |
| ENG 105: Advanced First-Year Composition OR  | 3     | C             |   |
| ENG 107 or ENG 108: First-Year Composition   |       |               |   |
| SOS 111: Sustainable Cities (SUST OR (HU or SB) & G)   | 3     | C             |   |
| Second Language: Requirement satisfied through the following:  |       |               |   |
| * Completion of language course(s) at the 102 level.   | 4     | C             |   |
| ⚠ Minimum 2.50 GPA in SFS and SOS.   |       |               |   |
| ⚠ Minimum 2.50 GPA ASU Cumulative.   |       |               |   |
| Term hours subtotal:   | 14    |               |   |
| Term 2 14 - 30 Credit Hours Critical course signified by ⚠   | Hours | Minimum Grade | Notes   |
| ENG 101 or ENG 102: First-Year Composition OR  |       |               | <ul style="list-style-type: none"> <li>ASU Language Placement: Only true beginners are eligible for 101-level courses. All other students are required to take a <b>placement or proficiency exam</b>, regardless of prior credit earned. <b>CLEP and AP</b> credit are also viable options for fulfilling the second language requirement.</li> <li>Join a <b>student club</b> or professional organization.</li> </ul>  |
| ENG 105: Advanced First-Year Composition OR  | 3     | C             |   |
| ENG 107 or ENG 108: First-Year Composition   |       |               |   |
| SOS 110: Sustainable World (SUST OR SB)  | 3     | C             |   |
| SOS 211: Calculus and Probability for the Life and Social Sciences (MATH)  | 3     | C             |   |
| Second Language: Requirement satisfied through the following:  |       |               |   |
| * Completion of language course(s) at the 102 level.   | 4     | C             |   |
| Social and Behavioral Sciences (SOBE)  | 3     |               |   |
| ⚠ Complete ENG 101 OR ENG 105 OR ENG 107 course(s).  |       |               |   |
| ⚠ Complete SOS 110 AND SOS 111 course(s).  |       |               |   |
| ⚠ Minimum 2.50 GPA in SFS and SOS.   |       |               |   |
| ⚠ Minimum 2.50 GPA ASU Cumulative.   |       |               |   |
| Term hours subtotal:   | 16    |               |   |
| Term 3 30 - 46 Credit Hours Critical course signified by ⚠   | Hours | Minimum Grade | Notes   |
| ⚠ SOS 220: Systems Thinking  | 3     | C             | <ul style="list-style-type: none"> <li>Create a first draft <b>resume</b> and start attending Global Futures career-related <b>workshops and lectures</b>.</li> </ul>   |
| CHM 101: Introductory Chemistry (SCIT OR SQ) OR CHM 113: General Chemistry I (SCIT OR SQ) OR CHM 114: General Chemistry for Engineers (SCIT OR SQ) | 4     |               |   |
| SFS 215: Fundamentals of Sustainable Food Systems (SUST OR L)  | 3     | C             |   |
| SOS 212: Systems, Dynamics and Sustainability (QTRS)   | 3     | C             |   |
|  |       |               |   |

|  |    |
|--|----|
| Humanities, Arts and Design (HUAD)             | 3  |
| 🚩 Complete First-Year Composition requirement. |    |
| 🚩 Minimum 2.50 GPA in SFS and SOS.             |    |
| 🚩 Minimum 2.50 GPA ASU Cumulative.             |    |
| Complete Mathematics (MATH) requirement.       |    |
| Term hours subtotal:                           | 16 |

| Term 4 46 - 62 Credit Hours Critical course signified by 🚩 | Hours | Minimum Grade | Notes  |
|--|-------|---------------|--|
| NTR 241: Human Nutrition                                   | 3     | C             | <ul style="list-style-type: none"> <li>Get involved with <b>mentorship opportunities</b> to learn from alumni about career paths.</li> </ul> |
| SFS 216: The Sustainable Plate (SUST)                      | 3     | C             |  |
| SOS 182: Water Planet (SCIT OR SQ)                         | 4     | C             |  |
| American Institutions (AMIT)                               | 3     |               |  |
| Humanities, Arts and Design (HUAD)                         | 3     |               |  |
| 🚩 Complete SFS 215 AND SFS 216 course(s).                  |       |               |  |
| 🚩 Complete SOS 211 AND SOS 212 course(s).                  |       |               |  |
| 🚩 Minimum 2.50 GPA in SFS and SOS.                         |       |               |  |
| 🚩 Minimum 2.50 GPA ASU Cumulative.                         |       |               |  |
| Term hours subtotal:                                       | 16    |               |  |

