

Fire Science AAS-T Requirements Effective Fall 2021 Program Planning Guide

Program Description: This two-year (full-time) program of study prepares students for a career in the fire service, as well as for career advancement. The degree will help prepare students for the pre-employment examination and screening processes they may undergo at local fire departments, such as written exams and interviews/oral boards. It will also enable current firefighters to qualify for career advancement opportunities.

The curriculum is based on the National Fire Academy Fire and Emergency Services Higher Education (FESHE) model curriculum for fire science. Students will graduate with the academic credentials necessary to enter a two-year community college baccalaureate program, such as the online Homeland Security Emergency Management program or the new Fire Science Leadership Management program at Pierce College.

Instruction will include principles of emergency services and career exploration, building construction, fire behavior and combustion, fire prevention and fire protection systems, principles of fire service administration, legal aspects of emergency services, fire service community relations. Curriculum and instruction will also focus on the cultural, social, and economic context of the communities being served. Students will be prepared to serve and engage with diverse (historically and systemically marginalized) communities.

The AHE 190 (Emergency Medical Technician) class is an intensive quarter long class. Commitment to attend all of the sessions is critical for successful course completion. This course teaches students the roles and responsibilities of the Emergency Medical Technician (EMT) according to State and local standards and requirements. Students develop skills in patient evaluation and other emergency medical procedures. Graduates of this program are eligible to take the National Registry of Emergency Medical Technician examination (NREMT) to qualify for State EMT certification after meeting the Washington State DOH requirement of employment. There is a rigorous application process for acceptance into the EMT course. An entrance examination must be completed with a passing score of at least 70%. American Heart Association BLS CPR (AHE 192) is a co-requisite and will be taken simultaneously with AHE 190. All required information must be submitted to the office prior to enrollment for verification, to include proof of immunizations, High School (or equivalent) completion, and Washington State Patrol background investigation.

Prerequisites: Some classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be evaluated or approved by a program advisor before registering. Courses in this degree with pre-requisites are marked with an asterisk (*). See catalog for more information.

Fire Science AAS-T Prerequisites: MATH 098, ENGL 98, placement into ENGL&101 or instructor permission

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

Program Requirements		
Course Number	General Education/Related Instruction Requirements (25 credits)	Credit Hours
ENGL&101*	English Composition (or other approved Communications course)	5
MATH&146*	Quantitative Reasoning (Recommend MATH&146 or MATH&107)	5
BIOL or CHEM	Natural World Course (Recommend Biology or Chemistry Lab course)	5
BUS 236	Interpersonal Communications for the Workplace (or other approved Human Relations Course)	5
HUM 105	Intercultural Communication (Recommend HUM 105, or other 5-credit course selected from a list of approved US Cultures or Global Studies courses)	5

Course Number	Core Degree Requirements (66 credits)	
FIRE 101	Principles of Emergency Services	5
FIRE 102	Fire Behavior and Construction	5
FIRE 103	Building Construction for Fire Protection	5
FIRE 104	Principles of Fire and Emergency Services Safety and Survival	5
FIRE 105	Fire Prevention	5
FIRE 106	Legal Aspects of Emergency Services	5
FIRE 107	Fire Protection Systems	5
FIRE 108	Principles of Fire and Emergency Services Administration	5
FIRE 109	Occupational Safety and Health for Emergency Services	5
FIRE 110	Strategy and Tactics	5
AHE 190 & AHE 192	Emergency Medical Technician Certificate	13
CWE 110	Internship or Practicum (could include an internship, fire service experience, a project at an ambulance employer, military experience, etc.)	3
		Total Credits: 91 (excluding pre-requisites)

Program Outcomes:

- Students will build skills that may be tested as part of the pre-employment screening processes at local fire departments when they apply for jobs in firefighting.
- Students will be prepared to engage in the recruit training program and complete the probationary period designated by the hiring organization.
- Students will demonstrate the foundational skills needed to begin or advance their fire service career.

What Skills do I need to be successful in this field?

See <https://www.onetonline.org/link/summary/33-2011.00>

What are some potential job titles?

- Fire Fighter/ Fire Rescue Technician
- Fire Company Officer

Wages, employment trends, and pathways

Municipal Firefighters

<https://seakingwdc.emsicc.com/careers/municipal-firefighter?radius=50%20miles®ion=Seattle%2C%20WA>

Course Sequence: This program of study is outlined by quarter, and it is suggested that classes are taken in the indicated sequence. However, it should not be concluded that students will always proceed through their program of study exactly as prescribed here. The number of quarters listed here is minimal. Not all courses are offered every quarter. Individual student experiences, educational and training background, and personal schedules and demands all may affect the time it takes to finish this program.

