Fiscal Unit/Academic Org	Food Science & Technology - D1156
Administering College/Academic Group	Food, Agric & Environ Science
Co-adminstering College/Academic Group	
Semester Conversion Designation	Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)
Current Program/Plan Name	Food Processing Minor
Proposed Program/Plan Name	Food Processing Minor
Program/Plan Code Abbreviation	FDPROC-MN
Current Degree Title	

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		20	13.3	15	1.7
Required credit hours offered by the unit	Minimum	8	5.3	5	0.3
	Maximum	15	10.0	11	1.0
Required credit hours offered outside of the unit	Minimum	5	3.3	4	0.7
	Maximum	5	3.3	4	0.7
Required prerequisite credit hours not included above	Minimum	0	0.0	0	0.0
	Maximum	10	6.7	9	2.3

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

- Will be able to integrate and apply food science principles (food chemistry, microbiology, engineering/processing, etc.) to problems in food processing and product design.
- Will understand the current issues in food science and food laws and regulations

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- Letter from the Program food processing.pdf

(Letter from the College to OAA. Owner: Mangino,Michael E)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Mangino,Michael E	09/30/2010 10:56 AM	Submitted for Approval
Approved	Barringer,Sheryl Ann	09/30/2010 11:54 AM	Unit Approval
Revision Requested	Stokoe,Laurie Anne	10/07/2010 01:03 PM	College Approval
Submitted	Mangino,Michael E	11/29/2010 07:39 AM	Submitted for Approval
Approved	Barringer,Sheryl Ann	11/29/2010 08:10 AM	Unit Approval
Revision Requested	Stokoe,Laurie Anne	11/29/2010 03:24 PM	College Approval
Submitted	Mangino,Michael E	11/30/2010 09:39 AM	Submitted for Approval
Revision Requested	Barringer,Sheryl Ann	11/30/2010 09:41 AM	Unit Approval
Submitted	Mangino,Michael E	11/30/2010 10:08 AM	Submitted for Approval
Approved	Barringer,Sheryl Ann	11/30/2010 12:47 PM	Unit Approval
Approved	Stokoe,Laurie Anne	01/14/2011 04:22 PM	College Approval
Pending Approval	Hanlin,Deborah Kay Vankeerbergen,Bernadette Chantal Meyers,Catherine Anne Jenkins,Mary Ellen Bigler Nolen,Dawn	01/14/2011 04:22 PM	ASCCAO Approval

Letter from the Program-offering Unit
The Department of Food Science & Technology is submitting the following

BS in Food Science	Converted
BS in Ag – Food Business	Converted
BS in Culinary Science	New
Minor in Food Processing	Converted
Minor in Food Safety	Converted
MS in Food Science	Converted
PhD in Food Science	Converted

The faculty held numerous meetings as a whole and in subgroups during this process. A faculty member attended the UCAT session on semester conversion and chaired a conversion committee.

The committee started by examining the results of two recent reviews by two external groups, The National Institute of Food and Agriculture (NIFA) formerly Cooperative State Research, Education, and Extension Service (CSREES) and The Institute of Food Technologists. The later review required that we map learning outcomes with courses.

Using the material generated for and by these reviews the committee considered what outcomes were still appropriate for our programs and how to best insure that students achieve these outcomes. A set of learning outcomes were generated and discussed with faculty. The committee also examined the curricula of 15 other food science programs to examine their learning outcomes and the course work that was utilized to achieve them. A grid was developed to show courses that were required by all or nearly all programs and others that were unique.

This information was shared with the entire faculty and a list of ten courses were devised would serve as the basis for our programs. Committees of faculty who taught quarter equivalent courses, related courses or courses that were being combined were formed and charged with developing syllabi and learning outcomes for each of the ten courses. They were also asked to consider at what level the learning outcomes for the degree were being met by these courses.

All course committees presented their material to the semester committee in groups of related courses. This was so that all were aware of what others were accomplishing, so that expectations of related courses were known by those concerned and to allow discussion and suggestions for modification.

Modified syllabi were posted to a web site to allow all faculty easy access and the chance to provide feedback. After the original ten courses were redesigned the remaining support courses were also examined and converted to a semester format. A similar process was followed for our graduate degree programs

A new program is also proposed as a result of work of collaboration between our department and the Central Ohio Technical College (COTC). It proposes a two plus two program combining an Associate Degree in Culinary Science with two years of work in the Department of Food Science and Technology to yield a BS in Culinary Science. Graduates of two-year culinary programs not from COTC but with a two year culinary degree from a program approved the American Culinary Association would also be eligible to participate. They would probably have to complete an additional three or four science courses to meet all degree requirements.

The faculty of the department is excited about the revised programs and is confident that the better packaging of learning objectives and alignment of prerequisite courses that has resulted will make our degree offerings stronger.

Program Rationale Statement

This minor will make use of the revised courses on a semester basis. While we feel the content of the courses will be improved there were no changes made to the minor. It is a simple conversion of a minor on quarters to one on semesters.