| Term 5 62 - 77 Credit Hours Necessary course signified by ⭐ | Hours | Minimum Grade | Notes  |
|---|-------|---------------|--|
| SOS 310: Equity, Justice and Sustainability                 | 3     | C             | <ul style="list-style-type: none"> <li>Begin <b>exploring internship opportunities</b> and meet with the College of Global Futures <b>Internship Advisor</b> to discuss your interests.</li> </ul> |
| SOS 311: Future Thinking and Strategies                     | 3     | C             |  |
| SOS 326: Sustainable Ecosystems                             | 3     | C             |  |
| SOS 327: Sustainable Food and Farms                         | 3     | C             |  |
| Skills Elective   | 3     | C             |  |
| ⭐ Minimum 2.50 GPA in SFS and SOS.                          |       |               |  |
| ⭐ Minimum 2.50 GPA ASU Cumulative.                          |       |               |  |
| Term hours subtotal:  | 15    |               |  |

| Term 6 77 - 92 Credit Hours Necessary course signified by ⭐ | Hours | Minimum Grade | Notes   |
|---|-------|---------------|---|
| Upper Division Focus Area Course                            | 3     | C             | <ul style="list-style-type: none"> <li>Students will select one focus area and complete 12 credit hours of courses from that area. Students may also talk with their academic advisor to craft a unique focus area.</li> <li>Meet with the College of Global Futures <b>Career Advisor</b> to review your <b>resume</b> and <b>LinkedIn</b> profile.</li> </ul> |
| Upper Division Skills Elective                              | 3     | C             |   |
| Focus Area Course   | 3     | C             |   |
| Global Communities, Societies and Individuals (GCSI)        | 3     |               |   |
| Governance and Civic Engagement (CIVI)                      | 3     |               |   |
| ⭐ Minimum 2.50 GPA in SFS and SOS.                          |       |               |   |
| ⭐ Minimum 2.50 GPA ASU Cumulative.                          |       |               |   |
| Term hours subtotal:  | 15    |               |   |

| Term 7 92 - 107 Credit Hours Necessary course signified by ⭐ | Hours | Minimum Grade | Notes   |
|--|-------|---------------|---|
| Upper Division Focus Area Course                             | 3     | C             | <ul style="list-style-type: none"> <li>Students will select one focus area and complete 12 credit hours of courses from that area. Students may also talk with their academic advisor to craft a unique focus area.</li> <li>Meet with the College of Global Futures <b>Career Advisor</b> to discuss and refine your career search process.</li> </ul> |
| CGF 484: Internship OR Upper Division Elective               | 3     |               |   |
| Complete 3 courses:  | 9     |               |   |
| Upper Division Elective                                      |       |               |   |
| ⭐ Minimum 2.50 GPA in SFS and SOS.                           |       |               |   |
| ⭐ Minimum 2.50 GPA ASU Cumulative.                           |       |               |   |
| Term hours subtotal:   | 15    |               |   |

| Term 8 107 - 120 Credit Hours <b>Necessary course signified by</b> ★ | Hours | Minimum Grade | Notes   |
|--|-------|---------------|---|
| SFS 498: Pro-Seminar (L)   | 3     | B-            | <ul style="list-style-type: none"> <li>Students will select one focus area and complete 12 credit hours of courses from that area. Students may also talk with their academic advisor to craft a unique focus area.</li> <li>Complete an in-person or virtual <b>practice interview</b>.</li> </ul> |
| Upper Division Focus Area Course                                     | 3     | C             |   |
| Complete 2 courses:  |       |               |   |
| Upper Division Elective  | 6     |               |   |
| Elective   | 1     |               |   |
| ★ Minimum 2.50 GPA in SFS and SOS.                                   |       |               |   |
| ★ Minimum 2.50 GPA ASU Cumulative.                                   |       |               |   |
| Term hours subtotal:   | 13    |               |   |

- 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.

