

# SCIENCE, TECHNOLOGY, ENGINEERING AND MATH



## STEM Highlights

- The best of both worlds: Our **specialized, customizable STEM majors offer an exceptional technical education.** When combined with JMU's liberal-arts foundation, our students graduate with the perspective and skills employers are looking for—ready to succeed in our complex world.
- **Small, student-focused classes and labs** allow STEM professors to guide through challenges to maximize their Madison Experience.
- **State-of-the-art equipment** provides students the ability to learn from exceptionally high-levels of STEM demonstrations and discoveries.



**"I've gotten involved with different things that are both professional development and social development. I've always thought that the academic experience can be more than just in the classroom."**

— LACHLAN HUDSON (CLASS OF 2022)  
ENGINEERING

### Making Your Madison Experience Unique

The Madison Experience is about giving students the ability to craft their own individual journey to success. At JMU, you can cross disciplines and take any minor or combination of minors regardless of your major, allowing you to discover new interests and create your own path.

## Programs of Study

### MAJORS

- Biology
- Biophysical Chemistry
- Biotechnology
- Chemistry
- Computer Information Systems
- Computer Science
- Earth Science
- Engineering
- Geography
- Geology
- Intelligence Analysis
- Integrated Science and Technology
- Mathematics
- Physics
- Quantitative Finance
- Statistics

### MINORS

- Astronomy
- Biochemistry and Molecular Biology
- Biology
- Chemistry
- Climate Science
- Computer Science
- Environmental Information Systems
- Environmental Management
- Environmental Science
- Geography
- Geology
- Humanitarian Affairs
- Integrated Science and Technology
- Mathematics
- Physics
- Robotics
- Science, Technology and Society
- Statistics

### PRE-PROFESSIONAL MINORS

- Pre-Athletic Training
- Pre-Dentistry
- Pre-Forensic Studies
- Pre-Law
- Pre-Medicine
- Pre-Occupational Therapy
- Pre-Optometry
- Pre-Pharmacy
- Pre-Physical Therapy
- Pre-Physician Assistant
- Pre-Theology
- Pre-Veterinary Medicine

### GRADUATE PROGRAMS

- Biology
- Computer Science
- Cyber Intelligence
- Integrated Science and Technology
- Mathematics
- Psychological Sciences

For details visit [jmu.edu/academics](http://jmu.edu/academics)



## Overview

### The Madison Experience

#### ACCESS TO FACULTY

Our professors make teaching their No. 1 priority. That's rare at a school our size. Small classes. Attention from professors. Big-school opportunities, yet a small-school feel.

#### HANDS-ON LEARNING

80 percent of our undergrads do research, a practicum, an internship or student teach. Many JMU students do more than one of these. Another example of how learning happens beyond the classroom at JMU.

#### A GREAT VALUE

A reasonable price and a solid return on investment have long been hallmarks of the Madison Experience. Niche cited JMU #19 in its Best Value Big Colleges ranking. Superb value. Return on investment. A bright future for you.

#### STUDY ABROAD

More than 1200 students participate in JMU's study abroad program each year. Imagine yourself studying the geology, flora and fauna of Connemara as part of the popular Summer Abroad in Ireland program.

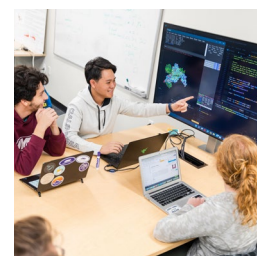
#### JMU OFFERS EXPERIENTIAL LEARNING WITH REAL WORLD APPLICATION

You get hands-on experience learning science and technology in collaboration with highly talented professors. Our students do research and have many opportunities to present their findings. Employers praise our graduates for their skill at working as part of a cohesive team. We have an impressive array of research equipment available to our undergraduate students.



#### WORKING SIDE-BY-SIDE WITH PROFESSORS

We know that the big issues facing our world - energy, biotechnology, the environment - often fall outside the confines of traditional academic disciplines. That's one reason we foster rich collaboration among students and professors from many different disciplines.



#### PRE-PROFESSIONAL HEALTH PROGRAMS

Students interested in STEM subjects are frequently interested in pursuing a career as a health professional. The Pre-Professional Health Advising office guides students interested in athletic training, dentistry, medicine, optometry, occupational therapy, pharmacy, physical therapy, physician assistant studies or veterinary medicine. Students can enroll in academic minors designed to help students prepare for admission to appropriate graduate, professional programs. More information about the minors can be found at [jmu.edu/pph](http://jmu.edu/pph).



[jmu.edu/academics](http://jmu.edu/academics)