



South Central College

## BDET 2110 Studio III

### Course Outcome Summary

#### Course Information

<b>Description</b>	Building Information Modeling (BIM) will be incorporated. Construction methods & materials, LEED principles, design process, preparation of details, research, and incorporation of applicable codes and ordinances shall be major factors in developing this coordinated set of working drawings. The International Building Code (IBC) and the American Disability Act (ADA) will be determining factors in this commercial project. This class will continue to further the students knowledge of construction, materials, and applications of various architectural and engineering design principles. (Prerequisites: BDET 1210 - Studio II)
<b>Total Credits</b>	4
<b>Total Hours</b>	96

#### Types of Instruction

Instruction Type	Credits/Hours
Lecture	2/32
Lab	2/64

#### Pre/Corequisites

BDET 1210 - Studio II

#### Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

#### Course Competencies

**1. Demonstrate building design knowledge.**

**Learning Objectives**

- Demonstrate an awareness of architectural requirements.
- Demonstrate an awareness of structural requirements.
- Demonstrate an awareness of mechanical requirements.
- Demonstrate an awareness of electrical requirements.

**2. Illustrate foundation plan comprehension.**

**Learning Objectives**

Draft project specific structural foundation plans.  
Dimension project specific foundation plans.  
Coordinate project specific foundation plan details.

**3. Demonstrate floor plan knowledge.**

**Learning Objectives**

Draft project specific floor plans.  
Dimension project specific floor plans.  
Coordinate project specific floor plan details.

**4. Illustrate roof plan knowledge.**

**Learning Objectives**

Draft project specific roof plans.  
Detail project specific roof plan elements.  
Coordinate project specific roof plan details.

**5. Demonstrate an awareness of reflected ceiling plans.**

**Learning Objectives**

Draft project specific reflected ceiling plans.  
Detail project specific reflected ceiling plan elements - electrical and mechanical disciplines.  
Coordinate project specific reflected ceiling plan details.

**6. Demonstrate sectioning comprehension.**

**Learning Objectives**

Draft project specific building sections.  
Demonstrate an understanding the building envelope.  
Select energy related building materials.

**7. Produce an understanding of exterior elevations.**

**Learning Objectives**

Draft project specific exterior elevations.  
Annotate project specific exterior elevations.  
Coordinate project specific elevation details.

**8. Illustrate wall type's comprehension.**

**Learning Objectives**

Select project specific wall types.  
Draft project specific wall types.  
Coordinate project specific wall types.

**9. Exhibit knowledge of framing materials.**

**Learning Objectives**

Draft project specific construction framing details.  
Annotate project specific construction framing details.  
Coordinate project specific construction framing details.

**10. Illustrate knowledge of site plans.**

**Learning Objectives**

Draft project specific site plans.  
Dimension project specific site plans.  
Annotate project specific site plans.

**11. Describe knowledge of building materials.**

**Learning Objectives**

Select LEED project specific compliant finish materials.  
Annotate project specific finish materials.  
Organize project specific finish materials.

**12. Demonstrate schedule comprehension.**

**Learning Objectives**

List the three main schedules in the architectural sheets.  
Explain components that make up the schedules.  
Organize project specific schedules.

**13. Demonstrate plan coordination.**

**Learning Objectives**

Critique construction documents.  
Correct construction documents.  
Categorize construction documents.

**14. Demonstrate ability to research.**

**Learning Objectives**

Study and apply ADA requirements.  
Institute requirements set forth by the IBC.  
Examine zoning ordinances and apply requirements.

**15. Demonstrate workplace professionalism & ethics.**

**Learning Objectives**

Make timely and sound decision.  
Take appropriate action to a situation.  
Ensure quality standards are met.

**SCC Accessibility Statement**

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: [www.southcentral.edu/disability](http://www.southcentral.edu/disability)

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.