Course Information Form (CIF)

Course Code: CAD 214

Course Title: Building Information Modeling (BIM) with Revit

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 15.1303
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 2-1-2
Credit Hour Distribution:

Lecture: 2	Lab: 1	Clinical: 0	**Total: 2**

General Course Information

Catalog Description

Students use Autodesk Revit to create coordinated 3D commercial architectural drawings and manage project data in a BIM environment. Coursework covers conceptual modeling, construction documentation, and collaboration tools for architectural and construction applications.

General Course Objectives

Students will use Autodesk Revit to produce 3D commercial building models, generate coordinated drawings and schedules, and collaborate effectively through BIM practices.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 059

Prerequisites

Credit or concurrent enrollment in CAD 114 and CIT 130

Methods of Evaluation

At least 9 drawing assignments. 1 final project.

Instructional Materials and Additional Supplies

Commercial Design Using Autodesk Revit 2021
Author: Daniel John Stine
ISBN: 1630573515

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Floor Plan	1. Draw a floor plan for a commercial building.	4	2	0
Roof	1. Develop a three dimensional roof plan for the structure.	4	2	0
Floor Systems and Reflected Ceiling Plan	1. Create plans for floor and ceiling systems.	3	2	0
Elevations	1. Develop interior and exterior elevation drawings.	4	2	0
Sections and Details	1. Draw section and detail views of the project.	3	2	0
Interior Design	1. Add building components such as desks and tables to the drawings.	3	2	0
Schedules	1. Develop door, window, and room finish schedules for the project.	3	1	0
Site Drawing and Rendering	1. Use Revit tools to create site drawings and building renderings.	3	1	0
Construction Document Set	1. Place all the completed drawings on sheets to assemble a set of construction documents.	3	1	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	15	0