
The University of Tennessee at Martin

Soil & Water Conservation Concentration 2005-2006

Career Opportunities

Urbanization, industrial growth and population growth are placing increased demands on our land and water resources. To provide food and shelter for future generations, many professionals trained to manage soil, water and other natural resources are needed. The future food supply must come from a declining land, energy and labor base, scientific principles and technology to protect and sustain our natural resources will become increasingly important.

The soil and water conservation curriculum prepares students for conservation and management of soil and water resources for the long range benefit of society. Requirements include a strong background in physical, chemical and biological relationship of soil, water and plants.

Employment Possibilities

Many excellent opportunities for employment are available for graduates of the soil and water conservation curriculum. Employment opportunities are available with federal agencies such as the Natural Resource Conservation Service and Bureau of Land Management; other government units, including state, county and municipal agencies; planning and economic development districts; business in the agricultural industry such as fertilizer, chemical, forest products and pollution control firms; public utility companies; and private industries including banks, financial institutions and real estate agencies. The local soil conservationist, soil scientist, land manager, etc., is most likely trained in this field.

Facilities

Facilities on campus, including the West Tennessee Agricultural Pavilion, the 700 acre UT Agricultural Experiment Station and UTM Agricultural Field Teaching/Demonstration Complex, and our nearness to farm people make an ideal setting and are excellent for study in this area. The great needs for conservation of soil, water and related natural resources for study are unlimited and easily accessible. Numerous computer facilities are also available for student use. Students participate in local, regional and national conferences and contests on a regular basis.

For More Information Contact

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

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Program of Study: Soil & Water Conservation Concentration

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

Freshman Year

Fall

Biology 110: Introductory Cell Biology and Genetics . . .	4
English 111: English Composition	3
Math 140: College Algebra and Elementary Functions	3
Natural Resources Management 100: Intro to Natural Resources Management	3
<u>Economics 100: American Enterprise System</u>	<u>3</u>
Total Hours	16

Spring

Biology 120: Introductory Plant and Animal Biology . . .	4
English 112: English Composition	3
Math 210: Calculus for Business and Life Sciences or Elementary Statistics and Probability	3
Plant Science 110: Introductory Plant and Soil Science	3
<u>Global Dynamics Elective*</u>	<u>3</u>
Total Hours	16

Sophomore Year

Fall

Chemistry 121: General Chemistry	4
Geology 110: Physical Geology	4
Global Dynamics elective*	3
Soil Science elective (see note 1)	1
Agricultural Engineering Technology 220: Surveying and Soil and Water Engineering	<u>3</u>
Total Hours	15

Spring

Chemistry 122: General Chemistry	4
Communications 230: Public Speaking	3
Soil Science 210: Introduction to Soil Science	4
Economics 100: American Enterprise System (Social Dynamics Elective)	<u>3</u>
Total Hours	14

Junior Year

Fall

Soil Science 315: Soil and Water Conservation	3
Physics elective (PHYS 150 or 211)	4
Geology 440 or 481	3
Soil Science elective (see note 1)	1
Agriculture 295: International Food and Fiber System (Global Dynamics Elective)	3
<u>GIS elective (see note 2)</u>	<u>3</u>
Total Hours	17

Spring

Plant Science 333: Weed Science or 422: Forage Crops	3
Global Dynamics elective*	3
Microbiology 251: General Bacteriology	4
Biology 331: General Ecology	3
<u>Social Dynamics elective*</u>	<u>3</u>
Total Hours	16

Senior Year

Fall

Agriculture 441: Interpretation of of Agricultural Research	3
Natural Resource Management 210: Mediating Environmental Conflict	3
English 325: Technical Communications	3
Natural Resources Management 390: Career Planning in Natural Resource Management	2
<u>Aesthetic Elective*</u>	<u>3</u>
Total Hours	14

Spring

Soil Science 321: Soil Genesis, Morphology and Classification	3
Soil Science 412: Soil Chemistry and Fertility or Soil Science 440: Soil Physics	3
Agricultural Engineering Technology 460: Waste Management Technology	3
<u>Science Electives (see note 3)</u>	<u>6</u>
Total Hours	15

*See catalog for options.

Note 1: SOIL 250: Soil and Landscape Evaluation, recommended.

Note 2: To selected from GEOG 310, GEOG 410, AGET 482, PRAD 300.

Note 3: To selected from upper division courses in departments of : agriculture and natural resources; biological sciences; chemistry; geology, geography and physics; or engineering. Student encouraged to satisfy electives with NRM 420.