

Careers

Electrical engineers design, develop, test, and supervise the manufacture of electronic equipment, such as electric motors, machinery controls, lighting, and wiring in buildings, automobiles, aircraft, radar, and navigation systems, and broadcast and communications systems.

Electrical engineers are employed in engineering and business consulting firms, government agencies, and manufacturers of electrical and electronic/computer equipment, office equipment, industrial machinery, and professional and scientific instruments.

Salary

Median annual earnings of electrical engineers were \$71,610 in 2004. According to a 2005 salary survey by the National Association of Colleges and Employers, starting annual salaries for job candidates with a bachelor's degree in computer engineering averaged \$52,464.

Job Outlook

Electrical engineering occupations are projected to grow more slowly than the average through 2014. Employment will continue to be driven by an increasing demand for electrical and electronic goods, including communications equipment, defense-related equipment, and consumer electronics.

Education & Training Options

Montgomery College offers an electrical engineering track in its engineering science A.S. curriculum. (See reverse for *electrical engineering curriculum*.)

By far the largest option in overall enrollment, electrical engineering offers the largest diversity of sub-specialties, ranging from the microscopic devices connected with modern communications and computer design, to the gigantic components associated with power production and transmission. Many bioengineering fields also encompass the application of electrical engineering principles.

■ 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. Specific requirements in colleges vary. Students planning to transfer in electrical engineering should consult an engineering adviser:

- University of Maryland College Park—follow the curriculum as published in the *Montgomery College Catalog*.
- Johns Hopkins University—follow the general engineering track.

■ Faculty

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

Contact @ MC

Rockville Campus240-567-5230
www.montgomerycollege.edu/departments/phengrv

Electrical 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.

Electrical Engineering: 402 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

EE 114	Programming Concepts for Engineering	4
EE 244	Digital Logic Design	3
MA 182	Calculus II	4
PH 161	General Physics I	3
	Behavioral and social sciences distribution	3

Third Semester

ES 240	Scientific and Engineering Computation	3
MA 280	Multivariable Calculus	4
PH 262	General Physics II	4
	Arts distribution	3
	Humanities distribution	3

Fourth Semester

EE 204	Basic Circuit Analysis	3
EE 206	Fundamental and Digital Circuit Laboratory2	
MA 282	Differential Equations	3
PH 263	General Physics III	4
	Behavioral and social sciences distribution	3

Total credit hours 64

* Students may substitute CH 102.