Master of Engineering in Computer Science and Molecular Biology (Course 6-7P)

The Department of Biology (http://catalog.mit.edu/schools/science/biology) and the Department of Electrical Engineering and Computer Science (EECS) (http://catalog.mit.edu/schools/engineering/electrical-engineering-computer-science) offer a joint curriculum that focuses on the emerging field of computational and molecular biology. The curriculum provides strong foundations in both biology and computer science and features innovative, integrative, capstone, and elective subjects. Students in the program are full members of both departments and of two schools, Science and Engineering, with one academic advisor from each department.

The Master of Engineering in Computer Science and Molecular Biology (http://catalog.mit.edu/degree-charts/master-computer-science-molecular-biology-course-6-7p) program builds on the Bachelor of Science in Computer Science and Molecular Biology program (Course 6-7) (http://catalog.mit.edu/degree-charts/computer-science-molecular-biology-course-6-7), which prepares students for careers that leverage computational biology (e.g., pharmaceuticals, bioinformatics, medicine, etc.) as well as further graduate study in biology, in computer science, and in emerging programs at the interface of these fields. The master's program provides additional depth in computational and/or molecular biology through coursework and a substantial thesis. The student selects (with departmental review and approval) 42 units of advanced graduate subjects, which include two concentration subjects in biology and/or computational biology plus a third subject in electrical engineering and computer science and/or biology. A further 24 units of electives are chosen from a restricted departmental list of math electives.

The Master of Engineering degree also requires 24 units of thesis credit. While a student may register for more than this number of thesis units, only 24 units count toward the degree requirement.

Financial Support

The fifth year of study toward the Master of Engineering degree can be supported by a combination of personal funds, an award such as a National Science Foundation Fellowship, a fellowship, or a graduate assistantship. Assistantships require participation in research or teaching in the department or in one of the associated laboratories. Full-time assistants may register for no more than two scheduled classroom or laboratory subjects during the term, but may receive academic credit for their participation in the teaching or research program. Support through an assistantship may extend the period required to complete the Master of Engineering program by an additional term or two. Support is granted competitively to graduate students and will not be available for all of those admitted to the Master of Engineering program. If provided, department support for Master of Engineering candidates is normally limited to the first three terms as a graduate student, unless the Master of Engineering thesis has been completed or the student has served as a teaching assistant or has been admitted to the doctoral program, in which cases a fourth term of support may be permitted.

Inquiries

Information about these programs is available from the EECS Undergraduate Office (http://www.eecs.mit.edu), Room 38-476, 617-253-4654, and the Biology Undergraduate Office (https://biology.mit.edu), Room 68-120, 617-253-4718.