

Ph.D. Materials Science & Engineering

About the Program

Materials Science & Engineering (MSE) underpins the development of many technologies, ranging from electronics to healthcare to manufacturing, and Rowan University's Ph.D. in MSE lies at the intersection of chemistry, physics, and engineering. MSE researchers seek to understand how processing, composition, and structure determine material properties and how those properties can be used for innovation. Research projects are generally sponsored by industry or federal and state agencies, and the work pushes the boundaries of science and technology.

The program curriculum, developed in collaboration with an industrial advisory board, offers a highly flexible interdisciplinary structure, allowing students to pursue and achieve their research objectives from fundamental theoretical work to applied device development to advanced manufacturing techniques. The nation has seen substantial growth in MSE-related jobs especially with employers such as major defense contractors, chemical companies, materials industries, and pharmaceutical companies, all of which employ large numbers of professionals with Ph.D. degrees.



For more information:
Materials Science & Engineering
mse@rowan.edu
go.rowan.edu/mse



Program Highlights

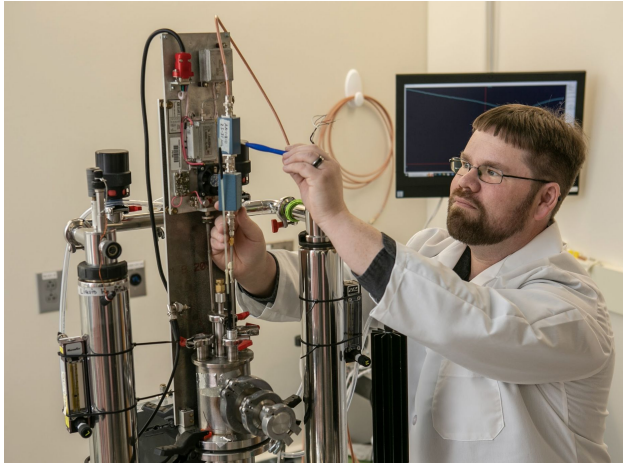
- Emphasis on experimental work for materials design and device development
- Dedicated, student-centered faculty mentors with access to cutting-edge instrumentation
- Interdisciplinary program between the College of Science & Mathematics and the Henry M. Rowan College of Engineering

Curriculum

- Focus on cutting-edge technology with hands-on training
- Highly flexible inter- and multidisciplinary structure
- Thesis research starts immediately and continues throughout

Research Areas Include:

- Catalysis
- Batteries
- Photovoltaics
- Nanotechnology
- Construction
- Biomaterials
- Biomedical devices
- Electronic materials and devices
- Additive manufacturing
- Polymeric materials
- Composites
- Sensors
- Many more!



Application Process

The following is a list of items required to begin the application process for this program. More information on the admissions process can be found at global.rowan.edu.

- Completed Rowan Global Application Form
- \$65 (U.S.) non-refundable application fee
- Bachelor's degree (or its equivalent) from an accredited institution of higher learning
- Official transcripts from all colleges attended (regardless of number of credits earned)
- Recommended minimum undergraduate cumulative GPA of 3.0 (on a 4.0 scale)
- Current professional resume or curriculum vitae
- Typewritten statement of professional objectives (provide reasons for pursuing the program and how this program would help you advance your career)
- Three letters of recommendation

Rowan University

is a top 100 national public research institution that offers bachelor's through doctoral programs in-person and online to 23,000 students. With eight colleges and nine schools, Rowan focuses on practical research at the convergence of science, engineering, business, and medicine while ensuring excellence in undergraduate education. It has earned national recognition for innovation, commitment to high-quality, affordable education, and developing public-private partnerships. Rowan is one of four universities in the nation to offer M.D. and D.O. degree programs and is the 4th fastest-growing research university in the nation.

Rowan is located in Glassboro, New Jersey, 30 minutes from Philadelphia and an hour from the Jersey Shore. The Glassboro area offers much to explore, including shopping, restaurants, outdoor recreation areas, farmer's markets, and the South Jersey Wine Trail. Visit www.visitsouthjersey.com for more information about the area.



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