

# ATCT-1811: SPECIAL TOPICS IN DOOR SAFETY INSPECTOR CERTIFICATION

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## Cuyahoga Community College

**Viewing: ATCT-1811 : Special Topics in Door Safety Inspector Certification**

**Board of Trustees:**

May 2025

**Academic Term:**

Fall 2026

**Subject Code**

ATCT - Appld Indus Tech - Carpentry

**Course Number:**

1811

**Title:**

Special Topics in Door Safety Inspector Certification

**Catalog Description:**

This 40-hour DSI Fire Door Inspection Training Program concentrates on teaching the participants how to effectively and efficiently navigate code books and apply codes to different scenarios that may be encountered while inspecting doors in public facilities. This course also teaches the participant how to perform inspections of doors in accordance with fire door inspection provisions and requirements specified in NFPA 80, Standard for Fire Doors and Other Opening Protectives, NFPA 101, Life Safety Code, NFPA 105, Standard for Smoke Door Assemblies and Other Opening Protectives and the Door Safety Inspecting and Maintaining Swinging Doors Handbook.

Successful completion of this

**Credit Hour(s):**

2

**Lecture Hour(s):**

2

## Requisites

**Prerequisite and Corequisite**

Department approval: Admission to apprenticeship program and sufficient score on 16 Doors and Hardware Class or DSI Pre-test

## Outcomes

**Course Outcome(s):**

Effectively and efficiently navigate code books and apply codes to different scenarios that may be encountered while inspecting doors in public facilities.

**Objective(s):**

1. Lookup and explain door- related requirements in NFPA 80, NFPA 105, and NFPA 101.
2. Explain Door Usage Types and Categories and Door Maintenance Priority Levels.

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**Course Outcome(s):**

Perform inspections of doors in accordance with fire door inspection provisions and requirements specified in accordance with National Fire Protection Association Standards ( NFPA 80, NFPA 101, NFPA 105) and American Hospital Association Standards.

**Objective(s):**

1. Recommend code-compliant repairs for fire-rated door assemblies.
  2. Perform Acceptance Testing Inspections.
  3. Perform door safety inspections of swinging egress and fire-rate door assemblies.
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**Methods of Evaluation:**

Upon successful completion of the Door Safety Inspector Certification, the participant should be able to:

1. Lookup and explain door-related requirements in NFPA 80, NFPA 105, and NFPA 101.
2. Explain Door Usage Types and Categories and Door Maintenance Priority Levels.
3. Recommend code-compliant repairs for fire-rated door assemblies.
4. Perform Acceptance Testing Inspections.
5. Perform door safety inspections of swinging egress and fire-rate door assemblies.

**Course Content Outline:**

## **I. Introduction to Fire and Egress Door Systems**

1. Purpose of fire-rated and smoke-resistant doors
  2. Life safety role in compartmentalization and egress
  3. Overview of applicable codes and standards:
    - a. NFPA 80 (Fire Doors and Other Opening Protectives)
    - b. NFPA 105 (Smoke Door Assemblies)
    - c. NFPA 101 (Life Safety Code)
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## **II. Code Interpretation and Requirements**

### **A. NFPA 80 – Fire Door Assemblies**

1. Scope and application
2. Fire door labeling requirements
3. Installation requirements
4. Inspection and testing requirements
5. Maintenance and repair criteria

### **B. NFPA 105 – Smoke Door Assemblies**

1. Purpose and differences from fire doors
2. Leakage requirements and testing
3. Installation and inspection standards
4. Maintenance expectations

### **C. NFPA 101 – Life Safety Code**

- Means of egress requirements
  - Door operation requirements:
    - Swing direction
    - Latching and locking
    - Hardware requirements
  - Accessibility and occupancy considerations
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## **III. Door Usage Types and Categories**

### **A. Door Usage Types**

1. Fire-rated doors
2. Smoke doors
3. Egress doors
4. Security doors
5. Specialty doors (e.g., hospital, industrial)

## **B. Door Categories by Function**

1. Interior vs. exterior doors
2. Rated vs. non-rated assemblies
3. High-use vs. low-use openings

## **C. Door Maintenance Priority Levels**

1. Critical (life safety impact)
  2. High (frequent use or required function)
  3. Moderate (routine function)
  4. Low (non-critical applications)
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# **IV. Code-Compliant Repairs**

## **A. Identifying Deficiencies**

1. Damaged door leaves or frames
2. Missing or non-compliant hardware
3. Improper clearances and gaps
4. Inoperative self-closing devices

