

Minors

In

Agricultural,
Consumer and
Environmental
Sciences

Fall 2008



ILLINOIS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Minors in Agricultural, Consumer and Environmental Sciences

ACES International

Animal Sciences

Food Science

Crop and Soil Management

Environmental Economics and Law

Nutrition

Quantitative Methods in Natural Resources and Environmental Sciences

Technical Systems Management

Agricultural Safety and Health

<http://students.aces.uiuc.edu/degrees/minors>

Updated by Agricultural, Consumer and Environmental Sciences Academic Programs, July 2008

Minors

The University of Illinois at Urbana-Champaign began offering university wide minors for its undergraduates the fall semester of 1998. A minor constitutes a coherent program of study requiring some depth in the subject but not as extensive a program as the major. Most minors will be comprehensive study in the discipline, rather than focusing on a narrow subfield of study. In general, minors consist of at least 16 and no more than 21 hours of course work. Except for clearly remedial offerings, prerequisite courses within the sponsoring unit count toward this total; prerequisite courses outside the sponsoring unit ordinarily do not count toward this total. At least six hours of course work for the minor should be advanced (400 level). The unit sponsoring the minor has the right to restrict enrollment in the minor and is not required to give priority for course registration.

Undergraduate students enrolled in a degree program at the University of Illinois at Urbana-Champaign are not required to complete a minor for degree certification. However, many find this a desirable opportunity to study at some depth a subject of additional interest to their major field of study. To officially pursue a minor on this campus, students must be aware of the information and follow the procedures outlined below.

- The completion of the minor is an optional degree requirement to the baccalaureate program.
- The sponsoring department of the minor is responsible for informing students of the approved requirements for the minor and for any advising associated with the minor.
- Students' enrollment periods will not be extended for the purpose of completing a minor. Students in the College of Agricultural, Consumer and Environmental Sciences may complete no more than two minors per baccalaureate degree.
- No priority in class registration will be given for courses required in the minor.
- Minor(s) will not be added retroactively to a student's record after graduation.
- Students completing any minor in the College of Agricultural, Consumer and Environmental Sciences may not enroll for any course in the minor for credit/no credit.

The student is responsible for notifying his or her college of the desire to pursue a minor. In the event of an intercollege transfer, the student is likewise responsible for notifying his or her new college of the intent to pursue a minor.

For instructions on how to declare an undergraduate minor refer to:

<http://www.provost.uiuc.edu/programs/advising/declare.html>

- The Statement of Intent to Pursue a Campus-Approved Minor may be submitted to the student's college of enrollment after 60 hours have been earned, and must be submitted no later than 5:00 p.m. on the first day of classes in the term of the student's graduation.
- Any variance from courses required in the minor must be approved on the Minor's Modification Form by the unit sponsoring the minor and submitted to the student's college office by 5:00 p.m. on the first day of class in the term of the student's graduation.
- The student is responsible for notifying his/her college of cancellation of the minor by use of the Minor's Modification Form.

NOTE: Information contained in this booklet is subject to change. Be sure to contact the appropriate unit offering the minor to obtain the most recent information.

ACES International

This minor will help students prepare for life and work in a global society and will provide the international skills employers expect of our graduates. While it is the intent of this minor to encourage students to spend time abroad and to develop proficiency in a foreign language, neither is required.

Students enrolled in this minor will be able to draw on resources outside the college as well as select from courses offered by the seven departments in the College of Agricultural, Consumer and Environmental Sciences. At least 12 hours of the total of 21 credit hours required for this minor must be College of Agricultural, Consumer and Environmental Sciences courses. At least 6 credit hours (ACES or non-ACES) must come from 400 level courses.

