



Western Technical College

10614132 Architectural Drafting - Commercial

Course Outcome Summary

Course Information

Description	This course challenges the intermediate architectural student to cultivate critical thinking skills in order to solve design problems associated with commercial architecture. Procedures to prepare construction documents for projects that meet current code and accessibility requirements will be highlighted. Students will capitalize on skills acquired in previous courses to develop architectural plans, elevations, sections, schedules and details.
Career Cluster	Architecture and Construction
Instructional Level	Associate Degree Courses
Total Credits	4
Total Hours	126

Pre/Corequisites

Prerequisite	10614106 Architectural CAD
Prerequisite	10804107 College Mathematics

Textbooks

Design Integration Using Autodesk Revit 2022. Copyright 2021. Stine, Daniel John. Publisher: Schroff Development Corporation. **ISBN-13**: 978-1-63057-451-2. Required.

Success Abilities

1. Cultivate Passion: Increase Self-Awareness
2. Live Responsibly: Develop Resilience

Program Outcomes

1. Develop construction documents
2. Evaluate building materials
3. Develop building designs
4. Integrate building systems

Course Competencies

1. Identify information required to prepare construction documents for a commercial building.

Assessment Strategies

- 1.1. By preparing construction document project files.

Criteria

You will know you are successful when

- 1.1. Project files include sheets for each specified component.
- 1.2. Sheets are organized per uniform drawing system guidelines.
- 1.3. Cover sheet includes an area location map.
- 1.4. Cover sheet includes a symbols legend.
- 1.5. Cover sheet includes a materials legend.
- 1.6. Cover sheet includes a sheet index.

Learning Objectives

- 1.a. List drawing sheets to include in a set of working drawings.
- 1.b. Discuss criteria for graphic informational elements.
- 1.c. Explain the use of a mock-up set of drawings.
- 1.d. Identify typical titleblock information.

2. Develop a site plan for a commercial building.

Assessment Strategies

- 2.1. By reproducing a given site plan.
- 2.2. By reproducing given site details.

Criteria

You will know you are successful when

- 2.1. Site plan contains accurate information that matches provided drawing.
- 2.2. Drawing includes all notes from previously designed site plan.
- 2.3. Drawing includes all dimensions from previously designed site plan.
- 2.4. Details show accurate representations of specified materials.
- 2.5. Details include labels and notes to indicate materials.
- 2.6. Site plan sheet is printed to scale on completed titleblock.

Learning Objectives

- 2.a. Identify factors affecting site plan preparation.
- 2.b. Differentiate between an architectural site plan and a grading site plan.
- 2.c. Outline information to be included on various types of site plans.
- 2.d. Discuss the sequence of drafting site plans.

3. Develop floor plans for a commercial building.

Assessment Strategies

- 3.1. By reproducing given floor plans.

Criteria

Your performance will be successful when:

- 3.1. Floor plans contain accurate information that matches provided drawings.
- 3.2. Drawings include all notes from previously designed floor plans.

- 3.3. Drawings include all dimensions from previously designed floor plans.
- 3.4. Floor plan sheets are printed to scale on completed titleblocks.

Learning Objectives

- 3.a. Identify factors affecting floor plan preparation.
- 3.b. Outline information to be included on floor plans.
- 3.c. Discuss the sequence of drafting floor plans.

4. Develop a roof plan for a commercial building.

Assessment Strategies

- 4.1. By reproducing a given roof plan.
- 4.2. By reproducing given roof details.

Criteria

Your performance will be successful when:

- 4.1. Roof plan contains accurate information that matches provided drawing.
- 4.2. Drawing includes all notes from previously designed roof plan.
- 4.3. Drawing includes all dimensions from previously designed roof plan.
- 4.4. Details show accurate representations of specified materials.
- 4.5. Details include labels and notes to indicate materials.
- 4.6. Roof plan sheet is printed to scale on completed titleblock.

Learning Objectives

- 4.a. Identify factors affecting roof plan preparation.
- 4.b. Outline information to be included on roof plans.
- 4.c. Discuss the sequence of drafting roof plans.

5. Develop reflected ceiling plans for a commercial building.

Assessment Strategies

- 5.1. By reproducing given reflected ceiling plans.
- 5.2. By reproducing given ceiling details.

Criteria

Your performance will be successful when:

- 5.1. Reflected ceiling plans contain accurate information that matches provided drawings.
- 5.2. Drawings include all notes from previously designed reflected ceiling plans.
- 5.3. Drawings include all dimensions from previously designed reflected ceiling plans.
- 5.4. Details show accurate representations of specified materials.
- 5.5. Details include labels and notes to indicate materials.
- 5.6. Reflected ceiling plan sheets are printed to scale on completed titleblocks.

Learning Objectives

- 5.a. Identify factors affecting reflected ceiling plan preparation.
- 5.b. Outline information to be included on reflected ceiling plans.
- 5.c. Discuss the sequence of drafting reflected ceiling plans.