#### Hide Course List(s)/Track Group(s)

| Skills Electives   | Procurement  | Ecosystem Science   |
|--|--|---|
| AIS 440: Cultural Professionalism (C)                                  | AGB 250: Economics of Resource Allocation: Food and Agriculture                    | ABS 207: Applied Plant Taxonomy   |
| AME 130: Prototyping Dreams (L)  | AGB 425: Food Supply Networks  | ABS 270: Sustainable Biological Systems   |
| CIS 105: Computer Applications and Information Technology (QTRS OR CS) | AGB 435: Commodity Futures and Options Markets                                     | ABS 274: Introduction to Wildlife Management                                      |
| CIS 300: Web Design and Development                                    | AGB 445: Food Retailing  | ABS 314: Applied Plant Physiology   |
| COM 225: Public Speaking (CIVI OR L)                                   | AGB 456: Food Product Innovation and Development                                   | ABS 318: Unseen Life on Earth   |
| COM 353: Professional Communication                                    | AGB 481: Strategic Pricing in Food Markets   | ABS 368: Plant Propagation  |
| COM 414: Crisis Communication  | NTR 142: Applied Food Principles   | ABS 370: Ecology  |
| ECN 211: Macroeconomic Principles (SOBE OR SB)                         | NTR 300: Computer Applications in Food Service                                     | ABS 372: Captive Animal Behavior Management                                       |
| ECN 212: Microeconomic Principles (SOBE OR SB)                         | NTR 343: Food Service Purchasing   | ABS 376: Wildlife Ecology   |
| ENG 216: Persuasive Writing on Public Issues (CIVI OR L)               | NTR 344: Nutrition Management and Leadership (L)                                   | ABS 378: Animal Nutrition   |
| FIS 305: Ways of Knowing (L)   | NTR 445: Management of Food Service Systems  | ABS 384: Natural Resources Measurements   |
| GIS 205: Geographic Information Science I (QTRS OR CS)                 | NTR 455: Retail Food Service Operations  | ABS 430: Watershed Management   |
| GIS 211: Geographic Information Science II (QTRS OR CS)                | SOS 328: Sustainability and Enterprise   | ABS 464: Desert Horticulture  |
| MGT 430: Negotiations  | SOS 485: Business and Sustainability II or SCM 485: Business and Sustainability II | ABS 479: Ecosystem Management and Planning (L)                                    |
| NLM 300: Fund Raising and Resource Development                         | TDM 481: Sustainable Food Management in Tourism                                    | ASB 362: People and Plants  |
|  |  | BIO 100: The Living World (SCIT OR SQ) or BIO 181: General Biology I (SCIT OR SQ) |