This minor is administratively based in the Agricultural, Consumer and Environmental Sciences Academic Programs. Student advising will take place in this unit. Assistant Dean Andrea Bohn will work with each student to plan a program of study that consists of a coherent pattern of coursework and other experiences, usually having a geographic or disciplinary focus, and drawing on offerings from each of the following three broad areas:

Required Courses for ACES International Minor

| | |
|---|--------------|
| Global Study in the Social Science Disciplines | <u>Hours</u> |
| One or more courses from | |
| ACE 251, 411, 435, 451, 455; | 3-9 |
| AGCM 320; ANTH 260, 262; | |
| ECON 420, 450; EPS 426; | |
| FSHN 145; GEOG 110, 204, 210, 410; | |
| GWS 480; HDFS 220, 470; HIST 258, 259; | |
| NRES 287, 449; POLS 241, 280, 382, 389; | |
| RLST 110; RSOC 443; UP 423 | |
| Global Study in the Natural Science Disciplines | <u>Hours</u> |
| One or more courses from | |
| ANSC 205; ATMS 140; | 3-9 |
| CPSC 116, 417, 431, 439; | |
| ENVS 201; NRES 100, 109, 449; | |
| HORT 464; PLPA 200; TSM 311 | |

Regional Specialization

Hours

The following four approaches/options
(Separately or in combinations) can be used
to complete this portion of the minor:

3-9

- A. Academic Credit earned through study or supervised activities outside the U.S. while registered for:
ACES 293, 298, 299
- B. Completion of one or more of the following courses offered by the Department of Agricultural and Consumer Economics:
ACE 254, 452, 453, 454
- C. Completion of courses that are approved by Area Studies Programs (See Minor Advisor):
Center for African Studies
Center for East Asian and Pacific Studies
Center for Latin American and Caribbean Studies
Program in South Asian and Middle Eastern Studies
European Union Center
- D. Foreign language courses that exceed the College of Agricultural, Consumer and Environmental Sciences graduation requirements.

At least six hours of the total required for this minor must be earned through 400 level coursework.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Andrea Bohn, Assistant Dean
Academic Programs
109 Mumford Hall
abohn@illinois.edu
333-3380

ANIMAL SCIENCES

The minor in Animal Sciences is designed to provide students with a basic understanding and knowledge of a discipline/subject matter area of their choice. Subject matter areas include animal production and management, nutrition, genetics, animal behavior, immunology, meat science/muscle biology, microbiology, reproductive physiology, and molecular biology. A minimum of 20 hours of Animal Sciences courses must be completed for this minor.

Required Courses for Animal Sciences Minor

| | <u>Hours</u> |
|---|--------------|
| ANSC 100 | 4 |
| Two courses selected from ANSC 321, 331, 340, 362 | 8 |
| Eight hours selected from ¹ Any additional Animal Sciences courses, with at least six hours at the 400 level. | 8 |

¹Cannot take ANSC 213 to fulfill this requirement

A student must be on clear academic standing for enrollment in this minor.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Dr. Tom Carr
Department of Animal Sciences
206b Meat Sciences Lab
trcarr1@illinois.edu
333-1014

CROP AND SOIL MANAGEMENT

The Crop and Soil Management minor is designed for students who desire a significant background in crop and soil systems to support study and practice of their major field. Selection of additional courses beyond the core will depend on the student's major and interests.

Required Courses for Crop and Soil Management Minor

| | <u>Hours</u> |
|---|--------------|
| CPSC 112 | 4 |
| CPSC 418 | 3 |
| NRES 201 | 4 |
| NRES 488 | 3 |
| A. One course selected from CPSC 116, 226, 261, 270, 352, 414, 417, 437, or 453; PLPA 200 or 204 ¹ | 3-4 |
| B. One course selected from CPSC 116, 226, 261, 270, 352, 414, 437, 453; PLPA 200, 204; ¹ NRES 312, 438, 471, 473, 474, 475, 483, 487 | 3-4 |

¹Course selected to fulfill requirement A must be different than course used to fulfill B. For example, CPSC 116 can fulfill A. or B. but not both A. & B.

Enrollment in the Crop and Soil Management minor is not available to students enrolled in the Crop Sciences major.

Student must be in good academic standing for enrollment in this minor.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Dr. Fred Kolb
Department of Crop Sciences
AE-120b Turner Hall
f-kolb@illinois.edu
333-9485

ENVIRONMENTAL ECONOMICS AND LAW

The minor in Environmental Economics and Law is designed to provide students with basic skills in economic and legal analysis, and to teach them how to apply those tools to environmental problems. Students will emerge from this minor with in-depth knowledge about issues related to environmental protection and natural resource management, and possibly a sustainable development or land-use planning. There are not prerequisites for the minor.