Standard Sequence

Fall 1: FIRE 101, FIRE 102, ENGL&101
 Winter 1: FIRE 103, FIRE 104, MATH&146
 Spring 1: FIRE 105, FIRE 106, BUS 236
 Summer1: CWE 110 (Internship) - *Course could be taken in spring or summer of subsequent year.
 Fall 2: FIRE 107, FIRE 109, HUM 105
 Winter 2: FIRE 108, FIRE 110, Natural World
 Spring 2: AHE 190

Intensive Sequence for Students with College Degrees (available beginning Fall 2022)

Fall 1: FIRE 101, FIRE 102, FIRE 107, FIRE 109
Winter 1: FIRE 103, FIRE 104, FIRE 108, FIRE 110
Spring 1: FIRE 105, FIRE 106, general education, if needed
Summer 1: AHE 190, CWE 110 (Internship)

Program Contact: Megan Bloomingdale (206) 934-4568 megan.bloomingdale@seattlecolleges.edu

Workforce Instruction Office (206) 934-3790

NSC Advising Office (206) 934-3658 <https://northseattle.edu/advising>

Program Website: <https://northseattle.edu/programs/fire-science>

Course Lists (refer to the college website for updates)

Quantitative Reasoning

MATH &107, 109, 116, 120*, &131*, &132*, 136, &141, &142, &146, &148, &151, &152, &153, &163, 211, 220, 224, 238, 239;
PHIL&120

Natural World

Anatomy & Physiology: BIOL 128*, &241*, &242*
Astronomy: ASTR &100, 102*, 104*, &110*, &115*, 201
Biology: BIOL &100*, 102*, 106*, 107*, 109, 120*, 125*,
128*,
130*, 150, &160*, 161*, 195, 196, &211*, &212*, &213*,
228*, 229*, 239*, &260*, 282*, 285*, 286*, 287*, 290, SPS
201*
Botany: BOT 110*, 112*, 113*
Chemistry: CHEM 106*, &110*, &121*, &122*, &123*,
&131*,
&139, &161*, &162*, &163*, 191*, 192*, 211*, &241, &242,
&243, &251*, &252*, 255, 256, &261, &262, &263
Environmental Science: ENVS &100, &101*, 150, 160, 170,
199, 201, 202*, 203, 204*, 205, 206*, 208, 216*, 221
Geology: GEOL &101*, &103*, 104*, 105*, 106, 108*, &110*,
111*, &115*, 118*, 202*, 207*, &208*
Health: HEA 125, 150, 160, 225, 228
Meteorology: MEY 100
Material Science: MSC 101

Nutrition: NTR 105*, 150, 155 NUTR 100, &101
Oceanography: OCEA &100, &101*
Physics: PHYS &100, 107*, &114*, &115*, &116*, &121*,
&122*, &123*, &221*, &222*, &223*
Science: SCI 100, 101*, 104, 107*, 110*, 111*, 112*, 113*,
114*,
115*, 116*, 117*, 118*, 119*, 121*, 122*, 129*, 131*, 132*,
133*
STEM: STEM 118
Sustainability: SUST 10
Anthropology: ANTH &204, &205, 275
Computer Science: CSC 110, 111, 142, 143
Engineering: ENGR 110, &111, 140, 142, &204, &214, &215,
&224, &225, 240, &242, 271
Geography: GEOG 205
Math: All MATH college transfer courses number 102 and
above.
Philosophy: PHIL &106, &120
Psychology: PSYC 217, 222

Human Relations (Social Science/ ICS)

American Ethnic Studies: AME 150, 151, 160, 201
Anthropology: ANTH &100, &106, 113, &125, 130, 135, 190,
201, &206, &210, 211, 212, 213, &216, &227, &228, 250,
270, 275
American Sign Language: ASL 120, 125
Biology: BIOL 150
Economics: ECON 100, 101, 102, &201, &202, 240
Environmental Science: ENVS &100, 101, 150, 160, 170, 200,
202, 206, 208, 214, 240, 294
Geography: GEOG &100, &200, 207, 230, 260
History: HIST 105, 106, 108, 120, &126, &127, &128, 131,
132,
&136, &137, 138, 140, 145, &146, &147, &148, 150, 191,
200, 208, 210, 211, 212, &214, &219, 221, 230, 240, 241, 242,
251, 268, 269, 273
Women's Studies: WMN 140, 200, 205, 213, 257

Humanities: HUM 105, 121, 170, 230
International Studies: ISP 101, 105, 110, 120, 160, 170, 200,
201, 205, 210, 220, 234, 251, 255, 260, 261, 270
Philosophy: PHIL &101, 102, 110, 111, 118, 160, 215, 210,
220,
240, 245, 250, 255, 267
Political Science: POLS &101, 105, 111, 112, 170, &200, &201,
&202, &203, 205, 206, 213, 220, 255
Psychology: PSYC &100, 120, &200, 205, 207, 209, 210, 217,
&220, 225, 230, 235, 245, 250, 255, 257, 260, 294
Religion: REL 150, 151
Sociology: SOC &101, 102, 105, 106, 107, 120, 130, 150, 170,
&201, 215, 220, 230, 245, 250, 253, 265, 271, 275, 280
Social Science: SSC 101, 103, 187, 330
STEM: STEM 118
Social Welfare: SWF 200

US Cultures and Global Studies

ART 254 CMST 205 DRMA &101 ENGL 219, 231, 240, &245, &246, 257, 258, 291 HUM 105, 200, 210 MUSC 113, 204 : AME 150, 151
ANTH &106, &210, &216 HIST 131, &136, &137, 140, &146, &147, &148, 150, 212, &214, &219, 230 ISP 105 PSYC 245 SOC 102, 150,
215, 245 WMN 140, 200