*Business Division*

# FIRE TECHNOLOGY AND ADMINISTRATION

The program in Fire Technology and Administration is designed to provide advanced training and education that develops competent leaders in fire protection, prevention, and administration. It also provides training and education for personnel of insurance companies and of industries involved in fire prevention and protection practices.

Working in career and volunteer fire departments, local, state and federal government agencies, industry, architectural and construction firms, insurance organizations, and related groups, the fire technologist knows the need for fire prevention activities, the necessity to educate both children and adults in fire safety, and the importance of enforcing fire prevention codes. Because of the broad spectrum of problems encountered and the need for extensive familiarity with many subjects, the work of the fire technologist is seldom routine or boring. There is always something new to learn. However, the greatest satisfaction may come from knowing that the effective fire technologist continually improves the world in which we live by making it a safer place.

The program of study which leads to the associate in science degree in Fire Technology and Administration is planned to help students meet the professional standards established by the National Fire Protection Association, the Connecticut Commission on Fire Prevention and Control, and the Connecticut Fire Marshal's Training Council.

*General Education Core course listings and definitions appear on pages 53-54. Placement testing will determine the sequencing of courses. Additional courses may be required.*

***Associate***

***Degree***

***Programs***

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| **Competency or Program Requirement** | **Course Number and Title** | Required Credits |
| Aesthetic Dimensions/Written Communications | Waived | 0 |
| Continuing Learning and Information Literacy/Ethics | ECN\*101 Principles of Macroeconomics or CSA\*H105 Introduction to Software Applications or CSC\*H101 Introduction to Computers | 3 |
| Critical Analysis and Logical Thinking/Written Communication | ENG\*101 Composition | 3 |
| Historical Knowledge | Choose any Historical Knowledge listed | 3 |
| Oral Communication | Choose any Oral Communications listed | 3 |
| Quantitative Reasoning | MAT\*H167 Principles of Statistics or MAT\*H172 College Algebra or higher | 3 |
| Scientific Knowledge◊ | CHE\*H111 Concepts of Chemistry | 4 |
| Scientific Reasoning◊ | BIO\*H105 or BIO\*H115 or PHY\*H110 or PHY\*H121 | 4 |
| Social Phenomena | Choose any Social Phenomena listed | 3 |
| Written Communication | Choose any Written Communication listed | 3 |
| Program Requirements  | FTA\*H112 Introduction to Fire Technology | 3 |
| FTA\*H116 Building Construction | 3 |
| FTA\*H118 Fire Prevention and Inspection | 3 |
| *Choose 2 of the 4 courses:* FTA\*H122 Fire Behavior and CombustionFTA\*H126 Safety and Survival FTA\*H210 Water Supply and HydraulicsFTA\*H272 Terrorism - First Responders | 6 |
|  | FTA\*H216 Municipal Fire Administration | 3 |
|  | FTA\*H218 Sprinklers and Fixed Extinguishing Systems | 3 |
|  | FTA\*H219 Fire Investigation | 3 |
|  | EMT\*H100 Emergency Medical Technician (or FTA electives) | 6 |
|  | General Electives (FYI - MAT 137 and/ or IDS 101 are General Electives) | 2 |

## Total Credits: 61

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Fire Technology Program Director is available over the summer for advising sessions and assistance. Call (203) 575-8797 for appointment.

### Program Objectives

*Upon successful completion of all program requirements, graduates will be able to:*

1. Demonstrate the ability to communicate verbally and in writing, prepare reports, presentations, investigations that support the administration and management of fire /emergency service agency in emergency or non-emergency situations.
2. Apply social and behavioral sciences, mathematical and scientific principles, and technical knowledge to develop and create solutions to address community problems and issues in the emergency management field they have not encountered previously.
3. Demonstrate knowledge of the organizational structure, both operational and administrative, of various types of emergency service providers, both public and private, career and volunteer, which impact the life safety of a community.
4. Understand human resource policies and procedures in order to assist members of an emergency service agency who are in need of assistance and intervention.
5. Apply basics of supervision and human resource management to set priorities so as to respond to community needs as determined in a community hazard assessment.
6. Develop a pre-incident plan of a specific facility, applying pre-planning policies, procedures and forms, so that all required elements are identified and catalogued.
7. Develop an initial action plan for an emergency operation to make maximum use of resources to control and mitigate the incident.
8. Demonstrate knowledge of safety policies, regulations and procedures as they apply to emergency and non-emergency operations of a community’s emergency response agencies.
9. Demonstrate the basic knowledge necessary to conduct an inspection to identify hazards and address code violations in an Assembly, Educational, Health Care, Detention and Correctional, Residential, Mercantile, Business, Industrial, Storage, Unusual Structures, and Mixed Occupancy, so that all hazards, including hazardous materials are identified, appropriate forms are completed and appropriate action is initiated.
10. Demonstrate an in depth knowledge of who issues various protocols, standards and guides on a local, state, and national level that provide guidance to and regulation of life safety organizations.
11. Describe the methods of heat transfer and chemical processes that govern the development and spread of fire and how to apply that to various types of structures and situations in order to control and extinguish the fire by altering and improving the structure.