**COLLEGE OF AGRICULTURE, FORESTRY AND LIFE SCIENCES**

The College of Agriculture, Forestry and Life Sciences (CAFLS) supports Clemson University’s land-grant mission to provide education, research and service to the public. The College of Agriculture, Forestry and Life Sciences serves more than 2,000 graduate and undergraduate students.

The College of Agriculture, Forestry and Life Sciences is a multi-disciplinary college of life-based sciences that prepares students to be leaders and innovators in their chosen careers. The shared biological foundation of the CAFLS Departments stimulates student learning and undergraduate research across disciplines; increases opportunities for team-based faculty research across departments, colleges and institutions; and makes available the latest scientific knowledge for the greater benefit of society.

To assist students in achieving these goals, the William B. Bookhart Jr. Student Services Center provides academic advising and developmental services to promote success for students in the related degree programs. These services involve recruitment and retention, academic advising, multicultural affairs, study abroad, career development, and placement.

The College of Agriculture, Forestry and Life Sciences is impacting the world one graduate at a time—from cell research to food production to packaged materials to the globe—developing partnerships for the future to make the world greener, healthier, tastier, and wealthier.

**Modern Language Requirement**

A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian, and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

### AGRIBUSINESS

**Bachelor of Science**

The Agribusiness curriculum provides strong training in economic and business principles as applied in agribusiness enterprises. Core classes in the major focus on agribusiness economics and management, leadership, marketing and sales, finance, accounting, and business skill development. Employment opportunities for graduates are many and diverse. Private sector opportunities include national and international careers in agribusiness management, banking, finance, sales, marketing, and public relations. Public sector opportunities include positions in organizations that promote food, agriculture, and natural resource interests; government agencies; and educational institutions. Moreover, the curriculum design provides graduates with the skills necessary to successfully establish their own businesses. By completing this curriculum, graduates will have fulfilled the requirements for an approved minor in the college, allowing students to tailor the program to meet specific career objectives.

The curriculum also emphasizes training on globalization, information technology, and interdisciplinary skills needed to analyze the complex interrelationships between business, the environment and society. Students are encouraged to participate on a creative inquiry student research team and to take advantage of an internship and/or study abroad opportunity. The program provides an excellent background for professional or graduate study in several disciplines.

### Freshman Year

**First Semester**

1. AGRB 2050 Agriculture and Society
2. MATH 1020 Business Calculus I
3. STAT 2220 Statistics in Everyday Life
4. Natural Science Requirement
5. Oral Communication Requirement
6. 16

**Second Semester**

1. AGRB 2020 Agricultural Economics
2. ENGL 1030 Composition and Rhetoric
3. STAT 2300 Statistical Methods I
4. Arts and Humanities (Non-Lit.) Requirement
5. Elective
6. 15

### Sophomore Year

**First Semester**

1. ACCT 2010 Financial Accounting Concepts
2. AGRB 3020 Economics of Farm Management
3. ECON 2120 Principles of Macroeconomics
4. MGT 2010 Principles of Management
5. Arts and Humanities (Literature) Requirement
6. 15

**Second Semester**

1. ACCT 2020 Managerial Accounting Concepts
2. AGRB 3570 Natural Resource Economics
3. Leadership Requirement
4. Minor Requirement
5. Social Science Requirement
6. 15

### Junior Year

**First Semester**

1. AGRB 3080 Quant. Agribusiness Analysis I
2. AGRB 3090 Econ. of Agricultural Marketing
3. ECON (MGT) 3060 Managerial Economics or ECON 3140 Intermediate Microeconomics
4. ENGL 3140 Technical Writing
5. Minor Requirement
6. 15

**Second Semester**

1. AGRB 3190 Agribusiness Management
2. AGRB 3510 Principles Agricultural Sales & Advertising
3. AGRB 4210 Globalization or ECON 3100 International Economy
4. ECON 3020 Money and Banking or ECON 3150 Intermediate Macroeconomics
5. Minor Requirement
6. 15

### Senior Year

**First Semester**

1. AGRB 4090 Commodity Futures Markets
2. AGRB 4120 Regional Economic Dev.
3. AGRB 4600 Agricultural Finance
4. LAW 3220 Legal Environment of Business
5. Minor Requirement
6. 15

**Second Semester**

1. AGRB 4080 Quant. Agribusiness Analysis II
2. AGRB 4520 Agricultural Policy
3. AGRB 4520 Prices
4. Internship, Creative Inquiry or Selected Topics
5. Minor Requirement
6. 15

121 Total Semester Hours

1See General Education Requirements.
2Select from AGED 3550, 4150
3See CAFLS approved minors in the Minors section
4AGRB 4900, 4910, 4940

### AGRICULTURAL EDUCATION

**Bachelor of Science**

Agricultural Education provides broad preparation in agricultural sciences and professional education, including communications and human relations skills. In addition to required courses, students may select a minor (see approved minors on page 58).

