INNOVATE

THE SCHOOL OF ENGINEERING, MATHEMATICS AND SCIENCE
AT ROBERT MORRIS UNIVERSITY

RMU.EDU/SEMS
“A faculty mentor took me under his wing and brought me to a local gathering of professionals. It ended up leading to a surgeon-shadowing experience, which really helped confirm what I wanted to do with my career.”

When Nolen Keely was doing his college search, he knew he wanted a place that would allow him to modify a traditional pre-med curriculum in a way that catered to his interest in math and science. RMU’s program in biomedical engineering turned out to be the perfect fit.

As a sophomore, Nolen became the first RMU student to be named an Institute Scholar by the Institute for Responsible Citizenship in Washington, D.C. It placed him in internships in the nation’s capital for two consecutive summers — first in Howard University’s orthopedic department, where he got an inside look at his chosen career field, and the next summer at the NFL Players Association, informing players about possible mental health issues and available services. Now a senior, Nolen is conducting research on shoulder prostheses. He’s also making an impact as a peer tutor and as president of RMU’s chapter of the National Society of Black Engineers.

RMU’s School of Engineering, Mathematics and Science is internationally recognized as a leader in STEM education. The school believes in faculty and student diversity and is committed to preparing students like Nolen for leadership and collaboration in an ever-changing world.
“The internship requirement is huge. It gives you such great exposure and experience. It really helps get your foot in the door.”

You might call SARAH BURNS a jack-of-all-trades. As a quality assurance engineer for Mitsubishi Electric Power Products in Pittsburgh, not only does Sarah make sure the company’s products are top-notch, she also qualifies vendors and performs in-depth investigations whenever problems arise. It’s the kind of challenging yet satisfying career she dreamed of at RMU while earning her bachelor’s in mechanical engineering and her master’s in engineering management.

Landing a job with Mitsubishi came as no surprise for Sarah, thanks to her yearlong internship with the company as an undergrad — which helped get her foot in the door, literally. Since then she’s earned accolades from her managers on the professionalism of her presentations, something she attributes to RMU’s focus on communication skills.

All engineering students in RMU’s School of Engineering, Mathematics and Science are required to complete an academic internship during their sophomore or junior years to put their skills to the test in a real-life industry setting. These engaged-learning opportunities are just one reason 95 percent of RMU grads have a job or are enrolled in graduate school a year after graduation.

After running a construction company for 15 years, JAKE SCHOOHVEN enrolled at RMU to complete a manufacturing engineering degree. A born tinkerer with a tool-crammed garage, Jake dug into filament research with one of his professors, a 3D printing expert who suggested he should look into the fast-growing field of additive manufacturing.

As soon as Jake earned his diploma, he got a job at General Electric’s additive manufacturing research center in nearby Findlay Township. Not the first RMU graduate hired at the gleaming new facility, Jake works with the direct metal laser machine team, using lasers to weld layers of metal powder. And typical of the start-up environment, as a new hire Jake has had the opportunity to get involved with everything from operation to research to shop layout.

Facility director Jen Cipolla says she has been so impressed with Jake and other RMU alumni and student interns that she has joined the board of visitors for the School of Engineering, Mathematics and Science, where she works closely with the dean to make sure its future graduates continue to be well prepared for the demands of the workforce.

Through close corporate relationships with major employers, including internships and other strategic connections, the School of Engineering, Mathematics and Science prepares students for career success. It really helps get your foot in the door.”

“RMU taught me how to learn, and that’s what this job is. Honestly, I’m learning how to be an additive manufacturing engineer because nobody really knows what that looks like right now.”
I probably would have quit. And if I’d chosen a bigger school, I probably wouldn’t have had that attention.”

“As an actuary for Highmark, JACLYN BOŠIJEVAC COX works with a team of analysts to set health insurance premiums for big companies with thousands of employees. It’s a perfect job for someone who always had a knack for numbers. It’s also a career she never would have dreamed of back when she was in high school.

Her actuarial science professors at RMU made all the difference, Jaclyn says. One-on-one attention and support helped her to get through the challenging coursework, especially as a freshman. Two professional internships during her time in college further prepared her for career success. Jaclyn also met her future husband Jeffrey, another Robert Morris alum, at an internship program Downtown. The rowing coach recruited her for varsity crew, and she loved it so much she still rows for Highmark’s corporate team. Now she advises younger women in the university’s Women’s Leadership and Mentorship Program.

Only 17 universities in the United States earn the designation Center of Actuarial Excellence, the highest recognition given by the Society of Actuaries. Considering the success of graduates like Jaclyn, it’s no surprise RMU is one of them.

“I do think that Robert Morris was a good place for me. It was a good fit.”

When a UPMC doctor came to speak to students at the RMU pre-med club, KELSEY PAXTON saw an opportunity. So the biology major buttonholed the visitor after the program and volunteered to work on any medical research project she had available. And it worked — that summer Kelsey had an internship at UPMC, assisting with medical research on polycystic ovary syndrome, even shadowing the doctor on her rounds with patients.

Taking advantage of opportunities is something Kelsey specialized in at RMU. As an honors student, she was a regular visitor to her professors’ office hours. She got involved with theater performances and the RMU dance team, and also spent a semester abroad at the University of Limerick, where her horseback riding class counted as animal behavior study credit toward her degree. And with the help of strong prep classes for the MCAT exams, Kelsey was accepted to the University of Pittsburgh School of Medicine. She plans to become a pediatric otolaryngologist.

Degree programs at the School of Engineering, Mathematics and Science place key emphasis on collaborative research, and students frequently co-publish scientific papers with faculty mentors. That builds strong resumes and creates a pathway to career success for students just like Kelsey.
UNDERGRADUATE PROGRAMS
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  Biomedical
  Industrial
  Mechanical
  Software
Manufacturing Engineering
Actuarial Science
Applied Mathematics
  Financial Mathematics
  Mathematics Education
Statistics and Predictive Analytics
Biology
  Pre-Medicine
  Biology Education
Environmental Science

GRADUATE PROGRAM
Engineering Management