

A.S. Fire Science Technology (60 Credits)

Guided Pathway: Associate of Science, Fire Science Technology (FSTA)

For more information, visit www.fgc.edu and your academic advisor.

Meta-major:

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 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.

All AS degrees must satisfy the statewide Civic Literacy requirement for graduation. Please see the [catalog](#).

SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS

PRE_ENROLLMENT	ACTION ITEMS
<p>Articulation of Credit:</p> <p>FFP X999 – Firefighter I & II Certification (9 Credit Hours) Industry Certification FLSFM006</p> <p>Completion of the Firefighter 1 & II programs, combined with State Certification through the Bureau of Fire Standards and Training as a Firefighter II shall articulate to 9 college credits to be used toward the Fire Science A.S. degree. These Credits will be awarded following the completion of additional 12 college credits at Florida Gateway College.</p>	<p>Program Entry Requirements</p> <ul style="list-style-type: none"> • Have a high school diploma or GED certificate and submit a completed 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. • Begin applying for Financial Aid and Scholarships. <ul style="list-style-type: none"> ○ You can start the FAFSA in October for the next academic year. (i.e., in October 2024, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2025) • Check with your advisor for important deadlines and dates. • If you are a certified firefighter, submit copies of your active license(s) to your advisor for articulation of credit application^{iv}. <p>REQUIRED: Contact the Test Center and schedule to take the PERT Exam, which must be taken before registering for classes. Meet with your advisor to discuss your plan of study.</p>
CREDIT HOURS: 9 (Articulated)	
SEMESTER 1	ACTION ITEMS



FFP 1505 – Fire Prevention Practices	
FFP 1510 – Codes and Standards	
FFP 2120 – Building Construction for the Fire Service	
ENC 1101 – Freshman Composition	
Choose one: AMH 2010 – US History to 1877 OR AMH 2020 – US History from 1877 OR POS 1041 – American Government ^{iv} (Social Science & civic literacy)	<ul style="list-style-type: none"> Meet with the program Coordinator of your advisor to confirm academic and career goals by the end of the semester. Set up the Fire Officer 1 C.C.C. as your second declared degree. (Advisor) REQUIRED: Complete the <i>Computer Competency</i> course within Canvas. Signup for and pass the Florida Civic Literacy Exam.
TOTAL SEMESTER CREDIT HOURS: 15	
SEMESTER 2	ACTION ITEMS
FFP 2720 – Company Officer	
FFP 2740 – Fire Service Course Delivery	
FFP 2830 – Firefighter Tactics & Strategies I	
FFP XXXX – Approved Program Elective	
Gen Ed – Mathematics Core Course	<ul style="list-style-type: none"> Meet with your advisor to confirm or update your academic/career pathway and program of study.
TOTAL SEMESTER CREDIT HOURS: 15	
SEMESTER 3	ACTION ITEMS
FFP 1540 – Private Fire Protection Systems I	
FFP 2811 – Firefighter Tactics & Strategies II	
FFP 2741 – Fire Service Course Design	
FFP XXXX – Approved Program Elective	<ul style="list-style-type: none"> Begin applying for Financial Aid and Scholarships. <ul style="list-style-type: none"> You can start the FAFSA in October for the next academic year. (i.e., in October 2024, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2025) Check with your advisor for important deadlines and dates.
Gen Ed – Humanities Core Course	
TOTAL SEMESTER CREDIT HOURS: 15	
SEMESTER 4	ACTION ITEMS
FFP 2521 – Construction Documents and Plans	
Gen Ed – Natural Science Core Course	<ul style="list-style-type: none"> After reviewing your final program of study, apply for Graduation. <ul style="list-style-type: none"> Meet with your advisor to apply for graduation for your degree. Sign up for commencement. Congratulations, graduate!
TOTAL SEMESTER CREDIT HOURS: 6	
PATHWAY TOTAL: 60 CREDIT HOURS	

- ⁱ Degree plans may change in later catalogs. You may use this pathway if you entered the college on or before this date.
ⁱⁱ Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by FGC to award the degree.
ⁱⁱⁱ This is not an official degree plan. For official degree requirements, [click here](#).
^{iv} You must earn a grade of "C" or better in all Gordon Rule classes.

Approved Program Electives
FFP 2111 – Fire Chemistry (3 credits)
FFP 2541 – Private Fire Protection Systems II (3 credits)
FFP 2770 – Ethical and Legal Issues in the Fire Service (3 credits)
FFP 1793 – Fire and Life Safety Instructor (3 credits)