

MONTCLAIR STATE UNIVERSITY

COLLEGE OF SCIENCE AND MATHEMATICS

MS in Pharmaceutical Biochemistry

Master of Science in Pharmaceutical Biochemistry

The STEM-designated MS in Pharmaceutical Biochemistry program at Montclair State University prepares students for careers in applied research or product development in the pharmaceutical industry and for work in management, inspection, sales and service. Specifically, these graduates will have the requisite skills in biochemistry, drug design and pharmacology to set them on a career path in the pharmaceutical industry.

This 30-credit program is uniquely poised to meet these objectives by providing a core curriculum which closely parallels the drug discovery process followed within the pharmaceutical industry. The core curriculum provides training in the biochemical aspects of drug discovery, drug screening and medicinal chemistry technologies, and pharmacological evaluation of new drug candidates.

\$103,650 average salary for biochemists in 2024

U.S. Bureau of Labor Statistics 2024

#81 Top Public Schools

U.S. News & World Report 2025, Top Public Colleges and Universities

“ I highly recommend the university to students and friends, particularly for its advantageous geographical location, which is especially appealing to international students. Situated in New Jersey, the campus is nestled in a welcoming and picturesque environment with mild climatic conditions. The Office of Global Engagement at Montclair has consistently proven to be helpful and supportive, assisting international students with visa matters, transitions, and their academic journeys. For these compelling reasons, I wholeheartedly recommend prospective students to consider joining Montclair State University.

Shih-Chieh - Taiwan
PhD Student



19 kilometers from New York City

120+ student clubs and organizations

Program Highlights

- STEM-designated (eligible for 3 years of OPT)
- Choice of graduate literature search and seminar OR research project and master's thesis
- Access to designated biochemistry labs
- Opportunities to join faculty research
- Can be completed in a two-year or 15-month format (with summer courses)
- Access to state-of-the-art biochemistry labs

Career Outcomes

Graduates with an MS in Pharmaceutical Biochemistry can go into a wide range of fields. Some of the most common career outcomes are:

- Biochemist
- Laboratory Supervisor
- Quality Control Inspector
- Chemist
- Patent Attorney
- Regulatory Affairs Specialist
- Clinical Research
- Specialist
- Pharmaceutical Sales Rep.
- Science Teacher
- College Professor
- Pharmacist
- Toxicologist
- Cytologist
- Physician
- Dairy Technologist

Sample Courses

This **30-credit program** consists of many course options to choose from that will help you gain the skills and knowledge you need to help you succeed in your future career.

- Advanced Biochemistry
- Enzyme Kinetics and Mechanisms
- Biomolecular Assay Development
- Biochemical Pharmacology
- Special Topics in Modern Genetics
- Molecular Biology I
- Molecular Biology II
- Signal Transduction
- Selected Techniques in Molecular Biology
- Bioinorganic Chemistry
- Advanced Organic Chemistry
- Drug Design in Medicinal Chemistry
- Advanced Analytical Chemistry
- Protein Structure
- Nucleic Acid Biochemistry
- Biochemistry Laboratory Techniques
- Graduate Research



Admission Requirements

- Application
- Application fee
- Official NACES transcript evaluation
- Official English proficiency test score
- Statement of purpose
- Two letters of recommendation
- Optional:
 - GRE
 - Resume

APPLY NOW

