

# 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 98.

## 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 Office of Undergraduate Admissions.

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 accredited by the Institute of Food Technologists.

*“The College of Agriculture has truly become my second family. The faculty and staff genuinely care about the success of their students and make an effort to get to know them beyond what might be seen in the classroom. They are always available to help whenever needed. I have had amazing internship and job opportunities because of the connections I have made in my major, in the college, and in the student organizations within the College of Agriculture. The wide variety of majors in the college makes it easy to find your place and gives an opportunity to make friends of all different backgrounds. The College of Agriculture is what attracted me to the University of Kentucky during my college search and I know I couldn’t have made a better choice! Thanks to the amazing people in this college, my education has been superior, inside and out of the classroom, and I feel I am prepared for a successful future.”*

– Kelly A. Davidson  
Agricultural Economics  
Class of 2008

*“During my time here at the University of Kentucky, I have been a part of many different groups of people that I consider families. I have a family among fellow Merchandising, Apparel, and Textile majors and my professors. I have a family among the College of Agriculture Ambassadors and the MAT Club, as well. The people that I have met and grown to know in the past three years are the faculty, staff, and students that make being in the College of Agriculture and School of Human Environmental Sciences the best collegiate experience anyone could ask for. I have been blessed with many networking opportunities and learning experiences that students in other majors do not have the access to – trips to New York’s Fashion Week through MAT 480 class, a trip to Atlanta’s AmericasMart through the MAT Club, the opportunity to network with other colleges at the National Agriculture Ambassador Convention in North Carolina, just to name a few. The College of Agriculture and School of Human Environmental Sciences pushed me to develop into the mature, responsible, determined leader that I am today and I wouldn’t change a second of those experiences. The college truly is one big, inspirational family of which I would gladly encourage anyone to become a member.”*

– Cara Drury  
Senior, Merchandising, Apparel and Textiles

Accreditations for the School of Human Environmental Sciences are listed on page 98 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 Animal Sciences
- Bachelor of Science in Career and Technical Education

## 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 Community Communications and Leadership Development

- 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 (premajor, 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 community communications and leadership development, 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 98 of this Bulletin for the list of degrees offered through the School of Human Environmental Sciences.

\*At the time of publication, the minor in rural sociology was in the process of being suspended. Consult your advisor for more information.

### Undeclared Majors

Students who are interested in the College of Agriculture or School of Human Environmental Sciences but are undecided 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 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 is maintained in the Office of Academic Programs, N6 Ag. Science Building – North, and in the Student Services Office, School of Human Environmental Sciences, 112 Erikson Hall. Students needing

assistance selecting an advisor or general information about academics may come to the Office of Academic Programs or the School of Human Environmental Sciences Student Services Office.

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

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

### 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, visit the Graduate School web site at: [www.research.uky.edu/gs/](http://www.research.uky.edu/gs/).

### 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 Academic Programs  
N6 Ag. Science Building – North  
University of Kentucky  
Lexington, KY 40546-0091  
(859) 257-3468 or (859) 257-3469**

### 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 complete 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, pre-major, 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 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 80-84 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 **and**  
MA 132 Calculus for the Life Sciences ..... 6

**or**  
MA 113 Calculus I ..... 4

#### Natural Sciences

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

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

CHE 111 Laboratory to Accompany  
General Chemistry I ..... 1

CHE 113 Laboratory to Accompany  
General Chemistry II ..... 2

#### USPElectives

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 111 Laboratory to Accompany  
General Chemistry I ..... 1

\*CHE 113 Laboratory to Accompany  
General Chemistry II ..... 2

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 **and**

\*MA 132 Calculus for the Life Sciences ..... 6

**or**

\*MA 113 Calculus I ..... 4

PHY 211 General Physics ..... 5

PHY 213 General Physics ..... 5  
(or equivalent with laboratory)

**Subtotal: Premajor Hours ..... 45-46**

### 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

**or**  
BCH 501 General Biochemistry **and**  
BCH 502 General Biochemistry ..... 6

#### Genetics

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

**or**  
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

#### Advanced Practical Skills

ABT 495 Experimental Methods in Biotechnology ... 4

**or**  
BIO 510 Recombinant DNA Techniques Laboratory . 4

#### Independent Study

ABT 395 Independent Study in Biotechnology ..... 3

**or**  
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**

\*\*The combination of ABT 201 and ABT 301 may be used to satisfy the University Writing Requirement.

### Specialty Support Hours

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 ..... 4

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. The plan must be signed by your advisor and returned to the Office of 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 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

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

### University Studies Requirements Hours

See “University Studies Program” on pages 80-84 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

#### Social Sciences

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.

#### Premajor Requirements Hours

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

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

\*MA 113 Calculus I ..... 4

OR

\*MA 123 Elementary Calculus and Its Applications

and

MA 162 Finite Mathematics and Its Applications ..... 6

STA 291 Statistical Method ..... 3

ECO 391 Economic and Business Statistics ..... 3

\*\*ENG 203 Business Writing ..... 3

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

\*\*May be used to satisfy the University Writing Requirement.

