

# College of Agriculture and School of Human Environmental Sciences

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The research, teaching, extension, and regulatory functions of the College of Agriculture are combined into a coordinated, mutually supporting program of undergraduate and graduate education. Teaching in this college is closely related to the other functions thus providing the student with a unique opportunity to broaden his or her background in the areas of research and application of scientific findings to stakeholders.

Degree and study programs in the college run the entire range of the food, fiber, and agricultural system from farm production and marketing, manufacturing, processing and fabrication through nutrition, hospitality management, and consumer, community, and family studies.

On July 1, 2003, the School of Human Environmental Sciences joined the College of Agriculture. Degree requirements and information pertaining to these programs are listed beginning on page 87.

## Admission

All students planning to study any phase of agriculture or human environmental sciences, including pre-veterinary medicine, are admitted directly into the College of Agriculture. Application for admission is made through the Undergraduate Admissions Office.

Students interested in the Landscape Architecture program must meet all requirements for admission to the University. In addition, enrollment in the landscape architecture program is determined by a selective admission procedure. Applicants are selected on a competitive basis as determined by potential success in the program.

## Accreditation

The undergraduate Forestry program at the University of Kentucky is accredited by the Society of American Foresters. The Landscape Architecture program is accredited by the American Society of Landscape Architects and meets all the requirements for licensing of landscape architects in Kentucky and other states. The Food Science program is

*"The College of Agriculture has given me the foundation needed to be successful for whatever endeavors I may take on in the future. With nationally ranked professors and a supportive staff, UK's College of Agriculture is able to offer students an environment where they can receive a first-class education and more. I came to UK expecting lectures, homework, and deadlines. I am graduating knowing that the College of Agriculture will be a place I can always call on. I left my family only to join another. I believe UK's College of Agriculture is one of the premier institutes in our country. Under one banner, education, research, camaraderie, and opportunity can be found."*

– Fatima Wazir  
Animal Sciences  
Class of 2004

*"The School of Human Environmental Sciences is composed of a close-knit family atmosphere along with a challenging classroom environment that has prepared me for future career objectives. Teachers make personal relationships with students and are dedicated to helping us achieve excellence in our chosen fields. Here I have found a home where the faculty and Administration take pride in helping each student go beyond his or her full potential. Students are encouraged to participate in multiple opportunities from College organizations to UK activities where you will have the chance to make a difference and leave your mark for future generations. The friendships I have made in the College with both students and faculty will undeniably last a lifetime."*

– Kerrie Goggin  
College Ambassador  
Senior, Family and Consumer  
Sciences Education

accredited by the Institute of Food Technologists.

Accreditations for the School of Human Environmental Sciences are listed on page 87 of this Bulletin.

## Undergraduate Programs in Agriculture

The University of Kentucky grants the following degrees in the College of Agriculture:

- Bachelor of Science in Agriculture
- Bachelor of Science in Agricultural Biotechnology
- Bachelor of Science in Agricultural Economics
- Bachelor of Science in Agricultural Education, Communications, and Leadership
- Bachelor of Science in Animal Sciences

## SPECIAL APPLICATION DEADLINE FOR SCHOOL OF HUMAN ENVIRONMENTAL SCIENCES

**Coordinated Program in Dietetics** Upper division program applicants (students who have 71 semester hours of lower division courses – special application, transcript(s), and recommendations are due by:

**Fall** Feb. 1

- Bachelor of Science in Food Science
- Bachelor of Science in Forestry
- Bachelor of Science in Horticulture, Plant and Soil Sciences
- Bachelor of Science in Landscape Architecture
- Bachelor of Science in Natural Resource Conservation and Management

Information on each major program (pre-major, major, and specialty support course requirements) follows. Students may obtain additional information on programs and recommended plans of study from the Associate Dean for Academic Programs.

Also available to students are minors in agriculture, agricultural economics, animal sciences, entomology, food science, pest management, plant and soil science, and rural sociology.

Students majoring in biosystems and agricultural engineering are enrolled in the College of Engineering. Degree requirements and curriculum are listed in the *College of Engineering* section of this Bulletin.

See page 87 of this Bulletin for the list of degrees offered through the School of Human Environmental Sciences.

### Undeclared Majors

Students who are interested in agricultural study or the human environmental sciences but uncertain about a major should work closely with advisors in the College of Agriculture. With careful course selection, students can work toward fulfilling general requirements while exploring the various areas of study in agriculture, natural resources, and human environmental sciences.

### Scholarships and Financial Aid

The College of Agriculture offers scholarship awards to students on the basis of academic accomplishment and involvement in extracurricular activities. Many of the departments in the college employ students in laboratories, greenhouses, barns, and field work in connection with the research program in agriculture. Information about scholarships and work opportunities is available in the Office of the Associate Dean for Academic Programs.

### Academic Advising

Students in the College of Agriculture are advised by selected faculty in the department of the student's major. Each student's academic plan and records are maintained in the Associate Dean for Instruction's office, N-6 Ag. Science Center, and in the Student Services Office, School of Human Environmental Sciences, 102 Erikson Hall. Students needing assistance selecting an advisor or general information about academics may come to the Associate Dean's office or to the School of Human Environmental Sciences.

Inquiries about programs or majors within the College of Agriculture may be directed to:

**Office of the Associate Dean  
for Academic Programs  
N6 Ag. Science Building  
University of Kentucky  
Lexington, KY 40546-0091  
(859) 257-3469 or (859) 257-3468**

### Graduate Work

The College of Agriculture offers the Master of Science degree in all college departments.

Doctor of Philosophy degrees are offered in the following areas: agricultural economics, animal sciences, biosystems and agricultural engineering, crop science, entomology, family studies, plant pathology, plant physiology, sociology, soil science, and veterinary science. For more information, students should see *The Graduate School Bulletin*.

### MINIMUM REQUIREMENTS FOR GRADUATION

**NOTE:** The following graduation requirements do not apply to degree programs in the School of Human Environmental Sciences; those requirements are described in the corresponding section of this Bulletin. Except where noted in specific degree programs, all students pursuing a Bachelor of Science degree in the College of Agriculture must complete:

1. the University Studies Program and University graduation requirements;
2. GEN 100: Issues in Agriculture;
3. a minimum of 120 credit hours with at least a 2.0 grade-point average. Some programs require more than the minimum 120 credit hours and have other grade-point average requirements. Remedial courses may **not** be counted toward the total hours required for the degree;
4. an Agriculture Major with a minimum of 24 hours including 3 hours in a 400-level capstone course;
5. a core of specialty or professional support courses outside the major department totaling at least 18 hours at the 200 level or above; and
6. a minimum of 45 credit hours from upper division courses (300 and above).

### B.S. in Agriculture with a major in INDIVIDUALIZED PROGRAMS

Individualized program opportunities have been developed to assist students with academic goals that cross several disciplines. Students pursuing the Bachelor of Science in Agriculture may pursue an individualized program in agriculture such as Entomology.

The procedure for entering an individualized program is as follows:

1. Each student must apply to the Associate Dean for Academic Programs. The student will receive an explanation of the program and its objectives, and the possible risks involved, including prospective employment and acceptance for advanced graduate degree work.

2. Students who continue their interest in the individualized program develop, with the assistance of an advisor, the plan which they propose to follow.

3. This plan must be submitted to the Associate Dean for consideration and possible approval.

4. Approval of the student's program by the Associate Dean will admit the student to the individual program option.

For more information, contact:

**Office of the Associate Dean  
for Academic Programs  
N6 Ag. Science Building  
University of Kentucky  
Lexington, KY 40546-0091  
(859) 257-3469 or (859) 257-3468**

### BACHELOR OF SCIENCE IN AGRICULTURAL BIOTECHNOLOGY

Agricultural biotechnology encompasses cellular and molecular approaches to the manipulation and improvement of agricultural plants, animals and microorganisms, and the control of agricultural pests and diseases. The primary purpose of the baccalaureate degree program in Agricultural Biotechnology is to train students in modern cellular and molecular biology and genetic engineering. Students will be provided with a firm foundation in the principles of genetics and molecular biology of both prokaryotic and eukaryotic organisms. Each student will then specialize in an area appropriate to his or her interest and career objectives, including: microbial, fungal, plant, insect and mammalian biotechnology.

Graduates will be prepared to assume government, university, and industry positions with research and technology applications to agriculture and food production. Employment opportunities include research scientists, laboratory technicians or managers in university, government, industrial, or clinical laboratories using biotechnological tools for research and production. Examples of research areas include: gene cloning, construction of novel pest and disease resistance genes, development of new immunological and nucleic acid types of diagnostic probes for plant and animal disease, genetic engineering of microorganisms for the production of important pharmaceutical agents, and development of new bioengineered strains of microorganisms for fermentation and food production services. Students will also be prepared to enter graduate programs in agriculture, molecular biology, and the biological sciences.

### Graduation Requirements

To earn a Bachelor of Science in Agricultural Biotechnology the student must com-

plete 132 semester hours with at least a 2.0 grade-point standing. A minimum of 45 credit hours must be from upper division courses (300 and above). Remedial courses may **not** be counted toward the total hours required for the degree. In addition to the University Studies requirements, students must complete college, premajor, major, and specialty support requirements, including an independent research project relevant to the student's interest in biotechnology.

### Plan of Study

As an agricultural biotechnology major you are required to develop an acceptable **Plan of Study** during your sophomore year for your junior and senior years. The plan must be signed by your advisor and returned to the Office of the Associate Dean for Academic Programs.

If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program.

Consult your academic advisor in developing your Plan of Study.

### College Required Hours

ABT 101 Introduction to Biotechnology <b>and</b>	
ABT 201 Scientific Method in Biotechnology <b>and</b>	
ABT 301 Writing and Presentations	
in the Life Sciences .....	4
GEN 100 Issues in Agriculture .....	3

**Subtotal: College Required Hours .....** 7

### University Studies Requirements Hours

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

#### Inference-Logic

MA 123 Elementary Calculus and Its Applications <b>and</b>	
MA 132 Calculus for the Life Sciences .....	6
<b>or</b>	
MA 113 Calculus I .....	4

#### Natural Sciences

CHE 105 General College Chemistry I .....	3
CHE 107 General College Chemistry II .....	3
CHE 115 General Chemistry Laboratory .....	3

#### USP Electives

BIO 150 Principles of Biology I .....	3
BIO 152 Principles of Biology II .....	3

### Premajor Requirements

	Hours
*BIO 150 Principles of Biology I .....	3
*BIO 151 Principles of Biology Laboratory I .....	2
*BIO 152 Principles of Biology II .....	3
*BIO 153 Principles of Biology Laboratory II .....	2
*CHE 105 General College Chemistry I .....	3
*CHE 107 General College Chemistry II .....	3
*CHE 115 General Chemistry Laboratory .....	3
CHE 230 Organic Chemistry I .....	3
CHE 231 Organic Chemistry Laboratory I .....	2
CHE 232 Organic Chemistry II .....	3
CHE 233 Organic Chemistry Laboratory II .....	2
*MA 123 Elementary Calculus and Its Applications <b>and</b>	

*MA 132 Calculus for the Life Sciences .....	6
<b>or</b>	
*MA 113 Calculus I .....	4
PHY 211 General Physics .....	5
PHY 213 General Physics .....	5
(or equivalent with laboratory)	
<b>Subtotal: Premajor Hours .....</b>	<b>45-46</b>

### Major Requirements Hours

#### Biotechnology

ABT 101 Introduction to Biotechnology .....	1
ABT 201 Scientific Method in Biotechnology .....	1
ABT 301 Writing and Presentations	
in the Life Sciences .....	2

#### Microbiology

BIO 208 Principles of Microbiology .....	3
BIO 209 Principles of Microbiology Laboratory .....	2

#### Biochemistry

BCH 401G Fundamentals of Biochemistry .....	3
<b>or</b>	
BCH 501 General Biochemistry <b>and</b>	
BCH 502 General Biochemistry .....	6

#### Genetics

ABT/ASC/ENT 360 Genetics .....	3
<b>or</b>	
BIO 304 Principles of Genetics .....	4
ABT 460 Introduction to Molecular Genetics .....	3
ABT 461 Introduction to Population Genetics .....	3

#### Statistics

STA 291 Statistical Method .....	3
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#### Advanced Practical Skills

ABT 495 Experimental Methods in Biotechnology .....	4
<b>or</b>	
BIO 510 Recombinant DNA Techniques Laboratory ...	4

#### Independent Study

ABT 395 Independent Study in Biotechnology .....	3
<b>or</b>	
ABT 399 Experiential Learning in Biotechnology .....	3

All students are expected to undertake an independent study project in an area of their interest for a minimum of 3 credit hours. This requirement can be met by a research project or an internship that is agreed upon by a student's advisor and approved by the Biotechnology Coordinating Committee prior to initiation of the project. Both written and oral reports are required when the project is completed.

**Subtotal: Major Hours .....** 31-35

### Specialty Support

Students must take a minimum of 21 credit hours of specialty support courses including at least one of the courses listed below. A number of the courses listed here may have additional prerequisites. Additional specialty support courses will be selected according to the student's area of interest with approval of the academic advisor.

