

Fire Science

Degree Type

Associate of Technical Science Degree

The WVC Fire Science program provides individuals interested in emergency services with entry-level training. The two-year program includes classes in general education and technical fire science studies. Coursework includes instruction in the skills necessary to achieve national certifications required for employment as a firefighter. Testing is administered and industry certifications will be issued. This program requires a grade of "C" or better in all required courses.

WVC core fire science courses will be taught at local fire districts utilizing district equipment and gear. Since the training is highly hands-on, affiliation with a local fire district will be important in order to complete the core fire science courses.

A total of 23 credits are available for industry certifications:

- IFSAC or Pro-Board Certification as Firefighter I (awards FS 106 & FS 121)
- IFAC and Pro-Board Certification in Hazardous Materials Awareness and Hazardous Materials Operations (awards FS 180)

Awarding of 17 credits for successfully completing course challenges are available for FS 130, 160 and 200.

Courses taught by WVC are FS 107, 110 and 152. They are available in the spring quarter of odd-numbered years.

Emergency Medical Technician (EMT 151, 13 credits) is not a requirement for the degree but if taken at WVC it may be used to fulfill the required 10 elective credits.

Students need to meet with the adviser for the fire science program, in order to ascertain program schedule and determine transferable credits.

Required Courses: Associate of Technical Science

Offered at Wenatchee campus

Core Fire Science Courses

Course ID	Title	Credits
FS 106	Basic Fire Science	10.0
FS 107	Customer Relations for Fire Service	4.0
FS 110	Pumpers and Water System Hydraulics	4.0
FS 121	Intermediate Fire Science	10.0
FS 130	Wildland Firefighting Basics	4.0
FS 152	Building Construction	3.0
FS 160	Tactics	3.0
FS 180	Hazardous Materials Operations	3.0
FS 200	Advanced Fire Science	10.0

Academic Requirements

Course ID	Title	Credits
CHEM& 110	Chemical Concepts	5.0
CMST& 210	Interpersonal Communication	5.0
CMST& 220	Public Speaking	5.0
ENGL& 101	Composition: General	5.0
ENGL 201	Composition: Advanced Essay	5.0
	MATH& 107 or MATH 200 or BCT 128	5.0
PEH 143	Cross-Training	2.0
PEH 162	Fitness Lab	2.0
	Elective (10 credits)	10.0

[ENGL& 101](#), [MATH& 107](#), [MATH 200](#), [BCT 128](#): Placement score required

Total Credits

95

Program outcomes

Graduates of the fire science technology degree program should be able to:

- Possess the industry recognized skills required for entry-level employment as a firefighter, meeting International Fire Service Accreditation Congress (IFSAC) standards for Firefighter I, Firefighter II, Hazardous Materials Operations and other industry standards.
- Demonstrate and appropriately use fire service equipment and procedures in conjunction with a variety of emergency response incidents; possess industry recognized apparatus operation knowledge, skills and abilities.
- Identify fire protection systems used in various occupancies including sprinkler systems, extinguishing agents, early warning devices, fire pumps, smoke and flame detection, and standpipes.
- Possess industry recognized hazardous materials first responder competencies to the level of First Responder Operations.
- Demonstrate the principles of effective risk management during incident operations including managing emergency scene safety with multiple responding units regarding the resources of time, personnel, equipment and jurisdictional authority.
- Understand the ethical responsibilities and consequences of working in an emergency services- related environment.
- Demonstrate critical thinking, problem solving abilities, teamwork, communication, intercultural appreciation and technical and information literacy skills as they apply to the fire service.
- Demonstrate employee traits considered strong in
- a professional work environment: dependability, appearance, positive attitude, thoroughness, timelines, safety and the human relations skills necessary for work in emergency services.
- Apply basic firefighting skills to a wild land/urban interface environment.
- Have a thorough knowledge of the hiring process to include Civil Service Examinations.

MATH& 107 or MATH 200 or BCT 128

Elective Credits 5

Course ID	Title	Credits
MATH& 107	Math In Society	5.0
MATH 200	Finite Mathematics	5.0
BCT 128	Business Math	5.0

Elective (10 credits)

Elective Credits 10