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## B.S. in Bioinformatics

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### Bioinformatics Career Outlook

Breakthroughs in technology have led to an explosion of genetic information in the biological sciences. The collection of information has vastly outstripped the ability of biologists to process this information. Bioinformatics is the specialty that works to cope with this information.

Some bioinformaticists apply known methods to mine data from this flood of information, answering questions about how genes control biology, or developing new drug treatments for disease. Others work at the forefront of computer science, mathematics and statistics to develop yet undiscovered ways to meaningfully process this information.

If you are excited by problems in biology and medicine and find mathematics and computer science interesting, then bioinformatics may be the major for you.

### Opportunities

The field of bioinformatics is growing at a breathtaking rate. Genetics and molecular biology promise to play an ever increasing role in medicine and so this is a perfect pre-medical major. Future bioinformaticists will mine sequence data for

insights into biological function and into disease processes. They will engineer proteins for new uses and will formulate and solve new problems in mathematics, statistics, and computer science. Our curriculum will prepare you for entry into graduate school as the first step in pursuing these projects

### Curriculum

Our curriculum is designed to help students prepare for this challenging field. In addition to mastering the core science courses of the biology major, our students develop expertise in computer science and mathematics, as well. Classes are small with ample opportunity to gain practical hands-on experience. Depending on your interests, you can emphasize the biological or the computational side. Throughout your four years, faculty participate in helping you choose a curriculum best suited to your interests and preparing you for the next stage of your career. Your last year will bring you to the forefront of this exciting new field.

Undergraduates earning a bachelor of science degree in bioinformatics will have an interdisciplinary knowledge base ideally suited to pursuing graduate studies in bioinformatics, genomics, molecular biology, computational biology, protein chemistry, and allied fields.