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|--|---|--|
| SOS 232: Professional Skills in Sustainability Practice  |   | BIO 130: Introduction to Environmental Science (SCIT OR SQ)                      |
| TWC 422: Social Media in the Workplace   |   | BIO 182: General Biology II (SCIT OR SG)   |
| TWC 443: Grant & Proposal Writing  |   | BIO 320: Fundamentals of Ecology   |
|  |   | BIO 322: Conservation of Biodiversity  |
|  |   | BIO 386: General Entomology  |
|  |   | BIO 405: Sonoran Desert Field Botany   |
|  |   | BMY 230: How Nature Works  |
|  |   | BMY 302: Principles of Life  |
|  |   | CEE 181: Technological, Social, and Sustainable Systems (SUST OR HU)             |
|  |   | MIC 205: Microbiology (SCIT OR SG)   |
|  |   | PLB 302: Plants and Civilization   |
|  |   | SES 106: Habitable Worlds (SCIT OR SQ)   |
|  |   | SOS 314: Basic Energy Science  |
| Business & Innovation (at least 2 courses must be from AGB, BUS, CIS, ECN, ENT, MGT, MKT or SCM) | Educational Leadership  | Global Engagement  |
| AGB 100: Introduction to Agribusiness  | CDE 232: Human Development (SOBE OR SB)                                 | AGB 302: International Management and Agribusiness (GCSI OR G)                   |
| AGB 250: Economics of Resource Allocation: Food and Agriculture                                  | CDE 337: Early Childhood Intervention                                   | AIS 180: Introduction to American Indian Studies (SOBE OR C)                     |
| AGB 302: International Management and Agribusiness (GCSI OR G)                                   | ECD 220: Introduction to Nutrition, Health and Safety                   | AIS 320: American Indian Philosophies and World Views (HUAD OR HU & C)           |
| AGB 321: Agribusiness Marketing  | EDP 310: Educational Psychology for Non-Teachers                        | AIS 480: Actualizing Decolonization (HU & C & G)                                 |
| AGB 333: Agribusiness Finance  | HEP 102: Foundations of Health Education and Health Promotion           | ASB 305: Poverty and Global Health (CIVI OR (L or SB) & C)                       |
| AGB 410: Agribusiness Management   | NTR 343: Food Service Purchasing  | GCU 121: World Geography (GCSI OR SB & G)  |
| AGB 414: Food and Agribusiness Policy Issues (L)   | NTR 344: Nutrition Management and Leadership (L)                        | GCU 432: Geography of China  |
| AGB 420: Food Advertising and Promotion  | NTR 445: Management of Food Service Systems                             | JHR 305: Theory and Practice of Social Justice and Human Rights (CIVI OR SB & G) |
| AGB 425: Food Supply Networks  | OGL 200: Introduction to Organizational Leadership (CIVI OR SB)         | POS 160: Global Politics (GCSI OR SB & G)  |
| AGB 435: Commodity Futures and Options Markets   | OGL 220: Behavioral Dynamics in Organizations (SOBE OR SB)              | POS 240: Introduction to Southeast Asia ((HU or SB) & G)                         |
| AGB 445: Food Retailing  | OGL 260: Resource Allocation in Organizations (SUST)                    | POS 260: Current Issues in International Politics (GCSI OR (L or SB) & G)        |
| AGB 452: Global Food and Agricultural Trade  | OGL 355: Leading Organizational Innovation and Change                   | POS 348: Do You Want to Build a Nation? (CIVI OR L)                              |
| AGB 456: Food Product Innovation and Development   | SCN 209: Introduction to Environmental Education Project                | POS 367: World Politics and Global Inequalities (GCSI OR G)                      |
| AGB 481: Strategic Pricing in Food Markets   | SCN 300: Foundations of Environmental Education                         | POS 454: Mexico (SB & G)   |
| BUS 434: Business Risk Management  | SCN 301: Ecology and Natural History of the Sonoran Desert (SCIT OR SG) | POS 480: Global Justice (GCSI OR G)  |
| ENT 305: Principles of Entrepreneurship  |   |  |
| ENT 340: Creativity and Innovation (L or HU)   |   |  |

