Montgomery College

Fire Protection Engineering

Careers

Fire is a significant problem. Each year in the U.S. more than 18,000 people are injured and 3,000 people die as a result of fire. In addition to personal losses, more than $10 billion in property damage occurred in 2002 as a result of fire. Fire protection engineering is a unique profession that uses science and technology to make our world safe from fire, and builds upon the basic tools of other engineering disciplines including:

- Mechanical engineering
- Electrical engineering
- Chemical engineering
- Civil engineering

Fire protection engineers (FPEs) design ways to protect people from fire. FPEs:

- Design building features
- Analyze activities in buildings
- Research materials/ products

A fire protection engineer may be the person responsible for determining what the fire hazards are in a proposed new or existing facility, and researching and designing fire protection systems such as alarms and sprinklers. They also might oversee the installation, maintenance and operations of these systems and may be responsible for their approval by government or other agencies responsible for ensuring a safe environment for people, data and property.

For more information on fire protection engineering, visit the Fire Protection Engineering Web site at *www.careersinfire protectionengineering.com.* This Web site is sponsored by the Society of Fire Protection Engineers.

Salary

According to a 2005 study conducted by the Society of Fire Protection Engineers of its membership, more than 50 percent of all the respondents made $78,000 or more. More than 25 percent of the respondents made $110,000 or more.

Education & Training Options

Montgomery College offers a fire protection engineering track in its engineering science A.S. curriculum. (See reverse for fire protection curriculum.)

Faculty

Four full-time faculty serve as engineering advisers. All hold their advanced degrees in either physics or engineering. All have extensive personal experience with direct application of their specialties in research and industry. Most retain some level of involvement in these areas even today. They share the classroom duties with a group of part-time faculty, including several veterans of many years at the College, who add their own special expertise on the world beyond academia.

■ Degree

This curriculum is designed to provide the first two years of a four-year program leading to the award of a B.S. in engineering. Students planning to transfer in biological resources engineering to:

University of Maryland College Park—follow the curriculum as published in the Montgomery College Catalog.

Johns Hopkins University—follow the general engineering track.

Another engineering school—consult with a Montgomery College adviser.

Contact @ MC

Rockville Campus 240-567-5230
www.montgomerycollege.edu/Departments/phengrv

Fire Protection Engineering Curriculum

Degrees, Certificates, and Letters of Recognition

Montgomery College is authorized by the Maryland Higher Education Commission (MHEC) to offer four degrees (associate of arts, associate of science, associate of applied science, and associate of arts in teaching) and certificates. In addition, the College recognizes students who satisfactorily complete certain course sequences with letters of recognition.

Some curricula are offered at all campuses, whereas others are limited to one or two. When a curriculum is offered at a specific campus, it is indicated by G for Germantown, R for Rockville, or TP for Takoma Park/Silver Spring.

Admission to Montgomery College is open to all.

Math, English, and reading assessment tests are required prior to registering. (Some students may be exempt from assessment. Consult the *Montgomery College Catalog* for criteria.) Financial aid and scholarships are available to qualified candidates.

Take the next step.

Complete an Application for Admission form (online @ **www.montgomerycollege.edu/admissions/mcadmiss.htm**) or **call 240-567-5000** for information.

Fire Protection Engineering: 403 Engineering Science A.S.

First Semester			
CH	135	General Chemistry for Engineers*	4
EN	102	Techniques of Reading and Writing II	3
ES	100	Introduction to Engineering Design	3
		Health foundation	1
MA	181	Calculus I	4
Second Semester			
ES	102	Statics	3
MA	182	Calculus II	4
PH	161	General Physics I	3
		Behavioral and social sciences distribution	3
		Humanities distribution	3
Third Semester			
ES	220	Mechanics of Materials	3
ES	221	Dynamics	3
MA	280	Multivariable Calculus	4
PH	262	General Physics II	4
		Behavioral and social sciences distribution	3
Fourth Semester			
ES	232	Thermodynamics	
	or		
ES	240	Scientific and Engineering Computation	3
MA	282	Differential Equations	3
PH	263	General Physics III	4
		Arts distribution	3
		Total credit hours	**61**

* Students may substitute CH 102.