The University of Tennessee at Martin
Bachelor of Science in Natural Resources Management (with a major in NRM)
Soil and Water Conservation Concentration (program 1152)

Overview
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. Therefore, scientific principles and technology to protect and sustain our natural resources are becoming 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.

Career Opportunities
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; businesses in the agricultural industry such as fertilizer, chemical, forest products and pollution control firms; public utility companies; and private industries including banks, financial institutions, real estate agencies, and non-governmental organizations. The local soil conservationist, soil scientist, land manager, etc., is most likely trained in this field.

Facilities
Facilities on campus, including the Ned R. McWherter Agricultural Complex, the 700-acre UT Martin Agricultural and Natural Resources 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, contests and research on a regular basis.

Dr. Wes Totten, Chair
Department of Agriculture, Geosciences, and Natural Resources
257 Brehm Hall
Martin, TN 38238
Phone: 731-881-7262
Email: wtotten@utm.edu
### Fine Arts (3 hours) Select One
- **ART 110** Understanding Visual Arts __/3
- **ARTH 210** The History of Art __/3
- **ARTH 211** The History of Art __/3
- **DANC 110** Understanding Dance __/3
- **MUS 111** Masterpieces of Music __/3
- **MUS 112** Music in Our Time __/3
- **MUS 113** Western Masterpieces __/3
- **MUS 114** Historical Survey of Jazz __/3
- **MUS 115** Music for the Masses __/3
- **THEA 110** Understanding Theatre __/3
- **THEA 111** Understanding Theatre __/3

### Biological & Physical Systems (20 hours)
- **BIOL 130** Foundations: Ecology, Evolution, & Diversity __/4
- **BIOL 140** Foundations: Cell & Molecular Biology __/4
- **CHEM 111** Intro to Chemistry I: General & Inorganic __/4
- **CHEM 121** General Chemistry __/4
- **CHEM 112** Intro to Chemistry II: Organic & Biochemistry __/4
- **GEOS 120** Earth Materials and Processes __/4

### Communication (9-10 hours)
- **ENGL 105** English Composition __/3
- **ENGL 111** English Composition __/3
- **ENGL 112** English Composition __/3
- **ENGL 113** English for Technical Writers __/3
- **COMM 230** Public Speaking __/3
- **COMM 229** Public Communication Online __/3
- **HONR 110** Public Speaking & Rhetorical Tradition __/3

### Humanities (9 hours) Select three
- **ENGL 250** British Literature; **ENGL 251** British Literature; **ENGL 260** American Literature; **ENGL 261** American Literature; **ENGL 270** World Literature; **ENGL 271** World Literature; **FREN 250-France Today; GERM 250-Germany Today; **HIST 121**-World Civilization I; **HIST 122**-World Civilization II; **HIST 201-History of U.S. I; HIST 202-History of U.S II; HONR 101-Great Works I, Ancient World and Classical Antiquity; HONR 102-Late Antiquity to Middle Ages; HONR 201-Late Middle Ages to Renaissance; JAPN 250-Japan Today; PHIL 110-Adventure of Ideas: Historical; PHIL 120-Adventure of Ideas: Contemporary; **PHIL 130-Ethics & Race; PHIL 160-Exploring Ethics; Rlst 201-Intro Religious Studies; SPAN 250-Latin America Today**

### Mathematics (6 hours)
- **MATH 210** Elementary Statistics & Probability __/3
- **MATH 140** College Algebra & Elementary Function __/3
- **MATH 160** Calculus for Business & Life Sciences __/3
- **MATH 185** Precalculus __/5

### Social & Behavioral Sciences (6 hours)
- **AGRI 295** International Food & Fiber Systems __/3
- **ANSC 270** Animal Welfare & Ethics __/3
- **ECON 100** American Enterprise System __/3
- **ECON 201** Principles of Macroeconomics __/3
- **ECON 202** Principles of Microeconomics __/3
- **ENGR 100** Society & Technology __/3
- **GEOG 151** Intro Regional Geo: NA, Europe, Russia __/3
- **GEOG 152** Intro Regional Geo: Asia, Africa, LA __/3
- **GEOG 202** Intro to Cultural Geography __/3
- **HLTH 111** Principles & Concepts in Personal Health __/3
- **HONR 202** Great Works IV-Enlightenment to Modernity __/3
- **IDST 201** Intro to Women’s Studies __/3
- **NRM 101** Wildlife, Conservation & Environmental Issues __/3

### Natural Resources Management Core (22 hours)
- **AGET 220** Surveying & Soil and Water Engineering __/3
- **AGRI 270** Intro to Geospatial Technology __/3
- **GEOG 270** Intro to Geospatial Technology __/3
- **NRM 100** Intro to Natural Resources Management __/3
- **NRM 210** Human Dimensions in Natural Resources Mgt __/3
- **SOIL 210** Soil Science __/4
- **Water Elective (3 hours) Select One**
- **NRM 225** Intro to Aquatic Science __/3
- **NRM 315** Restoration of Freshwater Habitats __/3
- **SOIL 315** Soil & Water Conservation __/3
- **SOIL 430** Wetland Science __/3
- **Plant Science Elective (3 hours) Select One**
- **PLSC 333** Weed Science __/3
- **PLSC 341** Dendrology & Forest Ecology __/3
- **PLSC 410** Silviculture __/3
- **PLSC 422** Forage Crops __/3

### Soil & Water Conservation Concentration (45 hours)
- **AGRI 441** Interpretation of Agricultural Research __/3
- **AGEC 110** Introduction to Agricultural Business __/3
- **AGET 460** Waste Management Technology __/3
- **ENGL 325** Technical Communications __/3
- **MBIO 251** General Bacteriology __/4
- **Physics (4 hours) Select one**
- **PHYS 101** Physics in Everyday Life __/4
- **PHYS 211** College Physics __/4
- **PHYS 150** Concepts & Demonstrations in Physics __/4
- **Plant Science Elective (3 hours) Select One that was not selected above**
- **PLSC 110** Introductory Plant & Soil Science __/3
- **PLSC 333** Weed Science __/3
- **PLSC 341** Dendrology & Forest Ecology __/3
- **PLSC 422** Forage Crops __/3
- **Soil Science (9 hours) Select Three**
- **SOIL 315** Soil & Water Conservation __/3
- **SOIL 321** Soil Genesis, Morphology, & Classification __/3
- **SOIL 412** Soil Chemistry & Fertility __/3
- **SOIL 440** Soil Physics __/3

### Geology upper-division (3 hours) UD GEOL course

### Soil Science Elective (2 hours) SOIL courses
- **SOIL 250** Soil & Landscape Evaluation (Recommended) __/1

### Upper-Division Science Electives (8 hours) UD courses in Agriculture, Geosciences, Natural Resources, Biological Sciences, Chemistry, Physics, Engineering
- **NRM 420** Supervised Field Experience (Recommended) __/3
### B.S. in Natural Resources Management
#### Soil and Water Conservation
#### 2019-2020

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