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|--|--|---|
| ENT 360: Entrepreneurship and Value Creation   | SCN 302: Environmental Education: A Global Perspective (SUST OR L & G)   | SGS 203: Contemporary Global Trends (SB & G)                          |
| FIS 308: Politics, Markets and Innovation (CIVI OR SB)   | TEL 111: Exploration of Education (HUAD OR SB)   | SOS 322: International Development and Sustainability                 |
| MGT 302: Principles of International Business (GCSI OR G)                                      | TEL 215: Introduction to Child and Adolescent Development (SOBE OR SB)   | STS 329: Technology in Developing Countries (SB & G)                  |
| MKT 300: Marketing and Business Performance  | USL 402: Service Learning: Education & Youth (C)   | STS 332: Global Issues in Science and Technology (SB)                 |
| MKT 390: Essentials of Marketing   |  | ARB 250: Middle East Culture in a Global Perspective (GCSI OR HU & G) |
| MKT 391: Essentials of Selling   |  | GPH 381: Geography of Natural Resources (SUST OR G)                   |
| MKT 395: Essentials of Advertising and Marketing Communication                                 |  |   |
| MKT 435: Entrepreneurial Marketing   |  |   |
| NTR 343: Food Service Purchasing   |  |   |
| NTR 455: Retail Food Service Operations  |  |   |
| SOS 328: Sustainability and Enterprise   |  |   |
| SOS 385: Business and Sustainability I (SUST) or SCM 385: Business and Sustainability I (SUST) |  |   |
| SOS 485: Business and Sustainability II or SCM 485: Business and Sustainability II             |  |   |
| TDM 481: Sustainable Food Management in Tourism  |  |   |
| TEM 455: Global Impact Entrepreneurship  |  |   |
| <b>Policy &amp; Governance</b>   | <b>Public Health &amp; Nutrition</b>   |   |
| AGB 414: Food and Agribusiness Policy Issues (L)   | AGB 414: Food and Agribusiness Policy Issues (L)   |   |
| AGB 452: Global Food and Agricultural Trade  | AGB 420: Food Advertising and Promotion  |   |
| AIS 380: Contemporary Issues of American Indian Nations (C)                                    | AGB 425: Food Supply Networks  |   |
| JUS 377: Arizona, Immigration, Latinos and Politics  | ASB 300: Food and Culture (SOBE OR (L or SB) & C)  |   |
| PAF 201: Economics and Public Policy (SOBE OR SB)  | ASB 100: Introduction to Global Health (GCSI OR SB & G)  |   |
| PAF 340: Contemporary Policy Challenges  | ASB 301: Global History of Health (HUAD OR SB & G & H)   |   |
| PAF 420: Managing Across Boundaries  | ASB 305: Poverty and Global Health (CIVI OR (L or SB) & C)   |   |
| POS 216: State and Local Government (SB)   | ASB 355: Traditional Medicine and Healing (HU or SB)   |   |
| POS 310: American National Government (AMIT OR SB)   | ASB 443: Cross-Cultural Studies in Global Health (GCSI OR (L or SB) & G) or SSH 403: Cross-Cultural Studies in Global Health (GCSI OR (L or SB) & G) |   |
| POS 313: The Congress (AMIT OR SB)   | ASB 448: Maternal and Child Health   |   |
| POS 325: Public Policy Development (CIVI OR SB)  |  |   |
| POS 471: Constitutional Law I (AMIT OR SB)   |  |   |

|   |   |
|---|---|
| POS 472: Constitutional Law II (SB)                   | BIO 100: The Living World (SCIT OR SQ)                          |
| POS 480: Global Justice (GCSI OR G)                   | or BIO 181: General Biology I (SCIT OR SQ)                      |
| SOS 321: Policy and Governance in Sustainable Systems | BIO 182: General Biology II (SCIT OR SG)                        |
| SOS 322: International Development and Sustainability | HCI 311: Health Innovation: Foundational Concepts               |
|   | HCR 230: Culture and Health (GCSI OR C & G)                     |
|   | HCR 231: Fundamentals of Community Health                       |
|   | HCR 336: Environmental Community Health                         |
|   | HSC 355: Eating for Lifelong Health (SOBE OR SB)                |
|   | ITA 350: Food and Culture: The Mediterranean Lifestyle in Italy |
|   | NTR 142: Applied Food Principles                                |
|   | NTR 320: History of Human Nutrition (HUAD OR H)                 |
|   | NTR 343: Food Service Purchasing                                |
|   | NTR 344: Nutrition Management and Leadership (L)                |
|   | NTR 345: Development of Healthy Cuisines                        |
|   | NTR 348: Cultural Aspects of Food (GCSI OR SB & C & G)          |
|   | NTR 351: Nutrition Communication (L)                            |
|   | NTR 353: The Western Diet                                       |
|   | NTR 445: Management of Food Service Systems                     |
|   | NTR 448: Community Nutrition (L)                                |
|   | NTR 450: Nutrition in the Life Cycle (SOBE OR SB)               |
|   | NTR 455: Retail Food Service Operations                         |
|   | PBH 422: Health Disparities and Access to Health                |
|   | POP 100: Introduction to Population Health                      |
|   | TDM 480: Sustainable Tourism                                    |

- **Total Hours:** 120
- **Upper Division Hours:** 45 minimum
- **University Undergraduate Graduation Requirements**

**Notes:**

Mathematics Placement Assessment score determines placement in first mathematics course.

General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.