

# Engineering Science

A S S O C I A T E I N S C I E N C E D E G R E E



## The Pathway to Your Future

The Engineering Science program at Genesee Community College is your pathway to a rewarding career in the engineering specialty of your choice. Genesee's program prepares you to pursue further education or begin working in research, product development, management and many other engineering opportunities. With well-equipped biology, chemistry and physics laboratories, Genesee students in the Engineering Science program enjoy small class sizes with affordable tuition.

## Seamless Transferability to Bachelor's in Engineering Programs

Genesee's program was designed in cooperation with a number of four-year colleges and universities in New York State, making it possible to seamlessly transfer all credits earned at GCC into baccalaureate programs at several institutions including:



UNIVERSITY of  
**ROCHESTER**



Cornell University



**Rensselaer**

**R·I·T**



UNIVERSITY at ALBANY  
State University of New York



University at Buffalo  
The State University of New York

## Exciting Careers for Bachelor's of Science Engineers

Opportunities in most engineering specialties offer excellent starting salaries and great potential for career advancement. As an engineer, you can design technology equipment, machinery, consumer products, transportation systems and much more – a degree in Engineering Science is a ticket to a fantastic career. Great professional opportunities await you with excellent benefits, starting salaries and job security throughout the nation and world. Listed below are careers and starting salaries based on a Bachelor's degree compiled by the US Department of Labor, Bureau of Labor Statistics.

Civil Engineering	\$83,380	Biomedical Engineering	\$82,590
Chemical Engineering	\$88,730	Aerospace Engineering	\$103,220
Environmental Engineering	\$84,360	Industrial Engineering	\$78,730
Mechanical Engineering	\$78,510	Computer Science	\$97,970
Electrical Engineering	\$87,220	Biotechnical Engineering	\$82,840



[www.genesee.edu](http://www.genesee.edu)

7 CENTERS OF LEARNING: Albion | Arcade | Batavia  
Dansville | Lima | Medina | Warsaw

Genesee Community College is an equal opportunity/affirmative action institution

# Engineering Science

## Curriculum

Academic discipline for Engineering includes math, physics, chemistry, computer information and engineering dynamics and circuitry. These courses provide an ideal foundation to branch off into specific disciplines such as civil, chemical, aeronautical, mechanical and electrical engineering or biotechnology.

### C O U R S E L I S T I N G :

**MAT 141 - Calculus I**

**MAT 142 - Calculus II**

**MAT 245 - Calculus III**

**MAT 255 - Differential Equations**

**PHY 131 - Physics with Calculus I**

**PHY 132 - Physics with Calculus II**

**PHY 133 - Physics with Calculus III**

**CHE 101 - General Chemistry I**

**EGR 235 - Engineering Mechanics I: Statistics**

**EGR 236 - Engineering Mechanics II: Dynamics**

**EGR 245 - Circuit Analysis (NEW!)**

**CIS 125 - Programming and Problem Solving**

*High School Prerequisites:* Four units of English, four units of social studies, laboratory courses in chemistry and physics, and mathematics through pre-calculus.

## EGR245: Circuit Analysis (4 credits)

*Discover the newest course in Genesee's Engineering Science program*

Genesee's newest addition to the Engineering Science degree program, EGR245: Circuit Analysis, focuses on the comprehensive study of the basic concepts of electrical engineering. Topics include resistive circuits, Kirchhoff's laws, equivalent sub circuits, dependent sources and op amps, loop and nodal analysis and duality, energy-storage elements, and transient analysis of first-order and second-order circuits. (Prerequisite: PHY132)

Fall 2011: EGR245 will meet on Monday, Wednesday and Fridays from 1:25pm – 2:40 pm at the Batavia Campus.

Contact Ronald Schumacher at 585-343-0055 Extension 6303 or at [rvschumacher@genesee.edu](mailto:rvschumacher@genesee.edu) to find out more!

## Full College Experience

While engineering students enjoy well-equipped science laboratories, the overall College also offers a modern campus featuring state-of-the-art teaching and learning technology. There are 87 smart classrooms, 33 computer labs, and seven distance learning labs throughout the seven campus locations. Additionally, Genesee offers excellent student services for one-on-one tutoring, a Math Learning Center and a Language Lab.

Outside classrooms, GCC is also a great place to enjoy the full college experience with more than 40 student clubs, including the Math Club, Chess Club, Billiard Club and many more. There are 14 intercollegiate men's and women's sport teams, and new athletics facilities featuring the outdoor turf field for soccer and lacrosse. Inside, students love hanging out in the Student Union with a game area, computers, fire place and café, while Genesee Center for the Arts offers a sophisticated arts and cultural space with the recently opened art gallery, and the Stuart Steiner Theatre.

Lastly, College Village, the student housing community is just a short stroll from the Batavia campus with apartment-style suites for 380 students.

## About Genesee Community College

Founded in 1966, Genesee has seven campus locations serving a 2,500-square mile region in the Western New York counties of Genesee, Livingston, Orleans, and Wyoming.

- ▶ Albion Campus - 456 West Ave. / 589-4936
- ▶ Arcade Campus - 25 Edward St. / 492-5265
- ▶ Batavia Campus (Main Campus) - One College Rd. / 343-0055
- ▶ Dansville Campus - 9221 Robert Hart Dr. / 335-7820
- ▶ Lima Campus - 7285 Gale Road / 582-1226
- ▶ Medina Campus - 11470 Maple Ridge Rd. / 798-1688
- ▶ Warsaw Campus - 115 Linwood Ave. / 786-3010

Additionally, Genesee offers numerous online courses and 12 online degrees.

## The Benefits of a Degree from GCC

Genesee Community College Engineering degree program provides an excellent introduction to the field with plenty of hands-on learning with small class and laboratory sizes offering exceptional instruction.

## Find Out More

For information about registration contact the GCC Admissions advisors at [admissions@genesee.edu](mailto:admissions@genesee.edu) or 1-800-CALL-GCC.

Admission into Genesee's Engineering program is open to all high school graduates and GED recipients. For additional information call the Admissions Office at (585) 343-6800 or go to [www.genesee.edu](http://www.genesee.edu).