

Agricultural Science Concentration

Production Option

Career Opportunities

Modern agriculture is a tremendously diverse industry. Career opportunities range from manufacturing and distributing resource inputs (i.e., seed, fertilizer, capital) to production (farming), marketing, processing (converting raw agricultural commodities into usable products) and merchandising (distributing food and other goods to consumers). This program of study provides a broad general education that includes courses from several subject matter disciplines in agriculture. More than 25 percent of the courses may be selected by students to give in-depth preparation in areas especially intriguing to them. This combination provides a good general education and a broad overview of the agricultural industry, while allowing specialization according to individual interests.

Employment Possibilities

Graduates of this curriculum may, depending upon elective courses completed, begin career employment in many aspects of the industry:

- Resource marketing and distribution-seed, fertilizer, pesticide, pharmaceutical, equipment and feed companies; farm supply cooperatives
- Agricultural service occupations-representatives for banks, insurance companies, Agricultural Extension Service, conservation agencies, farm credit agencies, production management consulting firms, communications and information firms and government agencies
- Farm, ranch and feedlot management
- Commodity processing-meat packing, fruit and vegetable processing, feed manufacturing, milling industries, inspection and quality-control services
- Grounds maintenance occupations-greenhouse and nursery operations, pest-management consulting firms, pest-control businesses, lawn-care firms, landscaping firms
- Merchandising of food and agricultural products-chain and independent grocery firms, garden-supply outlets

Facilities

A nearby 700-acre UTM Agricultural and Natural Resources Teaching/Demonstration Complex is jointly used for research, teaching, and demonstration. Modern agricultural laboratories and classrooms are located in Brehm Hall and the Ned R. McWherter Agricultural Complex. The student is taught to use the computer, and numerous computer facilities are available for the student's convenience. In some cases, field trips are made to nearby industries and farms to learn their operating procedures.

Sample Program of Study

This list includes all courses required; however, the sequence may be flexible.

Freshman Year

Fall

Agricultural Economics 110: Introduction to Agricultural Business	3
Animal Science 110: Introduction to Animal Science	3
Animal Science 119: Introduction to Animal Science Laboratory	1
Biology 110: Introductory Cell Biology and Genetics	4
English 111: English Composition	3
Math 140: College Algebra and Elementary Functions	3

Total Hours.....17

Spring

Agricultural Engineering Technology 110: Introduction to Agricultural Engineering	3
Biology 120: Introductory Plant and Animal Biology	4
English 112: English Composition.....	3
Plant Science 110: Introductory Plant and Soil Science ..3	
Plant Science 119: Introductory Plant and Soil Science Laboratory	1
Natural Resources Management 101: Wildlife, Conservation, and Environmental Issues (Social & Behavioral Sciences Elective).....	3

Total Hours.....17

Sophomore Year

Fall

Agricultural Engineering Technology 220: Surveying and Soil and Water Engineering	3
Chemistry 111: Introduction to Chemistry I: General and Organic.....	4
Soil Science 210: Introduction to Soil Science	4
Humanities Elective*	3

Total Hours.....14

Spring

Chemistry 112: Introduction to Chemistry II: General and Organic.....	4
Communications 230: Public Speaking	3
Math 210: Elementary Statistics and Probability	3
Fine Arts Elective*	3
Humanities Elective*	3

Total Hours.....16

Junior Year

Fall

Agriculture 295: International Food and Fiber Systems (Social & Behavioral Sciences Elective)	3
Agriculture 390: Career Planning in Agriculture	2
Plant Science 333: Weed Science	3
Ag Econ., Animal, Plant, or Soil Science Electives*	6

Total Hours.....14

Spring

Animal Science 350: Applied Animal Nutrition	3
Animal Science 380: Livestock Merchandising	3
Plant Science 322: Introductory Plant Pathology.....	3
Ag Econ., Animal, Plant, or Soil Science Elective*	3
AGRI/NRM Elective*	3

Total Hours.....15

Senior Year

Fall

Agriculture 420: Supervised Field Experience	3
Ag Econ., Animal, Plant, or Soil Science Elective*	3
AGRI/NRM Elective*	3
General Elective*	3
Humanities Elective*	3

Total Hours.....15

Spring

Agriculture 441: Interpretation of Agricultural Research ..3	
Agricultural Engineering Technology 482: Precision Technologies for Agriculture and Natural Resource Management	3
Zoology 325: Economic Entomology	3
AGRI/NRM Elective*	3

Total Hours.....12

*See catalog for options

For Additional Information Contact:

Dr. Jerry Gresham, Chair
Department of Agriculture and Natural Resources
257 Brehm Hall
Martin, TN 38238
Phone: (731) 881-7262
E-mail: anrinfo@utm.edu