#### Major Requirements Hours

**Note:** 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

**plus** 12 additional hours in the major ..... 12

**Subtotal: Major Hours ..... 25**

### Specialty Support

ACC 201 Financial Accounting I ..... 3

ACC 202 Managerial Uses of

Accounting Information ..... 3

**plus** 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

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

### Electives

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

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

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

### 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.

#### Premajor Requirements Hours

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

OR

\*MA 123 Elementary Calculus and Its Applications

and

MA 162 Finite Mathematics and Its Applications ..... 6

STA 291 Statistical Method ..... 3

\*\*ENG 203 Business Writing ..... 3

**Subtotal: Premajor Hours ..... 22-24**

\*\*May be used to satisfy the University Writing Requirement.

#### Major Requirements Hours

**Note:** 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

**plus** 12 additional hours in the major ..... 12

**Subtotal: Major Hours ..... 25**

#### Specialty Support Hours

ACC 201 Financial Accounting I ..... 3

ACC 202 Managerial Uses of

Accounting Information ..... 3

**plus** 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

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

### Electives

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

**Subtotal: Electives ..... minimum of 13**

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

## BACHELOR OF SCIENCE IN ANIMAL SCIENCES

Animals have many important roles in human societies including the provision of food and fiber, draft power, recreational and athletic activities, and companionship. In addition, animals and their interactions with humans have environmental consequences. The processing, preservation, and quality of animal-derived foods are of significant economic and safety importance. Animal Sciences involves studying and applying the basic principles of nutrition, reproduction, and genetics to the production and management of animals including horses, dairy and beef cattle, sheep, swine, poultry, and other domesticated species. Additional course work provides information on the production and handling of animal-derived foods.

No one program fits all Animal Sciences students. Students come from varied backgrounds and their 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 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.

As an Animal Sciences major, students have the opportunity to pursue specific interests by selecting one of three study options: Animal Industry, Food Industry or Pre-Professional. The Animal Industry option is for those students interested in animal production and management and can specialize in one of three areas: livestock, equine, or dairy. The Food Industry option is designed to provide an emphasis on aspects of food processing, chemistry, and safety. The Pre-Professional option is a rigorous study program for students with interests in veterinary sciences, human medicine, and graduate research. Students must consult the pre-professional advisor or graduate school advisor of the university to which they intend on applying for additional or specific requirements.

### Career Opportunities

To keep pace with the food, fiber, and recreation requirements of a growing world population, Animal Sciences graduates are needed in the livestock industry and closely related fields. The Animal Sciences major offers considerable flexibility in fulfilling specific career objectives, whether you are interested in working directly with livestock or indirectly in closely related areas such as agribusiness, research, government, or education.

### 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. In addition to University Studies requirements, students must complete college, departmental and specialty support requirements.

### 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 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 80-84 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

### USPElectives

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

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

### Premajor Requirements Hours

\*MA 123 Elementary Calculus

and Its Applications ..... 3

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 111 Laboratory to Accompany

General Chemistry I ..... 1

\*CHE 113 Laboratory to Accompany

General Chemistry II ..... 2

\*\*ENG 203 Business Writing ..... 3

**Subtotal: Premajor Hours ..... 21-22**

\*\*Satisfies the Graduation Writing Requirement.

### Major Requirements Hours

ASC 101 Domestic Animal Biology ..... 3

ASC 102 Applications of Animal Science ..... 3

ASC 205 Livestock, People

and Their Interactions ..... 1

ASC 325 Animal Physiology ..... 3

ASC 362 Animal Genetics ..... 4

ASC 364 Reproductive Physiology

of Farm Animals ..... 4

ASC 378 Animal Nutrition and Feeding ..... 4

ASC 470 Capstone for Animal Agriculture ..... 3

plus at least **three** of the following courses:

ASC 340 Poultry Production ..... 2

ASC 404G Sheep Science ..... 4

ASC 406 Beef Cattle Science ..... 4

ASC 408G Swine Production ..... 2

ASC 410G Equine Science ..... 3

ASC 420G Dairy Cattle Science ..... 3

**Subtotal: Major Hours ..... 32-36**

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

### Option A: Animal Industry

Students fulfilling the Major Requirements are eligible for the Animal Industry Option by taking certain required Specialty Support Courses (see below). In addition, students with more specific interests may, but are not required to, choose from three specializations available within this Option.

### No Specialization

(required Specialty Support only; see below) ..... 0

### Livestock Specialization

ASC 300 Meat Science ..... 4

and at least **two** from:

ASC 340 Poultry Production ..... 2

ASC 404G Sheep Science ..... 4

ASC 406 Beef Cattle Science ..... 4

ASC 408G Swine Production ..... 2

### Equine Specialization

ASC 310 Equine Anatomy and Conformation ..... 2

ASC 320 Equine Management ..... 3

ASC 410G Equine Science ..... 3

### Dairy Specialization

ASC 420G Dairy Cattle Science ..... 3

ASC 564 Milk Secretion ..... 3

**Subtotal: Option A Hours ..... 0-5**

### Option B: Food Industry

Students fulfilling the Major Requirements are eligible for the Food Industry Option by taking certain required Specialty Support Courses (see below) and:

ASC 300 Meat Science ..... 4

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

**Subtotal: Option B Hours ..... 7**

### Option C: Pre-Professional

Students fulfilling the Major Requirements are eligible for the Pre-Professional Option by taking certain Specialty Support Courses (see below). Students must consult the pre-professional advisor or graduate school advisor of the university to which they intend on applying for additional or specific requirements.

