

STRUCTURAL FIRE SCIENCE

Associate of Applied Science (AAS) Degree

96-99 credits

DEGREE AS AWARDED ON TRANSCRIPT

Associate of Applied Science, Structural Fire Science

PROGRAM DESCRIPTION

Program Mission: To provide students with the necessary skills, knowledge and abilities to enter the fire service or to increase skills, knowledge and abilities for those already employed as a firefighter.

Outcomes:

- Explain and apply strategic tactical priorities for safety, rescue, incident control and loss control for situations including: fire suppression, search and rescue, hazardous materials and disaster management.
- Effectively communicate with others using methods appropriate to the situation, population and multidisciplinary agencies.
- Demonstrate appropriate leadership skills and styles to promote effective teamwork in the field and within emergency service organizations.
- Apply safety practices to prevent the occurrence and severity of hostile fires, to mitigate the effect of fire on people and to assist in the determination of the cause of such fires.
- Demonstrate professional conduct by displaying a personal code of ethics, positive work ethics, flexibility, teamwork skills, physical fitness, safe procedures and sensitivity to diverse cultures and individuals.

The Structural Fire Science program is accredited by the Department of Public Safety Standards and Training (DPSST) and International Association of Fire Service Accreditation Congress (IFSAC).

COST OF PROGRAM

In addition to standard tuition, student fees and textbooks, students should anticipate the following estimated program 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.

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.

PROGRAM PREPARATION AND PREREQUISITES

Recommended prior to entry into Structural Fire program-specific courses:

- High school diploma or GED.
- 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.
- 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.

MINIMUM GPA OR GRADE REQUIREMENTS

All courses listed in the degree requirements must be completed at a "C" grade or better and graduates must have an overall 2.0 GPA or higher.

REGISTRATION INFORMATION

Most Structural Fire Science program-specific courses begin once per year in Fall term; there are a few entry-level courses offered several times per year and non-program support courses can begin in a term other than Fall or if students need to build skills related to the prerequisites. As a general rule, general education courses should be taken during year one and SFS specific courses in year two. Exceptions are based on individual student's education and experience.

PROGRAM STANDARDS

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.

NATIONAL/STATE LEGAL ELIGIBILITY OR UNIQUE REQUIREMENTS FOR LICENSURE AND/OR ENTRY INTO OCCUPATION, OR ADVANCEMENT IN THE OCCUPATION

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.

TRANSFER INFORMATION

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions. Currently, the COCC Structural Fire Science program has articulation agreements with Eastern Oregon University. For more information on these bachelor degree programs, please contact the SFS director at 541.383.7404.

STRUCTURAL FIRE SCIENCE *(continued)*

Associate of Applied Science (AAS) Degree

96-99 credits

PROGRAM COURSE REQUIREMENTS**Foundational Requirements****Communication**

WR 121	Academic Composition	4
WR 227	Technical Writing	4

Mathematics

MTH 065 ¹		4
----------------------	--	---

(or higher)

Program Requirements

EMT 151	Emergency Medical Technician-Part A	5
EMT 152	Emergency Medical Technician-Part B	5
SFS 101	Introduction to Emergency Services	4
SFS 102	Firefighter Safety and Survival	3
SFS 105	Fire Behavior and Combustion I	3
SFS 110	Building Construction for Fire	3
SFS 112	Public Education and Fire Prevention	3
SFS 120	Fixed Systems & Extinguisher	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 232	Hydraulics and Water Supply	4
SFS 275	Fire Tactics and Strategies w/Capstone	3
WF 215	Urban Interface	3

Other Required Courses

CH 104	Introduction to Chemistry I	4-5
or GS 105	Chemistry	
FOR 211	Supervision & Leadership	3
Health Course, choose one:		
HHP 242	Stress Management	3
or HHP 266	Nutrition for Health	
or HHP 295	Health and Fitness	
Activity Course, choose one:		
HHP 185	Any	1
PH 201	General Physics	4-5
or GS 104	Physics	
Speech Course, choose one:		
SP 111	Fundamentals of Public Speaking	3-4
or SP 115	Introduction to Intercultural Communication	
or SP 218	Interpersonal Communication	
or SP 219	Small Group Communication	

Approved Discipline Studies List

Choose one:	3-4
ANTH 103, BI 234, CJ 100, OL 244, PSY 101, PSY 201, PSY 202, PSY 216, SOC 201	

ELECTIVES

Students are required to choose nine credits from the SFS technical elective list.

AH 111	Medical Terminology	3
EMT 170	Emergency Response Comm./Documentation	2
EMT 171	Emergency Response and Patient Transport	2
EMT 195	Crisis Intervention	3
FOR 130	Chainsaw Use & Maintenance	2
SFS 121	Fire Law	1
SFS 122	Fire Department Budgets	1
SFS 205	Fire Behavior and Combustion II	3
SFS 263	Human Behavior in Fire	3
WF XXX	All WF prefix courses accepted as elective credit	1-9

FOOTNOTES

¹ Students planning to transfer to an institution offering a four-year degree should take MTH 105 or higher.

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 and EMT 152, 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.