ASC 364 Reproductive Physiology of Farm Animals ...	3
BIO 315 Introduction to Cell Biology .....	3
BIO 350 Animal Physiology .....	4
BIO 430G Plant Physiology .....	3
BIO 476G General Microbial Physiology .....	4
BIO/PGY 502 Principles of Systems,	
Cellular and Molecular Physiology .....	5
BIO 515 General Cell Biology .....	3
BIO 550 Comparative Physiology .....	3
BIO 580 Metabolism of Microorganisms .....	4
PGY/MI 590 Cellular and Molecular Physiology .....	4

**Subtotal: Specialty Support Hours .....** 21

### Electives

Electives should be selected to complete the 132 hours required for graduation.

**Subtotal: Electives .....** minimum of 15

**TOTAL HOURS: .....** 132

## BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS

The Agricultural Economics program enables graduates to pursue careers in agribusiness and food industries, international marketing and trade, or farm management and production. Opportunities are also available in public policy for agriculture and rural America and environmental economics. These career opportunities may be found in both the private and public sectors. Economic theory is applied to problems concerning the production, marketing, and distribution of agricultural and food products and also to public policy and natural resource and environmental issues facing rural communities.

Agricultural Economics students choose one of two options – Option A: Agricultural Economics, and Option B: Agribusiness Management and Food Marketing.

### Graduation Requirements

To earn the Bachelor of Science in Agricultural Economics, the student must have a minimum of 120 credit hours with at least a 2.0 grade-point average in one of the two program options. A student must earn a minimum grade of C in each of the four agricultural economics courses required in the major. A minimum of 45 credit hours must be from upper division courses (300 and above). Remedial courses may **not** be counted toward the total hours required for the degree. In addition to University Studies requirements, students must complete college, departmental and support requirements.

### Plan of Study

As an agricultural economics major you are required to develop an acceptable **Plan of Study** in your chosen area of emphasis for your junior and senior years. Submit the plan for approval to the department's Undergraduate Program Committee and the Director of Undergraduate Studies during the second semester of your sophomore year.

If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan for approval during the first semester you are enrolled in the department.

Consult your academic advisor in developing your Plan of Study.

### College Required Hours

GEN 100 Issues in Agriculture .....	3
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**Subtotal: College Required Hours .....** 3

### University Studies Requirements Hours

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

<b>Math</b>	
MA 109 College Algebra .....	3
<b>Inference-Logic</b>	
MA 123 Elementary Calculus and Its Applications .....	3
<b>or</b>	
MA 113 Calculus I .....	4
<b>Social Sciences</b>	
ECO 201 Principles of Economics I .....	3
One course other than economics from University Studies Program list .....	3

### OPTIONS

#### Option A: Agricultural Economics

This option provides a program of study for students interested in careers in rural public policy analysis, rural economic development, natural resource and environmental economics, cooperative extension, or a more individualized program.

<b>Premajor Requirements</b>	<b>Hours</b>
*ECO 201 Principles of Economics I .....	3
ECO 202 Principles of Economics II .....	3
*MA 113 Calculus I .....	4
<b>OR</b>	
*MA 123 Elementary Calculus and Its Applications <b>and</b>	
MA 162 Finite Mathematics and Its Applications .....	6
STA 291 Statistical Method .....	3
ECO 391 Economic and Business Statistics .....	3
<b>Subtotal: Premajor Hours</b> .....	<b>16-18</b>

<b>Major Requirements</b>	<b>Hours</b>
<b>Note:</b> Students must receive a grade of C or better in each of the following four agricultural economics courses required for graduation:	
AEC 302 Agricultural Management Principles .....	4
AEC 303 Microeconomic Concepts in Agricultural Economics .....	3
AEC 305 Food and Agricultural Marketing Principles ..	3
AEC 490 Quantitative Methods and Price Analysis .....	3
<b>plus</b> 12 additional hours in the major .....	12
<b>Subtotal: Major Hours</b> .....	<b>25</b>

<b>Specialty Support</b>	<b>Hours</b>
ACC 201 Financial Accounting I .....	3
ACC 202 Managerial Uses of Accounting Information .....	3
<b>plus</b> 15 additional hours of courses at the 200 level or higher to fulfill the student's area of interest and selected with advisor's approval from the following departments: ACC, AEN, ASC, BAE, COM, CS, DIS, ECO, ENT, FIN, FOR, MA, MGT, MKT, PLS, PS, PSY, SOC, VS .....	15
<b>Subtotal: Specialty Support Hours</b> .....	<b>21</b>

<b>Electives</b>	
Electives should be selected by the student to lead to the minimum total of 120 hours required for graduation.	
<b>Subtotal: Electives</b> .....	<b>minimum of 16</b>
<b>TOTAL HOURS:</b> .....	<b>120</b>

#### Option B: Agribusiness Management and Food Marketing

A student in this option should be qualified for careers in marketing, sales, and management of farms or firms involved in production, financing, processing, marketing and distribution of food and agricultural products, depending on the electives chosen.

<b>Premajor Requirements</b>	<b>Hours</b>
CS 101 Introduction to Computing I .....	3
*ECO 201 Principles of Economics I .....	3
ECO 202 Principles of Economics II .....	3
ECO 391 Economic and Business Statistics .....	3
*MA 113 Calculus I .....	4
<b>OR</b>	
*MA 123 Elementary Calculus and Its Applications <b>and</b>	
MA 162 Finite Mathematics and Its Applications .....	6
STA 291 Statistical Method .....	3
<b>Subtotal: Premajor Hours</b> .....	<b>19-21</b>

<b>Major Requirements</b>	<b>Hours</b>
<b>Note:</b> Students must receive a grade of C or better in each of the following four agricultural economics courses required for graduation:	
AEC 302 Agricultural Management Principles .....	4
AEC 303 Microeconomic Concepts in Agricultural Economics .....	3
AEC 305 Food and Agricultural Marketing Principles ..	3
AEC 422 Agribusiness Management .....	3
<b>plus</b> 12 additional hours in the major .....	12
<b>Subtotal: Major Hours</b> .....	<b>25</b>

<b>Specialty Support</b>	<b>Hours</b>
ACC 201 Financial Accounting I .....	3
ACC 202 Managerial Uses of Accounting Information .....	3
<b>plus</b> completion of the requirements of a Minor in Business, plus 3 additional hours of courses at the 200 level or higher selected with advisor's approval from the following departments: ACC, AEN, ASC, BAE, COM, CS, DIS, ECO, ENT, FIN, FOR, MA, MGT, MKT, PLS, PS, PSY, SOC, VS .....	15
<b>Subtotal: Specialty Support Hours</b> .....	<b>21</b>

<b>Electives</b>	
Electives should be selected by the student to lead to the minimum total of 120 hours required for graduation.	
<b>Subtotal: Electives</b> .....	<b>minimum of 13</b>
<b>TOTAL HOURS:</b> .....	<b>120</b>

### BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION, COMMUNICATIONS, AND LEADERSHIP

**NOTE:** At the time of publication, the B.S. in Agricultural Education, Communications, and Leadership was undergoing revision. Consult your advisor for more information.

#### Graduation Requirements

To earn the Bachelor of Science in Agricultural Education, Communications, and Leadership, the student must have a minimum of 120 credit hours with at least a 2.0 grade-point average. A minimum of 45 credit hours must be from upper division courses (300 level and above). Remedial courses may not be counted toward the total hours required for the degree.

#### Plan of Study

As an agricultural education, communications and leadership major you are required to develop an acceptable **Plan of Study** during your sophomore year for your junior and senior years. The plan must be signed by your

advisor and returned to the Office of the Associate Dean for Academic Programs.

If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program.

Students must complete the following:

<b>College Required Hours</b>	
GEN 100 Issues in Agriculture .....	3
<b>Subtotal: College Required Hours</b> .....	<b>3</b>

#### University Studies Requirements

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

<b>Major Requirements</b>	<b>Hours</b>
*AEC 101 The Economics of Food and Agriculture .....	3
*ACE 102 The Dynamics of Rural Social Life .....	3
ACE 302 Leadership Studies .....	3
ACE 320 Survey of Agriculture and Consumer Media .....	3
ACE 362 Practicum in Career and Technical Education, Agricultural Communications, and Leadership .....	3
ACE 501 Principles of Cooperative Extension .....	3
*GEN 100 Issues in Agriculture .....	3
<b>Subtotal: Major Hours</b> .....	<b>21</b>

In addition to the Major Requirements, students choose **one** of three options:

#### Option A: Agricultural Communications

JOU 101 Introduction to Journalism .....	3
<b>or</b>	
ISC 161 Introduction to Integrated Strategic Communication .....	3
JOU 204 Writing for the Mass Media .....	3
JOU 301 News Reporting .....	3
JOU 485 Community Journalism .....	3
COM/SOC 249 Mass Media and Mass Culture .....	3
COM/SOC 449 Social Processes and Effects of Mass Communication .....	3
ACE 400 Agricultural Communications Campaigns .....	3
ACE 490 Seminar in Agricultural Communications .....	3
<b>Subtotal: Option A Hours</b> .....	<b>24</b>

#### Specialty Support Requirements

It is recommended that this specialty area be drawn from (1) news/editorial, (2) advertising/public relations, or (3) electronic media. Students are to take at least twelve hours in the College of Agriculture. The student's advisor will make recommendations, but the specific courses the student takes will depend on his or her interests and academic goals.

<b>Subtotal: Option A Specialty Support</b> .....	<b>24</b>
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#### Option B: Agricultural Education

*CHE 105 General College Chemistry I .....	3
AED 210 Introduction to Career and Technical Education .....	3
AED 580 Methods of Teaching Career and Technical Education I .....	3
AED 586 Methods of Teaching Career and Technical Education II .....	3
AED 501 Practicum in Career and Technical Education .....	12
EDP 203 Teaching Exceptional Learners in Regular Classrooms .....	3
*Satisfies half of the University Studies natural sciences requirement.	
<b>Subtotal: Option B Hours</b> .....	<b>27</b>

**Specialty Support Requirements**

It is recommended that students complete at least two courses from five different agricultural areas. The student's advisor will make recommendations, but the specific courses the student takes will depend on his or her interests and academic goals.

**Subtotal: Option B Specialty Support ..... minimum of 30**

**Teacher Certification**

Besides receiving the B.S. in Agriculture students completing the requirements can obtain a letter of endorsement to teach agricultural education. Requirements for teacher certification are as follows:

To be certified you must be admitted to the teacher education program (TEP). To be admitted, you must have completed, or complete during the semester in which you apply, 60 semester hours of course work and AED 210 Introduction to Career and Technical Education and have at least a 2.5 grade-point standing (on a 4.0 scale).

Applicants are evaluated on an interview, recommendations, scholastic achievement, demonstrated skills, and professional commitment and goals. In addition, you must have three years of agricultural experience since the age of 14.

You must also complete at least 50 hours in agriculture courses, including six hours in each of the following areas: animal sciences, plant sciences, soils, agricultural engineering, and agricultural economics (including Farm Management or Agribusiness Management). A professional education component is also required.

You must successfully complete assessment items and portfolio items as required. Further, you must successfully complete the three basic sections of the PRAXIS Exam and a technical agriculture exam, scoring above cutoff scores specified by the State Board of Education for each exam. After completing these exams, students hired by Kentucky schools will complete a one-year paid internship as a first-year teacher and will be evaluated at least three times by a three-person committee before certification is completed.

Other agriculture majors can also qualify to teach agricultural education provided they meet current certification requirements.

**Note:** Because graduation and teacher certification requirements change frequently, students should obtain more complete information from their advisors.

**Option C: Public Service and Leadership**

- PS 101 American Government ..... 3
- PS 487G Introduction to Public Administration ..... 3
- PS 489G The Analysis of Public Policy ..... 3
- SOC 342 Organizations in Society
- or**
- SOC 542 Human Relations in Administration of Organizations ..... 3
- SOC/PSY 344 Social Psychology ..... 3
- ACE 490 Seminar in Agricultural Communications ..... 3
- AEC 305 Food and Agricultural Marketing Principles . 3
- AEC 532 Agricultural and Food Policy ..... 3

**Subtotal: Option C Hours ..... 24**

**Specialty Support Requirements**

It is recommended that this specialty area be drawn from (1) community and natural resources development, (2) legal and administrative studies, or (3) youth and family studies. Students are to take at least twelve hours in the College of Agriculture. The student's advisor will make recommendations, but the specific courses the student takes will depend on his or her interests and academic goals.

**Subtotal: Option C Specialty Support ..... 24**

**Electives**

Electives should be selected by the student to lead to the minimum total of 120 hours required for graduation.