### Specialty Support

#### Animal Industry Option

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, additional 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

#### Food Industry Option

CHE 230 Organic Chemistry I

or

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

FSC 304 Animal Derived Foods ..... 5

Depending on the student's area of interest and subject to the advisor's approval, additional 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 ..... 12

#### Pre-Professional Option\*

ABT/ENT 360 Genetics

or

BIO 304 Principles of Genetics ..... 3-4

CHE 230/231 Organic Chemistry

and Laboratory I ..... 5

CHE 232/233 Organic Chemistry

and Laboratory II ..... 5

PHY 211 General Physics ..... 5

PHY 213 General Physics ..... 5

\*Students must consult the pre-professional advisor or graduate school advisor of the university to which they intend on applying for additional or specific requirements.

**Subtotal: Specialty Support ..... 18-24**

### Electives

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

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

**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 CAREER AND TECHNICAL EDUCATION

The Career and Technical Education degree involves Agricultural Education and Family and Consumer Sciences Education. Students take courses in technical education and professional content.

Graduates of this degree pursue careers in both formal and informal education of agriculture or family and consumer sciences. Formal education opportunities include teaching in the middle school or high school classroom. Informal education opportunities include working in Extension and the public or private sectors of industry.

Students choose one of two options – Option A: Agricultural Education; or Option B: Family and Consumer Sciences Education. In addition to receiving the degree, graduates also attain Rank III teaching certification in Agricultural Education (Option A) or a Rank III teaching certification in Family and Consumer Sciences Education (Option B).

Both options lead to the Bachelor of Science in Career and Technical Education.

### Teacher Certification

Besides receiving the B.S. in Career and Technical Education, students completing the requirements obtain a letter of endorsement to teach agricultural or family and consumer sciences education.

Requirements for teacher certification are as follows:

You must be admitted to the teacher education program (TEP) after you have completed, or complete during the semester in which you apply, 60 semester hours of course work and AED/FCS 110 Introduction to Career and Technical Education and have at least a 2.5 grade-point standing (on a 4.0 scale). See a full description of “Admission, Retention, and Exit from Teacher Education Programs” on page 172 of this Bulletin.

Applicants are evaluated on an interview, recommendations, scholastic achievement, demonstrated skills, and professional commitment and goals. A student’s progress is continuously monitored, assessed, and reviewed throughout the teacher education program as described in the Teacher Education Programs section of this Bulletin. You must successfully complete assessment items and portfolio items as required. Further, you must successfully complete the Principles of Learning and Teaching Exam and a professional 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.

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

### Graduation Requirements

To earn the Bachelor of Science in Career and Technical Education, the student must have a minimum of 120 credit hours with at least a 2.5 grade-point average (required for Teacher Certification). 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 a career and technical education 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 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:

### College Required Hours

Agricultural Education option students complete the following:

GEN 100 Issues in Agriculture ..... 3

Family and Consumer Sciences Education option students complete the following:

HES 100 An Introduction to Professions in

Human Environmental Sciences ..... 1

HES 400 Concepts in Human Environmental

Sciences: Integration and Application ..... 2

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

### University Studies Requirements

See “University Studies Program” on pages 80-84 for the complete University Studies requirements. Students should work closely with their advisor to complete the University Studies Program requirements.

### Major Requirements Hours

AED/FCS 110 Introduction to Career and

Technical Education ..... 3

AED/FCS 362 Field Experiences in Career and

Technical Education ..... 3

AED/FCS 371 Advising a Career and Technical

Student Organization ..... 3

AED/FCS 435 Designing Curriculum and

Assessment in Career and Technical Education ..... 3

AED/FCS 580 Foundations of Teaching Career

and Technical Education ..... 3

AED/FCS 586 Methods of Teaching Career and

Technical Education ..... 3

AED/FCS 590 Teaching Experience in Career and

Technical Education ..... 12

EDP 203 Teaching Exceptional Learners in

Classrooms ..... 3

FAM 357 Contemporary Adolescence ..... 3

### Oral Communication for Family and Consumer Sciences Education Option

COM 181 Basic Public Speaking

or

COM 252 Introduction to

Interpersonal Communication ..... 3

**Subtotal: Major-Required Hours ..... 36-39**

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

## OPTIONS

### Option A: Agricultural Education

#### Option Requirements Hours

\*AEC 302 Agricultural Management Principles ..... 4

AEN 252 Farm Shop ..... 3

ASC 101 Domestic Animal Biology ..... 3

ASC 102 Applications of Animal Science ..... 3

CLD 102 The Dynamics of Rural Social Life

(or other Social Science elective) ..... 3

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

PLS 210 The Life Processes of Plants

or

PLS 386 Plant Production Systems ..... 3-4

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

**Subtotal: Option A Hours ..... 26-27**

\*ECO 201 is a prerequisite for AEC 302.

\*\*CHE 105 is a prerequisite for PLS 366.

### Specialty Support Requirements

Students must complete one additional agricultural economics course, one additional animal sciences course, one additional agricultural engineering course, two additional plant and soil sciences courses, and three additional courses in the College of Agriculture in consultation with your advisor.

