

## 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

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### 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