

## **Soil and Wetland Certificate**

This certificate program is designed to prepare individuals to be wetland delineators; site evaluators; to gain 15 credit hours in soils necessary to apply for an NRCS soil conservationist position; or to take the ARCPACS or soil certification exam.

The certificate is open to undergraduates and graduates in USM degree programs, and for environmental scientists, biologists, geologists, hydrologists, landscape architects, planners, plumbing and code enforcement officers, and engineers who would like to increase their knowledge of soils and jurisdictional wetlands.

The curriculum includes classes in soils, wetland ecology, erosion and sediment control, storm water management, and wetland delineation. A certificate will be presented to students completing 18 credit hours. Upon approval by the Department Chair, up to 8 prior credits may be applied toward the certification program. A grade of C- or better is required for all courses applied toward the certification. There is a \$100 fee to apply for the certificate program. For more information about this program please contact the Chair of the Department of Environmental Science.

### **Required:**

ESP 250     Soils and Land Use  
ESP 255     Soil morphology and classification  
ESP 260     Soil and Water Conservation Engineering  
ESP 303     Wetland Ecology  
ESP 350     Wetland Delineation

### **Electives:**

ESP 403     Bioremediation and Phytoremediation  
ESP 417     Site Planning and Assessment