

STRUCTURAL FIRE SCIENCE

Structural Fire Science

Associate of Applied Science

PROGRAM DESCRIPTION

The AAS degree in Structural Fire Science is designed for students seeking a career in the fire service industry or upgrading their skills for current fire service employment. The AAS degree is designed for students planning to enter their chosen career upon graduation.

ACCREDITATION

International Fire Service Accreditation Congress (IFSAC)
Department of Public Safety Standards & Training (DPSST)
Fire & Emergency Services Higher Education (FESHE)

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs

- CPR for Healthcare Provider card \$55, must remain current throughout EMT class.
- Background check, immunization upload and 10-panel drug screen is required for all students entering into the EMT class at an approximate cost of \$110.
- In some cases fees associated with immunizations can range from \$20-\$200.
- Fee for State Certification Testing and National Registry Test (currently \$170-\$350).
- Materials (boots, ear protection, gloves, etc.), \$200-\$350
- Other special equipment and clothing may be required as part of this program.

Enrollment Fees

- None

PROGRAM ENTRANCE REQUIREMENTS**Academic Entrance Requirements**

- Recommended:
 - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II with a grade "C" or better
 - Minimum placement scores resulting in MTH 060 Algebra I/ MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra with a grade "C" or better
 - High school diploma or GED

Other Entrance Requirements

- Required:
 - Students must be 18 or older for state and national testing for EMT and affiliation with a fire agency. Students do NOT need to be 18 to begin taking SFS courses.
 - All COCC students seeking enrollment in the EMT course and/or agency affiliation that requires practical experience will have to pass a Criminal History Check (CHC) as a condition of their acceptance into a medical, fire or other facility for training. Students who do not pass the CHC may not be eligible to complete training at affiliated sites, to sit for licensure or certification exams, or to be hired for some professional positions. Students who believe their personal history may interfere with their ability to complete the program of study or to obtain licensure or certification in their chosen field should contact the appropriate state board or the program director.
 - Complete a 10 panel urine drug screen with Verified Credentials, Inc. With the exception of certain prescribed medications, students with a positive drug screen, which prevents them from attending clinical, will be disqualified from entering the program. Please refer to the Structure Fire Science website and/or program handbook for more detailed information.

PROGRAM PERFORMANCE STANDARDS**Academic Requirements:**

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses with the program prefix must be completed with a grade of C or higher.

Additional Requirements

- All students will undergo drug screening, background check and immunization verification with the vendor approved by Central Oregon Community College, prior to entrance into the EMT courses, at their expense. Students will be administratively withdrawn from the program and the seat given to an alternate student if requirements are not initiated with the specified vendor by the due date indicated by the SFS program. Students with a positive urine drug screen will be disqualified from entering the EMT courses at Central Oregon Community College, with the exception of certain prescribed medications. The director of EMS/SFS will notify the student of positive drug screens and their resulting disqualification from the program. Students have a right to appeal the decision.
- Students must maintain a minimum 2.0 GPA while enrolled in the program and if affiliated and receiving a scholarship will be held to a higher GPA standard; students who do not meet this standard may be dismissed from the program. Students may also be dismissed if the student has violated a criminal or ethical standard.

PROGRAM COURSE REQUIREMENTS**Core Courses**

EMT 151	EMT Basic Part A	5
EMT 152	EMT Basic Part B	5
SFS 101	Introduction to Emergency Services	4
SFS 102	Firefighter Safety & Survival	3
SFS 105	Fire Behavior & Combustion I	3
SFS 110	Bldg Const. for Fire Personnel	3
SFS 112	Public Ed. & Fire Prevention	3
SFS 120	Fixed Systems & Extinguishers	3
SFS 123	HazMat Awareness & Operations	3
SFS 133	Fire Entry Exams	3

SFS 210	Fire Investigation	3
SFS 212	Fire Codes and Ordinances	3
SFS 230	Rescue Practices	3
SFS 232	Fire Protection Hydraulics and Water Supply	4
SFS 275	Capstone: Tactics & Strategies	3
WF 215	S-215 Fire Operations in the Urban Interface	3
Choose 9 credits from the SFS Technical Electives:		9
AH 111	Medical Terminology I	
EMT 170	Emergency Response Communication/Documentation	
EMT 171	Emerg Response Pt Transport	
EMT 195	Crisis Intervention	
FOR 130	Chainsaw Use and Maintenance	
SFS 121	Fire Law	
SFS 122	Fire Department Budget	
SFS 205	Fire Behavior and Combustion II	
SFS 263	Human Behavior in Fire	
Any course with a WF prefix		

Other Required Courses

CH 104	Introduction to Chemistry I	4-5
or GS 105	Physical Science: Chemistry	
FOR 211	Supervision and Leadership	3
HHP 242	Stress Management	3
or HHP 266	Nutrition for Health	
or HHP 295	Health and Fitness	
HHPA Activity Course		1
MTH 065	Algebra II (or higher) ¹	4
PH 201	General Physics I	4-5
or GS 104	Physical Science: Physics	
Choose one of the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	
Discipline Studies Course		3-4
Choose one of the following:		
ANTH 103	Cultural Anthropology	
BI 234	Microbiology	
CJ 100	Survey of the Criminal Justice System	
OL 244	Psych. of Risk & Adventure	
PSY 201	Mind and Brain	
PSY 202	Mind and Society	
PSY 216	Social Psychology	
SOC 201	Introduction to Sociology	
WR 121	Academic Composition	4
WR 227	Technical Writing	4

Total Credits 96-100

¹ Students planning to earn a four-year degree should take MTH 105 or higher.

ADVISING NOTES

The program requires hands-on training in fire and emergency medical skills and NFPA Firefighter I certification which requires a significant amount of on-the-job training (OJT) by joining a fire agency that require students to work with and around mechanical equipment, ropes, fire pumps, fire hose and appliances, ladders, various apparatus and hand tools (both manual and powered). Most local fire agencies have student and volunteer positions. Students must apply and compete for these positions. Passing a written and physical agility exam is required for acceptance into these positions. Students desiring to complete a degree in Structural Fire Science and Paramedicine must follow a specific course of study. Please see the program director for information.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Currently, the COCC Structural Fire Science program has articulation agreements with Eastern Oregon University.

Prior to taking the Emergency Medical Technician exam, students must answer background information questions concerning felony convictions, any regulatory discipline, ethical violations and mental competence. For more information, contact the SFS director at 541.383.7404.

The following are required for graduation in the SFS program and are only obtainable through affiliation in a fire agency:

- NFPA Firefighter I
- NFPA Hazmat Awareness & Operations
- I-200 FEMA or NWCG certified course

Upon Completion of EMT 151 EMT Basic Part A and EMT 152 EMT Basic Part B, student must pass the National Registry of EMT's written and Oregon Practical exams. Currently certified students do not need to retake the courses for the degree.

Students must hold a current EMT or higher Oregon certification for graduation with an SFS degree.