The Bachelor’s degree prepares students for professional education positions in the mainstream of agriculture, including teaching, cooperative extension service, and government agricultural agencies. The Agricultural Education degree also prepares students for other educational work, such as agricultural missionary, public relations, and training officers in agricultural industry.

In consultation with the departmental advisor, students choose one of the following emphasis areas: Communications, Leadership, or Teaching.

**Admission to Teaching Emphasis Students**

Professional application to the professional level of a program is processed during the term in which
a candidate is to complete 60 semester hours of work. At that time, the candidate is notified of his/her status. Prior to admission, the candidate must have passed all areas of the Praxis CORE and have a minimum cumulative grade-point average of 2.75. A candidate may exempt the CORE by meeting minimum ACT or SAT requirements as determined by the South Carolina Department of Education.

**Directed Teaching/Teaching Internship**—A candidate shall apply to the field experience director prior to the semester in which block methods courses are scheduled. The following conditions must be met prior to registration for directed teaching: (1) admission to the professional level of a program; (2) completion of at least 95 semester hours; (3) a minimum cumulative grade point average of 2.75.

**Freshman Year**

**First Semester**
1. AGED 1020 Agric. Ed. Freshman Seminar
2. AGED 3650 Multiculturalism in Agric. Ed.
3. AVS 1500 Introduction to Animal Science
4. BIOL 1050 General Biology Lab. I
5. BIOL 1030 General Biology I
6. COMM 1010 Communication Academic and Professional Development I
7. MATH 1010, 1020, 1060, 1080, or 2070

**Second Semester**
1. AGED 1000 Orientation and Field Experience
2. AGM 2050 Principles of Fabrication
3. BIOL 1040 General Biology II
4. BIOL 1050 General Biology Lab. I
5. HORT 1010 Horticulture
6. Mathematics Requirement

**Second Semester**
1. AGED 1020 Agric. Ed. Freshman Seminar
2. AGED 3650 Multiculturalism in Agric. Ed.
3. AVS 1500 Introduction to Animal Science
4. BIOL 1050 General Biology Lab. I
5. BIOL 1030 General Biology I
6. COMM 1010 Communication Academic and Professional Development I
7. MATH 1010, 1020, 1060, 1080, or 2070

**Second Semester**
1. AGED 1000 Orientation and Field Experience
2. AGM 2050 Principles of Fabrication
3. BIOL 1040 General Biology II
4. BIOL 1050 General Biology Lab. I
5. HORT 1010 Horticulture
6. Mathematics Requirement

**Senior Year**

**First Semester**
1. AGED 4070 Internship in Extension and Leadership Education

**Second Semester**
1. AGED 4070 Internship in Extension and Leadership Education

135 Total Semester Hours

*Select from any 2000 level or higher AGM, AGRB, AVS, ENR, FOR, PES or WFB course, or BE 4080, 4510, BIOL 4130, 4140, 4680, 4690, 4800, EES 4510, ENT 4690, ETOX 4850, GEOL 4850, HORT 4270, 4330, or MIRC 4140.

**Junior Year**

**First Semester**
1. AGED 3030 Mechanical Technology for Agriculture Education
2. AGM 2210 Surveying
3. COMM 2010 Intro. to Communication Studies
4. PES 2020 Soils
5. Arts and Humanities (Non-Lit.) Requirement

**Second Semester**
1. EDF 3020 Educational Psychology
2. ENR 3020 Natural Resources Measurements
3. HORT 4040 Plant Propagation Techniques Lab.
4. Advanced Writing Requirement
5. Departmental Communication Requirement
6. Oral Communication Requirement

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**Senior Year**

**First Semester**
2. AGED 4150 Leadership of Volunteers
3. AGED 4160 Ethics and Issues in Agriculture Education
4. MGT 2020 Principles of Management
5. Arts and Humanities (Literature) Requirement
6. Technical Requirement

**Second Semester**
1. AGED 4070 Internship in Extension and Leadership Education
3. AGED 4150 Leadership of Volunteers
4. AGED 4160 Ethics and Issues in Agriculture Education
5. MGT 2020 Principles of Management
6. Arts and Humanities (Literature) Requirement
7. Technical Requirement

