# Sample Four-Year Degree Plan

## B.S. MEDICAL TECHNOLOGY

The State University of New York at Fredonia is committed to doing our part to provide each student a clear path to graduation. This four-year degree plan is a sample map for fulfilling requirements in the major, the College Core Curriculum (CCC), and other supporting courses. The pathway that you take to your degree may differ somewhat from this illustration, depending on where you start and the detours and side trips you may take along the way. If you are committed to completing your degree in four years, we encourage you to consider signing up for the Fredonia in 4 program.

For complete information about this degree program, please consult the university catalog at fredonia.smartcatalogiq.com

### FIRST YEAR

- **Fall Semester**
  - **Course**: BIOL 131
    - **Credits**: 3
    - **Course**: BIOL 132
      - **Credits**: 1
  - **Course**: CHEM 115
    - **Credits**: 3
  - **Course**: CCC
    - **Credits**: 3
  - **Course**: CCC
    - **Credits**: 3

- **Spring Semester**
  - **Course**: BIOL 133
    - **Credits**: 3
  - **Course**: BIOL 134
    - **Credits**: 1
  - **Course**: CHEM 116
    - **Credits**: 3
  - **Course**: CHEM 126
    - **Credits**: 1

**TOTAL**: 15

### SECOND YEAR

- **Fall Semester**
  - **Course**: BIOL 237
    - **Credits**: 3
  - **Course**: BIOL 245
    - **Credits**: 4
  - **Course**: CHEM 214
    - **Credits**: 3
  - **Course**: CCC
    - **Credits**: 3

- **Spring Semester**
  - **Course**: BIOL 246
    - **Credits**: 4
  - **Course**: CHEM 216
    - **Credits**: 3
  - **Course**: CCC
    - **Credits**: 3
  - **Course**: CCC
    - **Credits**: 3

**TOTAL**: 15

### THIRD YEAR

- **Fall Semester**
  - **Course**: BIOL 333
    - **Credits**: 3
  - **Course**: BIOL 431
    - **Credits**: 1
  - **Course**: BIOL 461
    - **Credits**: 3
  - **Course**: PHYS 121
    - **Credits**: 3
  - **Course**: PHYS 123
    - **Credits**: 1
  - **Course**: CCC
    - **Credits**: 3

- **Spring Semester**
  - **Course**: BIOL 338
    - **Credits**: 3
  - **Course**: BIOL 453
    - **Credits**: 1
  - **Course**: PHYS 122
    - **Credits**: 3
  - **Course**: PHYS 124
    - **Credits**: 1
  - **Course**: CCC
    - **Credits**: 3
  - **Course**: CCC
    - **Credits**: 3

**TOTAL**: 15

### FOURTH YEAR

- **Fall Semester**
  - **Course**: MEDT 490
    - **Credits**: 15

- **Spring Semester**
  - **Course**: MEDT 491
    - **Credits**: 15

**GRAND TOTAL**: 120

The B.S. Medical Technology degree is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the American Medical Association Council on Health Education. Recent program graduates have obtained employment as clinical laboratory scientists in hospital laboratories, biomedical research facilities, forensic laboratories and the pharmaceutical industry; and as sales representatives for pharmaceutical, medical instrumentation and computer corporations. The percentage of Fredonia Medical Technology students passing the Board of Registry Examination on the first attempt has been 97 percent over the past 10 years, compared to a national passage rate of only 76 percent.

Biology

- **221 Science Center**
- **The State University of New York at Fredonia**
- **Fredonia, NY 14063**
- **(716) 673-3282**
- **email**: biology@fredonia.edu
- **web**: home.fredonia.edu/biology

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fredonia.edu
Why Study the Natural Sciences at Fredonia?
The Natural Sciences at Fredonia encompass state of the art programs in pure and applied sciences that prepare you well for graduate school and professional careers. Each program gives you the opportunity to engage in meaningful research in collaboration with the faculty.

Choose from a variety of disciplines
- Mathematical Sciences offer programs in pure and applied mathematics, as well as certification programs in mathematics education.
- Computer and Information Sciences have multiple programs including those in software development, systems management and cooperative computer engineering.
- Biology houses programs in Biology, Medical Technology, Molecular Genetics, Exercise Science and Biology Adolescence Education.
- The Department of Chemistry and Biochemistry offers programs approved by the premier accreditor, The American Chemical Society, as well as certification program in Adolescence Chemistry Education.
- Programs in the Physics Department include several concentrations in Physics (including Physics Education), as well as being the home for most Cooperative Engineering majors.
- Programs in Geology and Environmental Sciences cover all aspects of earth and planetary sciences as well as the interdisciplinary programs in environmental science and GIS.

Thrive in state-of-the-art Science Center
- Our new $60 million Science Center features $5 million in cutting-edge instruments and equipment. It boasts an innovative design that maximizes student learning, facilitates student-faculty collaboration, and creates spontaneous interactions across disciplines.
- Research labs and classrooms incorporate glass walls, natural light and open spaces, allowing visitors to easily observe students and faculty learning together.

Receive an exceptional value
- Fredonia alumni in graduate and medical schools consistently say they were better prepared than their peers at larger schools because of rigorous Fredonia courses, smaller class sizes, undergraduate research opportunities and genuine relationships with faculty mentors.
- Internships are conducted in hospital labs, physician offices, health departments, environmental agencies, and energy, biomedical and pharmaceutical companies, as well as hospitals, pharmacies, veterinary clinics and zoos.
- Health Professions Advising Program assists students pursuing careers in medicine, dentistry, optometry and veterinary medicine.
- Students perform field research in Lake Erie, its tributaries and Fredonia’s 200-acre nature sanctuary.

Exceptional faculty
- Faculty conduct research and are recognized consistently for their efforts on local, regional, national and international levels.
- Their interests range from studying the animal behavior of bats and praying mantises, among other species, quantifying the potential natural gas held with the Marcellus Shale region, and improving the water quality of the Great Lakes.

One professor’s research spurred a national law signed by President Obama. It bans the use of plastic microbeads in beauty and exfoliating products — because a Fredonian showed they contaminate water systems.

Alumni successes
- Many recent graduates are enrolled in medical, dental, veterinary and optometry schools.
- Alumni have gone on to become clinical scientists, high school teachers, biomedical research scientists, physicians, pharmacists, environmental scientists, venture capitalists, veterinarians, lab directors, lawyers and forensic scientists, among other professions.
- Fredonians are among the faculty at University of California at Berkley, Penn State University, Indiana University of Pennsylvania, The Scripps Research Institute and other institutions.