

# COMPUTER AIDED DESIGN & DRAFT (CADD)

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## **CADD 101 Introduction to CADD (3 credits)**

The content of the basic course includes learning CADD commands and working with the user-interface. File maintenance and plotting are used to create two-dimensional design models in a CADD environment using AutoCAD software. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

## **CADD 102 Intermediate CADD (3 credits)**

A continuation of Introduction to CADD with main emphasis on using CADD software to produce Advanced 2-D and introductory 3-D drawings. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

Prerequisite(s): CADD 101

## **CADD 131 Revit 1 (3 credits)**

CADD 131 introduces students to 3-dimensional Building Information Modeling (BIM) using the Revit software package. Students create and edit 3-dimensional building models. Students use these models to create complete sets of construction documents and presentation drawings. Course fee.

Prerequisite(s): CADD 101

## **CADD 222 Geometric Dimensioning and Tolerancing (3 credits)**

An in-depth print reading course stressing the rules and methods used to interpret engineering drawings according to ANSI Y14.5M-1994 standards. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

Prerequisite(s): CADD 102

## **CADD 250 Solid Modeling (3 credits)**

This course provides the student with the skills to develop three-dimensional solid models of a mechanical nature. Students learn to generate complex composite solids by performing Boolean operations on solid primitives. This building block approach to modeling utilizes constructive solid geometry and boundary representation concepts as the basis for defining the model. Course includes 30 lab hours and 30 lecture hours per semester. Course fee.

Prerequisite(s): CADD 102

## **CADD 252 Customizing AutoCAD (3 credits)**

This course explores the variety of tools that AutoCAD provides to customize the drawing environment. Students learn to set and understand system variables, customize the screen environment, create and install custom menus, and write simple AutoLISP programs. Course includes 30 lecture hours and 30 lab hours per semester. Offered in the fall only. Course fee.

Prerequisite(s): CADD 102

## **CADD 260 AutoLISP for AutoCAD (3 credits)**

AutoLISP for AutoCAD is a continuation of Customizing AutoCAD. The primary focus is on building a functional knowledge of the AutoLISP programming language and applying it to uses within AutoCAD. Students develop new AutoCAD commands and functions to automate the CADD process. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

Prerequisite(s): (CADD 102 and CADD 252)

## **CADD 263 Special Topics (3 credits)**

Special topics courses are developed to explore emerging issues or specialized content not represented in the main curriculum. Not all courses are offered each semester. See the schedule of classes for availability.

Prerequisite(s): CADD 101

## **CADD 265 Solidworks (3 credits)**

This course is an introductory course in the use of Solidworks CADD software. It focuses on developing an understanding of the program interface and methods of developing 3-dimensional solid models. Students produce a series of 3D models to test and explore the various methods of assembling a model in Solidworks. Course includes 30 lecture hours and 30 lab hours per semester. Only offered in the spring semester. Course fee.

## **CADD 273 Cooperative Education III: Computer Aided Design and Drafting (3 credits)**

Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled. Students must have completed 12 credits prior to co-op, and have a GPA of 2.0 or higher. Please see the Coordinator for Career Services in Advising, Career & Transfer Services for approval.