

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGY & SKILLED TRADES DIVISION
Building Construction Technology Program
Revision Date: March 2026

I. CATALOG DESCRIPTION

Course Number: CNST1325
Course Title: Drafting I
Prerequisite(s): CNST1225 or by Permission
Catalog Description: This course introduces the fundamentals of architectural drafting, including design principles, drafting techniques, industry standards, and applicable building codes. Students will learn to develop key residential working drawings such as floor plans, basement/foundation plans, construction details, and door and window schedules. Emphasis is placed on construction methods and addressing common design challenges in residential architecture.

Credit Hours: 3
Class Hours: 30
Lab Hours: 45
Total Contact Hours: 75

II. COURSE OBJECTIVES: *Course will:*

- A. Explain key site planning considerations.
- B. Describe the working drawings used to build a structure.
- C. Identify the three main areas in a typical residence.
- D. Apply preplanning information to design a floor plan, basement plan and foundation plan.
- E. Illustrate how to layout and draw floor plan and basement/foundation components.
- F. Demonstrate detailing concepts – how and what information is required and how it is drawn.
- G. Evaluate line weight and line contrast formats.
- H. Distinguish between types of lines.
- I. Use reference catalogs to find information about doors and windows.
- J. Collect door and window information and arrange it into door and window schedules.
- K. Produce a full set of residential working drawings.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Identify codes and their relationship to construction.
 - 2. Complete window and door schedules.
 - 3. Calculate stair data stairwell openings.
 - 4. Interpret and draw a residential floor and foundation plan.
 - 5. Dimension with symbols, notes and related construction to their drawings.
- B. General Education Learning Outcomes (GELOs)
 - 1. GELO #3: Critical Thinking & Problem Solving
Outcome 2: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE *(course outline may provide more detailed information)*

- A. Architectural Drafting Fundamentals
 - 1. Basic house designs.
- B. Architectural Planning
- C. Primary Residential Design Considerations. Living Area, Sleeping Area, and Service Area. Plan Development
 - 1. Floor Plans, Foundation Plans, Site Plans, Roof Designs
- D. Construction Systems and Supplemental Drawings
 - 1. Doors and Windows, Building Sections, Elevations, Stair Details
- E. Computer-Aided Drafting with Revit
 - 1. Revit Interface, Drawing Setup, Drafting Standards, Wall Layout, Door and Window Layout, Stairs, Permanent Appliances and Fixtures, and Cabinetry.
- F. Residential Drafting Capstone
 - 1. Design and draw a complete set of drawings.

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s): Architecture residential drafting and design ISBN 9781631263156
- B. Supplies: Calculator, Notebook

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
 - 1. Lecture
 - 2. Hands-on drawing projects
 - 3. Lab and classroom demonstrations
 - 4. Lab and classroom discussions
 - 5. Video presentations
 - 6. PowerPoint presentations
 - 7. Speaker(s)
 - 8. Field Trip(s)
 - 9. Instructional handouts

VII. METHODS OF EVALUATION

- A. Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 - 1. Tests and Quizzes
 - a. Complete tests and quizzes on assigned due date
 - b. Points are deducted if a test or quiz is not completed on the assigned due date.
 - c. Assigned due dates are provided.
 - 2. Assignment Sheets –Course Information Document
 - a. Define tests and quizzes
 - b. States when test and quiz assigned due dates are
 - c. States the number of points each test or quiz is worth
 - 3. Review sheets and class discussions are provided prior to each test and quiz.
 - 4. Drawings
 - a. Floor plan
 - b. Foundation plan
 - c. Construction Details
 - 5. Drawings Grade
 - a. Graded individually
 - b. Criteria for each drawing is listed on the assignment sheet

- c. Due dates are provided with assignment
- d. Complete projects on time
- e. Points are deducted if a project is late
- f. Based on the accumulated points for correct information divided by the total possible points for the drawing
- g. Total possible points for each drawing are listed on the assignment sheet

VIII. SPECIFIC COURSE REQUIREMENTS

- A. Student must meet all of the following to receive a passing grade:
 - 1. Achieve a passing grade of “C” (70%) or higher, based on SCC grading scale.
 - 2. Submit own work. Students turning in homework, reports, field notes, or calculations by someone other than themselves will receive 0% and be referred to the Division Dean and Dean of Students for further disciplinary action. Consequences can include failing the course.
 - 3. Demonstrate attitude, skills, and character commensurate with industry standards.
 - 4. Intentional damage to college property will not be tolerated and may result in punitive action, such as being removed from the program.
All cell phones will be turned off during class/lab time. If this becomes a problem, the instructor may consider the delinquent student absent.
- B. All program policies of the Building Construction Technology program will be strictly enforced.