

Master Syllabus

MET 1371 - CAD Concepts using AutoCAD

Division: Science, Mathematics and Engineering

Department: Mechanical Engineering Technology

Credit Hour Total: 3.0

Lecture Hrs: 2.0 **Lab Hrs:** 3.0

Date Revised: June 2014

Course Description:

Computer-aided drafting using the latest release of AutoCAD. Topics include: drawing and editing tools, two- and three-dimensional drawing, drawing layouts, scaling, dimensioning techniques and plotting. Two classroom, two lab hours per week.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Information Literacy Competency

Course Outcomes:

Scaling and plotting drawings

Develop scaled drawings and plot them as a hard copy and PDF at a specific scale.

Assessment Method: Portfolios

Performance Criteria: 70% or better score on the evaluation of the complete drawing submission set.

CAD drawing creation

Create drawings that reflect current practice in a variety of technical fields.

Assessment Method: Portfolios

Performance Criteria: 70% or better score on the evaluation of the complete drawing submission set.

Visualization and analysis skills

Apply visualization and analysis skills to 2D and 3D objects to extract information and develop proper views of a drawing.

Assessment Method: Portfolios

Performance Criteria: 70% or better score on the evaluation of the complete drawing submission set.

Outline:

CAD basics
Editing and plotting drawings
Dimensioning
Multiview projections and section views
Blocks, attributes, and external references
Customizing dimension styles
Gaining analysis information from your drawings
2D parametric CAD design
3D solids introduction