Master of Engineering in Computer Science, Economics, and Data Science (Course 6-14P)

The Department of Electrical Engineering and Computer Science and the Department of Economics offer a joint curriculum leading to a Master of Engineering in Computer Science, Economics, and Data Science. Computer science and data science provide tools for problem solving, and economics applies those tools to domains where there is rapidly growing intellectual, scholarly, and commercial interest, such as online markets, crowdsourcing platforms, spectrum auctions, financial platforms, crypto currencies, and large-scale matching/allocation systems such as kidney donation and public school choice systems. This joint program prepares students for jobs in economics, management consulting, and finance. Students in the program are full members of both departments, with a single advisor chosen from EECS or Economics based on interests of the student as well as the advisor’s interest and expertise in the 6-14 area.

The Master of Engineering in Computer Science, Economics, and Data Science (Course 6-14P) builds on the foundation provided by the Bachelor of Science in Computer Science, Economics, and Data Science (Course 6-14) to provide both advanced classwork and master’s-level thesis work. The student selects (with departmental review and approval) 42 units of advanced graduate subjects, which include two subjects in economics and two subjects in electrical engineering and computer science. 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.

Programs leading to the five-year Master of Engineering degree or to the four-year Bachelor of Science degree can be arranged to be identical through the junior year. At the end of the junior year, students with a strong academic record will be offered the opportunity to continue through the five-year master’s program. A student in the Master of Engineering program must be registered as a graduate student for at least one regular (non-summer) term. To remain in the program and to receive the Master of Engineering degree, students will be expected to maintain a strong academic record. Admission to the Master of Engineering program is open only to undergraduate students who have completed their junior year in the Course 6-14 Bachelor of Science program.

Financial Support

The fifth year of study toward the Master of Engineering degree can be supported by a combination of personal funds, 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, the student has served as a teaching assistant, or the student has been admitted to the doctoral program, in which cases a fourth term of support may be permitted.

Inquiries

For additional information regarding teaching and research programs, contact the EECS Undergraduate Office, Room 38-476, 617-253-4654, or visit the department’s website (https://www.eecs.mit.edu/academics/undergraduate-programs/meng-program).