Emory's Quantitative Sciences (QSS) major offers a rigorous and accessible way to combine mastery of quantitative approaches with whatever discipline or career path interests you. Our Biology track enables you to apply your quantitative expertise to areas like disease ecology, genetics/genomics, and computational neuroscience.

**Career options**

Your understanding of biological sciences and your skills in rigorous research design and methods will open doors to many career possibilities. Outside of academia, numerous research institutes and global agencies invest in the biological sciences. For example, the National Institute of Health has a Data Science Division with programs dedicated to big data in the biomedical sciences.

Your background and training will also give you a competitive edge in major industries. Pharmaceutical companies, such as Pfizer and Eli Lilly, and healthcare consultancies like Deloitte, Epic, and Accenture regularly recruit graduates who can combine knowledge of biological sciences and quantitative skills.
Research opportunities
Along with the quantitative skills you’ll learn in the major, Emory offers a host of opportunities for further research.

- Biology research at Emory stands out for its application and development of cutting-edge quantitative tools to study everything from how the brain processes information to the interactions of pathogens and hosts.
- Some researchers focus specifically on data mining, processing, and the extraction of relevant data from large and diverse datasets. Others examine the analytics and interpretation of diverse information sources, focusing on the analysis and characterization of data.

Quantitatively inclined students studying biology at Emory can participate in ongoing research projects studying pathology imaging, computational infrastructure, and systems biology.

Graduate study
Depending on your interests and career goals, you might pursue graduate study in biostatistics and biotechnology, or—if you’re more interested in policy—in public health or epidemiology. If your research interests are focused on eventually practicing medicine, our programs are an ideal foundation for earning either an MD or PhD.

Quantitative Sciences Program Requirements
As a QSS major, you must take:
- At least 7 QSS courses: 4 core and 3 upper-level electives
- A minimum of 6 additional courses in your chosen substantive track
- Additional electives (either in the QSS major or in your substantive track) may need to be taken to fulfill the QSS degree requirements.

Upper-Level Electives
Topics may include computational modeling, advanced statistics, GIS, technical writing, longitudinal analysis, maximum likelihood estimation, and experimental methods, among others.