**Subtotal: Electives ..... minimum of 4**

**TOTAL HOURS: ..... 120**

**BACHELOR OF SCIENCE IN ANIMAL SCIENCES**

Animal Sciences involves studying and applying the basic principles of nutrition, reproduction, and genetics to the production and management of horses, dairy and beef cattle, sheep, swine, and poultry. As a major, you will have the opportunity to pursue specific interests by selecting one of three options in animal production, dairy production or equine production

No one program fits all Animal Sciences students. Animal Sciences students come from varied backgrounds. Interests range from livestock and poultry production and management to marketing and public relations; from public education and extension to graduate training in research and teaching and veterinary medicine. No matter what livestock species you have an interest in, the Animal Sciences major will allow you to combine your interest with your desire for an exciting and rewarding career.

**Graduation Requirements**

To earn the Bachelor of Science in Animal Sciences, the student must have a minimum of 120 credit hours with at least a 2.0 grade-point standing. A minimum of 45 credit hours must be from upper division courses (300 and above). Remedial courses may **not** be counted toward the total hours required for the degree.

**Plan of Study**

As an animal sciences major you are required to develop an acceptable **Plan of Study** during your sophomore year for your junior and senior years. The plan must be signed by your advisor and returned to the Office of the Associate Dean for Academic Programs.

If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program.

Consult your academic advisor in developing your Plan of Study.

Each student must complete the following:

**College Required Hours**

- GEN 100 Issues in Agriculture ..... 3

**Subtotal: College Required Hours ..... 3**

**University Studies Requirements Hours**

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

**Math**

- MA 109 College Algebra ..... 3

**Inference-Logic**

- MA 123 Elementary Calculus and Its Applications ..... 3

**or**

- MA 113 Calculus I ..... 4

**Natural Sciences**

- CHE 105 General College Chemistry I ..... 3
- CHE 107 General College Chemistry II ..... 3
- CHE 115 General Chemistry Laboratory ..... 3

**USP Electives**

- BIO 150 Principles of Biology I ..... 3
- BIO 152 Principles of Biology II ..... 3

**Premajor Requirements**

**Hours**

- \*MA 109 College Algebra **and**
- \*MA 123 Elementary Calculus and Its Applications .... 6
- or**
- \*MA 113 Calculus I ..... 4
- \*BIO 150 Principles of Biology I ..... 3
- \*BIO 152 Principles of Biology II ..... 3
- \*CHE 105 General College Chemistry I ..... 3
- \*CHE 107 General College Chemistry II ..... 3
- \*CHE 115 General Chemistry Laboratory ..... 3

**Subtotal: Premajor Hours ..... 19-21**

**Major Requirements**

**Hours**

- ASC 106 Introductory Animal Sciences ..... 3
- ASC 120 Introductory Animal Science Laboratory ..... 1
- ASC 362 Animal Breeding ..... 3
- ASC 364 Reproductive Physiology of Farm Animals ... 3
- ASC 378 Animal Nutrition ..... 3
- ASC 380 Feeds and Feeding ..... 3
- ASC 470 Capstone for Animal Agriculture ..... 3

**Subtotal: Major Hours ..... 19**

In addition to the Major Requirements, students choose **one** of three options:

**Option A: Animal Production**

- ASC 300 Meat Science ..... 4
- plus** one of the following:
- ASC 404G Sheep Science ..... 4
- ASC 406 Beef Cattle Science ..... 4
- ASC 408G Swine Science ..... 3
- ASC 410G Equine Science ..... 3
- ASC 420G Dairy Cattle Science ..... 3

**Subtotal: Option A Hours ..... 7-8**

**Option B: Dairy Production**

- ASC 420G Dairy Cattle Science ..... 3
- ASC 564 Milk Secretion ..... 3

**Subtotal: Option B Hours ..... 6**

**Option C: Equine Production**

- ASC 310 Equine Anatomy and Conformation ..... 2
- ASC 320 Equine Management ..... 3
- ASC 410G Equine Science ..... 3

**Subtotal: Option C Hours ..... 8**

**Specialty Support**

- ABT/ASC/ENT 360 Genetics
- or**
- BIO 304 Principles of Genetics ..... 3-4
- CHE 230 Organic Chemistry I
- or**
- CHE 236 Survey of Organic Chemistry ..... 3

Depending on the student's area of interest and subject to the advisor's approval, an additional 15 hours of courses at the 200-level or above may be selected from biochemistry, biology, chemistry, physics, statistics, or any agricultural related area other than Animal Sciences ..... 15

**Subtotal: Specialty Support ..... 21-22**

**Electives**

Electives should be selected to complete the 120 hours required for graduation.

**Subtotal: Electives ..... minimum of 29**

**TOTAL HOURS: ..... 120**

## BACHELOR OF SCIENCE IN BIOSYSTEMS AND AGRICULTURAL ENGINEERING

The Agricultural Engineering curriculum is administered jointly by the College of Agriculture and the College of Engineering. Agricultural Engineering provides an essential link between the biological sciences and the engineering profession. This linkage is necessary for the development of food and fiber production and processing systems which preserve our natural resource base. Students in the agricultural engineering program can pursue one of four areas of specialization: Bioenvironmental Engineering, Food and Bioprocess Engineering, Machine Systems Automation Engineering and Thermal Environmental Engineering.

The degree requirements and curriculum are listed in the *College of Engineering* section of this Bulletin.

## BACHELOR OF SCIENCE IN FOOD SCIENCE

Food science is the study of the transformation of biological materials into food products acceptable for human consumption. This requires studying diverse scientific disciplines related to food, including chemistry, engineering, microbiology, biochemistry, toxicology, and management; and effectively applying the industrial and practical aspects to product development, food processing, preservation, and marketing. The program is administered by the Department of Animal and Food Sciences and offers training in the basic sciences and in the fundamentals of food science.

Career opportunities in food industries include: management, research and development of new food products and ingredients, process supervision, quality control, procurement, distribution, sales, and merchandising. Positions include sales and services in allied industries; consulting and trade association activities; and promotional and educational services. Governmental agencies employ food scientists whose work is directed towards research, regulatory control, and the development of food standards.

### Graduation Requirements

To earn the Bachelor of Science in Food Science, the student must complete a minimum of 128 semester hours with at least 45 hours from courses at the 300 level and above. A 2.0 grade-point standing (on a 4.0 scale) is necessary and remedial courses may **not** be counted toward the total hours required for the degree.

The Food Science program meets the requirements for accreditation by the Institute of Food Technologists and the National Organization of Food Science Professionals.

### Plan of Study

As a food science major you are required to develop an acceptable **Plan of Study** during your sophomore year for your junior and senior years. The plan must be signed by your advisor and returned to the Office of the Associate Dean for Academic Programs.

If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program.

Consult your academic advisor in developing your Plan of Study.

Each student must complete the following:

### College Required Hours

GEN 100 Issues in Agriculture ..... 3

**Subtotal: College Required Hours ..... 3**

### University Studies Requirements Hours

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

#### Inference-Logic

MA 123 Elementary Calculus and Its Applications ..... 3

#### Natural Sciences

CHE 105 General College Chemistry I ..... 3

CHE 107 General College Chemistry II ..... 3

CHE 115 General Chemistry Laboratory ..... 3

#### Social Sciences

AEC 101 The Economics of Food and Agriculture ..... 3

Plus one additional course ..... 3

#### USP Electives

BIO 150 Principles of Biology I ..... 3

BIO 152 Principles of Biology II ..... 3

### Premajor Requirements Hours

MA 132 Calculus for the Life Sciences ..... 3

BIO 208 Principles of Microbiology ..... 3

BIO 209 Introductory Microbiology Laboratory ..... 2

CHE 236 Survey of Organic Chemistry ..... 3

NFS 212 Introductory Nutrition ..... 3

PHY 211 General Physics ..... 5

STA 291 Statistical Method ..... 3

**Subtotal: Premajor Hours ..... 22**

### Major Requirements Hours

#### Required:

FSC 107 Introduction to Food Science ..... 3

AEN 340 Principles of Food Engineering ..... 4

NFS 311 Nutritional Biochemistry **or**

BCH 401 G Fundamentals of Biochemistry ..... 3

FSC 306 Introduction to Food Processing ..... 4

FSC 434G Food Chemistry ..... 4

FSC 530 Food Microbiology ..... 5

FSC 535 Food Analysis ..... 4

FSC 536 Advanced Food Technology ..... 4

**Subtotal: Major Hours ..... 31**

### Specialty Support

Students must select 22 credits from the following suggested list of support courses:

AEC 201 Introduction to Farm and

Natural Resource Finance ..... 3

AEC 305 Food and Agricultural

Marketing Principles ..... 3

ASC/ABT/ENT 360 Genetics ..... 3

CS 101 Introduction to Computing I ..... 3

ECO 201 Principles of Economics I ..... 3

FSC 304 Animal Derived Foods ..... 5

FSC 395 Special Problem in Animal

Science/Food Science ..... 2

FSC 399 Experiential Learning in Animal

Sciences/Food Science ..... 1-6

FSC 430G Sensory Evaluation of Foods ..... 3

FSC 538 Food Fermentation and

Thermal Processing ..... 4

FSC 540 Food Sanitation ..... 3

NFS 304 Experimental Foods ..... 3

**Subtotal: Specialty Support ..... 22**

### Electives

Elective courses should be selected by the student to lead to the minimum total of 128 hours required for graduation.

**Subtotal: Electives ..... minimum of 11**

**TOTAL HOURS: ..... 128**

## BACHELOR OF SCIENCE IN FORESTRY

Kentucky boasts many forested areas with famous reputations, such as Natural Bridge, Red River Gorge, Daniel Boone National Forest, and Robinson Forest. Robinson Forest is one of the largest research and educational forests in the eastern United States. It is managed by the Department of Forestry, and as a forestry student at the University of Kentucky all of its resources will be available to you as a unique outdoor laboratory.

The missions of the Department of Forestry are to identify and address the challenges and opportunities facing sustained management of our renewable natural resources, including forests, soils, water, and wildlife. These missions involve three interrelated functions: research, extension, and education. The research goal of the department is to obtain basic and applied information leading to wise and effective management of our natural resources. Forestry extension seeks to inform land owners and the general public about forest stewardship. Forestry education prepares students for careers as forestry and natural resource professionals. The objectives of the required courses in the forestry curriculum are to educate and train students in the communication, managerial, scientific, processing, and administrative skills and principles related to the stewardship and utilization of renewable natural resources. Accomplishment of these objectives will ensure a continuing supply of entry-level professionals for Kentucky and the nation.

The undergraduate (B.S.) program leading to the professional degree in forestry is accredited by the Society of American Foresters (SAF). SAF is the specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation as the accrediting agency for forestry in the United States. Additionally, you may become certified by The Wildlife Society if you choose appropriate elective courses.

**Career Opportunities**

Forestry graduates are employed as professional foresters in private forest industries and organizations, consulting companies, and public agencies, including the U.S. Forest Service, Soil Conservation Service, and state, county, or urban forestry programs. Graduates are also qualified to be research technicians in government, university, and private laboratories, or may continue their studies in specialized graduate programs.

The inclusion in the curriculum of management and processing principles makes UK forestry graduates attractive to the forest products industry; graduates are often employed as technical specialists, managers, and marketing and wood procurement personnel.

**Graduation Requirements**

The four-year Bachelor of Science program in Forestry consists of 133 semester hours. Eight of these hours are earned while attending a Summer Camp between the third and fourth academic years. This eight-week Summer Camp at Robinson Forest provides practical, in-the-field training and is required of all forestry students. The camp involves overnight travel and takes place at a number of field locations including but not necessarily limited to Robinson Forest.

The curriculum consists of University Studies program, preprofessional, professional, and specialty support components. FOR 100, Introduction to Forestry, is required of all undergraduates during their first semester. This course provides a broad overview of forestry. Preprofessional, professional, and specialty support courses provide the skills and understanding to manage forest resources. Electives, chosen with the assistance of your advisor, strengthen your knowledge of basic principles in areas of special interest to you.