List of Semester Courses

Required: 12 hours

FdSc&Te 2400 Intro to Food Processing	3
FdSc&Te 5330 Food Plant Operations	2
One from:	4
Microbiology 4090 Basic and Practical Microbiology	
Microbiology 5000 General Microbiology	
One from:	3
Fd Sc&Te 5420 Dairy Processing	
Fd Sc&Te 5430 Food Fermentations	
Fd Sc&Te 5410 Fruit & Vegetable Processing	
Fd Sc&Te 5400 Principles of Food Processing	
Anim Sci 4500 Meat Processing	
FA&B Eng 3481 Introduction to Food Process Engineering	

Electives: 3 hours from the following classes

(required and elective courses in the minor must total 15 -17 credit hours)

Fd Sc&Te 5310 Food Quality Assurance	3
Fd Sc&Te 5420 Dairy Processing	3
Fd Sc&Te 5430 Food Fermentations	3
Fd Sc&Te 5410 Fruit & Vegetable Processing	3
Fd Sc&Te 5400 Principles of Food Processing	3
Anim Sci 4500 Meat Processing	3
Fd Sc&Te 5710 Food Additives	2
Fd Sc&Te 5400 Principles of Food Processing	3
Fd Sc&Te 5536 Food Microbiology Lecture	2
Fd Sc&Te 5450 Food Packaging	2
FA&B Eng 3481 Introto Food Process Eng	3

Semester Advising Sheet(s)

Food Processing Minor (Fd Proc, 023)

College of Food, Agricultural,
and Environmental Sciences
The Ohio State University

Mike Mangino, Coordinating Adviser
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A minor in food processing is for students who wish to develop a better understanding of the fundamental principles of food processing for value addition, with a focus on plant operations. This minor will be especially helpful for those students who plan to work in the food industry. Topics covered include microbiology and engineering as food is processed and packaged.
The minor in Food Processing consists of 15 hours including 12 hours of required courses. **If Microbiology 509 or 520 is taken for major or GEC, then 4 additional elective credits must be taken.**

Required: 12 hours

FdSc&Te 2400 Intro to Food Processing	3
FdSc&Te 5330 Food Plant Operations	2
One from:	4
Microbiology 4090 Basic and Practical Microbiology	
Microbiology 5000 General Microbiology	
One from:	3
Fd Sc&Te 5420 Dairy Processing	
Fd Sc&Te 5430 Food Fermentations	
Fd Sc&Te 5410 Fruit & Vegetable Processing	
Fd Sc&Te 5400 Principles of Food Processing	
Anim Sci 4500 Meat Processing	
FA&B Eng 3481 Introduction to Food Process Engineering	

Electives: 3 hours from the following classes
(required and elective courses in the minor must total 15 -17 credit hours)

Fd Sc&Te 5310 Food Quality Assurance	3
Fd Sc&Te 5420 Dairy Processing	3
Fd Sc&Te 5430 Food Fermentations	3
Fd Sc&Te 5410 Fruit & Vegetable Processing	3
Fd Sc&Te 5400 Principles of Food Processing	3
Anim Sci 4500 Meat Processing	3
Fd Sc&Te 5710 Food Additives	2
Fd Sc&Te 5400 Principles of Food Processing	3
Fd Sc&Te 5536 Food Microbiology Lecture	2
Fd Sc&Te 5450 Food Packaging	2
FA&B Eng 3481 Introto Food Process Eng	3

Restrictions and General Information

1. This minor is not available to students majoring in Food Science.
2. A minimum overall GPA for courses comprising the minor shall be 2.0.
3. A minor should be declared at the time a student accumulates 60 hours.
4. A maximum of one coursemay overlap between the minor and the GEC (foundations, natural sciences, arts and humanities and social sciences).
5. Courses taken on a pass/non pass basis may not be applied to the minor.

Quarter Advising Sheet(s) *(required for re-envisioned or converted programs only)*

Food Processing Minor (Fd Proc, 023)

College of Food, Agricultural,
and Environmental Sciences
The Ohio State University

Jeff Culbertson, Coordinating Adviser
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688-4219
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A minor in food processing is for students who wish to develop a better understanding of the fundamental principles of food processing for value addition, with a focus on plant operations. This minor will be especially helpful for those students who plan to work in the food industry. Topics covered include microbiology and engineering as food is processed and packaged.
The minor in Food Processing consists of 15 hours including 12 hours of required courses. **If Microbiology 509 or 520 is taken for major or GEC, then 4 additional elective credits must be taken.**

Required: 12 hours

FdSc&Te 401 Intro to Food Processing	3
FdSc&Te 648 Food Plant Operations	3
One from:	4
Microbiology 509 Basic and Practical Microbiology	
Microbiology 520 General Microbiology	
One from:	3 -4
Fd Sc&Te 610 Dairy Processing	
Fd Sc&Te 611 Food Fermentations	
Fd Sc&Te 613 Fruit & Vegetable Processing	
Fd Sc&Te 5400 Principles of Food Processing	
Anim Sci 555.02 Meat Processing	
FA&B Eng 381 Introduction to Food Process Engineering	

Electives: 3 hours from the following classes
(required and elective courses in the minor must total 15 -17 credit hours)

Fd Sc&Te 410 HAACP	3
Fd Sc&Te 610 Dairy Processing	4
Fd Sc&Te 611 Food Fermentations	4
Fd Sc&Te 613 Fruit & Vegetable Processing	4
Fd Sc&Te 630 Principles of Food Processing	3
Fd Sc&Te 621 Food Additives	3
Fd Sc&Te 630 Principles of Food Processing	3
Fd Sc&Te 636.01 Food Microbiology Lecture	3
Fd Sc&Te 649 Food Packaging	3
Anim Sci 555.02 Meat Processing	4
FA&B Eng 3481 Introto Food Process Eng	3

Transition Policy

Transition will not be difficult and can in most cases be handled by a course for course substitutions.

I recommend this program for approval and I am willing to provide additional information or answer question as needed.

Thanks

Mike Mangino Professor Emeritus & Interim Chair