












2024 - 2025 Major Map

Applied Biological Sciences (Sustainable Horticulture), BS

School/College: College of Integrative Sciences and Arts
TSABSUBS

Term 1 0 - 14 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 181: General Biology I (SCIT OR SQ)	4	C	<ul style="list-style-type: none"> ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students Select your Career Interest Communities and play me3@ASU.
ASU 101-CLS: The ASU Experience	1		
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			
MAT 251: Calculus for Life Sciences (MATH OR MA)	3	C	
Social and Behavioral Sciences (SOBE)	3		
Term hours subtotal:	14		
Term 2 14 - 29 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 182: General Biology II (SCIT OR SG)	4	C	<ul style="list-style-type: none"> Students considering graduate school should complete the PHY 111/113 and PHY 112/114 sequence, using PHY 112/114 in place of electives. All other students will complete PHY 101. Join a student club or professional organization.
ABS 100: Discovering the Professions	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			
PHY 101: Introduction to Physics (SCIT OR SQ) OR PHY 111: General Physics (SCIT OR SQ) AND PHY 113: General Physics Laboratory (SCIT OR SQ)	4	C	
Humanities, Arts and Design (HUAD)	3		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	15		
Term 3 29 - 45 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 113: General Chemistry I (SCIT OR SQ)	4	C	<ul style="list-style-type: none"> Secure a part-time job or volunteer experience.
Global Communities, Societies and Individuals (GCSI)	3		
Governance and Civic Engagement (CIVI)	3		
Sustainability (SUST)	3		
Elective	3		
 Complete Mathematics (MATH) requirement.			
Term hours subtotal:	16		
Term 4 45 - 59.5 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ABS 260: Fundamentals of Sustainable Horticulture (SG)	4	C	<ul style="list-style-type: none"> Sustainable Horticulture Elective chosen from list below.
 CHM 116: General Chemistry II (SCIT OR SQ)	4	C	
ABS 200: Building Your Professional Self	.5	C	
Sustainable Horticulture Elective	3	C	

Humanities, Arts and Design (HUAD)	3
Term hours subtotal:	14.5

Term 5 59.5 - 76 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ABS 363: Sustainable Landscape Practice	4	C	<ul style="list-style-type: none"> Students considering graduate school should complete the Organic Chemistry Sequence of both CHM 233/237 and CHM 234/238 sequence, using CHM 234/238 in place of electives. Connect with faculty to seek opportunities for research.
★ ABS 370: Ecology	3	C	
ABS 300: Career Competencies and Skills	.5	C	
CHM 231: Elementary Organic Chemistry (SCIT OR SQ) AND CHM 235: Elementary Organic Chemistry Laboratory (SCIT OR SQ) OR CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I	4	C	
Upper Division Elective	3		
Elective	2		
Term hours subtotal:	16.5		

Term 6 76 - 90 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ABS 368: Plant Propagation	3	C	<ul style="list-style-type: none"> Use Handshake to research employment opportunities.
★ BIO 340: General Genetics	4	C	
ABS 362: Landscape Plants	4	C	
Upper Division Elective	3		
Term hours subtotal:	14		

Term 7 90 - 105 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ABS 311: Molecular and Cellular Biology OR ABS 314: Applied Plant Physiology OR BIO 353: Cell Biology OR BIO 360: Animal Physiology	3	C	<ul style="list-style-type: none"> Gather professional references. Apply for full-time career opportunities.
★ ABS 350: Applied Statistics (QTRS OR CS)	3	C	
★ ABS 464: Desert Horticulture	3	C	
American Institutions (AMIT)	3		
Upper Division Elective	3		
Term hours subtotal:	15		

Term 8 105 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ABS 490: Applied Biological Sciences Seminar	1	C	
★ Upper Division Sustainable Horticulture Elective	3	C	
Complete 2 courses: Upper Division Elective	5		
Complete 2 courses: Elective	6		
Term hours subtotal:	15		

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

Sustainable Horticulture Elective
ABS 225: Soils (SQ)
ABS 318: Unseen Life on Earth
ABS 364: Urban Forestry

ABS 365: Future of Agriculture: Vertical Farming

ABS 369: Hydroponic Food Crop Production

ABS 434: Soil Ecology

ABS 460: Organic Gardening

ABS 462: Greenhouse/Nursery Management

ABS 484: Internship

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

Notes:

Mathematics Placement Assessment score determines placement in first mathematics course.

Students must complete a minimum of 12 credit hours of science courses offered by the College of Integrative Sciences and Arts. Select from ABS, CHM, BIO, PHY, and MIC subject codes.

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.