**University Studies Requirements** Hours See “University Studies Program” on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

**Inference-Logic**

MA 123 Elementary Calculus and Its Applications ..... 3

**Natural Sciences**

CHE 105 General College Chemistry I ..... 3

CHE 107 General College Chemistry II ..... 3

CHE 115 General Chemistry Laboratory ..... 3

**Social Sciences**

AEC 101 The Economics of Food and Agriculture or

ECO 201 Principles of Economics I ..... 3

One other course other than economics from

USP list ..... 3

**USP Electives**

BIO 150 Principles of Biology I ..... 3

BIO 152 Principles of Biology II ..... 3

**Premajor Requirements**

High school trigonometry or  
MA 112 Trigonometry or equivalent ..... 0-2

\*MA 123 Elementary Calculus and Its Applications ..... 3

MA 162 Finite Mathematics and Its Applications ..... 3

\*BIO 150 Principles of Biology I ..... 3

\*BIO 151 Principles of Biology Laboratory I ..... 2

\*BIO 152 Principles of Biology II ..... 3

\*BIO 153 Principles of Biology Laboratory II ..... 2

\*CHE 105 General College Chemistry I ..... 3

\*CHE 107 General College Chemistry II ..... 3

\*CHE 115 General Chemistry Laboratory ..... 3

PHY 151 Introduction to Physics or any higher numbered physics course of 3 or more credit hours ... 3

\*AEC 101 The Economics of Food and Agriculture or

\*ECO 201 Principles of Economics I ..... 3

\*GEO 210 Pollution, Hazards, and Environmental Management or

\*SOC 260 Population, Resources and Change or one other departmentally-approved course of 3 or more credit hours ..... 3

STA 291 Statistical Method ..... 3

**Subtotal: Premajor Hours ..... 37-39**

**Major Requirements**

FOR 100 Introduction to Forestry ..... 3

FOR 200 Map Reading and Photogrammetry ..... 2

FOR 205 Forest and Wildland Soils and Landscapes ..... 4

FOR 219 Silvics and Tree Identification ..... 3

FOR 300 Forest Measurements ..... 4

FOR 340 Forest Ecology ..... 3

FOR 350 Silviculture ..... 4

FOR 360 Wood Technology and Utilization ..... 4

FOR 402 Forest Entomology ..... 3

FOR 410 Forest Pathology ..... 3

FOR 425 Timber Management ..... 4

FOR 430 Forest Wildlife Management ..... 3

FOR 440 Forest Resources for Recreation ..... 3

FOR 460G Forest Watershed Management ..... 3

FOR 480 Integrated Forest Resource Management ..... 5

**Forestry Field Camp<sup>†</sup>**

FOR 375 Taxonomy of Forest Vegetation ..... 1

FOR 376 Silvicultural Practices ..... 2

FOR 377 Forest Surveying ..... 1

FOR 378 Forest Mensuration ..... 2

FOR 379 Harvest and Utilization of Wood ..... 2

<sup>†</sup>Attendance at Forestry Field Camp requires completion of the following courses: FOR 200, FOR 205, FOR 219, FOR 300, FOR 340, FOR 350, FOR 360 (grade of C or better required in FOR 200, FOR 205, and FOR 219).

**Subtotal: Major Hours ..... 59**

**Specialty Support Requirement**

AEC 201 Introduction to Farm and Natural Resource Finance ..... 3

**Subtotal: Specialty Support ..... 3**

**Electives**

Elective courses should be selected by the student to lead to the minimum total of 133 hours required for graduation.

**Subtotal: Electives ..... minimum of 16**

**TOTAL HOURS: ..... 133**

**BACHELOR OF SCIENCE IN HORTICULTURE, PLANT AND SOIL SCIENCES**

The Horticulture, Plant and Soil Sciences degree program is designed to provide students with the knowledge and skills needed for a career in the production and management of plants and soils for food, fiber, forage, oil, recreation, landscaping and the enhancement of the human environment. Graduates have the technical and scientific skills as well as the communication, computational, leadership, and interpersonal capabilities necessary to function effectively as professionals. Careers are as diverse as they are challenging. Each Area of Emphasis prepares graduates for specific professional opportunities.

**Areas of Emphasis**

Students pursuing a Horticulture, Plant and Soil Sciences degree may choose from the following areas:

- Crops and Livestock
- Crops and Soils
- Horticulture Enterprise Management
- Horticultural Science
- Plant Pest Management
- Soil and Water Environmental Science
- Turfgrass Science

**Graduation Requirements**

Students must complete a minimum of 128 semester credit hours with at least 45 credit hours from courses at the 300 level or above. In addition to the University Studies and college requirements, students must select an Area of Emphasis with the assistance of an advisor and fulfill the area’s program requirements.

**Plan of Study**

As a horticulture, plant and soil sciences major you are required to develop an acceptable **Plan of Study** during your sophomore year for your junior and senior years. The plan must be signed by your advisor and returned to the Office of the Associate Dean for Academic Programs.

If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program.

Consult your academic advisor in developing your Plan of Study.

**College Required Hours**

GEN 100 Issues in Agriculture ..... 3

**Subtotal: College Required Hours ..... 3**

**University Studies Requirements** Hours

See “University Studies Program” on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

#### Math

MA 123 Elementary Calculus and Its Applications ..... 3

#### Natural Sciences

CHE 105 General College Chemistry I ..... 3

CHE 107 General College Chemistry II ..... 3

CHE 115 General Chemistry Laboratory ..... 3

In addition, the student must submit a proposed plan of study for the junior and senior years.

#### Premajor Requirements

\*MA 123 Elementary Calculus and Its Applications .... 3

\*CHE 105 General College Chemistry I ..... 3

\*CHE 107 General College Chemistry II ..... 3

\*CHE 115 General Chemistry Laboratory ..... 3

**Subtotal: Premajor Hours ..... 12**

#### Major Requirements

\*AEC 101 The Economics of Food

and Agriculture ..... 3

\*ACE 102 The Dynamics of Rural Social Life ..... 3

\*PLS 104 Plants, Soils, and People:

A Global Perspective ..... 3

PLS 210 The Life Processes of Plants ..... 3

PLS 220 Introduction to Plant Identification ..... 3

PLS 366 Fundamentals of Soil Science ..... 4

PLS 386 Plant Production Systems ..... 4

PLS 490 Topics in Plant and Soil Science ..... 3

\*Required in Horticulture, Plant and Soil Sciences curriculum and also satisfies University Studies or College of Agriculture requirements.

**Subtotal: Major Hours ..... 26**

#### Area of Emphasis (15-31 hours)

In addition to the 31 PLS and GEN credit hours listed above in Major Requirements, students will select an additional 15-31 credit hours from Plant and Soil Science (PLS) or Plant Pathology (PPA) courses. The total credit hours in the major depends upon the student's Area of Interest.

During the sophomore year each student will identify an Area of Emphasis and develop a Plan of Study that details the course work to be taken during the junior and senior years. Examples of Areas of Emphasis include Horticulture Enterprise Management, Crops and Livestock, Crops and Soils, Turfgrass Science, Soil and Water Environmental Science, Horticultural Science, and Plant Pest Management. The Plan of Study must be approved by the undergraduate curriculum committee in the Area of Emphasis.

**Subtotal: Area of Emphasis ..... 15-31**

#### Specialty Support Requirements (21-39 hours)

To be selected from courses (other than PLS or PPA) offered by animal science, entomology, veterinary science, natural resource conservation, landscape architecture, agricultural engineering, chemistry, geology, geography, physics, biology, mathematics, statistics, agricultural economics, accounting, management, marketing, and economics. Selection of courses and total credit hours depends upon the student's Area of Emphasis.

**Subtotal: Specialty Support ..... 21-39**

#### Electives

Elective courses should be selected by the student to lead to the minimum total of 128 hours required for graduation.

**Subtotal: Electives ..... minimum of 17**

**TOTAL HOURS: ..... 128**

## BACHELOR OF SCIENCE IN LANDSCAPE ARCHITECTURE

The profession of landscape architecture has grown out of the tradition of the great garden designers of Italy, France, England, and China to encompass the art and science of design, planning, and management of the land. The *science* of landscape architecture is concerned with the conservation and management of natural resources. The *art* of landscape architecture is concerned with the creation of more enjoyable, comfortable, and safe outdoor areas where human use requires adaptation of the natural environment.

This five-year professional program is accredited by the American Society of Landscape Architects and meets all the requirements for licensing of landscape architects in Kentucky and other states. Landscape architecture employment opportunities may be found in the designing of urban communities, plazas, university campuses, institutional grounds, parks and recreational areas, commercial and industrial sites, and residential communities, as well as in the areas of historic preservation, regional planning, and mine reclamation.

#### Admission Requirements

Admission to the University of Kentucky and to the College of Agriculture does not guarantee admission to the Landscape Architecture program. All applicants must be reviewed by the Landscape Architecture Program Chairperson. The number of applicants ultimately admitted is determined by the resources available to provide high quality instruction. Applicants will be reviewed on a comparative basis. Determination of acceptability into the program is based on the following.

#### Entering freshmen and transfer students from degree programs other than Landscape Architecture must:

1. submit a formal application to the Undergraduate Admissions Office indicating Landscape Architecture as your major;

2. meet the minimum criteria for admission or readmission to the University as specified in this Bulletin (The Landscape Architecture program requires a minimum of a 2.0 grade-point average on a 4.0 scale for eligibility to transfer into the program.); and

3. successfully complete the aptitude testing designated by the Landscape Architecture program.

If a student transferring from another degree program has a background in related design fields, he or she may submit available work, such as a portfolio or other work examples, as an indication of potential success.

#### Transfer students from degree programs in Landscape Architecture at other accredited institutions must:

1. submit a formal application to the Undergraduate Admissions Office indicating Landscape Architecture as your major;

2. meet the minimum criteria for admission to the University as specified in this Bulletin (The Landscape Architecture program requires a minimum of a 2.0 grade-point average on a 4.0 scale for eligibility to transfer into the program.); and

3. submit a portfolio for review which, combined with an evaluation of courses completed, will determine acceptance into the program as well as the level to which the student will be accepted.

#### Graduation Requirements

To earn a Bachelor of Science degree in Landscape Architecture, the student must have 145 semester hours with at least a 2.0 grade-point standing (on a 4.0 scale). Remedial courses may **not** be counted toward the total hours required for graduation. In addition to satisfying the University Studies Program requirements, each student must complete pre-major, professional, and specialty support requirements. The Landscape Architecture program policy requires a student to achieve a C grade or better in major design studios in order to advance to the next level.

#### University Studies Requirements Hours

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

#### Math

MA 109 College Algebra ..... 3

#### Natural Sciences

GLY 110 Endangered Planet: An Introduction to

Environmental Geology ..... 3

GLY 220 Principles of Physical Geology ..... 4

or

GLY 101 Physical Geology **and**

GLY 111 Laboratory for Physical Geology ..... 4

#### Social Sciences

ECO 101 Contemporary Economic Issues **or**

ECO 201 Principles of Economics I ..... 3

One course other than economics from University

Studies Program list ..... 3

#### Premajor Requirements Hours

AEN 103 Basic Principles of Surveying ..... 2

ARC 828 Computers and Architecture ..... 3

\*ECO 101 Contemporary Economic Issues **or**

\*ECO 201 Principles of Economics I ..... 3

\*GLY 101 Physical Geology **and**

GLY 111 Laboratory for Physical Geology ..... 4

or

\*GLY 220 Principles of Physical Geology ..... 4

\*GLY 110 Endangered Planet: An Introduction to

Environmental Geology ..... 3

**Subtotal: Premajor Hours ..... 15**

**Departmental Professional Requirements**

LA 205 History of Landscape Architecture ..... 3  
 LA 206 Contemporary Landscape Architecture ..... 3  
 LA 821 Landscape Architecture Design Studio I ..... 6  
 LA 822 Landscape Architecture Design Studio II ..... 6  
 LA 833 Landscape Architecture Design Studio III ..... 6  
 LA 834 Landscape Architecture Design Studio IV ..... 6  
 LA 841 Landscape Architecture Design Studio V ..... 6  
 LA 842 Landscape Architecture Design Studio VI ..... 6  
 LA 871 Design Implementation I ..... 4  
 LA 872 Design Implementation II ..... 4  
 LA 973 Advanced Design Implementation ..... 6  
 LA 975 Advanced Landscape  
 Architecture Studio ..... 6  
 Students must complete **four** courses at the 800 level and **two** courses at the 900 level from the following:  
 LA 850 Landscape Architecture Graphics ..... 3  
 LA 851 Design with Plants ..... 3  
 LA 853 History and Theory of Urban Form ..... 3  
 LA 854 Historic Landscape Preservation ..... 3  
 LA 855 Geographic Information Systems and  
 Landscape Analysis ..... 3  
 LA 857 Design Theories in  
 Landscape Architecture ..... 3  
 LA 858 Regional Land Use Planning Systems ..... 3  
 LA 895 Independent Work in Landscape  
 Architecture ..... 1-6  
 LA 952 Advanced Landscape Architectural  
 Graphic Communication ..... 3  
 LA 956 Advanced Geographic Information  
 Systems (GIS) and Landscape Analysis ..... 3  
 LA 959 Advanced Regional Land Use  
 Planning Applications ..... 3  
 LA 971 Senior Project ..... 3  
**Subtotal: Major Hours ..... 80**

**Specialty Support Requirements**

ARC 850 Professional Practice ..... 3  
 PLS 220 Introduction to Plant Identification ..... 3  
 PLS 320 Woody Horticultural Plants ..... 4  
 BIO 325 Introductory Ecology ..... 4  
**or**  
 FOR 340 Forest Ecology ..... 3  
 PLS 366 Fundamentals of Soil Science ..... 4  
**or**  
 FOR 205 Forest and Wildland Soils and Landscapes ... 4  
 Select one additional 400-500 level course from an area of study related to landscape architecture, such as GEO, HIS, SOC, PSY, PS, etc., with the approval of the student's advisor.

**Subtotal: Specialty Support ..... minimum of 20**

**Electives**

Electives should be selected by the student to lead to the minimum total of 145 hours required for graduation.

