

Date Submitted: 08/28/23 2:28 pm

Viewing: CPSCBS : Crop Science, Bachelor of Science in Agri Food & Life Sciences

Last approved: 03/22/23 9:58 am

Last edit: 02/09/24 2:58 pm

Changes proposed by: msavin

Catalog Pages Using this Program

- [Crop Science B.S.A.](#)
- [Crop Science \(CPSC\)](#)
- [Crop, Soil and Environmental Sciences \(CSES\)](#)

Submitter:	User ID:	msavin	Phone:	575-5740
Program Status	Active			
Academic Level	Undergraduate			
Type of proposal	Major/Field of Study			
Select a reason for this modification				
Making Minor Changes to an Existing Certificate, Degree or Program (including 15 or fewer hours, admission/graduation requirements, Focused Studies or Tracks)				
Are you adding a concentration?	No			
Are you adding or modifying a track?	No			
Are you adding or modifying a focused study?	No			
Effective Catalog Year	Fall 2024			
College/School Code	Bumpers College of Agricultural, Food, and Life Sciences (AFLS)			
Department Code	Department of Crop, Soil and Environmental Sciences (CSES)			
Program Code	CPSCBS			
Degree	Bachelor of Science in Agricultural, Food & Life Sciences			
CIP Code	01.1102 - Agronomy and Crop Science.			
Program Title	Crop Science, Bachelor of Science in Agri Food & Life Sciences			
Program Delivery Method	On Campus			
Is this program interdisciplinary?				
No				
Does this proposal impact any courses from another College/School?				
No Yes				
What are the total hours needed to complete the program?	120			

Program Requirements and Description

Requirements

- #### In Workflow
1. AFLS Dean Initial
 2. Director of Curriculum Review and Program Assessment
 3. Registrar Initial
 4. Institutional Research
 5. CSES Chair
 6. CSES Curriculum Committee
 7. AFLS Faculty
 8. AFLS Dean
 9. Global Campus
 10. Provost Review
 11. Undergraduate Council
 12. Faculty Senate
 13. Provost Final
 14. Registrar Final
 15. Catalog Editor Final

- #### Approval Path
1. 10/13/23 2:43 pm
Lona Robertson (ljrobert): Approved for AFLS Dean Initial
 2. 11/03/23 5:20 pm
Lisa Kulczak (lkulcza): Approved for Director of Curriculum Review and Program Assessment
 3. 11/06/23 8:39 am
Gina Daugherty (gdaugher): Approved for Registrar Initial
 4. 11/06/23 11:05 am
Doug Miles (dmiles): Approved for Institutional Research
 5. 11/07/23 12:42 pm
Jeff Edwards (jeffrey): Approved for CSES Chair
 6. 12/12/23 2:10 pm
Nathan Kemper (nkemper): Approved for CSES Curriculum Committee
 7. 02/15/24 11:26 am
Casey Owens Hanning

Requirements for a Major in Crop Science (CPSC)

State minimum core and discipline specific general education requirements.

(Course work that meets state minimum core requirements is in bold.)

- (cmowens):
- Approved for AFLS Faculty
- 8. 02/15/24 11:38 am
Lona Robertson (lrobert): Approved for AFLS Dean
- 9. 02/15/24 11:50 am
Suzanne Kenner (skenner): Approved for Global Campus
- 10. 02/15/24 9:18 pm
Matthew Ganio (msganio): Approved for Provost Review
- 11. 02/28/24 1:46 pm
Lisa Kulczak (lkulcza): Approved for Undergraduate Council

History

1. Aug 15, 2014 by Leepfrog Administrator (clhelp)
2. Aug 31, 2017 by Charlie Alison (calison)
3. May 21, 2019 by Mary Savin (msavin)
4. Dec 20, 2019 by Charlie Alison (calison)
5. May 15, 2020 by Gina Daugherty (gdaugher)
6. Jun 18, 2020 by Lisa Kulczak (lkulcza)
7. Dec 10, 2020 by Karen Turner (kjestal)
8. Dec 10, 2020 by Karen Turner (kjestal)
9. Apr 7, 2021 by Lisa Kulczak (lkulcza)
10. May 21, 2021 by Lisa Kulczak (lkulcza)
11. Jan 3, 2023 by Mary Savin (msavin)
12. Mar 22, 2023 by Charlie Alison (calison)

University Requirements		1
UNIV 1001	Course UNIV 1001 Not Found¹	
<u>UNIV 10051</u>	<u>University Perspectives¹</u>	