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

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

### Option B: Family and Consumer Sciences Education

#### Option Requirements Hours

FAM 251 Personal and Family Finance ..... 3

\*FAM 252 Introduction to Family Science ..... 3

\*FAM 253 Human Sexuality: Development,

Behavior and Attitudes ..... 3

FAM 255 Child Development ..... 3

FAM 256 Guidance Strategies for

Working with Young Children ..... 3

FCS 350 Design Issues for Family

and Consumer Sciences Educators ..... 3

MAT 120 Textiles for Consumers ..... 3

NFS 101 Human Nutrition and Wellness ..... 3

NFS 241 Food Service Sanitation ..... 1

NFS 302 Principles of Food Preparation ..... 3

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

**Subtotal: Option B Hours ..... 32**

\*Course can also be used to satisfy University Studies Program requirements.

### Specialty Support Requirements

In consultation with their advisor, select **five** courses from the following list:

CLD 401 Principles of Cooperative Extension ..... 3

FAM 360 Introduction to Family Intervention:

Working with Families and Individuals ..... 3

FAM 473 Family Life Education ..... 3

FAM 544 Cultural Diversity in American

Children and Families ..... 3

FAM 553 Parent-Child Relationships

Across the Lifecycle ..... 3

FAM 554 Working with Parents ..... 3

FAM 563 Families, Legislation and Public Policy .... 3

**Subtotal: Option B Specialty Support .... 15****Electives**

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

..... minimum of 3

**Total Minimum Hours for Program ..... 120**


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## BACHELOR OF SCIENCE IN COMMUNITY COMMUNICATIONS AND LEADERSHIP DEVELOPMENT

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Community Communications and Leadership Development is an interdisciplinary social science major. It provides students with the knowledge and skills to integrate communications, sociology, journalism, and community development theories and apply them to real-world situations involving local communities and agricultural organizations.

The major focuses on such skills as written and oral communication; strategic problem solving; critical thinking; understanding of group, organizational, and community dynamics; and ethical decision making.

The **agricultural communications option** is a writing-based curriculum that prepares graduates for careers as communications professionals with agricultural and community-based media outlets and organizations. The **public service and leadership option** prepares graduates for leadership positions in public and private organizations or government agencies. Students in both options are encouraged to participate in internship opportunities.

**Graduation Requirements**

To earn the Bachelor of Science in Community Communications and Leadership Development, 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 a community communications and leadership development 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:

**College Required Hours**

GEN 100 Issues in Agriculture ..... 3

**Subtotal: College Required Hours ..... 3****University Studies Requirements**

See “University Studies Program” on pages 80-84 for the complete University Studies requirements. Students should work closely with their advisor to complete the University Studies Program requirements.

**Major Requirements** **Hours**

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

\*\*CLD 250 Reading Critically and Writing Well:

Community Communications

and Leadership Development ..... 3

CLD 302 Leadership Studies ..... 3

CLD 320 Survey of Agriculture and

Consumer Media ..... 3

CLD 340 Community Interaction ..... 3

CLD 362 Field Experience in Community

Communications and Leadership Development .... 3

CLD 405 Analytic Methods for Community

Communications and Leadership Development ..... 3

CLD 420 Sociology of Communities ..... 3

CLD 490 Seminar in Community Communications

and Leadership Development ..... 3

**Subtotal: Major Requirements ..... 27**

\*Course can also be used to satisfy University Studies Program requirements.

\*\*May be used to satisfy Graduation Writing Requirement.

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

**OPTIONS****Option A: Agricultural Communications**

JOU 101 Introduction to Journalism ..... 3

CLD 204 Writing for the Mass Media ..... 3

CLD 301 News Reporting ..... 3

CLD 400 Agricultural Communications Campaigns .. 3

CLD 440 Community Processes

and Communication ..... 3

CLD 485 Community Journalism ..... 3

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

**Subtotal: Option A Hours ..... 21**

\*Course can also be used to satisfy University Studies Program requirements.

**Specialty Support Requirements**

Depending on the student’s area of interest and subject to his/her academic advisor’s approval, he/she will complete an additional 6 hours of courses in the College of Agriculture and 12 hours in communications, journalism and related areas; students may take CLD 401 as one of these courses. The majority of these courses must be at the 300+ level.

**Subtotal: Option A Specialty Support ..... 18****Option B: Public Service and Leadership**

\*PS 101 American Government ..... 3

AEC 305 Food and Agricultural Marketing

Principles ..... 3

AEC 532 Agricultural and Food Policy ..... 3

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

Choose **one** of the following:

CLD 400 Agricultural Communications

Campaigns ..... 3

CLD 440 Community Processes and

Communication ..... 3

CLD 485 Community Journalism ..... 3

Plus 6 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: PS, ANT, COM or SOC.

**Subtotal: Option B Hours ..... 21**

\*Course can also be used to satisfy University Studies Program requirements.

**Specialty Support Requirements**

Depending on the student’s area of interest and subject to his/her academic advisor’s approval, he/she will complete an additional 6 hours of courses in the College of Agriculture and 12 hours in related areas; students may take CLD 401 as one of these courses. The majority of these courses must be at the 300+ level.

