

BIOENGINEERING

UNIVERSITY OF PITTSBURGH

LA ROCHE UNIVERSITY

BY APPLYING BIOLOGICAL

SCIENCES to real-world problems, bioengineers pioneer the medical advancements that improve human health. From the food we eat to the medicine we consume, these professionals impact both industry and research.

La Roche University offers a pathway for you, too, to make a difference in the modern world. Through our dual degree option with the University of Pittsburgh, you'll find the starting point for an engineering career that's both meaningful and professionally rewarding.



CURRICULUM

ENGINEERING FOUNDATION COURSES

46 credits

SCIENCE AND MATHEMATICS COMPONENT

28 credits

Analytical Geometry & Calculus I
Analytical Geometry & Calculus II
General Chemistry I with Lab
General Chemistry II with Lab
Physics I with Lab
Physics II with Lab
Programming I with Lab

HUMANITIES AND SOCIAL SCIENCE COMPONENT

18 credits

Select courses from three different areas, not including science. One must be writing-intensive. Choose two non-introductory courses from the same department or theme. Suggestion: Modern Language in lieu of Community/Global courses.

BIOENGINEERING MAJOR REQUIREMENTS

39-43 credits

MATHEMATICS

13 credits

Analytical Geometry & Calculus III
Ordinary & Differential Equations
Linear Algebra
Probability & Statistics I

Continued

LA ROCHE UNIVERSITY | 9000 Babcock Blvd. | Pittsburgh, PA 15237 | laroche.edu

Freshman Admissions

844-838-4578 | 412-536-1272
admissions@laroche.edu

Transfer Admissions

412-536-1260
transferadmissions@laroche.edu



CURRICULUM *(continued)*

CHEMISTRY

4-8 credits

Organic Chemistry I & Lab
Organic Chemistry II & Lab*

**Optional but recommended
for medical school*

BIOLOGICAL SCIENCES

16 credits

General Biology I & Lab
General Biology II & Lab
Comparative Vertebrate
Anatomy I & Lab
Comparative Vertebrate
Anatomy II & Lab

ENGINEERING

3 credits

Statics and Mechanics of Materials I*

**Pitt – Summer year 3*

ENGINEERING/SCIENCE ELECTIVES

3 credits

One course in advanced life science,
computer science or mathematics not

already required by this program.
Course must be pre-approved.

PRE-APPROVED TECHNICAL/ PROFESSIONAL ELECTIVES*

Must be courses not already
designated as required in your
engineering track.

Advanced Life Science

Microbiology with Lab
Genetics
General Ecology
Cell Biology
Biochemistry
Immunology
Molecular Biology

Communications

College Writing II
Public Speaking
Business Communications
Writing for Public Relations
Technical Writing

Computer Science

Programming II & Lab

Algorithm Analysis
Systems Programming & Lab
Database Theory
Computer Organization
Operating Systems
Telecommunications
Advanced Database Theory

Mathematics

Discrete Mathematics I
Discrete Mathematics II
Probability & Statistics II
Complex Variables
History of Mathematics
Modern Abstract Algebra
Geometry
Real Analysis

*Any other LRU course
taken as a Technical or
Professional elective must be
pre-approved by the University
of Pittsburgh, Swanson School
of Engineering's Coordinator of
Transfer Student Services.