College of Agriculture and Life Sciences
School of Plant and Environmental Sciences
Bachelor of Science in Plant Science
Major in Integrated Agriculture Technologies
For students entering under UG catalog 2022-2023

APPROVED COMMISSION ON UNDERGRADUATE STUDIES AND POLICIES

Pathways to General Education (44-47 credits)

Concept 1 – Discourse (9 credit hours)
1F – Foundational
(3) ENGL 1105 First-Year Writing (3 credits) – F, S
(3) ENGL 1106 First-Year Writing (3 credits) – F, S, SI, SII
1A – Advanced/Applied
(3) – _____Choose from Approved Courses
Concept 2 – Critical Thinking in the Humanities (6 credits)
(3) – _____Choose from Approved Courses
(3) – _____Choose from Approved Courses
Concept 3 – Reasoning in the Social Sciences (6 credits)
(3) AAEC 1005 Econ Food Fiber Sys or ECON 2005 Principles of Economics – F, S
(3) SPES 2244: World Crops: Food & Culture€ – S
Concept 4 – Reasoning in the Natural Sciences (6 or 8 credits)
(3) CHEM 1035: General Chemistry* – F, S, SI, SII
(3) CHEM 1036: General Chemistry* – F, S, SI, SII
(1) CHEM 1045: General Chemistry Lab* -F
(1) CHEM 1046: General Chemistry Lab* -S
Concept 5 – Quantitative and Computational Thinking (11 credits)
5f – Foundational (8 credits)
(3) MATH 1025: Elementary Calculus – F, S, SI, SII
(3) CS 1014: Intro to Computational Thinking
a – Advanced/Applied (3 credits)
(3) – _____Choose from Approved Courses
Concept 6 – Critique and Practice in Design and the Arts (6 credits)
6d – Design
(3) – _____Choose from Approved Courses
6a – Arts
(3) – _____Choose from Approved Courses
Concept 7 – Critical Analysis of Identity and Equity in the United States (3 credits) (may be double-counted with another Pathways concept)
(3) SPES 2244: World Crops: Food & Culture€ – S

Plant Science Degree Core Requirements (23 credits)

(1) ALS 1234: CALS First Year Seminar or SPES 1004: First Year Seminar-F
(3) ALCE 3634: Comm Ag & Life Sci in Speaking – F, S
or ALCE 3624: Comm Agriculture in Writing – F, S
(3) BIOL 1105: Principles of Biology – F, W, SI
(3) BIOL 1106: Principles of Biology – F, W, SI
(3) ENSC 1015: Found Environmental Sci – F
(3) BIOL/HORT 2304: Plant Biology* – F, S
(3) PPWS 2104: Plants Genes and People*- F
(4) PPWS 4104: Plant Pathology – F

Integrated Agriculture Technologies Major Requirements (25 credits)

(2) CSES 2444 Agronomic Crops – F
or HORT-2234 Envir Factors in Hort– F
or CSES 2564: Turfgrass Management*- F
(3) CSES 3114/ENSC 3114/GEOS 3614: Soils* – F
(1) CSES 3124/ENSC 3124/GEOS 3624: Soils Laboratory* – F
(3) CSES 2224 Foundations of Precision Agriculture
(3) CSES 4224 Applied Concepts in Precision Agriculture*
(3) CSES 4234 Agroscience Data Integration*
(3) CSES 4524 Drone Applications in Ag Systems*
(3) CSES 4534 Internet of Things (IoT) for Smart Farming*
(3) GEOG 2084: Principles of GIS- F, S

Restricted Electives (minimum 18 credits or approved Minor)

(3) AAEC 2434: Foundations of Agribusiness* – F, S
(3) AAEC 2104: Personal Financial Planning – F, S
(3) AAEC 3004: Ag Prod & Cons Econ* – F, S
(3) AAEC 3314: Environmental Law - S
(3) AAEC 3504: Marketing Ag Products* – F
(3) AAEC 3604: Agricultural Law – F
(3) ALS 3404: Ecological Agriculture – F