Required Courses for Crop and Soil Management Minor

| | <u>Hours</u> |
|---|--------------|
| ACE/ECON/ENVS/NRES/UP 210 | 3 |
| ACE/ENVS/NRES 310 | 3 |
| ACE 406 | 3 |
| One course selected from ACE 100 or ECON 102 | 3-4 |
| One course selected from ACE 403, BADM 300 or UP 108 | 3 |
| One course selected from ACE 411, ECON 414 or ECON 484 | 3 |

A minimum of 18 hours must be completed for this minor.

Enrollment in the Environmental Economics and Law minor is not available to students enrolled in the Environmental and Natural Resources Management option of the Department of Agricultural and Consumer Economics or in the Human Dimensions option of the Department of Natural Resources and Environmental Sciences.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Dr. Amy Ando
Department of Agricultural and Consumer Economics
321 Mumford Hall
amyando@illinois.edu
333-5130

FOOD SCIENCE

The minor in Food Science is designed to broaden the student's knowledge of science and in particular food chemistry, food microbiology, and food engineering. The Food Science minor is also suitable for students who intend to pursue careers in engineering, microbiology, chemistry, scientific journalism, hospitality management, or science secondary education.

Required Courses for Food Science Minor

| | <u>Hours</u> |
|------------------------------------|--------------|
| Four required Food Science courses | |
| Select from: | |
| FSHN 101, | 3 |
| FSHN 414, | 3 |
| FSHN 461 & 462 or 465 ¹ | 3-6 |
| FSHN 471 | 3 |

Additional Food Science courses to complete 18 hours for the minor

| | |
|---|-----|
| Select from | |
| FSHN 131, 260, 302, 416, 418, 460, 466 or | 3-6 |
| ABE 485, FSHN 472, ANSC 350 or MCB 450, | |
| ABE 483 | |

A minimum 2.5 GPA is required for enrollment in this minor.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Ms. Terri Cummings
Department of Food Science and Human Nutrition
264 Bevier Hall
tcumming@illinois.edu
244-4405

¹For a FS minor with an emphasis in food processing it is recommended that students select the FSHN 461 and 462 option. However, 461 and 462 have prerequisites that not every student seeking a minor may choose to meet. Note: Student cannot take both FSHN 461 & 462 and FSHN 465.

NUTRITION

The minor in Nutrition is designed to broaden the student's knowledge of the biological sciences, with a particular emphasis on the science of nutrition. The field of nutrition is interdisciplinary. A minor in nutrition would benefit those students who intend to pursue careers in the food industry, kinesiology, or those planning to enter the medical, dental, or veterinary professions.

Required Courses for Nutrition Minor

| | <u>Hours</u> |
|---|--------------|
| FSHN 220 | 4 |
| FSHN 420 | 3 |
| FSHN 426 | 3 |
| FSHN 427 | 3 |
| Two courses selected from FSHN 322, 332, 421, 428, 429; ANSC 325, 420 | 6 |

A minimum 3.0 GPA is required for enrollment in this minor.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Dr. Tim Garrow
Department of Food Science and Human Nutrition
359A ERML
tagarrow@illinois.edu
333-8455

QUANTITATIVE METHODS IN NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

The Quantitative Methods in Natural Resources and Environmental Sciences Minor is designed for students who wish to develop competence in applying quantitative methods to natural resources and environmental decision-making to complement skills developed in their major area of study.

Required Courses for Quantitative Methods in Natural Resources and Environmental Sciences Minor

| | <u>Hours</u> |
|---|--------------|
| One course selected from Math 231 or 244 | 3-5 |
| One course selected from NRES 454 OR GEOG 479 | 3 |
| One course selected from ANSC 448; NRES 422, 427, 490; GEOG 468, 469; MSE 482 | 3-4 |
| Three or more hours selected from ACE 562; NRES 421; CPSC 440; ECON 471; SOC 485; STAT 420 | 3-4 |
| One more course selected from NRES 455, 493, 510; ACE 516, 563, 564, 566; ANSC 466; CEE 434; CS 455; ECON 465; GEOG 477; MATH 225, 415, 441; SOC 581; STAT 400 | 2-4 |

A minimum of 16 hours of courses must be completed for this minor.