CSES 10101	Introduction to Crop, Soil, and Environmental Science	
Communications		12
ENGL 1013	Course ENGL 1013 Not Found	
ENGL 1023	Course ENGL 1023 Not Found	
COMM 1313	Course COMM 1313 Not Found	
CSES 3023	Course CSES 3023 Not Found	
ENGL 10103	Composition I (ACTS Equivalency = ENGL 1013)	
ENGL 10203	Composition II (ACTS Equivalency = ENGL 1023)	
SPCH 10003	Public Speaking (ACTS Equivalency = SPCH 1003)	
CSES 30203	Crop, Soil, and Environmental Sciences Colloquium	
U.S. History or Government ²		3
Select 3 hours US History or Government State Minimum Core		
Mathematics and Computer Science		6
MATH 1203	Course MATH 1203 Not Found (or higher level MATH)	
ASTM 2903	Course ASTM 2903 Not Found	
or STAT 2303	Course STAT 2303 Not Found	
MATH 11003	College Algebra (ACTS Equivalency = MATH 1103) (or higher level MATH)	
ASTM 29003	Agricultural and Human Environmental Sciences Applications of Microcomputers	
or MATH 21003	Principles of Statistics (ACTS Equivalency = MATH 2103)	
Physical and Biological Sciences		15-19
BIOL 1543	Course BIOL 1543 Not Found	
& BIOL 1541L	and Course BIOL 1541L Not Found	
CHEM 2613	Course CHEM 2613 Not Found	
& CHEM 2611L	and Course CHEM 2611L Not Found	
ANSC 3123	Course ANSC 3123 Not Found	
or POSC 3123	Course POSC 3123 Not Found	
or BIOL 2323	Course BIOL 2323 Not Found	
BIOL 10103	Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)	
& BIOL 10101	and Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)	
CHEM 26103	Organic Physiological Chemistry (ACTS Equivalency = CHEM 1224 Lecture)	
& CHEM 26101	and Organic Physiological Chemistry Laboratory (ACTS Equivalency = CHEM 1224 Lab)	
ANSC 31203	Principles of Genetics	
or POSC 31203	Principles of Genetics	
or BIOL 23373	General Genetics	
Select one CHEM group (4-8 hours)		
CHEM 1073	Course CHEM 1073 Not Found	
& CHEM 1071L	and Course CHEM 1071L Not Found	
CHEM 1103	Course CHEM 1103 Not Found	
& CHEM 1101L	and Course CHEM 1101L Not Found	
& CHEM 1123	and Course CHEM 1123 Not Found	
& CHEM 1121L	and Course CHEM 1121L Not Found	
CHEM 12103	Fundamentals of Chemistry (ACTS Equivalency = CHEM 1214 Lecture)	
& CHEM 12101	and Fundamentals of Chemistry Laboratory (ACTS Equivalency = CHEM 1214 Lab)	
CHEM 14103	University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture)	
& CHEM 14101	and University Chemistry I Laboratory (ACTS Equivalency = CHEM 1414 Lab)	

[& CHEM 14203](#)
[& CHEM 14201](#)

[and University Chemistry II \(ACTS Equivalency = CHEM 1424 Lecture\)](#)
[and University Chemistry II Laboratory \(ACTS Equivalency = CHEM 1424 Lab\)](#)

Fine Arts and Humanities ²**6**

Select 3 hours from Fine Arts State Minimum Core

Select 3 hours from Humanities State Minimum Core

Social Sciences ²**9**~~AGEC 1103~~~~Course AGEC 1103 Not Found~~[AGEC 11003](#)[Principles of Agricultural Microeconomics](#)

Select 6 hours from Social Sciences State Minimum Core

Crop Science Core**27**~~CSES 1203~~~~Course CSES 1203 Not Found~~~~CSES 2103~~~~Course CSES 2103 Not Found~~~~& CSES 2101L~~~~and Course CSES 2101L Not Found~~~~CSES 2203~~~~Course CSES 2203 Not Found~~~~& CSES 2201L~~~~and Course CSES 2201L Not Found~~~~CSES 4013~~~~Course CSES 4013 Not Found~~~~CSES 4224~~~~Course CSES 4224 Not Found~~~~CSES 4143~~~~Course CSES 4143 Not Found~~~~ENTO 3013~~~~Course ENTO 3013 Not Found~~~~PLPA 3003~~~~Course PLPA 3003 Not Found~~[CSES 2302 Professional Development in Crop, Soil, and Environmental Sciences](#)[CSES 12003](#)[Introduction to Plant Sciences](#)[CSES 21033](#)[Crop Science](#)[& CSES 21001](#)[and Crop Science Laboratory](#)[CSES 22003](#)[Soil Science](#)[& CSES 22001](#)[and Soil Science Laboratory](#)[CSES 40133](#)[Advanced Crop Science](#)[CSES 42204](#)[Soil Fertility](#)[CSES 41403](#)[Principles of Weed Control](#)[ENTO 30103](#)[Introduction to Entomology](#)[PLPA 30003](#)[Principles of Plant Pathology](#)**Crop Science Electives ³****21**

