System Design and Management

MIT’s System Design and Management (SDM) (http://sdm.mit.edu) program, offered jointly by the MIT Sloan School of Management and School of Engineering, is a master’s program for experienced engineers and product development professionals who seek to build upon their technical background and advance to positions of leadership in their careers. Program 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. Program participants come from both private and government institutions, either as company-sponsored or self-sponsored students. Most SDM students have advanced degrees in other fields, and over half come from countries other than the United States.

The SDM program leads to a Master of Science in Engineering and 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. 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. For additional information, contact the SDM Program Office (sdm@mit.edu), Room E40-315, 617-452-2432.

System Design and Management Program

SDM offers a full-time on-campus option for resident degree students, and a commuter and distance learning instruction option 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.

Full-time Residential Option

The full-time program requires 12 months in residence at MIT.

Commuter and Distance Learning Options

The commuter and distance learning program options require 21 months to complete. Students in both options take three semesters of core classes (offered at a distance, for those in that option) in the first year, and must attend two one-week seminars held on campus in IAP (January) and at the end of the spring term. Distance learning students also must spend one semester in residence at MIT in their second year, taking the required foundation and elective units.

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.