**Subtotal: Electives ..... minimum of 3**  
**TOTAL HOURS: ..... 145**

**BACHELOR OF SCIENCE IN  
 NATURAL RESOURCE  
 CONSERVATION AND  
 MANAGEMENT**

The program in Natural Resource Conservation and Management is designed to provide students with the knowledge and skills needed for a career in the rapidly growing fields of environmental science and policy. As the world population grows, and as nations are drawn closer together through technology

and trade, the conservation and management of natural resources will become increasingly important to the sustained well-being of all societies. The curriculum provides students with exposure to a broad array of key disciplines involved with natural resources. As a result, graduates have the capacity to integrate different perspectives and diverse bodies of knowledge in dealing with real resource management problems.

All students in the program share a common core of major requirements. This core is designed to provide the student with broad exposure to the technical and socioeconomic dimensions of natural resources and their management. Important components of this core of courses are a required three-week summer camp after the sophomore or junior year and a required internship or research experience. In addition to this core, all students must develop a Concentration Area consisting of at least 18 hours of course work. This Concentration Area allows the student to focus the degree on an area of interest in the technical or policy oriented aspects of natural resource management. These courses must be chosen in consultation with the academic advisor and must be approved by the advisor and the NRCM Steering Committee as part of the plan of study for the student.

Graduates of the Natural Resource Conservation and Management degree program are employed as professionals in both the public and private sectors. Industries which have an impact upon the environment maintain a staff of environmental scientists and technicians to ensure compliance with the standards of our society. Government agencies employ broadly trained natural resource scientists to serve in regulatory or management functions for the resources in their jurisdiction. Additional employment opportunities exist in environmental journalism and education, and with the many nonprofit organizations which have environmental concerns. In addition, students in either option are well prepared for graduate programs dealing with resource and environmental issues and in traditional academic disciplines.

**Graduation Requirements**

To earn a Bachelor of Science in Natural Resource Conservation and Management, the student must complete at least 120 semester hours with at least a 2.0 grade-point standing. A minimum of 45 credit hours must be from upper division courses (300 and above). Remedial courses may **not** be counted toward the total hours required for the degree. In addition to the University Studies Program requirements, the student must complete college, premajor, major and concentration requirements, including an internship or research experience. The student will construct their concentration area with the approval of a faculty advisor in the area of interest.

**Plan of Study**

As a Natural Resource Conservation and Management major, you are required to work with your advisor to develop a complete **Plan of Study** during your sophomore year for your junior and senior years. The plan will be signed by your advisor, approved by the NRCM Steering Committee, and placed in your file in the Office of the Associate Dean for Academic Programs. If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program.

**University Studies Requirements Hours**  
 See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.

**Inference-Logic**

MA 123 Elementary Calculus and  
 Its Applications ..... 3  
**or**  
 MA 113 Calculus I ..... 4

**Natural Sciences**

CHE 105 General College Chemistry I ..... 3  
 CHE 107 General College Chemistry II ..... 3  
 CHE 115 General Chemistry Laboratory ..... 3

**Social Sciences**

ECO 201 Principles of Economics I ..... 3  
 One course other than economics from University  
 Studies Program list ..... 3

**USP Electives**

BIO 150 Principles of Biology I ..... 3  
 BIO 152 Principles of Biology II ..... 3

**College Required Hours**

GEN 100 Issues in Agriculture ..... 3  
**Subtotal: College Required Hours ..... 3**

**Premajor Requirements**

**Hours**

\*BIO 150 Principles of Biology I ..... 3  
 \*BIO 152 Principles of Biology II ..... 3  
 PLS 210 The Life Processes of Plants ..... 3  
 \*CHE 105 General College Chemistry I ..... 3  
 \*CHE 107 General College Chemistry II ..... 3  
 CHE 115 General Chemistry Laboratory ..... 3  
 \*ECO 201 Principles of Economics I ..... 3  
 GLY 220 Principles of Physical Geology ..... 4

MA 113 Calculus I  
**or**  
 MA 123 Elementary Calculus  
 and Its Applications ..... 3-4  
 STA 291 Statistical Method ..... 3  
 \*These courses satisfy USP requirements.

**Subtotal: Premajor Hours ..... 31-32**

**Major Requirements**

**Hours**

AEC 424 Principles of Environmental Law ..... 2  
 AEC 445G Introduction to Resource  
 and Environmental Economics ..... 3  
 FOR 315 Conservation Biology ..... 3  
 FOR 340 Forest Ecology ..... 3

NRC 301 Natural Resource Conservation and Management .....	3
NRC 320 Data Collection Technique** .....	3
NRC 380 Analysis of Natural Resource Systems .....	3
NRC 381 Natural Resource Policy Analysis .....	3
NRC 395 Independent Study in Natural Resources***	
<b>or</b>	
NRC 399 Experiential Education in Natural Resources*** .....	3
NRC 471 Senior Problem in Natural Resources .....	3
NRC 555 Geographic Information Systems and Landscape Analysis .....	3
PLS 366 Fundamentals of Soil Science .....	4
plus <b>one</b> of the following:	
NRC 420G Taxonomy of Vascular Plants .....	4
NRC 450G Biogeochemistry .....	3
NRC 455G Wetland Delineation .....	3
NRC 456G Constructed Wetlands .....	3
NRC 477G Land Treatment of Waste .....	3
NRC 545 Resource and Environmental Economics .....	3
**NRC 320 is a three-week summer camp field data collection experience. The student will attend this camp after the sophomore or junior year. This camp exposes the student to a wide range of natural resource techniques and concepts, including aquatic ecology, soil and plant sciences, wildlife and forestry, and waste management.	
***All students must complete either an internship (NRC 399) or a supervised research project (NRC 395). This requirement is designed to give the student real world exposure to natural resource work in their area of interest.	

**Subtotal: Major Hours** ..... **39-40**

### Concentration Area

In addition to the major requirements, each student, in consultation with his or her academic advisor, will select a minimum of 18 hours in course work that will constitute the student's Concentration Area. At least 9 of these hours must be at the 300 level or above. This Concentration Area consists of a unique set of courses that allow specialization in a particular area. For example, a student might choose to develop a concentration in Natural Resource Policy, Wildlife Ecology, or Soil and Water Science. Alternatively, the student may wish to minor in another natural resources related program, for example Geology or Economics. If a minor is chosen, those hours will count towards the Concentration Area hours. In either case, the Concentration Area should represent a coherent theme.

The Concentration Area will be developed in the sophomore year as part of the required Plan of Study. This Plan of Study must be approved by the student's advisor, the NRCM Steering Committee, and then put on file in the Office of the Associate Dean for Academic Programs in the College of Agriculture.

**Subtotal: Concentration Area** ..... **18**

### Electives

Free elective courses should be selected by the student to lead to the minimum total of 120 hours required for graduation.

**Subtotal: Electives** ..... **minimum of 6**

**TOTAL HOURS:** ..... **120**

## MINORS IN AGRICULTURE

### Minor in Agriculture

(NOTE: At the time of publication, the minor in agriculture was undergoing revision. Interested students should contact the College of Agriculture for more information.)

Students in this minor must complete 21 credit hours, selected from the following list. Courses must be selected from a minimum of three areas to assure diversity.

### General Agriculture

(A maximum of two courses) .....	Hours
ASC 106 Introduction to Animal Sciences .....	3
AEC 101 The Economics of Food and Agriculture .....	3
ACE 102 The Dynamics of Rural Social Life .....	3
PLS 104 Plants, Soils, and People: A Global Perspective .....	3
GEN 105 Engineering Applications in Agriculture .....	3
FSC 107 Introduction to Food Science .....	3

### Agricultural Economics

AEC 302 Agricultural Management Principles .....	4
AEC 303 Microeconomic Concepts in Agricultural Economics .....	3
AEC 305 Food and Agricultural Marketing Principles .....	3
AEC 309 International Agriculture, World Food Needs and U.S. Trade in Agricultural Products .....	3
AEC 321 Agricultural Futures Markets .....	3
AEC 422 Agribusiness Management .....	3

### Agricultural Engineering

AEN 320 Agricultural Structures .....	3
AEN 340 Principles of Food Engineering .....	4
AEN 345 Crop Drying and Processing .....	3

### Animal Sciences

ASC 300 Meat Science .....	4
ASC 360 Genetics .....	3
ASC 382 Principles of Livestock Nutrition .....	3
FSC 306 Introduction to Food Processing .....	4

### Entomology

ENT 310 Insect Pests of Field Crops .....	3
ENT 320 Horticultural Entomology .....	3
ENT 340 Livestock Entomology .....	2
ENT 402 Forest Entomology* .....	3

### Forestry

FOR 402 Forest Entomology* .....	3
FOR 410 Forest Pathology* .....	3
FOR 430 Forest Wildlife Management .....	3
FOR 440 Forest Resources for Recreation .....	3
FOR 460G Forest Watershed Management .....	3

### Plant and Soil Science

PLS 352 Nursery Production .....	3
PLS 366 Fundamentals of Soil Science .....	4
PLS 367 Soil and Water Analysis Laboratory .....	3
PLS 386 Plant Production Systems .....	4
PLS 402 Fruit Crop Production .....	3
PLS 440 Plant Propagation .....	3
PLS 465 Greenhouses and Controlled Environments ...	3
PLS 520 Vegetable Crop Management .....	3

### Plant Pathology

PPA 400G Principles of Plant Pathology .....	3
PPA 410 Forest Pathology* .....	3

\*Cross-listed courses. May satisfy only one departmental requirement.

### Minor in Agricultural Economics

Preprofessional Requirement	Hours
ECO 201 Principles of Economics I .....	3

### Minor Requirements

Two courses selected from:	
AEC 302 Agricultural Management Principles .....	4
AEC 303 Microeconomic Concepts in Agricultural Economics .....	3
AEC 305 Food and Agricultural Marketing Principles .....	3

In addition, students should select nine hours from other agricultural economics courses. A maximum of three credit hours from AEC 311, 312, 313, 314, 315, or 341 may be credited to the minor. AEC 399 may not be included.

### Minor in Animal Sciences

Minor Requirements	Hours
ASC 106 Introduction to Animal Sciences .....	3
ASC 120 Introductory Animal Science Laboratory .....	1
ASC 360 Genetics .....	3
ASC 364 Reproductive Physiology of Farm Animals .....	3
ASC 378 Animal Nutrition .....	3
<b>or</b>	
ASC 382 Principles of Livestock Nutrition .....	3

### Electives (5 hours)

Electives must be selected from the following list:

ASC 300 Meat Science .....	4
ASC 310 Equine Anatomy and Conformation .....	2
ASC 320 Equine Management .....	3
ASC 362 Animal Breeding .....	3
ASC 380 Feeds and Feeding .....	3
ASC 404G Sheep Science .....	4
ASC 406 Beef Cattle Science .....	3
ASC 408G Swine Science .....	3
ASC 410G Equine Science .....	3
ASC 420G Dairy Cattle Science .....	3
ASC 462G Artificial Insemination and Fertility of Farm Animals .....	2
ASC 564 Milk Secretion .....	3

### Minor in Entomology

Premajor Requirement	Hours
Two semesters of introductory biology .....	6

### Minor Requirements

Required: .....	15
ENT 300 General Entomology .....	3

Select the remaining credits (12 hours) from:

ENT 310 Insect Pests of Field Crops .....	3
ENT 320 Horticultural Entomology .....	3
ENT 340 Livestock Entomology .....	2
ENT 360 Genetics .....	3
ENT 395 Independent Work .....	1-3
ENT 402 Forest Entomology .....	3
ENT 530 Integrated Pest Management .....	3
ENT 561 Medical Entomology .....	4
ENT 563 Parasitology .....	4
ENT 564 Insect Taxonomy .....	4
ENT 567 Applications of Genetics .....	4
ENT 568 Insect Behavior .....	3
ENT 574 Advanced Applied Entomology .....	4

### Minor in Food Science

Required Courses	Hours
FSC 535 Food Analysis <b>or</b> .....	4
FSC 434G Food Chemistry .....	4
FSC 530 Food Microbiology .....	5
FSC 536 Advanced Food Technology <b>or</b> .....	4
FSC 538 Food Fermentation and Thermal Processing .....	4

### Elective Courses

Two of the following:

FSC 306 Introduction to Food Processing .....	4
AEN 340 Principles of Food Engineering .....	4
FSC 535 Food Analysis* <b>or</b> .....	4
FSC 434G Food Chemistry* .....	4
FSC 536 Advanced Food Technology* <b>or</b> .....	4
FSC 538 Food Fermentation and Thermal Processing* .....	4

\*If not taken as one of the required courses.