Select Twenty-One (21) hours from the following:

~~CSES 3214~~~~Course CSES 3214 Not Found~~~~CSES 3312~~~~Course CSES 3312 Not Found~~~~CSES 3322~~~~Course CSES 3322 Not Found~~~~CSES 3332~~~~Course CSES 3332 Not Found~~~~CSES 3342~~~~Course CSES 3342 Not Found~~~~CSES 3703~~~~Course CSES 3703 Not Found~~~~EN5C 3003~~~~Course EN5C 3003 Not Found~~~~EN5C 3263~~~~Course EN5C 3263 Not Found~~~~EN5C 3603~~~~Course EN5C 3603 Not Found~~~~CSES 4103~~~~Course CSES 4103 Not Found~~~~CSES 4133~~~~Course CSES 4133 Not Found~~

or <u>CSES 4143</u>	<u>Course CSES 4143 Not Found</u>
<u>ENTO 4123</u>	<u>Course ENTO 4123 Not Found</u>
<u>PLPA 4223</u>	<u>Course PLPA 4223 Not Found</u>
<u>PLPA 4333</u>	<u>Course PLPA 4333 Not Found</u>
<u>CSES 462V</u>	<u>Course CSES 462V Not Found (3 hours)</u>
<u>CSES 400V</u>	<u>Course CSES 400V Not Found (3 hours)</u>
<u>CSES 32104</u>	<u>Soil Resources and Nutrient Cycles</u>
<u>CSES 33102</u>	<u>Cotton Production</u>
<u>CSES 33202</u>	<u>Soybean Production</u>
<u>CSES 33302</u>	<u>Rice Production</u>
<u>CSES 33402</u>	<u>Cereal Grain Production</u>
<u>CSES 37003</u>	<u>Precision Agriculture for Crops</u>
<u>ENSC 30003</u>	<u>Introduction to Water Science</u>
<u>ENSC 32603</u>	<u>Soil and Water Conservation</u>
<u>ENSC 36003</u>	<u>GIS for Environmental Science</u>
<u>CSES 41003</u>	<u>Plant Breeding</u>
<u>CSES 41303</u>	<u>Ecology and Morphology of Weedy and Invasive Plants</u>
or <u>CSES 41403</u>	<u>Principles of Weed Control</u>
<u>ENTO 41203</u>	<u>Insect Pest Management</u>
<u>PLPA 42203</u>	<u>Plant Disease Control</u>
<u>PLPA 43303</u>	<u>Biotechnology in Agriculture</u>
<u>CSES 4620V</u>	<u>Internship (3 hours)</u>
<u>CSES 4000V</u>	<u>Special Problems (3 hours)</u>

General Electives**16-20**

Total Hours

120

¹ UNIV 10051 University Perspectives is required for new freshmen or transfers with less than 24 hours.

² See student degree audit for approved course list.

³ One three (3) hour study abroad course may be used in fulfilling three (3) hours of Crop Science Electives.

8-Semester Plan

Crop Science B.S.A.**Eight-Semester Degree Program**

See more about the [Eight-Semester Degree Policy](#) for university requirements of the program.

