WHAT CAN I DO WITH MY BIOINFORMATICS/COMPUTATIONAL BIOLOGY DEGREE?

Using the Major Sheet:
• Large headings indicate industry area and subheadings indicate employers within that area.
• Use the titles to search for careers and related careers in order to explore your options within different areas of industry. Note that some career titles have multiple names for similar positions.
• An asterisk (*) notes that additional training (certification, graduate school, high level of experience) may be needed in order to obtain this career. Make sure to thoroughly research career pathways.

COMPUTER SCIENCE/ENGINEERING
Computer Service Co., Large Corp. / Organizations, Software Development Firms, Biotechnology Companies
• Computational Biologist
• Molecular Modeling Researcher
• Software Engineer
• Software Engineer
• Bioinformatics Software Developer
• Computer Programmer
• Database Management
• Computational Analyst
• Software Developer
• Web Developer
• Data Analyst
• Digestion of Data
• Sequence Assembler
• Technical Support

INFORMATION TECHNOLOGY
Computer Service Corp. / Organizations, Software Development Firms, Biotechnology Companies
• Bioinformatics Analyst
• Network Administrator
• Clinical Data Manager
• Bioinformatician
• Biostatistician
• Data Visualization Specialist
• Laboratory Information Systems Analyst
• Database Programmer
• Data Mining Specialist

APPLIED SCIENCE
Medical and Hospital Clinics, Pharmaceutical Companies, Industrial Firms, Bioengineering Companies, Private or Hospital Diagnostic Laboratories, Agricultural Institutions
Biotechnology
• Forensic Biological Scientist
• Biostatistician
• Biologist
• Biomedical Chemist
• Molecular Microbiologist
• Chemistry Technologist
• Research Scientist
• Bioinformatician
• Biotechnologist
• Product Researcher
• Protein Matching
• Product Developer

Medical/Pharmaceutical/Genetics
• Biomedical Engineer
• Public Health/Infection Control
• Healthcare Scientist
• Phylogenist
• Gene Analyst
• Pathologist
• Cytotechnologist
• Biomedical Scientist
• Medical Writer
• Proteomic Specialist
• Pharmacologist
• Protein Analyst
• Cheminformatician
• Medical Technologist
• Genetic Researcher
• Geneticist
• Pharmacogenomicist
• Anatomist
• Scientific Curator
• Pharmacogenetician
• Virologist
EDUCATION/PUBLISHING
Colleges and Universities, Industrial Firms, Research Institutes, Government Labs
• Research Scientist
• Educational Programs Manager
• Public Health Educator
• Bioinformatics Professor
• Mathematician

GOVERNMENT/INDUSTRY
Bioengineering Companies, Public Health Service, Department of Health and Human Services, Environmental Protection Agencies, Food and Drug Administration, etc.
• Systems Engineer
• Operations Research Analyst
• Environmental Engineer
• Consultant
• Statistician
• Environmental Scientist
• Agricultural Analyst
• Plant Breeder
• Market Analyst

PREPROFESSIONAL PREPARATION
Prepares for Graduate Programs in:
• Management
• Math
• Dentistry
• Business
• Science
• Nursing
• Law
• Medicine

Preparation for a Competitive Job Market:
• Focus on transferable skill sets, as you pursue a degree in Bioinformatics/Computational Biology.
• Obtain relevant internship, co-op, or volunteer experiences.
• Supplement Bioinformatics/Computational Biology course work with classes that are relevant to your career.
• Meet with a Career Specialist to explore options, make decisions, and prepare for career choices.

Additional Career Center Resources:
• Major Sheets (BIOL, BIOC, BTEC, MATH, MOCB): http://careers.umbc.edu/tools/major-sheets/
• Links by Major: http://careers2.umbc.edu/tools/links.php
• Vault: http://careers.umbc.edu/students/discover/explore-careers-majors/
  -Click on Vault Career Insider portal link and provide UMBC user ID and password
  -Select “Guides” to view relevant guides such as:
    “Vault Guide to Pharmaceuticals and Biotechnology Jobs”
    “Vault Guide to Biology and Life Sciences Jobs”
    “Vault Guide to Government Agency Careers”
    “Vault Guide to Health Care Provider Jobs”
    “Vault Guide to Dental Care Jobs”
    “Career Launcher: Health Care Management”
    “Vault Career Guide to Pharmaceuticals and Biotech”
• Professional Associations:
  The International Society for Computational Biology: www.iscb.org
  Society for Industrial Microbiology and Biotechnology: http://www.simhq.org/
  American Institute for Biological Sciences: https://www.aibs.org/home/index.html
  National Association of Science Writers: https://www.nasw.org/
  Association of Clinical Research Professionals: http://www.acrpnnet.org/
• Additional Resources:
  Insight Data Science Fellows Program: http://insightdatascience.com/
  Virology Journal: http://www.virology.net/
  Bioinformatics.org: http://www.bioinformatics.org/
  Health eCareers: https://www.healthecareers.com/
• Professional/Graduate School Resources:
  UMBC PreMedical and PreDental Advising Office: http://premed.umbc.edu/
  Graduate Guide: http://www.graduateguide.com/
  National Association of Graduate and Professional Students: http://nagps.org/