Bachelor of Science in

FIRE SCIENCE

Come Back Stronger, Ready for Real Opportunities in Fire Services

The field of fire science needs dedicated professionals equipped with the expertise and experience to take on new challenges, lead others, and serve the public. This is your time — your moment — to earn your degree and meet that demand. Our bachelor’s program offers in-depth knowledge of rapidly changing technologies, tactics, and procedures, with a focus on interagency coordination, fire incident command, arson investigation, and life safety education.

The degree program is closely based on the Fire and Emergency Services Higher Education (FESHE) curriculum model and is accredited by the International Fire Service Accreditation Congress (IFSAC).
Why Study Fire Science at Purdue Global?

Built for Working Adults
Complete courses online, without compromising your work or family schedule.

Backed by the Power of Purdue
Earn a degree you can be proud of — and one that employers will respect. Achieve more in the fire science field with a name that opens doors in your career.

Faculty Are Experts in the Field
Learn from experienced professionals with a variety of backgrounds in public safety, emergency management, and firefighting. Many are currently working in fire safety; they understand your career requirements and the challenges you face, and offer real-world perspectives you can respect.

Your Experience and Certifications Count as College Credit
It’s time to get the recognition you deserve. Use prior coursework, professional learning, military training, and industry certifications to graduate sooner. We work closely with fire academies and fire service associations to make earning your degree more affordable and efficient.

Introductory Trial Period
Make sure online learning at Purdue Global is right for you. Enroll in the University and try our classes for 3 weeks — before you owe any tuition. That’s the Purdue Global Commitment.

IAFF Partnership and Tuition Reduction
Purdue Global partners with the International Association of Fire Fighters (IAFF) to provide members, staff, and immediate family members a significant tuition reduction.

Nationally Ranked and Respected
Purdue Global is part of the respected Purdue University system. One of the most prestigious research universities in the world, Purdue University is ranked in the top 10 best public universities in the U.S. by The Wall Street Journal/Times Higher Education.

Take The Next Step In Your Education and Your Career

Prepare for Leadership Opportunities
A bachelor’s degree could help current fire service professionals advance to higher-level positions in fire departments and private industry. A bachelor’s degree in fire science or a related field is now required for many management or supervisory roles.

Gain the Skills and Knowledge That Employers Demand

- **Fire foundations** — Gain a deep understanding of how building construction impacts firefighter safety, building codes and inspections, firefighting strategy, and fire prevention.
- **Analytical approaches** — Utilize scientific methods and reasoning for purposes of fire protection and investigation.
- **Firefighting strategy and technology** — Master the tactics and technology of firefighting as they apply to fire defense planning and methods of fire attack.
- **Fire investigation and analysis** — Explore fire dynamics, flame spread, and incident investigation, plus the technical, legal, and social aspects of arson.
- **Principles of emergency services** — Discover career opportunities in the industry, as well as multiagency planning and disaster response.
- **Psychology** — Analyze fire-related human behavior and the psychological effects of fire dynamics.
Curriculum

The courses focus on 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. The curriculum is reviewed and revised continually by industry experts to ensure it reflects the most recent developments and technical advances in the field.

Major Courses Include

- Fire Behavior and Combustion
- Building Construction for Fire Protection
- Fire Protection Hydraulics and Water Supply
- Fire Protection Systems
- Strategy and Tactics
- Occupational Safety and Health for Emergency Services
- Legal Aspects of Emergency Services
- Fire Investigation and Analysis
- Advanced Principles of Firefighter Safety and Survival
- Community Risk Reduction for Fire and EMS
- Fire Prevention Organization and Management
- Leadership and Management
- Safety Risk Management for Fire and EMS
- Personnel Management for Fire and EMS

Business Foundations Concentration

- Gain competencies in the fundamental concepts of business administration. Develop an understanding of the four functions of management, the components of a marketing strategy, and the financial performance of an organization.

Capstone Course

A final, hands-on capstone allows you to build your resume, gain real-world skills, and put your knowledge into action.

Program Detail

Credit Hours: 180
Program Length: 2–4 years (With transfer credit and other prior experience, the average completion time for Purdue Global bachelor’s degree graduates in 2021–2022 was 2.1 years.)
Course Load: 1–2 courses per term
Terms: 10 weeks long
Start Dates: Throughout the year
Delivery: 100% online

Additional Programs

- Bachelor of Science in Fire and Emergency Management
- Bachelor of Science in Emergency Management
- Master of Science in Homeland Security and Emergency Management
- Master of Public Administration
Career and Networking Opportunities

Industry Outlook

- The field is growing: employment of fire inspectors and investigators is projected to grow as fast as the average from 2021 to 2031. Job prospects for firefighters will also be good in that time frame.
- Many departments require a bachelor’s degree for positions higher than battalion chief.

Career Pathways and Outcomes

Roles
- Firefighter/firefighting manager
- Fire inspector/investigator
- First line supervisor
- Fire safety director
- Fire prevention educator
- Fire protection sales agent
- Deputy or assistant chief
- Fire chief

Settings/Industries
- Fire stations/departments
- Private industry fields such as insurance companies

Note: Additional academy training and education may be required for firefighting or emergency management jobs.

The Center for Career Advancement

Our Career Specialists connect you with job and networking opportunities and offer the following assistance:
- Career assessment/exploration
- Resume and cover letter review
- Interview preparation/mock interviews
- Portfolio development to showcase your skills
- Assistance in building an online presence
- Job search and networking support
- Virtual career fairs
- 24/7 online access to job openings and career development tools

Contact an Admissions Advisor at 844-PURDUE-G or visit purdueglobal.edu.

Purdue Global Is Accredited by the Higher Learning Commission

The HLC (HLCommission.org) is an institutional accreditation agency recognized by the U.S. Department of Education.

Military Friendly

We offer reduced tuition rates for servicemembers, veterans, and spouses.

IMPORTANT INFORMATION: PLEASE READ

For comprehensive consumer information, visit info.purdueglobal.edu.

1 Purdue Global does not guarantee transferability of credit. See the University Catalog for the Prior Learning policy.
2 Classes count toward a degree if satisfactorily completed. No credits are earned if the student withdraws during the introductory period (3 weeks for new qualifying undergraduate students), which begins day one of the first term. Students who choose to continue their studies at Purdue Global will need to meet specific requirements. Graduate programs not included. Additional terms may apply to international and non-U.S. citizen students. For further information, see the University Catalog.
3 Eligible family members include spouses, domestic partners, parents, siblings, and children. Must be an employee or member of an organization with which Purdue Global has an educational relationship. Contact an Admissions Advisor for details. May not be combined with other Purdue Global tuition reductions or ExcelTrack™ pricing.
4 Source: www.timeshighereducation.com/student/best-universities/best-public-universities-united-states. Rankings apply to Purdue University - West Lafayette and not to Purdue Global.
5 Purdue Global cannot guarantee employment or career advancement. In addition, job titles and responsibilities may vary from organization to organization. Additional academy training and education may be required for firefighting or emergency management jobs.
6 The University cannot guarantee that students will be granted admission to any future programs. Speak to an Advisor about transfer credit opportunities and see the University Catalog for the Prior Learning policy.
7 The average completion time for Purdue Global online bachelor's degree students who graduated in the 2021-2022 academic year was 2.1 years. Source: Purdue Global Office of Reporting and Analysis, July 2022.