ENGINEERING (EGR)

The mission of the engineering major is to educate students in an engineering curriculum that embraces and supports the unique culture of Wake Forest by combining the liberal arts core, innovative entrepreneurship, and engineering. The program provides an undergraduate engineering education that embodies the teacher-scholar ideal, emphasizing the close faculty-student engagement that is the hallmark of the Wake Forest community. Our goal is to attract enthusiastic students from around the US and the world who will make important contributions to solving society’s most pressing problems, fulfilling the Pro Humanitate motto of Wake Forest University.

Contact Information
Department of Engineering (http://college.wfu.edu/engineering)
Wake Downtown
455 Vine Street
Bldg 60 South, Rm 460X
Phone 336-702-1926

Programs
Major
• B.S. in Engineering

Courses

Engineering (EGR)

EGR 111. Introduction to Engineering Thinking and Practice. (4 h)
Introduction to the study and practice of engineering, systems thinking, design, research, creative and analytical problem solving practices, and engineering for humanity.

EGR 112. Introduction to Engineering Measurement and Analysis. (4 h)
Exploration of tools, processes, and quantitative and qualitative analysis for modern engineering practice.

EGR 113. Integrated Sciences. (4 h)
An integrated basic science course covering topics in the biological, chemical, and physical sciences.

EGR 211. Materials and Mechanics. (4 h)
Fundamentals of materials and mechanics for engineering applications.
P - EGR 111, 112, MST 111, PHY 113. P or C - MST 112.

EGR 212. Transport Phenomena. (4 h)
Engineering fundamentals in conservation and transport of mass, energy, and momentum.
P - EGR 111, 112, MST 111, PHY 113. P or C - MST 112.

EGR 281. Introductory Projects with Engineering. (1-4 h)
Specialized and focused learning via experiential projects. May be repeated for credit.

EGR 301. Special Topics in Engineering. (1-4 h)
Seminar and/or lecture and/or project-based and/or laboratory courses in selected topics. May be repeated if the course title changes.

EGR 381. Research. (1-4 h)
Research project conducted individually with a research mentor. May be repeated for credit.

Faculty
Chair Olga Pierrakos
Professor Olga Pierrakos