**Subtotal: Option B Specialty Support .... 18****Electives**

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

..... minimum of 15

**Total Minimum Hours for Program ..... 120**


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## BACHELOR OF SCIENCE IN FOOD SCIENCE

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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 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 80-84 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 111 Laboratory to Accompany

General Chemistry I ..... 1

CHE 113 Laboratory to Accompany

General Chemistry II ..... 2

#### Social Sciences

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

Plus one additional course ..... 3

#### USPElectives

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 401G 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 ..... 1-4

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

To earn the Bachelor of Science in Forestry, the student must complete a minimum of 133 semester hours. Eight of these hours are earned while attending a Summer Camp between the third and fourth academic years. 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 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. 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 80-84 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 111 Laboratory to Accompany

General Chemistry I ..... 1

CHE 113 Laboratory to Accompany

General Chemistry II ..... 2

#### 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

**USPElectives**

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

**Premajor Requirements****Hours**

High school trigonometry <b>or</b> 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 111 Laboratory to Accompany General Chemistry I .....	1
*CHE 113 Laboratory to Accompany General Chemistry II .....	2
PHY 151 Introduction to Physics <b>or</b> any higher numbered physics course of 3 or more credit hours ..	3
*AEC 101 The Economics of Food and Agriculture <b>or</b> *ECO 201 Principles of Economics I .....	3
*GEO 235 Environmental Management and Policy <b>or</b> one other departmentally-approved course of 3 or more credit hours .....	3
STA 291 Statistical Method .....	3

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

**Major Requirements****Hours**

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

**University Studies Requirements**

**Hours**  
See "University Studies Program" on pages 80-84 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
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**Natural Sciences**

CHE 105 General College Chemistry I .....	3
CHE 107 General College Chemistry II .....	3
CHE 111 Laboratory to Accompany General Chemistry I .....	1
CHE 113 Laboratory to Accompany General Chemistry II .....	2

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 111 Laboratory to Accompany General Chemistry I .....	1
*CHE 113 Laboratory to Accompany General Chemistry II .....	2

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

**Major Requirements**

*AEC 101 The Economics of Food and Agriculture .....	3
*CLD 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 Office of Undergraduate Admissions 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 premajor, 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 80-84 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 80-84 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 111 Laboratory to Accompany  
General Chemistry I ..... 1

CHE 113 Laboratory to Accompany  
General Chemistry II ..... 2

#### 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 111 Laboratory to Accompany  
General Chemistry I ..... 1

\*CHE 113 Laboratory to Accompany

General Chemistry II ..... 2

\*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 ..... 3

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 Techniques\*\*\* ..... 3

NRC 380 Analysis of Natural Resource Systems ..... 3

NRC 381 Natural Resource Policy Analysis ..... 3

NRC 395 Independent Study in Natural Resources†  
**or**

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 **one** 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

\*\*May be used to satisfy the University Writing Requirement.

\*\*\*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 ..... 40-41**

### 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 Animal Agriculture in the Modern World .....	3
AEC 101 The Economics of Food and Agriculture ....	3
CLD 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 382 Animal Production Principles .....	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 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 Fruit and Vegetable Production .....	4

**Plant Pathology**

PPA 400G Principles of Plant Pathology .....	3
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\*Cross-listed courses. May satisfy only one departmental requirement.

**Minor in Agricultural Economics**

<b>Preprofessional Requirement</b> 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****Prerequisites**

Note that several classes in both Group A and Group B have prerequisites beyond ASC 101. These are indicated in parenthesis following the courses below. Students taking the minor are responsible for satisfying the prerequisites.

**Minor Requirements** Hours

ASC 101 Domestic Animal Biology .....	3
ASC 102 Applications of Animal Science .....	3

Additional Course Work .....

At least **9 credit hours** must be selected from the list that follows (Groups A and B). At least one course must be selected from Group A and one course from Group B.

**Group A**

ASC 300 Meat Science .....	4
ASC 325 Animal Physiology ( <i>BIO 152 and CHE 107/113</i> ) .....	3
ASC 362 Animal Genetics .....	4
ASC 364 Reproductive Physiology of Farm Animals ( <i>CHE 230 or 236</i> ) .....	4
ASC 378 Animal Nutrition and Feeding ( <i>CHE 230 or 236</i> ) .....	4

**Group B**

ASC 340 Poultry Production .....	2
ASC 404G Sheep Science ( <i>ASC 300, 362, 364</i> ) .....	4
ASC 406 Beef Cattle Science ( <i>ASC 300, 362, 364</i> ) ....	4
ASC 408G Swine Production ( <i>ASC 378</i> ) .....	2
ASC 410G Equine Science ( <i>ASC 362, 364</i> ) .....	2
ASC 420G Dairy Cattle Science ( <i>ASC 362, 364</i> ) .....	3

**Total Hours Required** ..... 15

**Minor in Community Communications and Leadership Development**

The minor in Community Communications and Leadership Development requires 18 hours as follows:

**Minor Requirements** Hours

CLD 302 Leadership Studies .....	3
CLD 320 Survey of Agriculture and Consumer Media .....	3

Choose **two** of the following:

CLD 340 Community Interaction .....	3
CLD 405 Analytic Methods for Community Communications and Leadership Development .....	3
CLD 420 Sociology of Communities .....	3
CLD 440 Community Processes and Communication .....	3

Select **six** additional hours in CLD at the 300 level or above in consultation with your advisor.