Courses in the minor cannot be completed Credit/No-Credit.

| | | |
|--|---|---|
| Minor Advising information available from: Department of Natural Resources and Environmental Sciences | | |
| Dr. Tim Marty N-507 Turner Hall tmarty@illinois.edu 244-2917 | Dr. Richard Brazee W-523 Turner Hall braze@illinois.edu 333-6271 | Dr. George Gertner W-523 Turner Hall gertner@illinois.edu 333-9346 |

TECHNICAL SYSTEMS MANAGEMENT

The minor in Technical Systems Management is designed to broaden the students' ability to solve problems involving the application, management and/or marketing of agricultural engineering technologies. The minor in Technical Systems Management will benefit those students who want to supplement their major field with the study of related technologies. A minimum of 18 hours is required for the TSM minor. Prerequisites for Technical Systems Management Minor (not included in required 18 hours).

Mathematics 234
Physics 101 and Chemistry 102 and 103
and either
Physics 102 or Chemistry 104 and 105

Required Courses for Technical Systems Management Minor

| | <u>Hours</u> |
|---|--------------|
| TSM 100 | 3 |
| Fifteen hours or more selected from the following list with at least 6 coursework hours 400 level | |
| TSM 232 | 3 |
| TSM 233 | 3 |
| TSM 234 | 3 |
| TSM 262 | 4 |
| TSM 352 | 3 |
| TSM 363 | 2 |
| TSM 371 | 3 |
| TSM 372 | 3 |
| TSM 381 | 3 |
| TSM 435 | 3 |
| TSM 464 | 3 |
| TSM 465 | 3 |
| TSM 496 | 1-3 |

A minimum 2.5 GPA is required for enrollment in this minor.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Dr. Joe Harper
Department of Agricultural and Biological Engineering
360T AESB
jgharper@illinois.edu
333-2738

AGRICULTURAL SAFETY AND HEALTH

The minor in agricultural safety and health is designed to provide students with an in-depth understanding of the occupational safety and health issues associated with production agriculture. The program familiarizes students with the primary injury and illness control methodologies of behavioral persuasion and motivation, engineering design, and regulation or enforcement and their related strengths and weaknesses of effecting injury and occupational illness rates among agricultural populations. Additionally, students will develop an understanding of how to develop a safety risk management plan for a farm or other agricultural related business.

Required Courses for Agricultural Safety and Health Minor

| | <u>Hours</u> |
|---------|--------------|
| TSM 421 | |
| TSM 422 | |
| TSM 425 | 3 |

A minimum of 3 credit hours is required from the following courses:

| | |
|--------------------|-----|
| TSM 293 or ABE 293 | 1-4 |
| TSM 295 or ABE 396 | 1-4 |
| TSM 496 or ABE 295 | 1-4 |

A minimum of 6 credit hours selected from:

| | |
|-----------|--------|
| CHLH 101 | 3 |
| CHLH 244 | 3 |
| CHLH 274 | 3 |
| CHLH 304 | 3 |
| CHLH 469 | 3 or 4 |
| CHLH 474 | 4 |
| CHLH 540 | 4 |
| EOHS 400 | 3 |
| EOHS 421 | 2 |
| FSHN 480 | 3 |
| HDFS 105 | 3 |
| HRE 415 | 4 |
| HRE 585 | 4 |
| IE 440 | 3 or 4 |
| IE 442 | 3 |
| KIN 262 | 3 or 4 |
| KIN 454 | 3 or 4 |
| PSYC 100 | 4 |
| PSYC 103 | 4 |
| PSYC 358 | 4 |
| PSYCH 456 | 3 or 4 |

A minimum of 18 hours and a 2.5 GPA is required for enrollment in this minor.

Courses in the minor cannot be completed Credit/No-Credit.

Minor Advising information available from:
Dr. Robert Aherin
Department of Agricultural and Biological Engineering
raherin@illinois.edu
336 AESB, 333-9417