

# BACHELOR OF SCIENCE IN FIRE SCIENCE

## Description and Outcomes

Purdue Global is recognized by the U.S. Fire Administration as an official Fire and Emergency Services Higher Education (FESHE) institution. The Bachelor of Science in Fire Science closely follows the FESHE model and is designed to provide you with foundational skills in firefighter safety, building codes, fire prevention, code inspection, and firefighting strategy and tactics. In addition, the program explores technical, legal, and social aspects of arson, the application of technology to firefighting, and the psychological effects of fire dynamics. The program serves fire service professionals seeking enhanced skills and a broad spectrum of knowledge in the field of fire science. The curriculum includes analytical approaches to fire protection and investigation, disaster and fire defense planning, hazardous materials management, fire protection structure and system design, and the role of the fire service within the community.

If you have already completed an associate's or bachelor's degree from an accredited institution, you may be eligible for degree requirements to be waived and replaced with advanced start credit. Refer to Advanced Start Credit in Bachelor's Degrees (<https://catalog.purdueglobal.edu/policy-information/prior-learning/advanced-start-credit-bachelors-degrees/>) for details.

## Concentration

You can personalize your degree with a concentration in business foundations. The business foundations concentration will allow you to gain competencies in the fundamental concepts of business administration. You will develop an understanding of the four functions of management, the components of a marketing strategy, and the financial performance of an organization.

## Accelerated Master's Degree Options

If you are interested in earning a master's degree, consider an accelerated master's degree option. Refer to the Progression Requirements (<https://catalog.purdueglobal.edu/undergraduate/social-behavioral-sciences/>) section for details.

## Program Length

The Bachelor of Science in Fire Science program consists of a minimum of 180 quarter credit hours. Upon successful completion of the program, graduates will be awarded a bachelor of science degree.

## Program Outcomes

### Discipline-Specific Outcomes

1. Fire Foundations: Demonstrate an understanding of building construction as it relates to firefighter safety, building codes, fire prevention, code inspection, and firefighting strategy and tactics.
2. Fire Investigation and Analysis: Investigate technical, legal, and social aspects of arson.
3. Psychology: Analyze the issues that deal with the psychological effects of fire dynamics.
4. Research Methods: Apply scientific methods of inquiry to arrive at reasoned decisions regarding fire science.

5. Technology: Analyze methods that integrate the use of technology to inform operational and strategic decisions that will enhance firefighting strategy and tactics.

## General Education Literacies and Professional Competencies

In addition to the discipline-specific outcomes, general education literacies and professional competencies are integrated throughout your academic program. You can review the general education literacies and professional competencies associated with your academic program in the General Education and Professional Competency Requirements (<https://catalog.purdueglobal.edu/undergraduate/general-education-professional-competency-requirements/>) section of this Catalog.

## Program Availability

For program availability, please refer to the U.S. State and Other Approvals (<https://catalog.purdueglobal.edu/policy-information/university-information/accreditation-approvals-memberships/>) section and Program Availability Information (<https://www.purdueglobal.edu/catalog-program-availability-info.pdf>).

## Policies

Please refer to school-specific policies (<https://catalog.purdueglobal.edu/undergraduate/social-behavioral-sciences/>) and the Policy Information (<https://catalog.purdueglobal.edu/undergraduate/policy-information/>) section for general Purdue Global policies.


## Certification, State Board, and National Board Exams

Certain state certification and licensure boards have specific educational requirements for programs to lead to a license or certification that is a precondition for employment in a recognized occupation. Prospective and current students must review Purdue Global's State Licensure and Certifications (<https://www.purdueglobal.edu/about/accreditation/licensure-state-authorizations/>) site to view program and state-specific licensure information.




Unless otherwise specified, Purdue Global's programs are not designed to meet any specific state's licensure or certification requirements. Licensure-track programs may limit enrollment to students in certain states; please see Purdue Global's Program Availability Information (<https://www.purdueglobal.edu/catalog-program-availability-info.pdf>) to determine enrollment eligibility.

You are responsible for understanding the requirements of optional certification exams. Such requirements may change during the course of your program. You are not automatically certified in any way upon program completion. Although certain programs are designed to prepare you to take various optional certification exams, Purdue Global cannot guarantee you will be eligible to take these exams or become certified. Your eligibility may depend on your work experience, completion of education and/or degree requirements, not having a criminal record, and meeting other certification requirements.

## Degree Plan

The  icon appears in the title of traditional courses that are also available as a set of module courses. Module course availability may be limited to certain academic calendars. See Course Types (<https://catalog.purdueglobal.edu/policy-information/university-information/approach-to-learning/>) for information about module courses.

## Program Requirements

Code	Title	Credits
<b>Core Requirements</b>		
CM107	 College Composition I	5
CM220	 College Composition II	5
CS212	 Communicating Professionalism	5
SS270	Social Problems	5
100/200 Level	Mathematics Requirement <sup>1</sup>	5
100/200 Level	Arts and Humanities Requirement <sup>1</sup>	5
100/200 Level	Science Requirement <sup>1</sup>	5
100/200 Level	Social Science Requirement <sup>1</sup>	5
100/200 Level	General Education Elective	5
Total Core Requirements		45
<b>Major Requirements</b>		
FS100	Introduction to Fire and Emergency Services <sup>2</sup>	5
FS101	Fire Behavior and Combustion	5
FS102	Building Construction for Fire Protection <sup>2</sup>	5
FS103	Fire Protection Hydraulics and Water Supply <sup>2</sup>	5
FS104	Fire Protection Systems <sup>2</sup>	5
FS105	Fire Prevention Practices	5
FS201	Strategy and Tactics	5
FS202	Principles of Emergency Services <sup>2</sup>	5
FS204	Occupational Safety and Health for Emergency Services <sup>2</sup>	5
FS208	Legal Aspects of Emergency Services <sup>2</sup>	5
FS301	Fire Investigation and Analysis	6
FS302	Advanced Principles of Firefighter Safety and Survival	6
FS304	Community Risk Reduction for Fire and EMS	6
FS401	Fire Prevention Organization and Management	6
FS402	Political, Ethical, and Legal Foundations of Emergency Services	6
FS403	Leadership and Management	6
FS412	Safety Risk Management for Fire and EMS	6
FS413	Research Analysis for Fire Emergency Services	6
FS414	Personnel Management for Fire and EMS	6
FS498	Bachelor's Capstone in Fire Science	6
Total Major Requirements		110
<b>Open Elective Requirements</b>		
Open Electives <sup>3</sup>		25
Total Open Elective Requirements		25
<b>TOTAL CREDITS</b>		<b>180</b>

<sup>1</sup> For options to fulfill this requirement, see the corresponding literacy in General Education and Professional Competency Requirements (<https://catalog.purdueglobal.edu/undergraduate/general-education-professional-competency-requirements/>).

<sup>2</sup> These degree requirements can be waived for students who are eligible for advanced start credit with a prior degree. See Advanced Start Credit in Bachelor's Degrees (<https://catalog.purdueglobal.edu/policy-information/prior-learning/advanced-start-credit-bachelors-degrees/>) for details.




<sup>3</sup> Eligible students who choose to complete an accelerated master's degree option will take four graduate-level courses in addition to selected undergraduate electives.

## Concentration Requirements

Concentration courses are completed within the open electives requirement of the degree plan.

Students in this program are not required to select a concentration.

## Business Foundations

Code	Title	Credits
AC112	Accounting Fundamentals for Management	5
MT140	 Introduction to Management	5
MT203	 Human Resource Management	5
MT219	 Marketing	5
<b>TOTAL CREDITS</b>		<b>20</b>