

Master Syllabus

CAT 2201 - Advanced Revit

Division: Science, Mathematics and Engineering

Department: Civil Engineering Technology

Credit Hour Total: 2.0

Lecture Hrs: 1.0 **Lab Hrs:** 2.0

Prerequisite(s): CAT 1121 OR CAT 1131

Date Revised: January 2015

Course Description:

Learn the philosophy of building information modeling and how Revit and other computer-based modeling software can assist in the design, analysis and documentation of buildings. One classroom, two lab hours per week.

General Education Outcomes:

- Oral Communication Competency
- Critical Thinking/Problem Solving Competency
- Computer Literacy Competency
- Information Literacy Competency

Course Outcomes:

Revit Interoperability

Demonstrate the capabilities of Revit to interact with other software to provide building analysis, design support and documentation.

Assessment Method: Portfolios

Performance Criteria:

Score of 70% or better

Building Information Modeling

Identify which software can support various aspects of the building information modeling process and how they interact with the core software, Revit.

Assessment Method: Portfolios

Performance Criteria:

Score of 70% or better

Revit Modeling Techniques

Demonstrate Revit building information modeling techniques and how models should be prepared for analysis by additional software.

Assessment Method: Portfolios

Performance Criteria:

Score of 70% or better

Revit Modeling and System Design

Integrate various system design decisions in Revit building information models to facilitate analysis.

Assessment Method: Portfolios

Performance Criteria:

Score of 70% or better

Outline:

Building information modeling philosophy

Current software interoperability for building design and analysis

Application of Revit software in modeling

Linking and analyzing Revit models across disciplines

Exploration of alternative software analysis and integration tools