First Year

	Units
	Fall/Spring
ENGL 1013 Course ENGL 1013 Not Found (Satisfies General Education Outcome 1.1)	
MATH 1203 Course MATH 1203 Not Found (or higher level MATH (Satisfies General Education Outcome 2.1))	
ENGL 10103 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)	<u>3</u> =
MATH 11003 College Algebra (ACTS Equivalency = MATH 1103) (or higher level MATH (Satisfies General Education Outcome 2.1))	<u>3</u> =
Satisfies General Education Outcome 3.4:	
BIOL 1543 Course BIOL 1543 Not Found	0 -
& BIOL 1541L Course BIOL 1541L Not Found	
CSES 1203 Course CSES 1203 Not Found	3 -
UNIV 1001 Course UNIV 1001 Not Found	4 -
BIOL 10103 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)	<u>4</u> =
& BIOL 10101 Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)	
CSES 12003 Introduction to Plant Sciences	<u>3</u> =
UNIV 10051 University Perspectives	<u>1</u> =
CSES 10101 Introduction to Crop, Soil, and Environmental Science	<u>1</u> =
CSES 2103 Course CSES 2103 Not Found	- 4
& CSES 2101L Course CSES 2101L Not Found	
ENGL 1023 Course ENGL 1023 Not Found (If exempt, see adviser for communication courses.) (Satisfies General Education Outcome 1.1)	- 3
COMM 1313 Course COMM 1313 Not Found (Satisfies General Education Outcomes 1.2 and 5.1)	- 3
AGEC 1103 Course AGEC 1103 Not Found (Satisfies General Education Outcome 3.3)	- 3
CSES 21033 Crop Science	= <u>4</u>
& CSES 21001 Crop Science Laboratory	
ENGL 10203 Composition II (ACTS Equivalency = ENGL 1023) (If exempt, see adviser for communication courses.) (Satisfies General Education Outcome 1.1)	<u>3</u>
SPCH 10003 Public Speaking (ACTS Equivalency = SPCH 1003) (Satisfies General Education Outcomes 1.2 and 5.1)	= <u>3</u>
AGEC 11003 Principles of Agricultural Microeconomics (Satisfies General Education Outcome 3.3)	= <u>3</u>
U.S. History or Government Core Elective (Satisfies General Education Outcome 4.2) ⁵	3
Year Total:	15 16

Second Year

	Units
	Fall/Spring
Satisfies General Education Outcome 3.4:	
CHEM 1103 Course CHEM 1103 Not Found	0 -
& CHEM 1101L Course CHEM 1101L Not Found	
or CHEM 1073 and CHEM 1071L	
CHEM 14103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture)	<u>4</u> =
& CHEM 14101 University Chemistry I Laboratory (ACTS Equivalency = CHEM 1414 Lab)	
or CHEM 12103 and CHEM 12101	
Social Sciences State Minimum Core Elective (Satisfies General Education Outcome 3.3) ⁴	3
Fine Arts or Humanities State Minimum Core Elective (Satisfies General Education Outcome 3.1 or 3.2) ^{1,2}	3
Crop Science Elective ^{4,5}	3
Crop Science Elective ^{4,5}	2-3
CSES 2302 Professional Development in Crop, Soil, and Environmental Sciences	<u>2</u> =
CHEM 1123 Course CHEM 1123 Not Found	- 4
& CHEM 1121L Course CHEM 1121L Not Found	
or CHEM 2613 and CHEM 2611L	
ASTM 2903 Course ASTM 2903 Not Found	- 3
or STAT 2303 Course STAT 2303 Not Found	
CHEM 14203 University Chemistry II (ACTS Equivalency = CHEM 1424 Lecture)	= <u>4</u>
& CHEM 14201 University Chemistry II Laboratory (ACTS Equivalency = CHEM 1424 Lab)	
or CHEM 26103 and CHEM 26101	
ASTM 29003 Agricultural and Human Environmental Sciences Applications of Microcomputers	= <u>3</u>
or MATH 21003 Principles of Statistics (ACTS Equivalency = MATH 2103)	
Social Sciences State Minimum Core Elective (Satisfies General Education Outcomes 3.3 and 4.1) ⁴	3
Fine Arts or Humanities State Minimum Core Elective (Satisfies General Education Outcome 3.1 or 3.2) ^{1,2}	3
Crop Science Elective ^{4,5}	2-3

