

M.S. in Biology of Health

The Master of Science in Biology of Health (MSBH) program is a postbaccalaureate premedical program designed to provide graduate-level health sciences and basic biomedical training. It is intended for students who intend to transition to medical and other health professions schools (e.g., dentistry, physical therapy, physician assistant, podiatry, etc.), and enables them to complete additional coursework in the foundational sciences, demonstrate the ability to succeed in graduate-level studies, and prepare for national admissions examinations.

Students participating in the MSBH Program will be advised by the NJIT Pre-Health Advisory Committee, which provides mentorship on course selection, professional school applications, and national admissions examinations (MCAT or similar). It is also the formal entity behind the 'committee letter' of recommendation that most health professional schools prefer to receive.

Students are expected to complete a total of 30 university course credits (usually 10 courses). This includes 18 credits from 6 required courses, at least 3 credits (1 course) from the list of neuroscience electives, and 9 credits (3 courses) from the list of other elective courses. Required courses can be substituted with good justification and permission by the program advisor, and a second neuroscience elective can count towards the other elective requirements. Students may choose an elective outside the list with approval of the program advisor.

In order to graduate, students must have achieved a minimum 3.0 grade point average on a 4.0 scale for 24 credits, with no more than 6 credits of C grades and no failing grades. Courses in which a student received a failing grade must be repeated and can only be satisfied by earning a grade of B or better.

The expected most common study period for each student is one academic year consisting of two semesters, with the possibility of early registration to take two courses in the summer semester. Students who start in the spring semester and students who elect to register for a lighter course load per semester will be advised on the best sequence of courses to show significant advancement for early applications to medical or other professional programs. The sequence of course work for each student will be planned with the Pre-Health Committee and targeted to the dates of specific professional program application deadlines and admissions tests (MCAT or similar).

Code	Title	Credits
Required Courses		
BIOL 650:	Human Anatomy	3
BIOL 644:	Physiological Mechanisms	3
BIOL 646:	Endocrinology	3
CHEM 673	Biochemistry	3
BIOL 628	Cell Biology of Disease: Cells Gone Bad	3
PTC 660:	Medical Ethics	3
Neuroscience Elective		
Select one		3
R120 517	Develomental Neurobiology	
BIOL 648:	Neuropathology	
BIOL 635	Intro to Comp Neuroscience	
BIOL 636	Advanced Comp Neuroscience	
BIOL 640	Cellular Neurophysiology	
BIOL 641	Systems Neuroscience	
Other Electives		
Select three		9
Foundational electives		
R120 515	Molecular Bio Of Eukaryotes	
R120 524	Cell Molec Dev	
BIOL 610	Comparative Vertebrate Anatomy	
BIOL 612	Comparative Animal Physiology	
BIOL 645	Biological Imaging Techniques	
BIOL 672	Computational Systems Biology	
MATH 615	Approaches to Quantitative Analysis in the Life Sciences	
Medical and applied science electives		
BIOL 668:	Evolutionary Medicine	
BIOL 653:	Medical Genetics and Genomics	
BIOL 643:	Biology of Addiction	

BIOL 606	App Bioproc & Immun Based Ther
BIOL 725	Independent Study I
BME 668	Medical Imaging Systems
BME 671	Biomechanics of Human Structure and Motion
EVSC 616	Toxicology
MATH 654	Clinical Trials Design and Analysis
PTC 640	Health Communications

Total Credits

30