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**Junior Year**

**First Semester**
1. AGED 3030 Mechanical Technology for Agriculture Education
2. AGM 2210 Surveying
3. HORT 3030 Landscape Plants
4. PES 2020 Soils
5. Advanced Writing Requirement
6. Arts and Humanities (Non-Lit.) Requirement

**Second Semester**
1. EDF 3020 Educational Psychology
2. ENR 3020 Natural Resources Measurements
3. HORT 4040 Plant Propagation
4. HORT 4050 Plant Propagation Techniques Lab.
5. Oral Communication Requirement
6. Technical Requirement

**Senior Year**

**First Semester**
2. AGED 4150 Leadership of Volunteers
3. AGED 4160 Ethics and Issues in Agriculture Education
4. MGT 2020 Principles of Management
5. Arts and Humanities (Literature) Requirement
6. Technical Requirement

**Second Semester**
1. AGED 4070 Internship in Extension and Leadership Education
3. AGED 4150 Leadership of Volunteers
4. AGED 4160 Ethics and Issues in Agriculture Education
5. MGT 2020 Principles of Management
6. Arts and Humanities (Literature) Requirement
7. Technical Requirement

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Junior Year
First Semester
3 - AGED 3030 Mechanical Technology for Agriculture Education
3 - AGM 2210 Surveying
3 - HORT 3030 Landscape Plants
4 - PES 2020 Soils
3 - Advanced Writing Requirement
16
Second Semester
3 - AGED 4160 Ethics and Issues in Agriculture and the Food and Fiber System
3 - EDF 3020 Educational Psychology
3 - ENR 3020 Natural Resources Measurements
3 - HORT 4040 Plant Propagation
1 - HORT 4050 Plant Propagation Techniques Lab.
3 - Oral Communication Requirement
16
Senior Year
First Semester
1 - AGED 4000 Supervised Field Experience II
3 - AGED 4010 Instructional Methods in Ag. Ed.
3 - AGED 4030 Principles of Adult/Ext. Education
3 - AGED 4230 Curriculum
3 - EDLT 4980 Secondary Content Area Reading
3 - Arts and Humanities (Literature) Requirement
16
Second Semester
12 - AGED 4060 Directed Teaching
2 - AGED 4250 Teaching Agricultural Mechanics
14
130 Total Semester Hours

AGRICULTURAL MECHANIZATION AND BUSINESS
Bachelor of Science
The Agricultural Mechanization and Business major provides a program for students who desire training in areas relevant to dynamic agricultural enterprises. The program is organized with strength in both business management and technical support of agriculture and agribusiness. To produce well rounded individuals with good communication skills, the curriculum includes courses in the humanities, social sciences, English composition, and public speaking.

Graduates in Agricultural Mechanization and Business find meaningful and remunerative employment in a variety of situations directly and indirectly related to agricultural production, processing, marketing, and the many services connected therewith. Farming and technical sales in the agricultural, industrial, and heavy equipment industries are frequently chosen careers.

By completing this curriculum, graduates will have fulfilled the requirements for an Agricultural Business Management minor or other selected minor. Contact the Enrolled Student Services Office to have the minor recorded.

Additional information is available from the departmental offices or can be found at www.clemson.edu/cafs/safe/agemec/index.html.

Second Semester
3 - AGM 4020 Irrigation System Design
3 - AGM 4520 Mobile Power
3 - COMM 3150 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Minor Requirement
15
Senior Year
First Semester
1 - AGM 4000 Senior Seminar in Agricultural Mechanization and Business
3 - AGM 4050 Environmental Control in Animal Structures
3 - AGM 4060 Mechanical and Hydraulic Systems
3 - AGRB 3190 Agribusiness Management or
3 - MGT 2010 Principles of Management
3 - AGRB 3090 Econ. of Agricultural Marketing or
3 - MKT 3010 Principles of Marketing
3 - Minor Requirement
16
Second Semester
3 - AGM 4100 Precision Agriculture Technology
3 - AGM 4720 Capstone
3 - Minor Requirement
3 - Plant/Crop Science or Soil Science Req.
3 - Social Science Requirement
15
124 Total Semester Hours

Note: Students must earn a grade of C or better in all required AGM courses and in MATH 1020.

ANIMAL AND VETERINARY SCIENCES
Bachelor of Science
The Animal and Veterinary Sciences curriculum provides students with both a basic and applied understanding of the scientific principles needed for successful careers in the scientific, technical, and business phases of livestock and poultry production, processing, and marketing; or veterinary/medical professions. Strengths of this program include extensive hands-on instruction at Clemson’s six animal farms, personalized advising, and the opportunity for valued-added experiences, including involvement in research, teaching, extension, international travel, and internships. Students choose from three concentrations.