Year Total:	17 16
Third Year	Units
	FallSpring
CHEM 2613 Course CHEM 2613 Not Found	4 -
& CHEM 2611L Course CHEM 2611L Not Found	
or CHEM 1123 and CHEM 1121L	
PLPA 3003 Course PLPA 3003 Not Found	3 -
ENTO 3013 Course ENTO 3013 Not Found	3 -
General Elective ⁴	3 -
CSES 2203 Course CSES 2203 Not Found	0 -
& CSES 2201L Course CSES 2201L Not Found	
<u>CHEM 26103 Organic Physiological Chemistry (ACTS Equivalency = CHEM 1224 Lecture)</u>	<u>4</u> =
<u>& CHEM 26101 Organic Physiological Chemistry Laboratory (ACTS Equivalency = CHEM 1224 Lab)</u>	
<u>or CHEM 14203 and CHEM 14201</u>	
<u>PLPA 30003 Principles of Plant Pathology</u>	<u>3</u> =
<u>ENTO 30103 Introduction to Entomology</u>	<u>3</u> =
<u>CSES 22003 Soil Science</u>	<u>4</u> =
<u>& CSES 22001 Soil Science Laboratory</u>	
ANSC 3123 Course ANSC 3123 Not Found	
or POSC 3123 Course POSC 3123 Not Found	
or BIOL 2323 Course BIOL 2323 Not Found	
<u>ANSC 31203 Principles of Genetics</u>	= <u>3</u>
<u>or POSC 31203 Principles of Genetics</u>	
<u>or BIOL 23373 General Genetics</u>	
Crop Science Elective ^{4,5}	2-3
Crop Science Elective ^{4,5}	3
General Elective ⁴	6
Year Total:	14 14
Fourth Year	Units
	FallSpring
CSES 3023 Course CSES 3023 Not Found (Satisfies General Education Outcome 6.1)	3 -
CSES 4224 Course CSES 4224 Not Found	4 -
<u>CSES 30203 Crop, Soil, and Environmental Sciences Colloquium (Satisfies General Education Outcome 6.1)</u>	<u>3</u> =
<u>CSES 42204 Soil Fertility</u>	<u>4</u> =
Crop Science Elective ^{4,5}	3
Crop Science Elective ^{4,5}	2-3
Crop Science Elective ^{4,5}	3
CSES 4013 Course CSES 4013 Not Found	- 3
CSES 4143 Course CSES 4143 Not Found	- 3
<u>CSES 40133 Advanced Crop Science</u>	= <u>3</u>
<u>CSES 41403 Principles of Weed Control</u>	= <u>3</u>
Crop Science Electives OR General Electives ²	0-7
Year Total:	16 12

Total Units in Sequence: 120

- 1 The Fine Arts Elective courses which satisfy General Education Outcome 3.1 include: [ARCH 10003](#), [ARHS 10003](#), [COMM 10003](#), [DANC 10003](#), [LARC 10003](#), [MUSC 10003](#), [THEAT 10003](#)
- 2 The Humanities Elective courses which satisfy General Education Outcome 3.2 include: [AAST 20203](#), [ANTH 10303](#), [ARCH 10103](#), [CLST 10003](#), [CLST 100H3](#), [CLST 10103](#), [COMM 12303](#), [DANC 10003](#), [ENGL 12103](#), [GNST 20003](#), [HIST 11193](#), [HIST 111H3](#), [HIST 11293](#) or Intermediate-level world language (usually 2003-level).
- 3 The Social Science Elective courses which satisfy General Education Outcomes 3.3 and 4.1 include: [ANTH 10203](#), [COMM 10203](#), [HDFS 14003](#), [HDFS 24103](#), [HIST 11193](#), [HIST 11293](#)
- 4 Students must complete 40 hours of upper division courses (3000-4000 level). It is recommended that students consult with their academic adviser when making course selection.
- 5 See student degree audit for approved course list.

No	Are Similar Programs available in the area?
Estimated Student Demand for Program	50

Scheduled Program 2029-2030

Review Date

Program Goals and Objectives

Program Goals and Objectives

- 1. Graduates have the discipline-specific knowledge in crop sciences required to perform successfully in private, government, or academic entry-level positions.
- 2. Graduates are able to critically analyze, synthesize, and evaluate new information to make informed decisions.
- 3. Graduates have the ability to solve complex, multidisciplinary problems.
- 4. Graduates are able to prepare and synthesize information to effectively communicate, both orally and in writing.

Learning Outcomes

Learning Outcomes

- 1. Students will demonstrate the discipline specific knowledge required to function as crop science professionals.
- 2. Students will demonstrate the ability to critically evaluate situations or scenarios to arrive at well thought out and supported decisions and outcomes.
- 3. Students will demonstrate the ability to work through and solve complex, multidisciplinary problems.
- 4. Communication skills
 - a. Students will demonstrate the skills required to effectively communicate technical/scientific information in oral platforms.
 - b. Students will demonstrate the ability to integrate, organize, and effectively present written reports of technical/scientific information.

Description and justification of the request

Description of specific change	Justification for this change
<p>CSES is developing a freshmen (1 credit hour) and sophomore (2 credit hour) level course to add the CPSC degree as required courses. To include these 3 credit hours, 3 hours of general electives are being removed.</p>	<p>To better orient and integrate freshman into the department and help students develop professional skills to succeed in college and their future careers, these two courses are being added to the CPSC degree plan.</p>

Upload attachments [24-25-cpscbs proposed.docx](#)

Reviewer Comments **Lisa Kulczak (lkulcza) (11/03/23 5:15 pm):** Added course information for courses not found; both are currently in the approval process.