**Minor in Pest Management**

Prerequisite	Hours
One course from the following: ASC 320, 404G, 406, 408G, 420G PLS 352, 386, 402, 408, 412, 515, 520, 525, 556 ..... 3-4	

**Minor Requirements**

ENT 300 General Entomology .....	3
PLS 404 Integrated Weed Management .....	4
PPA 400G Principles of Plant Pathology .....	3
Select at least nine hours from the following:	
ENT 310 Insect Pests of Field Crops .....	3
ENT 320 Horticultural Entomology .....	3
ENT 340 Livestock Entomology .....	2
ENT 402 Forest Entomology .....	3
ENT 530 Integrated Pest Management .....	3
ENT 574 Advanced Applied Entomology .....	4
PPA 410 Forest Pathology .....	3
PPA 595 Epidemiology and Control of Plant Diseases .....	4
VS 351 Principles of Animal Hygiene and Disease Control .....	3
PLS 470G Soil Nutrient Management .....	3
ASC 378 Animal Nutrition .....	3

**Minor in Plant and Soil Science**

Preminor Requirement	Hours
CHE 105 General College Chemistry I .....	3

**Minor Requirements**

Required: .....	18
PLS 104 Plants, Soils, and People: A Global Perspective .....	
PLS/BIO 210 The Life Processes of Plants <b>or</b> BIO 152 Principles of Biology II .....	3
PLS 366 Fundamentals of Soil Science .....	4
plus nine more hours of plant and soil science courses chosen from the following prefixes: PLS, PPA.	

**Minor in Rural Sociology****Prerequisites**

Students must complete SOC 101 or ACE 102 **and** one other sociology course at the 100 or 200 level.

Any student wishing to minor in rural sociology should file an application with and be interviewed by the Director of Undergraduate Studies in sociology prior to entering the program.

**Minor Requirements**

Students must complete 15 hours in sociology, at least 12 of which must be at the 300 level or above, including one of the following six-hour blocks:  
SOC 302 and SOC 303 **or**  
SOC 304 and SOC 305 **or**  
SOC 302 and SOC 304

**PRE-VETERINARY MEDICINE**

Students interested in becoming veterinarians may enroll in the College of Agriculture at the University of Kentucky and complete their requirements for admission to veterinary school.

Although the Commonwealth of Kentucky does not have a school of veterinary medicine, it is a participating member of the Southern Regional Education Board plan, under which legal Kentucky residents may attend the Auburn University School of Veterinary Medicine. Each year 34 students are chosen from Kentucky to enter the Auburn program.

There is also a plan whereby two legal Kentucky residents may be accepted by the Tuskegee University School of Veterinary Medicine each year.

Under both of the above programs the students selected are exempt from the out-of-state tuition that would normally apply to a Kentucky resident. Admission is on a competitive basis with the final selection being made by a committee from each of the veterinary schools.

Pre-veterinary studies is not a degree program, but a pre-professional curriculum. It is strongly recommended that all pre-veterinary students choose a degree goal early in their college career. Although it is possible to complete pre-vet requirements in three years, the majority of students accepted to Auburn have a B.S. or B.A. degree.

A minimum of 72 semester hours with an overall grade-point average of 2.50 (on a 4.0 basis) is required prior to consideration for admission. Due to the high level of competition for admission to any veterinary school, a student should maintain at least a 3.0 academic standing on all college work. The average overall GPA for students accepted to veterinary schools is approximately 3.45. The student must have completed all of the required courses or acceptable substitutes by June 15 of the year of possible acceptance. Courses in certain advanced sciences must be taken within six years of entry to Auburn. All required courses must have a grade of "C" or greater.

Auburn applicants can use the Veterinary Medical College Application Service (VMCAS) application, available at: [www.vmcas.org](http://www.vmcas.org). The deadline for Auburn applications is October 1. Auburn requires the General Aptitude portion of the Graduate Record Examination (GRE). Tuskegee requires a separate application form and the GRE, taken within three years of application. Additional forms are required for both schools; forms are available from Dr. Dwyer after June 1.

The following curriculum is designed to meet the requirements for both Auburn and Tuskegee. However, some changes in the pre-veterinary curriculum may go into effect during the school year. *The student has the responsibility to work closely with his or her pre-veterinary advisor in making certain that all requirements are met for consideration for acceptance.*

All CLEP and advanced placement credit for required courses must have prior approval by Dr. Dwyer. Auburn does not accept correspondence credit for required courses.

**Pre-Veterinary Curriculum**

	Hours
UK Written Communication requirement* .....	6-7
Literature (e.g. ENG 334)** .....	3 or 6
Fine Arts (e.g. MUS 100)** .....	3
Humanities/Fine Arts electives** .....	6
History (e.g. HIS 108/109)** .....	3 or 6
Social sciences electives** (e.g. USP Social Sciences plus anthropology [Cross-Cultural]) .....	9
MA 123 Elementary Calculus and Its Applications .....	3
<b>OR</b>	
MA 113 Calculus I .....	4
<b>The above courses are waived for students with a B.S. or B.A. degree.</b>	
BIO 150/152 Principles of Biology I and II .....	6
BIO 151/153 Principles of Biology Laboratory I and II .....	4
CHE 105 General College Chemistry I .....	3
CHE 107 General College Chemistry II .....	3
CHE 115 General Chemistry Laboratory .....	3
CHE 230 Organic Chemistry I .....	3
CHE 231 Organic Chemistry Laboratory I .....	2
CHE 232 Organic Chemistry II .....	3
CHE 233 Organic Chemistry Laboratory II .....	2
PHY 211 General Physics .....	5
PHY 213 General Physics .....	5
BCH 401G Fundamentals of Biochemistry .....	3
Science Electives*** .....	6

Tuskegee requires ASC 378, BCH 401G (Biochemistry), 6 hours of math, and ASC 106 (Introduction to Animal Sciences).

\*HON 101/102 can be used.

\*\*Students should contact a UK pre-veterinary advisor regarding alternative courses.

\*\*\*Science electives can include BIO 308, BIO 315, BIO 340, BIO 350 or other upper level science courses which are approved by a pre-veterinary advisor.

Auburn strongly urges students to take organic chemistry and physics courses at a four-year college or university.

Tuskegee and all other north American veterinary schools require biochemistry.

All pre-veterinary students that enter veterinary school without obtaining an Animal Science degree and petition UK for one later must fulfill the departmental requirements for an Animal Science degree. In order to be eligible for the B.S. in Animal Science, students must have completed all University Studies courses and all the course requirements of one of the Animal Science options – animal production, dairy production, or equine production. Of the Animal Science courses required, only ASC 300 and 310 can be replaced by the anatomy taken during the course of study at the veterinary school.

Direct further inquiries to:

**Roberta M. Dwyer, DVM, MS**  
**Department of Veterinary Science**  
**Gluck Equine Research Center**  
**College of Agriculture**  
**University of Kentucky**  
**Lexington, KY 40546-0099**  
**(859) 257-4757 ext. 81122**  
**e-mail: [rmdwyer@uky.edu](mailto:rmdwyer@uky.edu)**

## SCHOOL OF HUMAN ENVIRONMENTAL SCIENCES

Human Environmental Sciences provides science-based programs concerned with the interactions of individuals and families within multiple environmental contexts, including social, cultural, economic, and political. The specialized areas of study prepare graduates for professional roles through academic work, practicum or field experience, and research with a focus on improving quality of life for individuals and families throughout the lifespan.

There are three departments in the School of Human Environmental Sciences – Family Studies; Merchandising, Apparel and Textiles; and Nutrition and Food Science. Each department offers both undergraduate and graduate study.

### Undergraduate Programs in Human Environmental Sciences

The University of Kentucky grants the following degrees in the School of Human Environmental Sciences:

- Bachelor of Science in Dietetics
- Bachelor of Science in Family and Consumer Sciences
- Bachelor of Science in Hospitality Management
- Bachelor of Science in Human Nutrition
- Bachelor of Science in Merchandising, Apparel and Textiles

### Minors Offered

The following minors are available:

- Family Studies
- Merchandising, Apparel, and Textiles
- Nutrition

### Accreditations and Approvals

All undergraduate programs in the School of Human Environmental Sciences are accredited by the American Association of Family and Consumer Sciences.

Additionally, all programs and facilities which can be accredited or approved have achieved that recognition:

- Didactic and Coordinated Programs in Dietetics are both accredited by the Commission on Accreditation for Dietetic Education (CADE)
- National Council for Accreditation of Teacher Education has accredited the program in Family and Consumer Sciences Education

### Unique Features of the College Facilities and Services

Research Center for Families and Children; Betty D. Eastin Historic Costume Collection; textiles quality research laboratory; The Family Center (personal and marriage counseling); The Lemon Tree Restaurant; and nutrition research laboratories.

### Scholarships

Over fifty scholarships are awarded each year to undergraduate and graduate students enrolled in the School of Human Environmental Sciences. Information about scholarships is available from the Student Services Office, 102 Erikson Hall.

### Advising

All students are assigned a faculty advisor during their first semester in a program in the School of Human Environmental Sciences. For more information about programs or advising, contact:

**School of Human  
Environmental Sciences  
College of Agriculture  
102 Erikson Hall  
University of Kentucky  
Lexington, KY 40506-0050  
(859) 257-2855**

### DEPARTMENT OF FAMILY STUDIES

The Department of Family Studies is committed to offering quality programs for students preparing to work with individuals and families in various settings including schools, private and public social agencies, and business. The focus is on enhancing the quality of life for families. Undergraduate programming is at an applied level using an interdisciplinary approach from the perspectives of individual and family development, family resource management, and family systems.

The department offers a major in family and consumer sciences with options in **a)** family and consumer sciences (non-teaching) and **b)** family and consumer sciences education (teaching).

Students in the family and consumer sciences major earn the degree Bachelor of Science in Family and Consumer Sciences. A minor in family studies is available.

The family and consumer sciences non-teaching option, Option A, prepares students to work with individuals and families in unique ways. Positions include coordinators of community education and outreach, crisis management, residential care, family financial management, research and planning, and social service workers. Students completing the program are eligible to apply to become cer-

tified family life educators through the National Council on Family Relations. Contact the Department of Family Studies, 315 Funkhouser Building, (859) 257-7750, for more information about this optional credential.

The family and consumer sciences education option, Option B, prepares students for careers in teaching, extension services, adult education, and related activities which focus on teaching. Professional education courses in teaching methods and supervised teaching in family and consumer sciences classes at the middle and high school levels are included in the option. The option is accredited by the National Council for Accreditation on Teacher Education and approved by the Kentucky Department of Education. Students must perform at **C** grade level or better for all courses required for certification. To be state-certified, candidates must also successfully complete all state-mandated testing requirements.

### Continuous Assessment

1. All students in the family and consumer sciences education program are expected to meet the standards and rules for Admission, Retention, and Exit from Teacher Education Programs as set forth in the section "Admission, Retention and Exit from Teacher Education Programs" on page 154.

2. **Assessment at the Point of Entry to the FCSE Program.** The admission process provides the first point for formal assessment of the competencies outlined in the Initial Certification Program Folio for the program. Students who apply for admission must (a) meet the requirements for admission to the Teacher Education Program, and (b) be able to articulate their philosophy of teaching and document their experiences with youth in an initial portfolio and an entrance interview.

3. **On-going Assessment.** Once a student is admitted to the program, he/she meets with an advisor to plan the remainder of the program. Prior to the student teaching semester, the student must present a portfolio that documents his/her progress toward meeting program competencies.

4. **Exit Assessment.** At the exit assessment, students must document that they have met all program competencies through a final review of their portfolio and the successful completion of student teaching in an appropriate school placement.

### Statement on Student Teaching

Student teaching in the family and consumer sciences education program is 16 weeks and consists of eight weeks in a middle school family and consumer sciences program, and eight weeks in a high school family and consumer sciences program. Students enroll in: HEE 501 Practicum in Career and

Technical Education ..... 12

## BACHELOR OF SCIENCE IN FAMILY AND CONSUMER SCIENCES

**NOTE:** At the time of publication, the B.S. in Family and Consumer Sciences was undergoing revision. Consult your advisor for more information.

Each student must complete the following:

1. Complete University Studies requirements.
2. Complete the School requirements listed below.
3. Complete 128 credit hours with a minimum grade-point average of 2.0 for Option A (Non-Teacher Certification); minimum grade-point average of 2.5 for Option B (Teacher Certification).

4. Complete the required curriculum in the major program.

5. All students majoring in Family and Consumer Sciences Education must apply and be admitted to the professional Teacher Education Program in order to complete the program. (See the *College of Education* section in this Bulletin for additional information regarding admission to the Teacher Education Program.)

