CULINARY FOOD SCIENCE (H SCI)

The Culinary Food Science degree program is a food science-based degree in which students develop basic culinary skills along with knowledge of the accompanying sciences. As a graduate, you'll combine food product development skills and entrepreneurial talents with scientific and technological knowledge.

The department also offers a culinary food science minor (http://catalog.iastate.edu/previouscatalogs/2016-2017/collegeofhumansciences/foodscienceandhumannutrition/#undergraduateminor) .

Administered by the Department of Food Science and Human Nutrition

Total Degree Requirement: 120 cr.
Students must fulfill International Perspectives and U.S. Diversity requirements by selecting coursework from approved lists. These courses may also be used to fulfill other area requirements. Only 65 cr. from a two-year institution may apply to the degree which may include up to 16 technical cr.; 9 P-NP cr. of electives; 2.00 minimum GPA.

International Perspectives: 3 cr.
U.S. Diversity: 3 cr.
Communications and Library: 10 cr.

ENGL 150	Critical Thinking and Communication	3
ENGL 250	Written, Oral, Visual, and Electronic Composition	3
LIB 160	Information Literacy	1
SP CM 212	Fundamentals of Public Speaking	3
Total Credits		**10**

Humanities and Social Sciences: 6-12 cr.

Select Humanities course from approved list		3
If H Sci student, select:		6
Additional Humanities course		
Additional Humanities or Social Science course		
ECON 101	Principles of Microeconomics	3

Ethics and Environmental: 3-6 cr.

FS HN 342	World Food Issues: Past and Present	3
If AgLS student, select from:		2-3
ENV S 120	Introduction to Renewable Resources	
ENV S 201	Introduction to Environmental Issues	

Mathematical Sciences: 6-8 cr.

Select at least 3 credits from:		3-4
MATH 140	College Algebra	
MATH 143	Preparation for Calculus	
MATH 160	Survey of Calculus	
MATH 165	Calculus I	
MATH 181	Calculus and Mathematical Modeling for the Life Sciences I	
Select at least 3 credits from:		3-4
STAT 101	Principles of Statistics	
STAT 104	Introduction to Statistics	
Total Credits		**6-8**

Physical Sciences: 9 cr.

CHEM 163	College Chemistry	4
or CHEM 177	General Chemistry I	
CHEM 163L	Laboratory in College Chemistry	1
or CHEM 177L	Laboratory in General Chemistry I	
CHEM 231	Elementary Organic Chemistry	3
CHEM 231L	Laboratory in Elementary Organic Chemistry	1
Total Credits		**9**

Biological Sciences: 12-13 cr.

BBMB 301	Survey of Biochemistry	3
BIOL 211	Principles of Biology I	3
BIOL 212	Principles of Biology II	3
MICRO 201	Introduction to Microbiology	2-3
or MICRO 302	Biology of Microorganisms	
MICRO 201L	Introductory Microbiology Laboratory	1
or MICRO 302L	Microbiology Laboratory	
Total Credits		**12-13**

Animal Science Coursework: 6 cr.

AN S 270	Foods of Animal Origin	2
AN S 270L	Foods of Animal Origin Laboratory	1
AN S 460	Processed Meats	3
Total Credits		**6**

Food Science and Human Nutrition: 41 cr.

FS HN 101	Food and the Consumer	3
FS HN 104	Introduction to Professional Skills in Culinary Science	1
FS HN 110	Professional and Educational Preparation	1
FS HN 167	Introduction to Human Nutrition	3
FS HN 203	Contemporary Issues in Food Science and Human Nutrition	1
FS HN 214	Scientific Study of Food	3
FS HN 215	Advanced Food Preparation Laboratory	2
FS HN 265	Nutrition for Active and Healthy Lifestyles	3
FS HN 311	Food Chemistry	3
FS HN 311L	Food Chemistry Laboratory	1
FS HN 314	Foundations of Culinary Science	1
FS HN 403	Food Laws, Regulations, and the Regulatory Process	2
FS HN 405	Food Quality Assurance	3
FS HN 406	Sensory Evaluation of Food	3
FS HN 411	Food Ingredient Interactions and Formulations	2
FS HN 412	Food Product Development	3
FS HN 420	Food Microbiology	3
FS HN 480	Professional Communication in Food Science and Human Nutrition	1
Take one of the following courses for 2 credits:		2
FS HN 491B	Supervised Work Experience: Food Science	
or FS HN 491D	Supervised Work Experience: Culinary Science	
Total Credits		**41**

Hotel, Restaurant, Institutional Management: 16 cr.

MKT 340	Principles of Marketing	3

HSP M 233	Hospitality Sanitation and Safety	3
HSP M 380	Quantity Food Production Management	3
HSP M 380L	Quantity Food Production and Service Management Experience	2
HSP M 383	Introduction to Wine, Beer, and Spirits	2
HSP M 487	Fine Dining Management	3
Total Credits		**16**

Electives 0-8 cr. Select from any university coursework to earn at least 120 total credits.
Go to FS HN courses. (http://catalog.iastate.edu/previouscatalogs/2016-2017/azcourses/fs_hn)

Culinary Food Science, B.S.

Freshman

Fall	**Credits**	**Spring**	**Credits**
FS HN 110	1	FS HN 101	3
CHEM 163 or 177	4	FS HN 104	1
CHEM 163L or 177L	1	FS HN 167	3
BIOL 211	3	BIOL 212	3
MATH 140, 143, 160, 165, or 181	3-4	ECON 101	3
ENGL 150	3	STAT 101 or 104	3-4
LIB 160	1		
	16-17		**16-17**

Sophomore

Fall	**Credits**	**Spring**	**Credits**
CHEM 231	3	FS HN 265	3
CHEM 231L	1	BBMB 301	3
ENGL 250	3	MICRO 201 or 302	2-3
FS HN 203	1	MICRO 201L or 302L	1
HSP M 233	3	FS HN 214	3
SP CM 212	3	FS HN 215	2
	14		**14-15**

Junior

Fall	**Credits**	**Spring**	**Credits**
AN S 270	2	FS HN 314	1
AN S 270L	1	FS HN 342	3
FS HN 311	3	FS HN 403	2
FS HN 311L	1	HSP M 380	3
FS HN 411	2	HSP M 380L	2
FS HN 420	3	Humanities	3
Humanities (H Sci) or ENV S course (AgLS)	2-3		
	14-15		**14**

Senior

Fall	**Credits**	**Spring**	**Credits**
FS HN 406	3	AN S 460	3
FS HN 491B or 491D, Internship	2	FS HN 405	3
HSP M 383	2	FS HN 412	3
HSP M 487	3	FS HN 480	1
MKT 340	3	Humanities or Social Science (H Sci) or elective (AgLS)	3
U.S. Diversity course	3	Electives*	3
	16		**16**

Total Credits: 120-124

Footnotes

* Choose elective courses to total equal to or greater than 120 credits.

Note This sequence is only an example. The number of credits taken each semester should be based on the individual student's situation. Factors that may affect credit hours per semester include student ability, employment, health, activities, and grade point consideration.