# Washtenaw Community College Comprehensive Report

# UAT 185 Inspection, Testing, and Maintenance (ITM) of Fire Protection Systems/ASSE15000 (UA 7050)
# Effective Term: Fall 2020

## Course Cover

**Division:** Advanced Technologies and Public Service Careers
**Department:** United Association Department
**Discipline:** United Association Training
**Course Number:** 185
**Org Number:** 28200
**Full Course Title:** Inspection, Testing, and Maintenance (ITM) of Fire Protection Systems/ASSE15000 (UA 7050)
**Transcript Title:** ITM Fire Protect Systems 7050
**Is Consultation with other department(s) required:** No
**Publish in the Following:**
**Reason for Submission:** New Course
**Change Information:**
**Rationale:** New United Association course
**Proposed Start Semester:** Fall 2020
**Course Description:** In this course, students will identify and study the codes for inspection and testing of water-based fire protection systems in accordance with the National Fire Protection Association (NFPA 25). Students will review the process and documentation, as well as perform hands-on testing, including the maintenance required to restore the system to normal operation. In addition, students will have the opportunity to take the American Society of Safety Engineers (ASSE) 15000 Water-Based Fire Protection certification exam. Limited to United Association program participants.

## Course Credit Hours

**Variable hours:** No
**Credits:** 3
**Lecture Hours: Instructor:** 45 **Student:** 45
**The following Lab fields are not divisible by 15: Student Min, Instructor Min**
**Lab: Instructor:** 3 **Student:** 3
**Clinical: Instructor:** 0 **Student:** 0

**Total Contact Hours: Instructor:** 48 **Student:** 48
**Repeatable for Credit:** NO
**Grading Methods:** Letter Grades
Audit
**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

## College-Level Reading and Writing

College-level Reading & Writing

## College-Level Math

## Requisites

## General Education

**Degree Attributes**
Below College Level Pre-Reqs

## Request Course Transfer

**Proposed For:**

## Student Learning Outcomes

1. Identify the codes and standards for inspection, testing and maintenance of a fire protection system.
   **Assessment 1**
   Assessment Tool: Outcome-related written exam questions
   Assessment Date: Fall 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 80%of the students will score 80% or higher.
   Who will score and analyze the data: U.A. instructors

2. Demonstrate a main drain test, dry valve test and fire pump test in accordance with NFPA 25.
   **Assessment 1**
   Assessment Tool: Demonstration
   Assessment Date: Fall 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Observational checklist
   Standard of success to be used for this assessment: 80% of the students will score 80% or higher.
   Who will score and analyze the data: U.A. instructors

## Course Objectives

1. Identify codes and standards for the inspection, testing and maintenance of water-based fire protection systems.
2. Discuss the application of codes and the process for documentation.
3. Locate and navigate online resources for references to tests and NFPA documentation.
4. Discuss and demonstrate the sequencing of a main drain test, including documentation and system restoration.
5. Discuss and demonstrate sequencing of dry valve trip test, including documentation and system restoration.
6. Discuss and demonstrate the sequencing of a pre-action valve trip test, including documentation and system restoration.
7. Discuss and demonstrate the sequencing of a fire pump test at 100% and 150% churn, including documentation and system restoration.
8. Discuss all safety issues involved in performing tests, including personal protective equipment (PPE), lockout/tagout and pressure concerns.
9. Discuss equipment used for testing.
10. Review the history of water-based fire protection systems and the need for standards.

## New Resources for Course

## Course Textbooks/Resources

Textbooks

National Fire Protection Association. *NFPA 20*, ed. NFPA, 2013
National Fire Protection Association. *NFPA 25*, ed. NFPA, 2014
National Fire Protection Association . *NFPA 13*, ed. NFPA, 2017
National Fire Protection Association. *NFPA 14*, ed. NFPA, 2013
Manuals
Periodicals
Software

## Equipment/Facilities

| Reviewer | Action | Date |
|---|---|---|
| **Faculty Preparer:** | | |
| *Tony Esposito* | *Faculty Preparer* | *May 29, 2020* |
| **Department Chair/Area Director:** | | |
| *Marilyn Donham* | *Recommend Approval* | *Jun 05, 2020* |
| **Dean:** | | |
| *Jimmie Baber* | *Recommend Approval* | *Jun 10, 2020* |
| **Curriculum Committee Chair:** | | |
| *Lisa Veasey* | *Recommend Approval* | *Oct 26, 2020* |
| **Assessment Committee Chair:** | | |
| *Shawn Deron* | *Recommend Approval* | *Oct 27, 2020* |
| **Vice President for Instruction:** | | |
| *Kimberly Hurns* | *Approve* | *Oct 27, 2020* |