



Twin Cities Campus

Soil Science Minor

Soil, Water, & Climate

College of Food, Agricultural and Natural Resource Sciences

- Program Type: Undergraduate free-standing minor
- Requirements for this program are current for Fall 2019
- Required credits in this minor: 21 to 26
- This program requires summer terms.

This minor provides a strong background in basic soil sciences, covering such topics in conservation and land use management, soil chemistry and fertility, soil physics and hydrology, and soil genesis and morphology. Students completing the minor meet the minimum requirements for employment with the Natural Resources Conservation Service as a soil conservationist. They are also prepared to take the Fundamentals of Soil Science - Professional Soils Scientist in-Training Examination. Students must complete at least 20 credits for the minor.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Minor Requirements

Minor Courses

- [SOIL 2125](#) - Basic Soil Science [PHYS, ENV] (4.0 cr)
- [ESPM 3221](#) - Soil Conservation and Land-Use Management (3.0 cr)
- [ESPM 3612W](#) - Soil and Environmental Biology [WI] (4.0 cr)
- [SOIL 4511](#) - Field Study of Soils (2.0 cr)
- [ESPM 3131](#) - Environmental Physics (3.0 cr)
 - or [ESPM 4216](#) - Contaminant Hydrology (3.0 cr)
- [SOIL 3416](#) - Plant Nutrients in the Environment (3.0 cr)
 - or [LAAS 5311](#) - Soil Chemistry and Mineralogy (3.0 cr)

Electives

2 credit minimum; alternate courses listed above may be included as electives.

- [SOIL 3521](#) - Soil Judging (1.0 cr)
 - or [ESPM 4021W](#) - Problem Solving: Environmental Review [WI] (4.0 cr)
- or [SOIL 3993](#) - Directed Study (1.0 - 4.0 cr)
- or [ESPM 4601](#) - Environmental Pollution (3.0 cr)
- or [SOIL 5232](#) - Vadose Zone Hydrology (3.0 cr)
- or [LAAS 5515](#) - Soil Formation: Earth Surface Processes and Biogeochemistry (3.0 cr)
- or [FNRM 3114](#) - Hydrology and Watershed Management (3.0 cr)
- or [ESPM 5555](#) - Wetland Soils (3.0 cr)
 - or [SOIL 5555](#) - Wetland Soils (3.0 cr)