
COURSE PREFIX/NO: EGT 105
COURSE TITLE: Basic Civil Drafting
LEC HRS/WK: 1.0
LAB HRS/WK: 3.0
CREDIT HRS/SEMESTER: 2.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course covers the applications of drawing techniques, to structures, map topography, and other civil applications.

COURSE COMPETENCIES

Upon successful completion of this course, the student should be competent to perform the following tasks:

Module 1 – Introduction to Surveying Fundamentals

- Define terms related to maps and civil drafting
- Identify types of maps
- Describe land measurement techniques used in surveying
- Calculate leveling field notes to determine unknown elevations
- Describe global positioning system (GPS)

Module 2 - Location and Direction

- Determine the azimuths of given lines
- Establish the bearing, distance, latitude, and departure from a given traverse
- Draw a traverse from given information
- Determine the length and bearing of property lines from given northing and easting information and then draw the traverse

Module 3 – Legal Descriptions and Plot Plans

- Use civil engineer scale to measure given lines
- Draw plot plans from sketches and given information
- Define specific mapping symbols
- Use mapping symbols to draw a map from given information

Module 5 - Topographic Maps

- Describe topographical features using contour lines
- Identify different types of contour lines
- Create contour map field notes and use the interpolation method
- Construct profile drawings using contour maps
- Construct profile drawings using profile measurement field notes

Module 6 - Highway Layout

- Create a highway layout drawing using the point of curve and point of intersection methods
- Construct a vertical curve profile drawing
- Calculate tangent distances for a vertical curve

MINIMAL STANDARDS / PERFORMANCE OBJECTIVES

Successful completion of the course requires the completion of each module with an average of 60 points. Grades will be calculated from all tests/projects and homework assignments.

COURSE REQUIREMENTS

Students are responsible for attaining the course competencies through completion of the following requirements:

Attendance

The college attendance policy, stated in the college handbook, will be honored.

Participation in Class Discussion

Assignments

Students are expected to complete all assignments and any supplementary exercises designated by the instructor.

Academic Honesty

York Technical College adheres to the SCTCS Student Code, approved by the State Board for Technical and Comprehensive Education on September 13, 2007. Copies of this code are available in the Library and from Student Services. ... Any student caught cheating or involved in any other academic dishonesty will be given a grade of zero and will be subject to further disciplinary action.

EVALUATION CRITERIA/GRADING:

The grading scale will be the standard for York Technical College:

Grade Points	
A	90 - 100
B	80 - 89
C	70 - 79
D	60 - 69
F	0 - 59

Evaluation Method

Module Test	25%
Class Assignments	50%
Drawings and Projects	25%

ENTRY LEVEL SKILLS

Knowledge of the fundamental principles of drafting and a current release of AutoCAD is required. It is strongly recommended that the student have a basic math skills background in arithmetic operations with decimals and fractions and a fundamental knowledge of trigonometry.

PREREQUISITES: EGT 110

CO-REQUISITES: None

Disability Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.