

INDUSTRIAL ENGINEERING

UNIVERSITY OF PITTSBURGH

LA ROCHE UNIVERSITY

USING MATHEMATICAL, PHYSICAL AND SOCIAL SCIENCES

with the principles of engineering design, industrial engineers develop, improve and implement complex systems and processes. If you're looking for a career that combines engineering with operations management, La Roche University prepares you for this people-oriented field. Our joint program with the University of Pittsburgh focuses on productivity and quality to improve current technology.



CURRICULUM

ENGINEERING FOUNDATION COURSES

46 credits

SCIENCE AND MATHEMATICS COMPONENT

Complete 7 courses – 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**
• Complete 6 courses – 18 credits
• Select courses from three different areas, not including science. One must be writing-intensive. Two non-introductory courses from the same department or theme. Suggestion:
• Modern Language in lieu of
• Community/Global courses.

• **INDUSTRIAL ENGINEERING MAJOR REQUIREMENTS**
• Complete 13 courses – 28-38 credits

• **MATHEMATICS**
• 13 credits

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

• **ENGINEERING**
• 6 credits

• Database Theory
• Engineering Economic Analysis*
• *PCHE at Pitt: Spring Year 3

Continued

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

Transfer Admissions
412-536-1260
transferadmissions@laroche.edu



CURRICULUM *(continued)*

ENGINEERING ELECTIVES

Maximum of 3 courses

Materials Structure and Properties*

Statics and Mechanics of Materials*

Intro to Thermodynamics*

Programming II/lab

**Pitt: Summer Year 3*

COMMUNICATIONS

3 credits

Oral Communications

TECHNICAL ELECTIVES

6 credits

Complete two courses in advanced life science, computer science or math.

Courses 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.*