*Prerequisites: Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.
€ Satisfies Pathways 3 and 7
Key: F – Fall, S – Spring, W – Winter, SI – Summer, Part I, SII – Summer, Part II

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Restricted Electives continued, (minimum 18 credits or approved Minor)

(3) BIOL 2804: Ecology* – F, S, SII
(3) CS-1064: Intro to Programming in Python
(3) CS-1044: Intro Prog in C
(3) CS-1054: Intro to Programming in Java
(3) CS 1114: Intro to Software Design
(3) CSES 2244: Ag Global Food Sec and Health – F
(3) CSES 2434: Crop Evaluation - S
(3) CSES 3144: Soil Description & Interp* – F
(3) CSES/ENSC 3614: Soil Phys & Hydro Properties* – S
(3) CSES 4214: Soil Fertility and Management* – F
(3) CSES 4144: Plant Breeding & Genetics – S
(3) CSES/ENSC 3644: Plant for Env Rest* – S
(3) CSES/ENSC 4134: Soil Genesis & Class* - S
(3) CSES 4344: Crop Physiology and Ecology - S
(3) CSES 4544: Forage Crop Ecology – S
(3) CSES/ENSC 4774: Reclamation of Disturbed Lands* – F
(3) CSES/ENSC 4764: Bioremediation* - F
(3) CSES/ENSC 4854: Wetland Soils and Mitigation* - F
(3) CSES/ENSC/CHEM 4734: Environmental Soil Chemistry* –S
(3) ENT/PPWS 4264: Pesticide Usage – S
(3) ENT 4254: Insect Pest Management* – S
(3) HORT 2184: Plants, Places, Culture Globally – S
(3) HORT 2234: Envir Factors in Hort - S
(3) HORT 4064: Soil Microbiology* - F
(3) GEOG/GEOS 4354 Intro Remote Sensing – F,S
(3) PHYS-2205: General Physics* – F, S, SI, SII
(3) PHYS-2206: General Physics* – F, S, SI, SII
(3) PPWS 2754: Weeds that Shape our World -F
(3) PPWS 4154: Plant Problem Diagnosis* – F
(3) PPWS 4604: Biological Invasions* – F
(3) SPES 2004: Cannabis Sci Ind & Culture- S

Free Electives (to reach 120 Total Credit Hours)

( ) _____
( ) _____
( ) _____

Approved Minors

Agribusiness Management and Entrepreneurship
Agricultural and Applied Economics
Animal and Poultry Sciences
Civic Agriculture and Food Systems
Dairy Science
Entomology
Environmental Economics
Environmental Science
Global Food Security and Health
Horticulture
Food Science & Technology
International Trade & Development
Leadership & Social Change
Plant Health Sciences
Turfgrass Management
Wetland Science

Note:

*Prerequisites: Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor.
€ Satisfies Pathways 3 and 7
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Total Hours Required: 120

*Prerequisites: Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor

Satisfactory Progress:

By the end of the academic year in which the student has attempted 60 credits (including transfer, advanced placement, advanced standing and credit by examination), "satisfactory progress" toward a BS PLSC degree will include:

Passing the following:

- At least 24 credits that apply to the Pathways to General Education
- CHEM 1035 and 1036
- ALS 1234 or SPES 1004, CSES/ENSC 3114 and CSES/ENSC 3124
- 6 credits of Math

GPA Requirements:

- Overall GPA: 2.0 (each semester in order to be in good academic standing)
- In-major GPA: 2.0 (by the time the student graduates)
    - Includes classes in: CSES, HORT, and PPWS

Language Study Requirement - Students who do not complete two years of a single foreign or classical language or American Sign Language in high school, may do so by taking six credits of college-level foreign or classical language or American Sign Language. The six credits used to meet this requirement may not be used to satisfy the minimum number of credits required for gradation.