

## 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

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### **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
- ▣ Information Literacy

### **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