### School Requirements

HES 100 An Introduction to Professions in Human Environmental Sciences .....	1
HES 400 Concepts in Human Environmental Sciences: Integration and Application .....	2
One course in Human Environmental Sciences, outside the student's major prefix .....	3

**Subtotal: School Required Hours .....** 6

### University Studies Requirements Hours

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

#### Inference-Logic

STA 200 Statistics: A Force in Human Judgment .....	3
PHI 120 Introductory Logic .....	3

#### Oral Communication

COM 181 Basic Public Speaking or	
COM 252 Introduction to Interpersonal Communication .....	3

#### Natural Sciences

BIO 102 Human Ecology .....	3
BIO 103 Basic Ideas of Biology .....	3

#### Social Sciences

FAM 252 Introduction to Family Science .....	3
PSY 100 Introduction to Psychology .....	4

### Premajor Requirements Hours

*COM 181 Basic Public Speaking or	
*COM 252 Introduction to Interpersonal Communication .....	3
*PHI 120 Introductory Logic or	
PHI 330 Professional Ethics .....	3

*PSY 100 Introduction to Psychology .....	4
*STA 200 Statistics: A Force in Human Judgment .....	3
Two courses in PHY, BIO, or CHE .....	6
<b>Subtotal: Premajor Hours .....</b>	<b>19</b>

### Major Requirements

NFS 101 Human Nutrition and Wellness .....	3
FAM 250 Consumer Issues .....	3
FAM 251 Personal and Family Finance .....	3
*FAM 252 Introduction to Family Science .....	3
*FAM 253 Human Sexuality: Development, Behavior and Attitudes .....	3
FAM 254 Developmental Psychology .....	3
FAM 255 Child Development .....	3
FAM 360 Introduction to Family Intervention: Working With Families and Individuals .....	3
FAM 383 Concepts of Personal and Family Management .....	3
FAM 399 Practicum in Family Studies .....	3
FAM 473 Family Life Education .....	3
FAM 563 Families, Legislation, and Public Policy .....	3
*These courses may also be used to fulfill University Studies requirements.	
<b>Subtotal: Major Hours .....</b>	<b>minimum of 36</b>

In addition to the Major Requirements, students choose one of two options:

### Option A: Family and Consumer Sciences (Non-Teacher Certification Program)

SOC 101 Introductory Sociology or	
ANT 220 Introduction to Cultural Anthropology .....	3
ECO 201 Principles of Economics I .....	3
ENG 203 Business Writing or	
ENG 205 Intermediate Writing .....	3
FAM 354 The Family in Cross-Cultural Perspective or	
FAM 544 Cultural Diversity in American Children and Families .....	3
FAM 390 Introduction to Research in Family Studies ...	3
FAM 401 Normal Family Development and Process ...	3
FAM 402 Family Economics and Management Issues .....	3
FAM 486 Field Experiences in Family Resource Management or	
FAM 499 Internship in Family Life Education .....	3
FAM 502 Families and Children Under Stress .....	3
Additional option support within FAM chosen with advisor approval .....	6
<b>Subtotal: Option A .....</b>	<b>33</b>

### Option B: Family and Consumer Sciences Education (Teacher Certification Program)

FAM 256 Guidance Strategies for Working With Young Children .....	3
EDP 203 Teaching Exceptional Learners in Regular Classrooms .....	3
HEE 210 Introduction to Career and Technical Education .....	3
NFS 204 Principles of Food Preparation .....	3
HEE 580 Methods of Teaching Career and Technical Education I .....	3
HEE 586 Methods of Teaching Career and Technical Education II .....	3
MAT 120 Textiles for Consumers .....	3
MAT 232 Apparel Production Studio .....	3
ID 273 Interior Design Awareness .....	3
HEE 501 Practicum in Career and Technical Education .....	12
<b>Subtotal: Option B .....</b>	<b>39</b>

### Electives

Electives should be selected by the student to lead to the minimum total of 128 hours required for graduation.

<b>Minimum Elective Hours .....</b>	<b>7</b>
<b>TOTAL HOURS: .....</b>	<b>128</b>

### Minor in Family Studies

Any student interested in a minor in family studies should file an application with the department prior to entering the program.

### Minor Requirements

FAM 251 Personal and Family Finance .....	3
FAM 252 Introduction to Family Science .....	3
FAM 255 Child Development .....	3

### Minor Electives

Twelve additional hours in Family Studies from the following with six hours at the 300-, 400- or 500-level:

FAM 250, 253, 254, 256, 354, 357, 383, 509, 553, 554, 563.
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## DEPARTMENT OF MERCHANDISING, APPAREL, AND TEXTILES

The Department of Merchandising, Apparel, and Textiles is committed to excellence as it prepares students for merchandising, apparel, and textiles positions in an increasingly diverse and technological world. Teaching, research, and service programs support student development and contribute to the economic and social well-being of the Commonwealth, the nation, and the world. The department offers the Bachelor of Science in Merchandising, Apparel, and Textiles. A minor is also available.

## BACHELOR OF SCIENCE IN MERCHANDISING, APPAREL, AND TEXTILES

**NOTE:** At the time of publication, the B.S. in Merchandising, Apparel, and Textiles was undergoing revision. Consult your advisor for more information.

The Merchandising, Apparel, and Textiles program develops graduates who are consumer and technology focused with a global orientation. Students study concepts and develop skills necessary for understanding consumer and market trends, strategies, and industry structures that facilitate the development, sourcing, marketing, and merchandising of consumer goods and services in the domestic and international marketplace.

The curriculum challenges students to think creatively, to learn research and problem solving techniques, and to interact in team efforts, while gaining knowledge of the merchandising process. Students gain awareness of the interrelationships of people, technology, and materials in the dynamic social, economic, and global environment of the merchandis-

ing, apparel and textile industry. Course work includes a strong business component, interaction with professionals and field experience. Internships are a required component of the program, which can lead to permanent professional placement. Faculty encourage student participation in industry-sponsored projects related to merchandising and product development.

Each student must complete the following:

1. Complete University Studies requirements.
2. Complete the School requirements listed below.
3. Complete 128 credit hours with a minimum grade-point average of 2.0.
4. Complete the required curriculum in the major program.

### School Requirements

HES 100 An Introduction to Professions in Human Environmental Sciences .....	1
HES 400 Concepts in Human Environmental Sciences: Integration and Application .....	2
One course in Human Environmental Sciences, outside the student's major prefix .....	3
<b>Subtotal: School Required Hours .....</b>	<b>6</b>

**University Studies Requirements Hours**  
See "University Studies Program" on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

### Humanities (recommended sequence):

HIS 104 A History of Europe Through the Mid-Seventeenth Century .....	3
HIS 105 A History of Europe From the Mid-Seventeenth Century to the Present .....	3

### Premajor Requirements Hours

Writing course (200 level or above) .....	3
*COM 181 Basic Public Speaking .....	3
FAM 250 Consumer Issues .....	3
*SOC 101 Introductory Sociology .....	3
*PSY 100 Introduction to Psychology .....	4
*ECO 201 Principles of Economics I .....	3
ECO 202 Principles of Economics II .....	3
*STA 200 Statistics: A Force in Human Judgment or	
**STA 291 Statistical Method .....	3
*These courses may also be used to fulfill University Studies requirements.	
**MA 123 is a prerequisite to STA 291.	
<b>Subtotal: Premajor Hours .....</b>	<b>25</b>

### Major Requirements

MAT 114 Introduction to Merchandising .....	3
MAT 120 Textiles for Consumers .....	3
MAT 237 Aesthetics in Merchandising .....	3
MAT 247 Dress and Culture .....	3
MAT 312 Merchandising Promotion .....	3
MAT 315 Merchandise Planning and Control .....	3
MAT 340 Professional Practice .....	1
MAT 350 Problem Solving in Merchandising .....	3
MAT 414 Merchandising Strategy Analysis .....	3
MAT 420 Consumer Demand in Merchandising .....	3
MAT 425 Economics of Merchandise Sourcing .....	3
MAT 470 International Merchandising .....	3
MAT 490 Internship .....	6

MAT 515 Specification and Evaluation of Textiles and Apparel .....	3
<b>Subtotal: Major Hours .....</b>	<b>43</b>

### Professional Support (21 hours)

ACC 201 Financial Accounting I .....	3
ACC 202 Managerial Uses of Accounting Information .....	3
MKT 300 Marketing Management .....	3
MKT 320 Retail and Distribution Management .....	3
MGT 301 Business Management .....	3

**plus** six hours at the 200 level or above to be chosen with approval of the academic advisor from such areas as business, communication and social sciences or additional MAT courses.

**Subtotal: Professional Support .....** 21

### Electives

Electives should be selected to complete the minimum total of 128 hours required for graduation.

**Subtotal: Minimum Elective Hours .....** 6

**TOTAL HOURS .....** 128

## Minor in Merchandising, Apparel, and Textiles

Students interested in this minor should file an application with the department in 318 Erikson Hall.

### Minor Requirements

MAT 114 Introduction to Merchandising .....	3
MAT 120 Textiles for Consumers .....	3
MAT 237 Aesthetics in Merchandising .....	3
MAT 312 Merchandising Promotion .....	3
MAT 315 Merchandise Planning and Control .....	3
MAT 350 Problem Solving in Merchandising .....	3
MAT 470 International Merchandising .....	3
<b>plus</b> three hours from one of the following:	
MAT 420 Consumer Demand in Merchandising .....	3
MAT 425 Economics of Merchandise Sourcing .....	3
MAT 515 Specification and Evaluation of Textiles and Apparel .....	3

## DEPARTMENT OF NUTRITION AND FOOD SCIENCE

The Department of Nutrition and Food Science provides sound undergraduate and graduate programs in foods and nutrition, and is concerned with research and extension services.

The department offers the Bachelor of Science in Dietetics, the Bachelor of Science in Hospitality Management, and the Bachelor of Science in Human Nutrition. A post-baccalaureate dietetic internship is also offered.

A minor in nutrition is also available.

## BACHELOR OF SCIENCE IN DIETETICS

Dietetics prepares professionals who are recognized for expertise in food and nutrition. Graduates of the Dietetics program function as entry level professionals with opportunities for practice in medical nutrition therapy and community dietetics, food systems management, and business.

Students in dietetics choose either Program Option A or B. Both options lead to the Bachelor of Science in Dietetics and fulfill the foundation knowledge and skills requirements established by the Commission on Dietetic Education (CADE) of the American Dietetic Association (ADA) which accredits the programs. Both programs are accredited by CADE.

**Option A**, designated as the Didactic Program in Dietetics (DPD), provides the Foundation Knowledge and Skills for dietetics education. Completion of the didactic curriculum provides "eligibility" to apply for a CADE accredited dietetic internship. Students must consider the highly competitive scenario in acquiring acceptance to a Dietetics Internship. Successful completion of the Dietetics Internship provides "eligibility" to sit for the national registry examination of the Commission of Dietetic Registration which grants use of the nationally recognized credential "R.D.," registered dietitian. Option A is accredited. Graduates of Option A may compete for placement in the Dietetic Internship program offered by the Department of Nutrition and Food Science or any other dietetic internship programs outside the department. A student completing the DPD must be a declared dietetics major in the Department of Nutrition and Food Science.

**Option B**, the Coordinated Program in Dietetics (CP) provides the academic curriculum and the supervised practice experience. Students who have completed the premajor requirements and are interested in the "coordinated" approach to attaining the didactic and supervised practice at UK may apply for admission to the CP in dietetics which requires two years of study combined with supervised practice. Option B, CP, is an accredited program for which admission is selective. Graduates of Option B are "eligible" to write the CDR registry examination at the first available examination date.

Admission to the University of Kentucky does not guarantee admission to the Coordinated Program (CP). A limited number of students who have completed the required preprofessional courses will be admitted on the basis of cumulative grade-point average and other criteria indicating potential for becoming a successful dietitian. Application to CP should be made by February 1 prior to potential fall admission. Program application materials should include an application form, a letter of professional goals and qualifications, three letters of reference, and a personal interview. The CP Admissions Committee considers grade-point average, letters of recommendation, letter of application, work experience, honors and extracurricular activities. The personal interview evaluates communication skills, knowledge of the profession, goals, organizational and leadership skills.

Applicants will be notified of provisional acceptance before UK's priority registration dates for the ensuing fall semester. Final acceptance depends on acceptable completion of the work in progress at the time of the application. Transfer students are urged to contact the Student Services Office, 102 Erikson Hall, for a preliminary evaluation of credits well in advance of the application date.

**Dietetics Internship Program (DI)**, an internship, is offered for students who have completed a Didactic Program in Dietetics at UK or other accredited institutions. Qualified graduates compete for a limited number of positions in the DI. For information regarding the Dietetics Internship Program, the application and screening procedures, contact:

**Director  
Dietetics Internship Program  
Dept. of Nutrition and Food Science  
204 Funkhouser Building  
University of Kentucky  
Lexington, KY 40506-0054**

**Degree Requirements**

Each student must complete the following:

1. Complete University Studies requirements.
2. Complete the School requirements listed below.
3. Complete 128 credit hours with a minimum grade-point average of 2.0.
4. Complete the required curriculum in the major program.

**School Requirements**

HES 100 An Introduction to Professions in Human Environmental Sciences .....	1
HES 400 Concepts in Human Environmental Sciences: Integration and Application .....	2
One course in Human Environmental Sciences, outside the student's major prefix .....	3
<b>Subtotal: School Required Hours .....</b>	<b>6</b>

**University Studies Requirements**

See "University Studies Program" on pages 71-75 for the complete University Studies requirements. Students should work closely with their advisor to complete the University Studies Program requirements.

**Progression Requirements**

Students must attain a grade-point average of **2.4** or above to progress into course work designated as major requirements. In addition, students must achieve a grade of **C** or better in all course work designated as major requirements.

