

DESIGN AND MANAGEMENT

System Design and Management

The System Design and Management (SDM) program, offered jointly by the MIT Sloan School of Management and School of Engineering, leads to a Master of Science in Engineering and Management (<https://catalog.mit.edu/degree-charts/sm-system-design-management>). The program focuses on developing competencies in the areas of systems thinking, management skills, leadership, and an end-to-end understanding of systems development. Students take subjects drawn from three areas: systems (systems engineering, architecture, and optimization), management, and a technical area of the student's choosing.

The program is designed for experienced engineers and product development professionals who seek to build upon their technical background and advance to positions of leadership in their careers. Participants come from both private and government institutions, either as company-sponsored or self-sponsored students. Applicants have significant engineering and/or managerial experience, in addition to a scientific or engineering education. On average, SDM student-fellows have about 10 years of work experience. Most SDM students have advanced degrees in other fields, and over half come from countries other than the United States.

Degree Options

SDM offers a full-time residential option and commuter and distance learning options for technical professionals who are continuing in their positions at remote locations while enrolled in the program. The subject requirements are the same for all options, and all programs begin on campus in late August, two weeks before the start of the fall term. All students are required to spend one full-time, 13-week semester in residence on campus during either the spring or fall term. Typically, students fulfill the residency requirement during the second year, dedicating the other second-year semester to thesis research and development, which can be done at a distance.

Residential Option

Residential students complete the entire program on campus, typically in 16 months (or as few as 12 with faculty approval). Students have the option to extend their experience through internships or teaching or research assistantships.

Commuter Option

Students who live locally can choose the commuter option and complete the program in 21–24 months by taking one to two courses per semester.

Distance Learning Option

Distance learning students typically finish the program in 21–24 months, completing the first year at a distance and spending one semester in residence full time at MIT.

Admissions

Application deadlines are in mid-January, and mid-March. Applicants receive a decision within four to six weeks after the deadline by which the complete application was received. Additional Information on admissions requirements are available on the SDM program website (<https://sdm.mit.edu>) or from the SDM Program Office (sdm@mit.edu), 617-452-2432.

Integrated Design and Management

The Integrated Design and Management (IDM) (<https://idm.mit.edu>) program is not currently admitting new students.

The Integrated Design and Management (IDM) (<https://idm.mit.edu>) program, leading to a master's of science degree in engineering and management, is dedicated to enabling the learning and development of extraordinary, innovative leaders who will bring new levels of creativity, vision, and integrity to business and society. The curriculum combines the inspired, intuitive methods taught in the world's best design schools with the systematic, analytical methods of the world's best engineering and business schools.

To achieve balance, the backgrounds of IDM's student body and faculty are composed of equal parts engineering, business, and design. Through exposure and interaction of these different backgrounds, students learn to appreciate and integrate the value of the other disciplines in their activities. This balanced, integrated approach has been demonstrated time and again to produce new business paradigms, great products, and the creative courage to solve complex, hard-to-define problems.

IDM's core curriculum is taught in the Integrated Design Lab (ID Lab), a design studio environment, where interdisciplinary teams have dedicated team space to practice the human-centered design process, complete with state-of-the-art tools ranging from 3D printers to robotic arms. In this action-based environment, empathy is generated, trial and error is encouraged, failure is celebrated, and the potential for success is realized.

IDM is a track within the System Design and Management Program.