**Minor in Entomology**

<b>Premajor Requirement</b> 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 Insects Affecting Human and Animal Health .....	3
ENT 563 Parasitology .....	4
ENT 564 Insect Taxonomy .....	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 ...	2-4

**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 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 and Feeding .....	4

**Minor in Plant and Soil Science****Premajor Requirement** Hours

CHE 105 General College Chemistry I .....	3
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**Minor Requirements**

Required: .....	18
PLS 104 Plants, Soils, and People: A Global Perspective .....	3

PLS/BIO 210 The Life Processes of Plants **or**  
 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

**NOTE:** At the time of publication, the minor in rural sociology was in the process of being suspended. Contact your advisor for more information.

#### Prerequisites

Students must complete SOC 101 or CLD 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

### Minor in Sustainable Agriculture

The minor in Sustainable Agriculture requires 21 to 23 hours as follows:

Minor Prerequisite	Hours
ECO 201 Principles of Economics I .....	3

#### Minor Requirements

Required: .....	9
SAG 101 Introduction to Sustainable Agriculture .....	3
SAG 201 Cultural Perspectives on Sustainability .....	3
SAG 397 Apprenticeship in Sustainable Agriculture .....	3

Select **one** from:

GEO 235 Environmental Management and Policy ....	3
GLY 210 Habitable Planet: Evolution of the Earth System .....	3
*PLS 366 Fundamentals of Soil Science .....	4

Select **one** from:

AEC 302 Agricultural Management Principles .....	4
AEC 305 Food and Agricultural Marketing Principles .....	3
AEC 445G Introduction to Resource and Environmental Economics .....	3

Select **one** from:

**SOC 360 Environmental Sociology .....	3
GEN 501 Agricultural and Environmental Ethics .....	3

\*Prerequisite: CHE 105.

\*\*Prerequisite: SOC 101.

## 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, except for Animal Nutrition.

### 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

**OR**

MA 113 Calculus I .....	4
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**The above courses are waived for students with a B.S. or B.A. degree.**

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 111 Laboratory to Accompany General Chemistry I .....	1
CHE 113 Laboratory to Accompany General Chemistry II .....	2
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

ASC 378 Animal Nutrition and Feeding .....	4
<b>or</b>	
ASC 380 Feeds and Feeding .....	3
Science Electives*** .....	6

Tuskegee requires ASC 378, BCH 401G (Biochemistry), 6 hours of math, and ASC 101 and ASC 102.

\*HON 101/102 can be used.

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

\*\*\*Science electives must be two of the following courses: BIO 304, BIO 350 or ASC 325, BIO 308, BIO 315, BIO 542, ASC 364, BIO 561 or BIO 563, BIO 529, Comparative Anatomy (not taught at UK).

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

All pre-veterinary students who 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 Sciences, students must have completed all University Studies courses, all college requirements and all of the required core courses and production courses required in the Animal Sciences degree program.

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: rmdwye2@email.uky.edu**  
**www.ca.uky.edu/gluck/index.htm**

## 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 Science
- Bachelor of Science in Hospitality Management
- Bachelor of Science in Human Nutrition
- Bachelor of Science in Merchandising, Apparel and Textiles

The College also offers an option in Family and Consumer Sciences Education within the B.S. in Career and Technical Education (see pages 90-91).

### Minors Offered

The following minors are available:

- Family Studies
- Merchandising, Apparel, and Textiles\*

\*At the time of publication, the minor in merchandising, apparel, and textiles was in the process of being suspended. Consult your advisor for more information.

### 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, 112 Erikson Hall, and the College of Agriculture Scholarship Office, N-6 Ag Science Building.

### 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  
 112 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 science. (The College also offers a Bachelor of Science in Career and Technical Education with an option in Family and Consumer Sciences Education; see pages 90-91.) Students in the family sciences major earn the degree

Bachelor of Science in Family Science. A minor in family studies is available.

Family science 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 certified 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.

## BACHELOR OF SCIENCE IN FAMILY SCIENCE

Each student must complete the following:

1. Complete University Studies requirements.
2. Complete the School requirements listed below.
3. Complete 120 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
NFS 101 Human Nutrition and Wellness .....	3
<b>Subtotal: School Required Hours .....</b>	<b>6</b>

### University Studies Requirements

See "University Studies Program" on pages 80-84 of this Bulletin 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 252 Introduction to Interpersonal Communication .....	3
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### Written Communication

ENG 104 Writing: An Accelerated Foundational Course .....	4
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### Natural Sciences

Two courses in BIO, CHE, or PHY .....	6
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### Graduation Writing Requirement

Choose **one** of the following:

ENG 203 Business Writing .....	3
ENG 230 Introduction to Literature .....	3
ENG 233 Literature and Identities .....	3
ENG 234 Introduction to Women's Literature .....	3

**Graduation Writing Requirement Hours .. 3**

Premajor Requirements	Hours
COM 252 Introduction to Interpersonal Communication .....	3
*PHI 120 Introductory Logic or	
PHI 332 Professional Ethics .....	3
*PSY 100 Introduction to Psychology .....	4
*STA 200 Statistics: A Force in Human Judgment .....	3
*Two courses in BIO, CHE, or PHY .....	6
*SOC 101 Introduction to Sociology .....	3
ECO 201 Principles of Economics I .....	3
*These courses may also be used to fulfill University Studies requirements.	
<b>Subtotal: Premajor Hours .....</b>	<b>25</b>

