

MAJOR IN FERMENTATION AND FOOD SCIENCE, FERMENTATION SCIENCE AND TECHNOLOGY CONCENTRATION

Requirements

Effective Fall 2026

Freshman

		AUCC	Credits
CO 150	College Composition (GT-CO2)	1A	3
FTEC 115	Cultural Aspects of Fermented Foods	1C	3
FTEC 155	Introduction to Food Science	3A	3
MATH 117	College Algebra in Context I (GT-MA1)	1B	1
MATH 118	College Algebra in Context II (GT-MA1)	1B	1
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	1B	1
SOC 100	Introduction to Sociology (GT-SS3)	3C	3
Select one group from the following:			4

Group A:

BZ 110	Principles of Animal Biology (GT-SC2)	3A
BZ 111	Animal Biology Laboratory (GT-SC1)	3A

Group B:

LIFE 102	Attributes of Living Systems (GT-SC1)	3A
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Select one group from the following:

5-8

Group A:

CHEM 107	Fundamentals of Chemistry (GT-SC2)	3A
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)	3A

Group B:

CHEM 111	General Chemistry I (GT-SC2)	3A
CHEM 112	General Chemistry Lab I (GT-SC1)	3A
CHEM 113	General Chemistry II	

Arts and Humanities (<https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/> 3B #arts-humanities)

3

Total Credits

27-30

Sophomore

CHEM 245	Fundamentals of Organic Chemistry	4
CHEM 246	Fundamentals of Organic Chemistry Laboratory	1
FTEC 210	Science of Food Fermentation	3
FTEC 292	Careers in Fermentation and Food Science	1
SPCM 200	Public Speaking	3
Select one group from the following:		5

Group A:

LIFE 205	Microbial Biology
LIFE 206	Microbial Biology Laboratory

Group B:

MIP 300	General Microbiology
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MIP 302	General Microbiology Laboratory		
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		3B	3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		3D	3
Electives (see list below) ¹			6
Total Credits			29
Junior			
BC 351	Principles of Biochemistry		4
FTEC 350	Fermentation Microbiology	4B	3
FTEC 360	Brewing Processes	4A	4
FTEC 447	Food Chemistry		3
HEM 330	Alcohol Beverage Control and Management		2
MIP 334	Food Microbiology		3
Select one course from the following:			3
CO 300	Writing Arguments (GT-CO3)	2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)	2	
CO 301C	Writing in the Disciplines: Social Sciences (GT-CO3)	2	
JTC 300	Strategic Writing and Communication (GT-CO3)	2	
Select one course from the following:			3
STAT 201	General Statistics (GT-MA1)	1B	
STAT 204	Statistics With Business Applications (GT-MA1)	1B	
Elective (See list below) ¹			3
Total Credits			28
Senior			
FTEC 400	Food Safety		3
FTEC 422	Brewing Science I		5
FTEC 430	Sensory Evaluation of Food Products		2
FTEC 460	Brewing Science II		5
FTEC 465	Food Production Operations		3
FTEC 492 ²	Senior Seminar Fermentation and Food Science	4C	4
Electives (See list below) ¹			11-14
Total Credits			33-36
Program Total Credits:			120

Department Electives

Code	Title	AUCC	Credits
ANEQ 360	Principles of Meat Science		3
CBE 205/BIOM 205	Biological and Cellular Engineering		3
FTEC 110	Food-From Farm to Table		3
FTEC 205	Beer Styles and Tasting		2
FTEC 351	Fermentation Microbiology Laboratory		2
FTEC 375	Introduction to Fermentation Unit Operations		4
FTEC 487	Internship		3
FTEC 495	Independent Study		1-6
FTEC 570	Food Product Development		2
FTEC 572	Food Biotechnology		2
FTEC 574	Current Issues in Food Safety		2

HEM 335/FSHN 335	Food, Society and Social Media		3
MATH 126	Analytic Trigonometry (GT-MA1)	1B	1
MATH 141	Calculus in Management Sciences (GT-MA1)	1B	3-4
or MATH 155	Calculus for Biological Scientists I (GT-MA1)		
MGT 305	Fundamentals of Management		3
MGT 430	Leadership and Social Responsibility		3
MIP 335	Food Microbiology Laboratory		2
PH 121	General Physics I (GT-SC1)	3A	5
PH 141	Physics for Scientists and Engineers I (GT-SC1)	3A	5

¹ Students may select from the Department Electives course list, or they may select any course as a free elective. Select enough elective credits to bring the program total to 120 credits, of which at least 42 must be upper-division (300- to 400-level).

² FTEC 492 should be taken in both semesters of Senior year.