

# ATCT-2370: INTERIOR SYSTEMS LAYOUT

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## Cuyahoga Community College

**Viewing: ATCT-2370 : Interior Systems Layout**

**Board of Trustees:**

September 2025

**Academic Term:**

Fall 2025

**Subject Code**

ATCT - Appld Indus Tech - Carpentry

**Course Number:**

2370

**Title:**

Interior Systems Layout

**Catalog Description:**

Includes elementary concepts of the interior systems industry construction methods used to layout and fabricate standard metal stud partition walls and soffit systems. Includes related blueprint reading skills, angle and octagon wall layout, applicable math concepts, and safety regulations as prescribed by Occupational Safety and Health Administration (OSHA) standards.

**Credit Hour(s):**

2

**Lecture Hour(s):**

2

## Requisites

**Prerequisite and Corequisite**

ATCT-1351 Metal Studs and Dry Walls, and ATCT-2361 Suspended Ceilings, and departmental approval: Admissions to Carpentry Technology apprenticeship program.

## Outcomes

**Course Outcome(s):**

Layout and fabricate metal stud partitions and soffit systems using various radius and angle shapes.

**Objective(s):**

1. Identify various components, materials, and terminology used in the interior systems industry.
2. Safely operate and use hand and power tools required for wall and soffit fabrication.
3. Interpret blueprints to lay out and fabricate metal stud partitions having perpendicular intersections, and containing door and window openings.
4. Identify OSHA standards for safe working procedures in the interior systems industry.

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**Methods of Evaluation:**

1. Exams
2. Quizzes
3. Skills evaluation
4. Participation

### Course Content Outline:

1. Concepts
  - a. Job Planning
    - i. Job site inspection
    - ii. Equipment and material
    - iii. Terminology
    - iv. Communication skill with others
    - v. OSHA Standards
  - b. Layout procedures
    - i. Grid lines
    - ii. Point of beginning
    - iii. Parallel lines
    - iv. Special shapes
  - c. Layout methods
    - i. Angled walls
    - ii. Radius walls
    - iii. Door and window openings
  - d. Unique layout problems
    - i. Bisecting lines and angles
    - ii. Circles and arcs
    - iii. Octagons
2. Skills
  - a. Interpret blueprints for layout information, equipment and materials needed
  - b. Proper procedures for layout of grid lines, point of beginning, perpendicular and parallel lines, and special shapes
  - c. Layout of angle, radius, and door and window openings
  - d. Layout of unique problems such as bisecting lines and angles, circles and arcs, and octagons
  - e. Operate hand and power tools for interior systems
3. Issues
  - a. Handling of sharp material
  - b. Hand and powertool safety
  - c. Sequence of construction on differing projects

### Resources

Koel, Leonard. Carpentry. 7th ed. Homewood IL: American Technical Publishers, 2021.

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Carpenters International Training Fund. *Doors and Hardware*. Las Vegas, NV: Carpenters International Training Fund, 2022.

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Carpenters International Training Fund. *Interior Systems Layout*. Las Vegas, NV: Carpenters International Training Fund, 2021.

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### Resources Other

1. [www.carpenters.org](http://www.carpenters.org) (<http://www.carpenters.org>) United Brotherhood of Carpenters
2. [www.tradesecrets.gov](http://www.tradesecrets.gov) (<http://www.tradesecrets.gov>) Interior Systems Resource Material
3. [www.cisca.org](http://www.cisca.org) (<http://www.cisca.org>) Ceilings and Interior Systems Construction Association
4. [www.manta.com](http://www.manta.com) (<http://www.manta.com>) Interior Systems

Top of page

Key: 280