

URBAN SCIENCE AND PLANNING WITH COMPUTER SCIENCE

Bachelor of Science in Urban Science and Planning with Computer Science (Course 11-6)

Urban settlements and technology around the world are rapidly co-evolving as flows of population, finance, and politics are reshaping the very identity of cities and nations globally. We already see rapid and profound change, especially in mega-cities, including pervasive sensing, the growth and availability of continuous data streams, advanced analytics, interactive communications and social networks, and distributed intelligence. Examples of new technologies facilitated by or requiring big data and new informatics concentrated in urban areas include, but are not limited to, autonomous vehicles, sensor-enabled self-management of natural resources, cybersecurity for critical infrastructure biometric identity, the sharing or gig-economy, and continuous public engagement opportunities through social networks and data and visualization.

The Bachelor of Science in Urban Science and Planning with Computer Science (Course 11-6) (<https://catalog.mit.edu/degree-charts/urban-science-planning-computer-science-11-6>) emphasizes the development of fundamental skills in urban planning and policy, including ethics and justice; statistics, data science, geospatial analysis, and visualization; and computer science, robotics, and machine learning. The Course 11-6 program provides numerous opportunities for field-based problem-solving experience through labs, UROP assignments and client-based courses in which students synthesize and empirically integrate what they are learning about theory and practice at the intersection of computer and urban science. Students also have the opportunity to specialize through the selection of a customized concentration of upper-level electives in data visualization, applied spatial analysis, design, and public policy. Students in the program are full members of both departments and of two schools, Architecture and Planning and Engineering.

Email for more information (duspinfo@mit.edu) or call 617-253-1933.