

COMPUTER SCIENCE, ECONOMICS, AND DATA SCIENCE

Bachelor of Science in Computer Science, Economics, and Data Science (Course 6-14)

The Department of Electrical Engineering and Computer Science (<https://catalog.mit.edu/schools/engineering/electrical-engineering-computer-science>) and the Department of Economics (<https://catalog.mit.edu/schools/humanities-arts-social-sciences/economics>) offer a joint curriculum leading to a Bachelor of Science in Computer Science, Economics and Data Science (Course 6-14) (<https://catalog.mit.edu/degree-charts/computer-science-economics-data-science-course-6-14>). The interdisciplinary major provides students a portfolio of skills in economics, computing, and data science that are increasingly valued in both the business world and academia. The economics and computer science disciplines have a substantial overlap both in their reliance on game theory and mathematical modeling techniques and their use of data analytics. The economics side of the program includes subjects in microeconomic theory and econometrics and electives that expose students to how economists in various fields use mathematical models and statistical evidence to think about problems. The computer science side includes a number of subjects that develop complementary knowledge, including the study of algorithms, optimization, and machine learning (which is increasingly integrated with econometrics). The program also includes coursework in several mathematical subjects, including linear algebra, probability, discrete mathematics, and statistics, which can be taken in various departments.

The Course 6-14 major is also well suited to students whose primary interest is in game theory and mathematical modeling. It can prepare students for graduate study in either discipline.