

Minor in Food Science

The minor requires at least 15 credits, including at least 6 credits taken at Iowa State University in courses numbered 300 or above. The minor must include at least 9 credits that are not used to meet any other college or university requirement. The same courses may not be applied to two different minors. All courses must be taken for a grade.

Along with the courses listed below, students must meet all of the corresponding pre-requisites*. Typical courses needed to meet pre-requisites for the Food Science Minor can include, but are not limited to: BIOL 211, BIOL 212, MICRO 201/L or 302/L, CHEM 163/L or 177/L & 178, CHEM 231/L, BBMB 301, a Physics course, and/or courses in the FS HN department. Students should carefully check the Iowa State University Catalog to ensure that they know course pre-requisites, understand the sequence of the courses, and develop a plan for completing all pre-requisites and requirements by their planned graduation dates.

2013-14, 2014-15, 2015-16, 2016-17, 2017-18, and 2018-19 Catalog requirements:

1. For students from outside the department

<u>Course</u>	<u>Credits</u>
FS HN 101	3
FS HN 167	3
Select 9 additional credits from at least two of the following areas:	9
Food chemistry area: FS HN 214 plus lab (115 or 215), FS HN 311 (lab optional: 311L), 410, 411	
Food microbiology area: FS HN 407, 419, 420, 421	
Food processing/engineering area: FS HN 351, 405, 471, 472	
Total Credits	15

2. For students majoring in Culinary Science, Dietetics, or Nutritional Science

<u>Course</u>	<u>Credits</u>
Select 9 credits from at least two of the following areas:	9
Food chemistry area: FS HN 214 plus lab (115 or 215), FS HN 311 (lab optional: 311L), 410, 411	
Food microbiology area: FS HN 407, 419, 420, 421	
Food processing/engineering area: FS HN 351, 405, 471, 472	
Select additional credits to total 15 from courses not taken above and FSHN 403, 406, 412	
Total Credits	15

Note: Within the 2011-12 and 2012-13 Catalogs, the FS HN 214 lab experience (115 or 215) was optional.

* Prerequisite guide for courses included in the minor:

<u>Course</u>	<u>Pre-requisites</u>
FS HN 101	High school biology and chemistry or 3 credits of each
FS HN 167	High school biology or 3 credits of biology
FS HN 214	FS HN 167 or 265; CHEM 231 or 331; plus concurrent enrollment in FS HN 115 or 215
FS HN 311	CHEM 231 and 231L or CHEM 331 and 331L; credit or enrollment in BBMB 301
FS HN 351	FS HN 207, MATH 160 or equivalent, and PHYS 111 or equivalent
FS HN 403	3 credits in food science coursework at 200 level or above
FS HN 405	FS HN 214 or FS HN 311; STAT 101 or STAT 104
FS HN 406	FS HN 214 or FS HN 311 or AN S 360; 3 credits in statistics
FS HN 407	FS HN/MICRO 420
FS HN 410	FS HN 214 or FS HN 311 or CHEM 211
FS HN 411	FSHN 214 or FS HN 311 and FS HN 115, FS HN 215 or FS HN 311L
FS HN 412	FS HN 311 or FS HN 411
FS HN 419	MICRO 201 or 302, plus a course in biochemistry
FS HN 420	MICRO 201 or 302
FS HN 421	MICRO 201 or 302; MICRO 201L or 302L; credit or enrollment in FS HN/MICRO 420
FS HN 471	FS HN 351 or A E 451 or CHE 357; MICRO 201 or 302
FS HN 472	Credit or enrollment in FS HN 471 or A E 451 or CH E 357