### Major Requirements

FAM 251 Personal and Family Finance .....	3
*FAM 252 Introduction to Family Science .....	3
*FAM 253 Human Sexuality: Development, Behavior and Attitudes .....	3
FAM 255 Child Development or	
PSY 223 Developmental Psychology .....	3
FAM 360 Introduction to Family Intervention: Working With Families and Individuals .....	3
FAM 390 Introduction to Research in Family Studies .....	3
FAM 402 Issues in Family Resource Management .....	3
FAM 499 Internship in Family Science .....	3
FAM 544 Cultural Diversity in American Children and Families or	
FAM 354 The Family in Cross-Cultural Perspective .....	3
*These courses may also be used to fulfill University Studies requirements.	
<b>Subtotal: Major Hours .....</b>	<b>27</b>

### Professional Support

In addition to the major requirements, each student in consultation with his or her academic advisor will select a minimum of 18-21 credits in course work in a university-recognized minor. At least 12 of these hours must be at the 300 level or above. A minor is a structured group of courses that leads to considerable knowledge and understanding of a subject. Suggested minors include Psychology, Sociology, Gender and Women's Studies, Anthropology, Economics, Political Science, Appalachian Studies, Business, Communication, Health Promotion, Human Nutrition, Community and Leadership Development, etc.

Students must contact the department responsible for the minor program for guidance and advising.

<b>Subtotal: Professional Support Hours .....</b>	<b>18-21</b>
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### Electives

Electives at the 300 level or above to reach 120 credits including sufficient credits to reach 45 hours at the 300 level or above. Work with an advisor to select additional FAM classes if available.

<b>Subtotal: Electives .....</b>	<b>17-20</b>
<b>TOTAL HOURS: .....</b>	<b>120</b>

## Option in Family and Consumer Sciences Education

### Within B.S. in Career and Technical Education

The Family and Consumer Sciences Education option of the Bachelor of Science in Career and Technical Education prepares graduates for careers in teaching, extension services, adult education and related activities for consumer and family science programs. Professional education courses in teaching methods and supervised teaching in family and consumer sciences classes at the middle school and high school levels are included in the option. See further information under Career and Technical Education on pages 90-91.

### 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.

## 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 in-

dustry 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 merchandising, 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 120 credit hours with a minimum grade-point average of 2.0.
4. Complete the required curriculum in the major program.

\*For the Inference section under Inference and Communicative Skills, majors select Philosophy (PHI 120 or PHI 320) and Statistics (STA 200).

### 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

See "University Studies Program" on pages 80-84 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.

### Program Entrance Requirements

The minimum grade-point average for entrance of all students into the Merchandising, Apparel and Textiles program is 2.0.

### Progression Requirements

Students must attain a C or better in all premajor courses required for progression into course work designated as major requirements. This includes: Writing course (200 level), COM 181, FAM 250, PSY 100, SOC 101, ECO 201, ECO 202, STA 200 or STA 291.

### Graduation Requirements

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

Premajor Requirements	Hours
Writing course (200 level or above) .....	3
*COM 181 Basic Public Speaking .....	3
FAM 250 Consumer Issues .....	3
*PSY 100 Introduction to Psychology .....	4
*SOC 101 Introduction to Sociology .....	3
*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>
<b>Major Requirements</b>	
MAT 114 Introduction to Merchandising .....	3
MAT 120 Textiles for Consumers .....	3
MAT 237 Aesthetic Experience in Retail .....	3
MAT 247 Dress and Culture .....	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 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
Choose 3 credits from:	
MAT 480 Merchandising, Apparel and Textiles Study Tour .....	3
DMT 520 Textiles for Interiors .....	3
MAT 522 History of Textiles .....	3
MAT 533 History of Costume .....	3
MAT 547 Social and Psychological Aspects of Apparel .....	3
MAT 570 Electronic Retailing (E-Tailing) .....	3
MAT 559 Special Topic in Merchandising, Apparel and Textiles (Subtitle required) .....	3
MAT 395 Independent Study in Merchandising, Apparel and Textiles .....	3
MAT 595 Independent Study in Merchandising, Apparel and Textiles .....	3
MAT 359 Special Topics in Merchandising, Apparel and Textiles (Subtitle required) .....	3
<b>Subtotal: Major Hours</b> .....	<b>40</b>
<b>Professional Support (21 hours)</b>	
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.	
<b>Subtotal: Professional Support</b> .....	<b>21</b>
<b>Electives</b>	
Electives should be selected to complete the minimum total of 120 hours required for graduation.	
<b>Subtotal: Minimum Elective Hours</b> .....	<b>6</b>
<b>TOTAL HOURS</b> .....	<b>120</b>

### Minor in Merchandising, Apparel, and Textiles

**NOTE:** At the time of publication, the minor in merchandising, apparel, and textiles was in the process of being suspended. Consult your advisor for more information.

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 Aesthetic Experience in Retail .....	3
MAT 315 Merchandise Planning and Control .....	3
MAT 350 Problem Solving in Merchandising .....	3
MAT 470 International Merchandising .....	3

plus three hours from one of the following:

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.

