**Associate of Science - Fire Science**

**(Semester Hours to Complete 60) (CIP# 1743020112)**

The Associate of Science in Fire Science Technology is a limited access program for state certified firefighters. The program is designed to provide firefighters, fire investigators, fire officers and fire protection professionals a scientific understanding of tactical fire suppression techniques, investigative methodology, and fire prevention practices. This Associate of Science degree provides a route for existing firefighters to advance their careers by aligning educational course offerings with the requirements for the state certification below:

|  |  |
| --- | --- |
| **Certifications Imbedded within Program** | |
| Fire Officer I | FLSFM0014 |
| Fire Officer II |  |
| Fire Service Instructor I |  |
| Fire Service Instructor II |  |
| Fire Inspector I | FLSFM007 |

Program Entry Requirements

* Have a high school diploma or GED certificate and submit an application to FGC.
* Students must have successfully completed Fire I & Fire II and be a certified Firefighter II through the Florida Bureau of Fire Standards and Training.

**Program Learning Outcomes**

Graduates of the Fire Science Technology A.S. will be able to:

1. Understand the fundamentals as to how fires start, spread, and are controlled as well as field nomenclature and fire chemistry.
2. Explore the history and current status of fire prevention, code enforcement, fire organization, the fire bureau, use of the fire codes, tort law and liability, identification and correction of fire hazards, fire prevention systems, fire investigation and fire and life safety education.
3. Comprehend the concepts of building construction, techniques related to fire safety, the principles of water use in fire protection and how to utilize hydraulic pumps to address water supply problems.
4. Discuss fire protection, career opportunities in related fields, fire loss analysis, department organization and management, function of public and private fire protection services, laws and codes governing the fire service, special hazards in fire protection, and fire strategy and tactics.
5. Define risk evaluation and control procedures for fire stations, training sites, emergency vehicles, emergency situation involving fire or EMS< hazardous material, terrorism and technical rescue.
6. Analyze the principles of fire control through the utilization of personnel, equipment and extinguishing agents on the fire ground.
7. Understand instructional methods, instructional planning, and running effective training programs for adult learners.

**Program Requirements: 60 Credits Total**

|  |  |  |  |
| --- | --- | --- | --- |
| **General Core Courses** | | | |
| **Course Prefix** | **Course Name** | **Credits** | **Information** |
| ENC 1101 | Freshman Composition I | 3 |  |
| MAC 1105 | College Algebra | 3 |  |
| AMH 2020 or  POS 1041 | United States History from 1865 or American Government; | 3 |  |
|  | General Core Science | 3 |  |
|  | General Core Humanities | 3 |  |
|  | **Total** |  | **15 Credit Hours** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Required Courses** | | | | |
| **Course Prefix** | **Course Name** | **Credits** | **Perquisites** | **Information** |
| FFP 2120 | Building Construction for the Fire Service | 3 |  | Required for Fire Officer I Certification |
| FFP 2720 | Company Officer | 3 |  | Required for Fire Officer I Certification |
| FFP 1740 | Fire Service Course Delivery | 3 |  | Required for Fire Officer I Certification, Fire Instructor 1 |
| FFP 2810 | Firefighter Tactics and Strategy I | 3 |  | Required for Fire Officer I Certification |
| FFP 1505 | Fire Prevention Practices | 3 |  | Required for Fire Officer II Certification |
| FFP 1540 | Fire Protection Systems & Devices | 3 |  | Required for Fire Officer II Certification |
| FFP 2811 | Firefighter Tactics & Strategy II | 3 | FFP 2810 | Required for Fire Officer II Certification |
| FFP 2741 | Fire Service Course Design | 3 |  | Required for Fire Officer II Certification. Fire Instructor II |
| FFP 1510 | Codes and Standards | 3 |  | Required for Fire Inspector I Certification |
| FFP 2521 | Construction Documents and Plans Reviewed | 3 |  | Required for Fire Inspector I Certification |
|  | **Total Credits** |  |  | **30** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Technical Electives (9 credits)** | | | |
| **Course Prefix** | **Course Name** | **Credits** | **Information** |
| FFP X999 | Firefighter I & II Certification | 9 | Articulated Credit for confirmation of a Firefighter II Certification. |
|  | **Total Credits** |  | **9** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Program Electives – 6 Credits (Pick 2 Courses)** | | | | |
| **Course Prefix** | **Course Name** | **Credits** | **Prerequisites** | **Information** |
| FFP 2111 | Fire Chemistry | 3 |  | Required for Fire Inspector II |
| FFP 2541 | Fire Protection Systems II | 3 | FFP 1540 | Required for Fire Inspector II |
| FFP 2770 | Ethical and Legal Issues in the Fire Service | 3 |  | Required for Fire Inspector II |
| FFP 1793 | Fire and Life Safety Educator I | 3 |  |  |
|  | **Total Credits** |  |  | **6** |