ENGINEERING SCIENCE NANOTECHNOLOGY: CHEMISTRY/BIOENGINEERING EMPHASIS

UNIVERSITY OF PITTSBURGH

& LA ROCHE UNIVERSITY

THE NEWLY EMERGING FIELD OF NANOTECHNOLOGY is the study of

atoms and molecules with an emphasis on quantum mechanical effects. From medicine to electronics, nanotechnology has potential for far-reaching applications.

If you have an interest in modern materials science, La Roche University's dual degree option with the University of Pittsburgh offers the analytical skills that you need to apply the principles of physical sciences, mathematics and engineering to solve technical problems.



CURRICULUM

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.

ENGINEERING SCIENCE MAJOR REQUIREMENTS 28-30 credits

MATHEMATICS

16 credits

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

CHEMISTRY

Choose any 3 courses – 9-11 credits

Organic Chemistry I with Lab Organic Chemistry I with Lab Inorganic Chemistry Physical Chemistry I Physical Chemistry II Biochemistry

ENGINEERING

3 credits

Materials Structure and Properties* *Pitt – Summer Year 3

Continued

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

Freshman Admissions 844-838-4578 | 412-536-1272 admissions@laroche.edu **Transfer Admissions** 412-536-1260 transferadmissions@laroche.edu

ENGINEERING SCIENCE

& LA ROCHE UNIVERSITY

CURRICULUM (continued)

*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

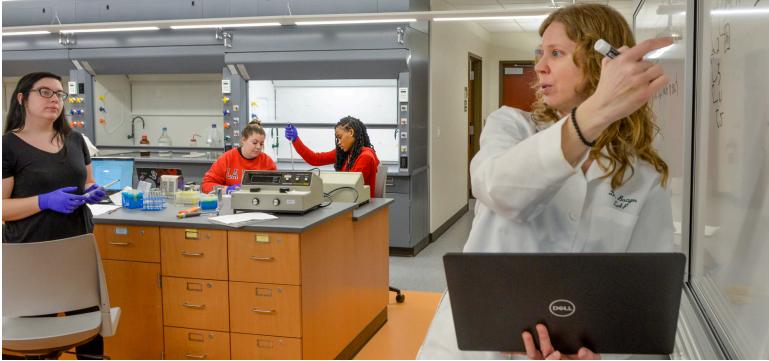
Programming II with Lab Algorithm Analysis Systems Programming with Lab Database Theory Computer Organization Operating Systems Telecommunications Advanced Database Theory

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.





NON-DISCRIMINATION POLICY: La Roche University does not discriminate on the basis of race, color, national origin, sex, disability, age, or religion in its programs and activities. The following persons have been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Life & Dean of Students | 412-536-1069, Assistant Director of Accessibility and Equity | 412-536-1177, Associate Vice President for Human Resources | 412-536-1115. For further information on notice of non-discrimination, call 1-800-421-3481.