



Course Information

Course Title	Civil Drafting
Course Prefix, Num. and Title	DFTG2430: Civil Drafting
Division	Technology & Business
Department	Engineering Design
Course Type	WECM Course
Course Catalog Description	An in-depth study of drafting methods and principles used in civil engineering.
Pre-Requisites	DFTG1405 & DFTG1409
Co-Requisites	MATH1316

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:3
Lab/Other Hours	
Equated Pay Hours	4.5
Lab/Other Hours Breakdown: Lab Hours	3
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

Map Symbols - Identify map symbology

Map Scales - Convert R/F scales to Graphic scales and vice versa

Contours - Layout existing and grade-line contours

Plan and Profile - Layout contours, create plan and profile drawings

Plats - Layout traverses using bearings, deflection angles, distances and coordinates

Drainage - Create drawings for drainage systems

Azimuths and Bearings - Layout traverses using bearings, deflection angles, distances and coordinates

Range and Townships - Identify and use legal land descriptions

Curve Data - Calculate curve data

Land Development - use property deed (written description) to draw a plat using CAD techniques

Survey Basics/Easements - Identify and use legal land descriptions and survey data to create plat drawing

Civil Terminology - Identify terms used in civil work

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Interpret field notes

Develop documents for a civil project

Analyze and layout drainage and utilities infrastructure

Perform related calculations

Methods of Assessment:

Given survey data in chart form, students produce a plat

Use court legal description to draw parcel of land by interpreting metes and bounds;

Create a legend, boundary markers, etc. and use this parcel of land to create a subdivision

Combine contours, plan and profile & 3D civil design

Curve Data

The above assignments will be evaluated using the ED Program Rubric.

Required text(s), optional text(s) and/or materials to be supplied by the student:

A text covering the technical material covered in this course. An example would be Civil Drafting Technology by Madsen, Shumaker, Madsen

A flash drive is required for archiving data files

Note book to store notes and drawings.

Suggested Course Maximum:

20

List any specific or physical requirements beyond a typical classroom required to teach the course.

Computers with CAD 2D and 3D software.

Plotters capable of printing 34" x 44" drawings.

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Daily Drawings/Lab Work/Daily Quizzes to assure comprehension of drafting skills-	40%
Three to Four Major Exams or Drawings covering individual topics-	30%
Civil Design Project -	30%

Based on the above breakdown, grades will be awarded as prescribed by Wharton County Junior College Standards.

90% to 100% = A
80% to 89% = B
70% to 79% = C
60% to 69% = D
Below 60% = F

Note: A letter grade of "C" or above average must be achieved in all degree specific classes to attain graduation.

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills
 - Teamwork
 - Social Responsibility
 - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist