

**Number & Title of Course:**

ARCH 4060 Building Technology II, 4 credits

**Course Description:**

This course investigates the building envelope and structural system, explored through the creation of a set of technical drawings for a commercial building.

**Course Goals:**

- The primary goal is to integrate materials, structural systems, and technologies into the design and documentation process.
- To consider the implications of accessible design into the design and documentation process.
- To understand the methods and techniques necessary to develop a detailed set of technical documents including drawings and specifications.

**Course Objectives:**

- Students should be able to convey through drawings and written descriptions knowledge of typical construction materials, their assembly and applications.
- Students should be able to demonstrate the architectural and tectonic relationship of building elements and their assembly at individual component level of detail.
- Students should be able to research material alternatives and appropriately apply material research to the design and documentation process.
- Students should be able to use BIM software to develop to scale technical drawings.

**Student Performance Criteria addressed:**

B.4. Technical Documentation

B.5. Structural Systems

**Topical Outline:**

Material Assembly and Systems (50%)

Construction Documentation (50%)

**Prerequisites:**

ARCH 2060 Building Technology I; ARCH 4000 *Design V: Technology – Co-Requisite*

**Textbooks/Learning Resources:**

*The Architect's Studio Companion*; 6th Edition; Allen, Iano; John Wiley and Sons; 2017

*Building Construction Illustrated*; Ching, John Wiley and Sons, 2014

*Architectural Graphic Standards*; Ramsey, Sleeper; John Wiley and Sons; 2008

2-D/3-D computer software

**Offered:**

Fall, Annually

**Faculty assigned:**

Greg Eddy, Adjunct Assistant Professor of Architecture (Fall 2017)

Joe Sinclair, Adjunct Assistant Professor of Architecture (Fall 2016)