



**GROVE CITY  
COLLEGE**

*Because faith and freedom matter*

DEPARTMENT OF

# MECHANICAL ENGINEERING

ALBERT A. HOPEMAN, JR. SCHOOL OF SCIENCE, ENGINEERING AND MATHEMATICS

## DEPARTMENT FACULTY

Blair T. Allison, Ph.D., P.E.

*Professor of Mechanical Engineering*

Erik J. Anderson, Ph.D.

*Professor of Mechanical Engineering*

Mark Archibald, Ph.D.

*Professor of Mechanical Engineering*

Erik R. Bardy, Ph.D.

*Professor of Mechanical Engineering*

Stacy G. Birmingham, Ph.D.

*Dean and Professor of Mechanical Engineering*

Michelle A. Clauss '83, Ph.D.

*Professor of Mechanical Engineering*

John M. Dixon '05, Ph.D.

*Assistant Professor of Mechanical Engineering*

Mark C. Fair '85, Ph.D.

*Professor of Mechanical Engineering and Physics*

Mark Reuber, Ph.D., P.E.

*Field Director for the Office of International Education and Professor of Mechanical Engineering*

Vern W. Ulrich, Ph.D., P.E.

*Professor of Mechanical Engineering*

## DEPARTMENT DESCRIPTION

Mechanical Engineering is a broad discipline that develops technological solutions to societal problems in order to benefit mankind. Graduates apply their skills to a vast array of areas including but not limited to renewable energy systems, medical devices, fuel efficient automobiles and building climate control systems.

## MAJOR

Mechanical Engineering

The Bachelor of Science degree in mechanical engineering prepares students for graduate work and employment in engineering research, design, manufacturing, production, sales and management. Students complete 100 hours of course requirements in addition to the College core curriculum, which starts with an exposure to the fundamentals of science and engineering and culminates in a capstone design project.

## MINORS

Robotics

The field of robotics is developing rapidly and Grove City is excited to be devoting important resources to the development of this discipline. Students complete 19-20 hours of course requirements (no additional credits are required; students take alternate classes to fulfill mechanical engineering requirements). Courses feature hands-on learning experiences, practical design and programming courses.

Chemical Engineering

Students complete 19-20 hours of course requirements from the fundamental level through separation processes in chemical engineering applications (only 3 additional credits are required beyond the normal mechanical engineering requirements).

## ACCREDITATION

The mechanical engineering program at Grove City College is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

## STUDY ABROAD OPPORTUNITIES

Approximately 1/3 of all mechanical engineering students study at the College's European Study Center in Nantes, France during the fall semester of their junior year (limited enrollment). Short-term international study options are also available for mechanical engineering majors during January/May intersessions.

## UNDERGRADUATE RESEARCH OPPORTUNITIES

Opportunities exist for students to become involved in research during the school year and summer. Current research areas include alternative energies, biomimetic propulsion, experimental fluid dynamics, light alternative vehicles, biomedical instrumentation, control systems, electrostatics applied in the food drying industry, and more.

## ON-CAMPUS ENGINEERING ORGANIZATIONS

The American Society of Mechanical Engineers, American Society of Heating, Refrigerating and Air Conditioning Engineers, Society of Automotive Engineers and the Society of Women Engineers are active groups on campus.

## INTERNSHIPS

Students are encouraged to participate in industry and/or research internships during summers and breaks. Faculty and the College's Career Services Office can assist students in the process of applying for these experiences.

## CAREER AND GRADUATION OPPORTUNITIES

Graduates enjoy a wide variety of employment opportunities and have been hired by companies such as Bechtel Plant Machinery, General Electric, Honda R&D Americas, Northrop Grumman, Rolls Royce Nuclear Services, Toyota Motor Engineering & Manufacturing and Westinghouse Electric Company. Many of our students have gone to graduate schools such as MIT, Princeton, Notre Dame and Penn State.

“The mechanical engineering program at Grove City College has given me the tools to expand and utilize my engineering skill set. As a result, I know that I am prepared to enter my vocation with excellence for the glory of God.”

– Jake Wassenaar '13



Michelle A. Clauss, Ph.D.  
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Grove City College is a highly ranked, nationally recognized private liberal arts and sciences college that equips students to pursue their unique callings through an academically excellent and Christ-centered learning and living experience distinguished by a commitment to affordability and promotion of the Christian worldview, the foundations of a free society and the love of neighbor. Established in 1876, the College is a pioneer in independent private education and accepts no federal funds. It offers students degrees in 60 majors on a picturesque 180-acre campus north of Pittsburgh, Pa. Accredited by the Middle States Commission on Higher Education, Grove City College is routinely ranked as one of the country's top colleges by U.S. News & World Report, The Princeton Review and others based on academic quality and superior outcomes.