ARC 221 Revised: January 2025

Virginia Western Community College ARC 221 Architectural CAD Applications Software I

Prerequisites

CAD 111

Corequisites

none

Course Description

Teaches the principles and techniques of architectural drawing practices through the use of architecture specific CAD software. Utilizes the commands and features of the software to generate drawings that emphasize architectural design and structural systems.

Semester Credits: 3 Lecture Hours: 2 Lab/Clinical/Internship Hours: 2

Required Materials

Textbooks:

Revit Architecture 2015: A Hands-On Guide, 1st ed., author: Goldberg, Peach Pit Press, ISBN# 9780133144680

Other Required Materials:

None

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Course Outcomes

At the completion of this course, the student should be able to utilize the following:

- Understand the concepts of Revit Architecture.
- Create building models.
- Generate different analysis such as area, solar studies.
- Create walkthroughs, detail views and schedules.

Topical Description

- Introduction to Autodesk Revit Architecture
- Getting Started with Revit Architecture
- Creating the First Project
- Using Basic Building Components-I
- Using the Editing Tools
- Working with Datum and Creating Standard Views
- Using Basic Building Components-II
- Using Basic Building Components-III
- Adding Site Features
- Using Massing Tools
- Adding Annotations and Dimensions
- Creating Project Details and Schedules
- Creating Drawing Sheets and Plotting
- Creating 3D Views
- Rendering Views and Creating Walkthroughs
- Using Advanced Features

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Notes to Instructors

• The final project/exam is worth 15-20% of the final grade.

ADA Statement (PDF)

<u>Title IX Statement</u> (PDF)