6. Develop exterior elevations for a commercial building.

Assessment Strategies

- 6.1. By reproducing given exterior elevations.

Criteria

Your performance will be successful when:

- 6.1. Exterior elevations contain accurate information that matches provided drawings.
- 6.2. Drawing includes all notes from previously designed exterior elevations.
- 6.3. Drawing includes all dimensions from previously designed exterior elevations.
- 6.4. Exterior elevations sheet is printed to scale on completed titleblock.

Learning Objectives

- 6.a. Identify factors affecting exterior elevation preparation.
- 6.b. Outline information to be included on exterior elevations.

6.c. Discuss the sequence of drafting exterior elevations.

7. Develop building sections for a commercial building.

Assessment Strategies

7.1. By reproducing given building sections.

Criteria

Your performance will be successful when:

- 7.1. Building sections contain accurate information that matches provided drawings.
- 7.2. Drawing includes all notes from previously designed building sections.
- 7.3. Drawing includes all dimensions from previously designed building sections.
- 7.4. Building sections sheet is printed to scale on completed titleblock.

Learning Objectives

- 7.a. Identify factors affecting building section preparation.
- 7.b. Outline information to be included on building sections.
- 7.c. Discuss the sequence of drafting building sections.

8. Develop wall sections for a commercial building.

Assessment Strategies

8.1. By reproducing given wall sections.

Criteria

Your performance will be successful when:

- 8.1. Wall sections contain accurate information that matches provided drawings.
- 8.2. Drawing includes all notes from previously designed wall sections.
- 8.3. Drawing includes all dimensions from previously designed wall sections.
- 8.4. Wall sections sheet is printed to scale on completed titleblock.

Learning Objectives

- 8.a. Identify factors affecting wall section preparation.
- 8.b. Outline information to be included on wall sections.
- 8.c. Discuss the sequence of drafting wall sections.

9. Develop vertical transportation drawings for a commercial building.

Assessment Strategies

- 9.1. By reproducing given vertical transportation drawings.
- 9.2. By reproducing given stair details.

Criteria

Your performance will be successful when:

- 9.1. Vertical transportation sheet contains accurate information that matches provided drawings.
- 9.2. Drawings include all notes from previously designed vertical transportation components.
- 9.3. Drawings include all dimensions from previously designed vertical transportation components.
- 9.4. Details show accurate representations of specified materials.
- 9.5. Details include labels and notes to indicate materials.
- 9.6. Vertical transportation sheet is printed to scale on completed titleblock.

Learning Objectives

- 9.a. Identify factors affecting vertical transportation drawing preparation.
- 9.b. Outline information to be included on vertical transportation drawings.
- 9.c. Discuss the sequence of drafting vertical transportation drawings.

10. Develop enlarged plans for a commercial building.

Assessment Strategies

- 10.1. By reproducing given enlarged plans.
- 10.2. By reproducing given interior details.

Criteria

Your performance will be successful when:

- 10.1. Enlarged plans contain accurate information that matches provided drawings.
- 10.2. Drawing includes all notes from previously designed enlarged plans.
- 10.3. Drawing includes all dimensions from previously designed enlarged plans.
- 10.4. Details show accurate representations of specified materials.
- 10.5. Details include labels and notes to indicate materials.
- 10.6. Enlarged plan sheet is printed to scale on completed titleblock.

Learning Objectives

- 10.a. Identify factors affecting enlarged plan preparation.
- 10.b. Outline information to be included on enlarged plans.
- 10.c. Discuss the sequence of drafting enlarged plans.

11. Develop interior elevations for a commercial building.

Assessment Strategies

- 11.1. By reproducing given interior elevations.

Criteria

Your performance will be successful when:

- 11.1. Interior elevations contain accurate information that matches provided drawings.
- 11.2. Drawing includes all notes from previously designed interior elevations.
- 11.3. Drawing includes all dimensions from previously designed interior elevations.
- 11.4. Interior elevations sheet is printed to scale on completed titleblock.

Learning Objectives

- 11.a. Identify factors affecting interior elevation preparation.
- 11.b. Outline information to be included on interior elevations.
- 11.c. Discuss the sequence of drafting interior elevations.

12. Develop schedules for a commercial building.

Assessment Strategies

- 12.1. By reproducing given schedules.
- 12.2. By reproducing given frame elevations.

Criteria

Your performance will be successful when:

- 12.1. Schedules contain accurate information that matches provided drawings.
- 12.2. Schedules are formatted to match provided drawings.
- 12.3. Frame elevations contain accurate information that matches provided drawings.
- 12.4. Drawing includes all notes from previously designed schedule sheet.
- 12.5. Drawing includes all dimensions from previously designed schedule sheet.
- 12.6. Schedule sheet is printed to scale on completed titleblock.

Learning Objectives

- 12.a. Identify factors affecting schedule preparation.
- 12.b. Differentiate between various types of schedules.
- 12.c. Outline information to be included on schedules.
- 12.d. Discuss the sequence of drafting schedules.