

ENGINEERING FOR CONSERVATION PLANNING (OK-ENG-001)

Overview

This course will familiarize the participants with basic engineering principles necessary for conservation planning. Participants will learn basic hydrology computations and surveying techniques and be provided with detailed instructions on the proper planning, design, layout, checkout, and certification of the most common engineering practices installed in Oklahoma which are: (1) Terraces, (2) Diversions, (3) Waterways, (4) Ponds, and (5) Grade Stabilization Structures. In addition, participants will be provided with a brief overview of other types of engineering practices such as irrigation, waste management, federal contracting, and handling structural failures.

This course contains classroom and field activities. Participants must be prepared for outdoor field conditions, whatever the weather conditions. Participants will have a "hands on" opportunity to utilize surveying equipment and other engineering equipment during the course.

Objectives

Upon completion of this training, participants will:

1. Have a basic knowledge of engineering activities in NRCS.
2. Understand Engineering Job Approval Authority and NRCS policies on application of engineering practices.
3. Understand the basics of hydrology and how to determine drainage areas and compute runoff.
4. Have a working knowledge of field surveying and surveying techniques.
5. Understand the basics of planning, design, layout, and checkout of the most common engineering practices: terraces, diversions, waterways, ponds, and grade stabilization structures.

Prerequisites

NRCS or conservation partner employees with at least six months of experience.

Duration

One week (no exam).