

Engaged *Faculty*

At Morgan State, you'll learn from faculty who are leaders and recognized experts in their fields. You will find that faculty in SCMNS conduct research in a wide variety of cutting-edge areas. Examples include how the genome and environmental conditions like poverty and stress influence health disparities in cancer and metabolic disorders; how the brain regulates reproductive functions using animal models; evolution equations in math; image processing; and bioinformatics. **Whatever field of study you choose, you'll learn from published scholars and recognized professionals.**

A list of scholarly works and research can be found on the SCMNS website at www.morgan.edu/scmns.

Further *Study*

Our students often go on to pursue advanced graduate studies at institutions including Boston University, Carnegie Mellon University, George Washington University, Johns Hopkins University, University of Maryland, and West Virginia University, among many others. Morgan State's own School of Computer, Mathematical, and Natural Sciences offers a **Master of Arts degree in Mathematics, and Master of Science degrees in Bioinformatics and Science with specializations in Biology, Chemistry, and Physics.** Our **Ph.D. programs** include Bioenvironmental Science and Industrial and Computational Mathematics.

Top *Employers*

Area employers actively seek out our graduates. Top recruiters of our Medical Technology students, for example, include the University of Maryland Medical Center and The Johns Hopkins Hospital. Physics students have been recruited by Applied Physics Laboratory, the Naval Surface Warfare Center, and the United States Patent and Trademark Office. Recent Computer Science graduates have received **multiple job offers** from corporations and government organizations including Lockheed Martin, the National Security Agency, and others. Actuarial Science majors have received internships and full-time offers from top financial service and consulting firms including Travelers, Prudential, Liberty Mutual, and Willis Towers Watson.

One-hundred percent of graduates from our Medical Technology program have found employment within six months of graduation.

Learn more or
schedule a visit at
Morgan.edu

Morgan State University

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**School of Computer,
Mathematical, and
Natural Sciences**



#ExperienceMorgan

Leading in *Education*

THE SCHOOL OF COMPUTER, MATHEMATICAL, AND NATURAL SCIENCES

Research is central to the degree programs offered within the School of Computer, Mathematical, and Natural Sciences. Here you can select from eight majors within our five departments, where even as an undergraduate, you'll benefit from a **continuous research experience** that prepares you to succeed in your field. You'll also benefit from working within our state-of-the-art facilities. **The Richard N. Dixon Science Research Center** includes specialized laboratories for biology, histology, immunology, neuroscience, physics, physiology, and toxicology, in addition to a research greenhouse.

Our Continuous Undergraduate Research Experience (CURE) offers a comprehensive research experience throughout your undergraduate study.

RESEARCH SUPPORT PROGRAMS

The School of Computer, Mathematical, and Natural Sciences offers five research support programs:

- **The ASCEND program** uses a novel entrepreneurial research training approach to prepare undergraduates for graduate and professional careers in the Health Sciences.
- **Extreme Science Internship (ESI)**, in partnership with Johns Hopkins University, addresses issues associated with materials under extreme conditions.
- **NASA Goddard Earth Sciences Technology and Research (GESTAR) Internship program** provides internships for students in the area of earth science.
- **Minority Access to Research Careers Honors Undergraduate Training Program (MARC U*STAR)** supports research training for honors undergraduates and prepares students for entry into graduate programs in the biomedical sciences.
- **Minority Biomedical Research Support/Research Initiative for Scientific Enhancement (MBRS/RISE)** program is designed to increase the number of minority scientists in biomedical and behavioral science research.

Areas of Study

The School of Computer, Mathematical, and Natural Sciences is made up of five academic departments: the Department of Biology, the Department of Chemistry, the Department of Computer Science, the Department of Mathematics, and the Department of Physics and Engineering Physics. **Together, these five departments offer six degree programs that result in a Bachelor of Science (B.S.) degree. We also offer B.S. degrees in two Professional Programs: Actuarial Science and Medical Technology.**

ACTUARIAL SCIENCE The Bachelor of Science degree in Actuarial Science is offered through the Department of Mathematics. The program incorporates accounting, economics, finance, and mathematics into one discipline, and it is the only degree program of its kind in Maryland. As a student, you'll prepare to apply mathematical and statistical methods to assess risk in the insurance and financial services industries and related professions.

BIOLOGY The Bachelor of Science degree in Biology offers an education in the fundamental concepts and principles of the field. As a student, you'll develop the strong quantitative and analytical skills necessary to discover, understand, test, and demonstrate biological concepts and principles. You'll prepare for additional study or a career in a broad range of fields from medicine to research and teaching.

CHEMISTRY The Bachelor of Science degree in Chemistry offers both a General and a Professional track. The General track will prepare you for a career in education or health sciences, while the Professional track prepares you for a career in chemical sciences or to continue your studies. Both tracks provide a solid foundation in the theories, principles, and basic techniques of science, with a particular emphasis on undergraduate research.

COMPUTER SCIENCE The Bachelor of Science degree in Computer Science is designed to provide you with practical IT knowledge and a solid foundation in theoretical computer science. From data structures and programming languages to database design and artificial intelligence, you'll develop the necessary skills that prepare you to think critically in a rapidly evolving, global discipline.



Learn more at

Morgan.edu/scmns

MATHEMATICS The Bachelor of Science degree in Mathematics includes courses in algebra, analysis, statistics, and topology that provide core mathematical knowledge and deductive reasoning skills; these are complemented by a senior seminar course in mathematical communication. The program will prepare you for a career in education, or in research and statistics in the insurance and financial services industries and related professions.

MEDICAL TECHNOLOGY The Bachelor of Science degree in Medical Technology is offered through our Biology Department. The pre-professional phase of our program includes education in the liberal arts, while the professional phase offers further technical study, including 20 weeks of clinical rotations. The curriculum prepares you for a career in hospitals, private laboratories, biotechnology, the pharmaceutical industry, research, or technical sales.

PHYSICS The Bachelor of Science degree in Physics is designed to teach you the fundamental principles governing space, time, matter, and energy in the universe. You'll learn about different fields of physics and gain familiarity with experimental techniques and scientific instrumentation.

The Bachelor of Science degree in Engineering Physics emphasizes fundamental courses in physics, mathematics, and engineering to provide a thorough foundation in applied physics such as aerodynamics, electrical and mechanical engineering, nanotechnology, optics, and solid-state physics.

Physics majors are always in demand. In addition to technical careers in research, teaching, and applied physics, graduates often also pursue non-technical careers in business, law, or medicine.