Students must complete the following requirements:

<b>Premajor Requirements</b>	<b>Hours</b>
BIO 152 Principles of Biology II .....	3
BIO 208 Principles of Microbiology .....	3
CHE 105 General College Chemistry I .....	3
CHE 107 General College Chemistry II .....	3
CHE 115 General Chemistry Laboratory .....	3

CHE 230 Organic Chemistry I <b>or</b>	
CHE 236 Survey of Organic Chemistry .....	3
COM 181 Basic Public Speaking <b>or</b>	
COM 252 Introduction to Interpersonal Communication <b>or</b>	
COM 287 Persuasive Speaking .....	3
ECO 201 Principles of Economics I .....	3
NFS 201 Introduction to the Dietetics Profession .....	1
NFS 204 Principles of Food Preparation .....	3
NFS 212 Introductory Nutrition .....	3
NFS 241 Food Service Sanitation .....	1
PGY 206 Elementary Physiology .....	3
PSY 100 Introduction to Psychology .....	4
SOC 101 Introductory Sociology .....	3
STA 200 Statistics: A Force in Human Judgment .....	3
<b>Subtotal: Premajor Hours .....</b>	<b>45</b>

**Major Requirements** **Hours**

Prior to beginning the major requirements, students should register a choice of Option A or Option B with the Office of Student Services, 103 Erikson Hall.

NFS 301 Dietetics Practice .....	2
NFS 304 Experimental Foods .....	3
NFS 311 Nutritional Biochemistry .....	3
NFS 312 Nutrition and Wellness in the Life Cycle .....	3
NFS 314 Dietetics: Counseling and Communication .....	3
NFS 340 Institutional Purchasing .....	3
NFS 342 Quantity Food Production .....	4
ACC 201 Financial Accounting I .....	3
NFS 346 Human Resources Management for the Food and Hospitality Industries <b>or</b>	
MGT 301 Business Management .....	3
NFS 403 Community Nutrition and Wellness .....	3
NFS 408G Seminar in Food and Nutrition .....	1
NFS 510 Advanced Nutrition .....	3
NFS 511 Therapeutic Nutrition .....	4
NFS 513 Advanced Therapeutic Nutrition .....	2
<b>Subtotal: Major Hours .....</b>	<b>40</b>

**Option Requirements**

One option must be completed concurrently with the major requirements stated above.

**Option A – Didactic Program in Dietetics (DPD)**

NFS 480 Dietetics Pre-Professional Practice .....	1-6
<b>Subtotal: Option A .....</b>	<b>1-6</b>

**Option B – Coordinated Program in Dietetics (CP)**

Option B is a selective admission program. See statement above regarding admission procedures and criteria.

NFS 800 Nutrition in the Life Cycle: Practicum* .....	1
(co-req: NFS 312)	
NFS 808 Community Nutrition: Practicum* .....	2
(co-req: NFS 403)	
NFS 810 Therapeutic Nutrition: Practicum* .....	5
NFS 812 Food Service Systems: Practicum* .....	5
NFS 814 Advanced Food Systems Practicum* .....	3
NFS 816 Advanced Therapeutic Nutrition* .....	3
NFS 818 Evaluation of Dietetic Practices* .....	2
*800-level course requires admission to CP.	
<b>Subtotal: Option B .....</b>	<b>21</b>

**Electives**

Electives should be selected by the student to lead to the minimum total of 128 hours required for graduation.

<b>Subtotal: Minimum Elective Hours .....</b>	<b>1-15</b>
<b>TOTAL HOURS .....</b>	<b>128</b>

Requests for applications or further information may be directed to:

**Director, Coordinated Program  
Department of Nutrition  
and Food Science  
204 Funkhouser Building  
University of Kentucky  
Lexington, KY 40506-0054**

**BACHELOR OF SCIENCE IN  
HOSPITALITY MANAGEMENT**

In the Hospitality Management and Tourism program option in Nutrition and Food Science, which leads to the B.S. in Hospitality Management, students acquire the specialized knowledge needed for careers in the hospitality industry. They also receive training in the basic functions, objectives, and techniques of management. The student is prepared for managerial positions in hotels, restaurants, non-commercial food service and tourism areas, as well as positions as purchasing agents, food service equipment specialists, food service planning specialists, and other careers.

**Entrance Requirement**

The minimum grade-point average for entrance of all students into the Hospitality Management and Tourism program is **2.30**.

**Progression Requirement**

In addition, students must have completed the following premajor courses with a grade of **C** or better in order to progress to courses which are major requirements: CS 101, ACC 201, ACC 202, ECO 201 (fulfills one-half the University Studies social sciences requirement), ECO 202, HMT 120, HMT 210, HMT 270, HMT 208 or NFS 204, and NFS 241.

**Graduation Requirement**

Students must fulfill all prerequisites and achieve a grade of **C** or better in all NFS and HMT courses which are major requirements.

Each student must complete the following:

1. Complete University Studies requirements.
2. Complete the School requirements listed below.
3. Complete 128 credit hours with a minimum grade-point average of 2.0.
4. Complete the required curriculum in the major program.

**School Requirements**

HES 100 An Introduction to Professions in Human Environmental Sciences .....	1
HES 400 Concepts in Human Environmental Sciences: Integration and Application .....	2
One course in Human Environmental Sciences, outside the student's major prefix .....	3
<b>Subtotal: School Required Hours .....</b>	<b>6</b>

**University Studies Requirements Hours**  
See “University Studies Program” on pages 71-75 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

**Math**

MA 123 Elementary Calculus and Its Applications ..... 3

**Social Sciences**

ECO 201 Principles of Economics I ..... 3

plus one other course from University Studies

Program social sciences list ..... 3

**Premajor Requirements Hours**

Two semesters of a single foreign language ..... 6-8

**Diversity Courses** (beyond USP cross-cultural)

ANT 160 Cultural Diversity in the Modern World

plus one of the following courses:

ANT 220 Introduction to Cultural Anthropology

ANT 324 Contemporary Latin American Cultures

ANT 327 Culture and Societies of India

AAS 200 Introduction to African-American Studies

WS 200 Introduction to Women’s Studies  
in the Social Sciences ..... 6

CS 101 Introduction to Computing I ..... 3

ACC 201 Financial Accounting I ..... 3

ACC 202 Managerial Uses of  
Accounting Information ..... 3

ECO 201 Principles of Economics I ..... 3

ECO 202 Principles of Economics II ..... 3

HMT 120 Introduction to Hospitality  
Management and Tourism ..... 3

HMT 210 Hotel Rooms Division Management ..... 3

HMT 270 Principles of Travel and Tourism ..... 3

HMT 208 Introduction to Food and Beverage  
or

NFS 204 Principles of Food Preparation ..... 3

MA 123 Elementary Calculus and Its Applications  
(prerequisite for STA 291) ..... 3

STA 291 Statistical Method ..... 3

Advanced writing course (200 level or above) ..... 3

NFS 241 Food Service Sanitation ..... 1

**Subtotal: Premajor Hours ..... 49-51****Major Requirements Hours****Required:**

NFS 342 Quantity Food Production ..... 4

HMT 345 Information Technology  
in the Hospitality Industry ..... 3

HMT 350 Hospitality Managerial Accounting ..... 3

HMT 499 Hospitality and Tourism  
Senior Field Experience ..... 3

FIN 300 Corporation Finance ..... 3

MGT 301 Business Management ..... 3

MKT 300 Marketing Management ..... 3

**Subtotal: Major Hours ..... 22****Plus** at least 15 hours selected from the following courses.  
Only three hours of HMT 395 may count for this requirement:

NFS 340 Institutional Purchasing ..... 3

NFS 346 Human Resources Management  
for the Food and Hospitality Industries ..... 3

HMT 320 Hospitality and Tourism Marketing ..... 3

HMT 330 Meetings and Convention Management ..... 3

HMT 460 Advanced Seminar in  
Lodging and Tourism ..... 3

HMT 470 Hospitality and Tourism Law and Ethics ..... 3

HMT 480 Trends Analysis for the  
Hospitality Industry ..... 3HMT 488 Advanced Food Service  
Management Seminar ..... 3HMT 359 Hospitality and Tourism Special Topics:  
(subtitle required) ..... 1-3  
HMT 395 Hospitality and Tourism  
Independent Study ..... 1-3  
**Subtotal: Major Selection ..... 15****Electives**

Electives should be selected by the student to lead to the minimum total of 128 hours required for graduation.

**Subtotal: Minimum Elective Hours ..... 4****TOTAL HOURS: ..... 128****BACHELOR OF SCIENCE IN  
HUMAN NUTRITION****with a major in Human Nutrition**

The Bachelor of Science in Human Nutrition offers appropriate preparation for further study in nutritional sciences and health-related sciences, particularly public health, preventive medicine, and nutrition research.

Each student must complete the following:

1. Complete University Studies requirements.
2. Complete the School requirements listed below.
3. Complete 128 credit hours with a minimum grade-point average of 2.0.
4. Complete the required curriculum in the major program.

**School Requirements**HES 100 An Introduction to Professions in  
Human Environmental Sciences ..... 1HES 400 Concepts in Human Environmental  
Sciences: Integration and Application ..... 2One course in Human Environmental Sciences,  
outside the student’s major prefix ..... 3**Subtotal: School Required Hours ..... 6****University Studies Requirements**

See “University Studies Program” on pages 71-75 for the complete University Studies requirements. Students should work closely with their advisor to complete the University Studies Program requirements.

**Premajor Requirements Hours**

\*PSY 100 Introduction to Psychology ..... 4

\*MA 113 Calculus I or  
MA 123 Elementary Calculus and Its Applications ... 3-4

\*CHE 105 General College Chemistry I ..... 3

\*CHE 107 General College Chemistry II ..... 3

\*CHE 115 General Chemistry Laboratory ..... 3

CHE 230 Organic Chemistry I ..... 3

CHE 231 Organic Chemistry Laboratory I ..... 2

CHE 232 Organic Chemistry II ..... 3

CHE 233 Organic Chemistry Laboratory II ..... 2

STA 291 Statistical Method ..... 3

\*BIO 150 Principles of Biology I ..... 3

\*BIO 151 Principles of Biology Laboratory I ..... 2

\*BIO 152 Principles of Biology II ..... 3

\*BIO 153 Principles of Biology Laboratory II ..... 2

\*COM 181 Basic Public Speaking  
or

COM 287 Persuasive Speaking ..... 3

PGY 206 Elementary Physiology ..... 3

ANA 209 Principles of Human Anatomy ..... 3

\*These courses may also be used to fulfill University Studies requirements.

**Subtotal: Premajor Hours ..... 48****Major Requirements Hours**

NFS 204 Principles of Food Preparation ..... 3

NFS 212 Introductory Nutrition ..... 3

NFS 240 Nutrition and Physical Fitness ..... 3

NFS 241 Food Service Sanitation ..... 1

NFS 311 Nutritional Biochemistry ..... 3

NFS 312 Nutrition and Wellness in the Life Cycle ..... 3

NFS 304 Experimental Foods

or

FSC 434G Food Chemistry ..... 3-4

NFS 403 Community Nutrition and Wellness ..... 3

NFS 408G Seminar in Food and Nutrition ..... 1

NFS 510 Advanced Nutrition ..... 3

NFS 516 Maternal and Child Nutrition ..... 3

NFS 591 Special Problems in Food and Nutrition\* ..... 6

\*Human Nutrition majors must complete six hours in NFS 591. Minimum credit hours per enrollment is three per academic session. Students must attain junior classification to qualify for enrollment.

**Subtotal: Major Hours ..... 35****Electives**

Electives should be selected by the student to complete the minimum total of 128 hours required for graduation.

**Subtotal: Minimum Elective Hours ..... 14-15****TOTAL HOURS: ..... 128****Minor in Nutrition****NOTE:** At the time of publication, the minor in nutrition was undergoing revision. Interested students should contact the Department of Nutrition and Food Science for more information.

Any student wishing to minor in nutrition should file an application with and be interviewed by the chairperson of the Department of Nutrition and Food Science prior to entering the program. After the interview, the student should provide his or her college dean with a copy of the minor program requirement sheet.

**Premajor Requirements Hours**

BIO 152 Principles of Biology II ..... 3

CHE 105 General College Chemistry I ..... 3

CHE 107 General College Chemistry II ..... 3

CHE 236 Survey of Organic Chemistry ..... 3

PGY 206 Elementary Physiology (or equivalent) ..... 3

**Minor Requirements**

NFS 212 Introductory Nutrition ..... 3

NFS 311 Nutritional Biochemistry ..... 3

NFS 312 Nutrition and Wellness in the Life Cycle ..... 3

NFS 510 Advanced Nutrition ..... 3

**Minor Electives**

A minimum of three hours to be chosen from:

NFS 511 Therapeutic Nutrition ..... 4

NFS 516 Maternal and Child Nutrition ..... 3

NFS 403 Community Nutrition and Wellness ..... 3

NFS 408G Seminar in Food and Nutrition\* ..... 1

\*May be repeated to a maximum of 3 hours.