

Master Syllabus

CAT 2741 - Current Topics in Architecture

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 1101 AND CAT 1201

Date Revised: October 2012

Course Description:

Explore recent developments in the architectural profession, especially as related to the architectural technology curriculum. Topics to include environment, green building, energy conservation, building technology, etc. One classroom, two lab hours per week.

General Education Outcomes:

- ▣ Oral Communication Competency
- ▣ Written Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Computer Literacy Competency
- ▣ Information Literacy Competency

Course Outcomes:

Environmental Impact

Describe how the built environment impacts the global ecosystem and how design decisions can impact or mediate this situation.

Assessment Method: Portfolios

Performance Criteria: Score of 70% or better

Building Information Modeling

Describe appropriate building information modeling workflow and current software and product offerings to assist or manage this flow.

Assessment Method: Portfolios

Performance Criteria: Score of 70% or better

Integrated Project Delivery

Identify methods and workflows to support integrated project delivery by a variety of built environment disciplines.

Assessment Method: Portfolios

Performance Criteria: Score of 70% or better

Material and System Advances

Describe new materials and systems to provide advanced performance of buildings and other built environment components.

Assessment Method: Portfolios

Performance Criteria: Score of 70% or better

Outline:

Environmental impact of the built environment
Recent technological advances in built environment issues
Application of software in modeling buildings and impact on environment
Linking and analyzing Revit models across disciplines
Exploration of alternative software analysis and integration tools