

B.S. Integrated Plant Sciences
Agricultural Biotechnology Major
Advising Sheet 2021-2022

University Common Requirements (UCORE):

34 credit minimum required, with no more than three, three-credit courses within the major.

First Year Experience (3 credits) [ROOT]	Credits	Term	Grade	Offered
HISTORY 105/305: Roots of Contemporary Issues	3			F, S, SS

Foundational Competencies (9 credits minimum)	Credits	Term	Grade	Offered
<i>Written Communication (3) [WRTG]</i>				
ENGLISH 101: Introductory Writing (or based on placement)	3			F, S, SS
<i>Communication (3) [COMM] [WRTG]</i>				
H_D 205: Dev. Effective Com. or COM 102: Com. in Info. Soc.	3 - 4			F, S, SS
<i>Quantitative Reasoning (3) [QUAN]</i>				
STAT 212: Intro to Stat Methods	4			F, S, SS

Ways of Knowing (16 credits minimum)	Credits	Term	Grade	Offered
<i>Inquiry in the Social Sciences (3) [SSCI]</i>				
ECONS 101 Fundamentals of Microeconomics	3			F, S, SS
<i>Inquiry in the Humanities (3) [HUM]</i>				
Elective	3			F, S, SS
<i>Inquiry in the Creative and Professional Arts (3) [ARTS]</i>				
Elective	3			F, S, SS
<i>Inquiry in the Natural Sciences (7 minimum) [BSCI] [PSCI] [SCI]</i>				
BIOLOGY 106: Intro to Organismal	4			F, S, SS
CHEM 105: Principles Of Chem I	4			F, S, SS

Integrative and Applied Learning (6 credits minimum)	Credits	Term	Grade	Offered
<i>Diversity (3) [DIVR]</i>				
Elective	3			F, S, SS
<i>Integrative Capstone (3) [CAPS]</i>				
CROP_SCI 425: Trends in Plant Science	3			S

Integrated Plant Sciences Core Requirements:

Course	Credits	Term	Grade	Offered
BIOLOGY 107: Intro to Cell Bio & Genetics	4			F, S, SS
CHEM 106: Princ. Of Chem II	4			F, S, SS
HORT/CROP_SCI 102: Cultivated Plants	3			F, S online
HORT/CROP_SCI 202: Crop Growth and Development	4			S
SOIL_SCI 201: Soil: A Living System	3			F, S
ENTOM 343: [M] General Entomology	3			F
ENTOM 351: Ecological & Integrated Pest Management	3			S
PL_P 429: General Plant Pathology	3			F
CROP_SCI 411: [M] Crop Environmental Interactions or HORT 416: Adv. Hort Crop Physiology	3			CROP_SCI 411: F HORT 416: S
HORT/CROP_SCI 495 or 498: Professional Work/Research Experience	1			F, S, SS

Agricultural Biotechnology Major Requirements:

Course	Credits	Term	Grade	Offered
CHEM 345: Organic Chemistry I	4			F, S, SS
CROP_SCI 445: [M] Plant Breeding	4			S even
BIOLOGY 420: Plant Physiology	3			F
HORT 480: Plant Genomics & Biotechnology	3			F even
MATH 106: College Algebra and MATH 108: Trigonometry or MATH 140 Calculus for Life Scientists**	4 - 5			MATH 140: F, S OTHER: F, S, SS
MBIOS 301: General Genetics	4			F, S, SS
MBIOS 303: Intro Biochemistry	4			F, S, SS
MBIOS 305: General Microbiology	3			F, S, SS
MBIOS 401: Cell Biology	3			F, S
MBIOS 404: Molecular Biology	3			F
MBIOS 478: Bioinformatics	3			F
DATA 115 Intro to Data Analytics or STAT 412: Statistical Methods in Research	3			F, S, STATS 412: SS
400/500 level Seminar in any CAHNRS Dept.	1			S

Open Electives:

Course*	Credits	Term	Grade	Offered

CHECK LIST FOR THIS MAJOR:

Writing in the Major (2 [M] courses)		
Writing Portfolio		
40 Upper-Division Credits		
UCORE	36-37 credits	
IPS Core	32 credits	
Agricultural Biotechnology Major	42-43 credits	
Open Electives	8-10 credits	
Total (at least 120 credits)		

NOTES:

**Electives are chosen by the student and are needed to reach the minimum 120 credits to graduate. Electives can be used towards a minor. Contact an advisor or the department for more information on courses for your minor interest.*

***or higher calculus*

DATA 115 is recommended if STATS 212 was taken at WSU. STATS 412 is recommended if STATS 212 wasn't taken at WSU

Last Updated 9/20/2021

FOUR-YEAR PLAN

	Fall Semester	Hours	Spring Semester	Hours
First Year	CHEM 105 [PSCI] ENGLISH 101 [WRTG] CROP_SCI/HORT 102 MATH 140 OR MATH 106/108 [QUAN]	4 3 3 4 OR 5	CHEM 106 [PSCI] ECONS 101 [SSCI] HISTORY 105 [ROOT] CROP_SCI/HORT 202	4 3 3 4
Second Year	BIOLOGY 106 [BSCI] or 107 [BSCI] COM 102 or HD 205 [COMM] STAT 212 [QUAN] Electives	4 3 or 4 4 3	BIOLOGY 106 [BSCI] or 107 [BSCI] Creative & Professional Arts [ARTS] ENTOM 351 Humanities [HUM] SOIL_SCI 201 Complete Writing Portfolio	4 3 3 3 3
Third Year	BIOLOGY 420 CHEM 345 ENTOM 343 [M] MBIOS 301 PL_P 429	3 4 3 4 3	Diversity [DIVR] MBIOS 303 MBIOS 305 Elective	3 4 3 3 or 4
Fourth Year	HORT 480 ⁴ MBIOS 404 MBIOS 478 DATA 115 ³ Elective	3 3 3 3 4	CROP_SCI 445 [M] ⁴ CROP_SCI 495 400/500 level Seminar in any CAHNRS Dept. HORT 416 ² MBIOS 401 Integrative Capstone [CAPS]	4 1 1 3 3 3

Footnotes

¹Seminar in CAHNRS (1 credit): AGTM 451, CROP SCI/SOIL SCI 412, HORT/VIT ENOL 409, or as approved by advisor.

²CROP_SCI 411 [M] can be taken in the fall as an alternative to HORT 416.

³STAT 412 can be taken as an alternative to DATA 115.

⁴These are every-other year courses, so may need to be taken a different year than shown in 4-year plan