## **B. Repair Requirements**

1. What repairs are permitted in the field
2. When components must be replaced
3. Maintaining fire ratings and labels

## **C. Code Compliance Considerations**

1. Approved parts and materials
  2. Documentation of repairs
  3. Coordination with AHJ (Authority Having Jurisdiction)
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# **V. Acceptance Testing Inspections**

## **A. Purpose of Acceptance Testing**

1. Verifying proper installation
2. Ensuring compliance before occupancy

## **B. Inspection Procedures**

1. Verifying labels and ratings
2. Checking installation alignment and clearances
3. Hardware function testing

## **C. Documentation and Reporting**

1. Inspection checklists
  2. Recording deficiencies
  3. Certification and sign-off requirements
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# **VI. Door Safety Inspections**

## **A. Swinging Egress Door Inspections**

1. Operation and unobstructed path
2. Proper swing direction
3. Latching and locking mechanisms
4. Panic hardware functionality

## **B. Fire-Rated Door Assembly Inspections**

1. Annual inspection requirements (NFPA 80)
2. Inspection criteria:

- a. Door, frame, hinges
  - b. Seals and gasketing
  - c. Closing devices
3. Clearance and gap measurements

### **C. Common Deficiencies and Corrections**

- 1. Non-compliant field modifications
- 2. Missing labels or damaged components
- 3. Improper hardware substitutions

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## **VII. Inspection Procedures and Best Practices**

- 1. Step-by-step inspection workflow
- 2. Use of inspection tools and checklists
- 3. Safety precautions during inspection
- 4. Professional documentation standards

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## **VIII. Integration and Application**

- 1. Case studies of door failures and code violations
- 2. Real-world inspection scenarios
- 3. Prioritizing repairs based on risk levels
- 4. Preparing reports for compliance and audits

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## **IX. Assessment and Competency Verification**

- 1. Code lookup exercises (NFPA 80, 105, 101)
- 2. Practical inspection simulations
- 3. Deficiency identification exercises
- 4. Final comprehensive inspection and report

### **Religious Accommodation**

Before reviewing the course schedule, students should carefully review the following religious accommodation policy and other required instructional policies:

#### **Religious Accommodation:**

Students seeking an accommodation for absences permitted under Ohio's Testing Your Faith Act must provide the instructor with written notice of the specific dates for which the student requires an accommodation and must do so not later than fourteen (14) days after the first day of instruction. Please submit requests for accommodations at this link: <https://portal2.tri-c.edu/ReligiousAccommodation/ReligiousAccommodationForm>. Students with questions about their religious accommodations under Ohio's Testing Your Faith Act may contact the College's Office of General Counsel and Legal Services by phone at 216.987.4856 or via email at [legal@tri-c.edu](mailto:legal@tri-c.edu).

#### **Other Required Instructional Policies:**

<https://www.tri-c.edu/student-resources/curriculum/documents/syllabus-part-b.pdf>

### **Weekly Schedule**

	<b>Topics</b>
Week 1	Introduction to Fire & Egress Door Systems
Week 2	Code Overview & Navigation
Week 3	NFPA 80 – Scope & Labeling
Week 4	NFPA 80 – Installation Requirements
Week 5	NFPA 80 – Inspection & Maintenance
Week 6	NFPA 105 – Smoke Door Assemblies

Week 7	NFPA 101 – Means of Egress
Week 8	NFPA 101 – Hardware & Accessibility
Week 9	Door Usage Types & Categories
Week 10	Maintenance Priority Levels
Week 11	Identifying Deficiencies
Week 12	Code-Compliant Repairs
Week 13	Acceptance Testing Inspections
Week 14	Door Safety Inspections
Week 15	Inspection Procedures & Application
Week 16	Finals Week

The Course Schedule is subject to change due to pedagogical needs, instructor discretion, parts of term, and unexpected events.

### Required/Recommended Readings

Instructor provided materials.

### Resources for the Instructor

National Fire Protection Association. *NFPA 80 Standard for Fire Doors and Other Opening Protectives*. National Fire Protection Association, 2025. 2025 edition.

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National Fire Protection Association. *NFPA 105 Standard for Smoke Door Assemblies and Other Opening Protectives*. 2022 edition. National Fire Protection Association, 2022 .

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National Fire Protection Association. *NFPA 101 Life Safety Code*. 2024 ed. National Fire Protection Association, 2024.

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American Hospital Association and The American Society for Healthcare Engineering (ASHE). *Inspecting and Maintaining Swinging Doors Handbook (A How-To-Guide to Egress and Fire Door Safety)*. American Hospital Association, 2018.

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