



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title - Advanced Computer-Aided Drafting

Course Prefix and Number - DFTG2432

Department - Engineering Design

Division - Technology & Business

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours # : Lecture hours# : Lab/other hours # **4:3:3**

Equated Pay hours for course - $(3 + (3 * .5)) = 4.5$

Course Catalog Description - Study of advanced techniques, including the use of a customized system. Presentation of advanced drawing applications, such as solids modeling and linking graphic entities to external non-graphic data.

Prerequisites/Co requisites - DFTG1410 & DFTG2419

List Lab/ Other Hours
Lab Hours 3
Clinical Hours
Practicum Hours
Other (list)

Prepared by Jo Ann Lurker

Date 10-23-11

Reviewed by department head Jo Ann Lurker

Date 10-23-11

Accuracy verified by Division Chair David Kucera

Date 10-28-11

Approved by Dean of Vocational Instruction or Vice President of Instruction Lac

Date 11-9-12



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

- Data management concepts & techniques
- Introduction to a DBMS
- Introduction to SQL
- Create a database connection to AutoCAD and: link data to graphic objects, querying linked data, modify existing linked data
- Setting up the MicroStation database interface
- introduction to the MSCatalog
- creating the data dictionary
- Creation of a database connection to MicroStation and: link data to graphic objects, querying linked data, modify existing linked data

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
<p>Create and use a customized CAD system; produce documents and/or models; and use OLE with external software.</p> <p>Demonstrate a basic knowledge of database terms and concepts by successfully completing assigned projects</p> <p>Demonstrate a basic knowledge of database concepts by being able to create a simple relational database that will maximize data input integrity by creating field pictures, field default values and create lookup tables</p> <p>Demonstrate the ability to create and export AutoCAD attribute data and MicroStation Tag data</p> <p>Configure AutoCAD and MicroStation for database connections</p> <p>Demonstrate a basic knowledge of SQL by be able to create simple SQL statements from within Microsoft Access, AutoCAD and MicroStation</p> <p>Demonstrate the ability to make database queries from within AutoCAD and MicroStation</p> <p>Demonstrate the ability to add, and modify external data in a connected database from within AutoCAD and MicroStation</p>	<p>A semester project will be assessed using the departmental rubric.</p> <p>Eighty percent of the students will earn a minimum of 70% of the points defined by the rubric.</p>

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

No text is required.
A flash drive is required for archiving data files

IV. Suggested Course Maximum - 20

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

Computer workstations, plotters/printers, data projection system and appropriate software

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

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

The grade is based on the average of : written examinations, drawing projects and daily work as specified in the course syllabus. Each of these components are weighted equally.

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed
- **Academic WCJC Core Course**
Attach the Core Curriculum Checklist, including the following:
 - Basic Intellectual Competencies
 - Perspectives
 - Exemplary Educational Objectives
- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.