### BACHELOR OF SCIENCE IN DIETETICS with a major in Nutrition and Food Science

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 Dietetics 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, 112 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**  
**203 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 80-84 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 111 Laboratory to Accompany General Chemistry I .....	1
CHE 113 Laboratory to Accompany General Chemistry II .....	2
CHE 230 Organic Chemistry I <b>or</b>	
CHE 236 Survey of Organic Chemistry .....	3
CLA 131 Medical Terminology from Greek and Latin .....	3
ECO 201 Principles of Economics I .....	3
NFS 212 Introductory Nutrition .....	3
NFS 241 Food Service Sanitation .....	1
NFS 302 Principles of Food Preparation .....	3
PGY 206 Elementary Physiology .....	3
PSY 100 Introduction to Psychology .....	4
SOC 101 Introduction to Sociology .....	3
STA 200 Statistics: A Force in Human Judgment .....	3
<b>Subtotal: Premajor Hours .....</b>	<b>44</b>

**Major Requirements**

Prior to beginning the major requirements, students should register a choice of Option A or Option B with the Office of Student Services, 112 Erikson Hall.

ACC 201 Financial Accounting I .....	3
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 340 Institutional Purchasing .....	3
NFS 342 Quantity Food Production .....	4
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 514 Dietetics: Counseling and Communication Theories and Applications .....	3
NFS 515 Medical Nutrition Therapy .....	5
<b>Subtotal: Major Hours .....</b>	<b>39</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 requires the student to apply to admission to the CP after completion of premajor requirements. See Bulletin for details.

NFS 800 Nutrition in the Life Cycle: Practicum* .....	1
(co-req: NFS 312)	
NFS 808 Community Nutrition II: Supervised Practice* .....	2
(co-req: NFS 403)	
NFS 810 Medical Nutrition Therapy I: Supervised Practice* .....	5
NFS 812 Food Service Systems Management: Supervised Practice* .....	5
NFS 814 Food Service Systems Management II: Supervised Practice* .....	3
NFS 816 Medical Nutrition Therapy II: Supervised Practice* .....	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 hours required for graduation.

<b>Subtotal: Minimum Elective Hours .....</b>	<b>1-15</b>
<b>TOTAL HOURS: Option A .....</b>	<b>128</b>
<b>TOTAL HOURS: Option B .....</b>	<b>137</b>

Requests for applications or further information may be directed to:

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

**Hours****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, ECO 202, HMT 120, HMT 210, NFS 241, and HMT 270.

**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 80-84 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
<b>plus</b> one other course from University Studies Program social sciences list .....	3

**Premajor Requirements Hours**

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

**Diversity Requirements**

These courses will **NOT** satisfy the USP Cross-Cultural requirement for HMT majors:

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  
 GWS 200 Introduction to Gender and 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  
 COM 181 Basic Public Speaking ..... 3  
 ECO 201 Principles of Economics I ..... 3  
 ECO 202 Principles of Economics II ..... 3  
 ENG 203 Business Writing ..... 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  
 MA 123 Elementary Calculus and Its Applications (prerequisite for STA 291) ..... 3  
 STA 291 Statistical Method ..... 3  
 NFS 241 Food Service Sanitation ..... 1

**Subtotal: Premajor Hours ..... 49-51**

**Major Requirements Hours**

**Required:**

HMT 308 Principles of Food and Beverage **or**  
 NFS 302 Principles of Food Preparation ..... 3  
 HMT 345 Information Technology in the Hospitality Industry ..... 3  
 HMT 350 Hospitality Managerial Accounting ..... 3  
 HMT 499 Hospitality and Tourism Internship ..... 3  
 NFS 342 Quantity Food Production ..... 4  
 FIN 300 Corporation Finance ..... 3  
 MGT 301 Business Management ..... 3  
 MKT 300 Marketing Management ..... 3

**Subtotal: Major Core Hours ..... 25**

**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 360 Tourism Planning and Development ..... 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 ..... 3  
 HMT 488 Strategic Management in the Hospitality and Food Service Industry ..... 3  
 HMT 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 120 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

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

**University Studies Requirements**

See "University Studies Program" on pages 80-84 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 111 Laboratory to Accompany General Chemistry I ..... 1  
 \*CHE 113 Laboratory to Accompany General Chemistry II ..... 2  
 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 252 Introduction to Interpersonal Communication **or**  
 COM 287 Persuasive Speaking ..... 3  
 PGY 206 Elementary Physiology ..... 3  
 ANA 209 Principles of Human Anatomy ..... 3

**Subtotal: Premajor Hours ..... 48-49**

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

**Major Requirements Hours**

NFS 212 Introductory Nutrition ..... 3  
 NFS 241 Food Service Sanitation ..... 1  
 NFS 302 Principles of Food Preparation ..... 3  
 NFS 304 Experimental Foods **or**  
 FSC 434G Food Chemistry ..... 3-4  
 NFS 311 Nutritional Biochemistry ..... 3  
 NFS 312 Nutrition and Wellness in the Life Cycle .... 3  
 NFS 315 Nutrition Issues in Physical Activity ..... 3  
 NFS 403 Community Nutrition and Wellness ..... 3  
 NFS 408G Seminar in Food and Nutrition ..... 1  
 NFS 510 Advanced 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 senior classification to qualify for enrollment.

**Subtotal: Major Hours ..... 32-33**

**Professional Support Electives**

Select 18 hours in Professional Support Electives at the 300 level or above.

**Subtotal: Professional Support Hours ... 18**

**Electives**

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

**Subtotal: Minimum Elective Hours ..... 3**

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