MIT STEPHEN A. SCHWARZMAN COLLEGE OF COMPUTING

Overview

The mission of the MIT Stephen A. Schwarzman College of Computing (*https://computing.mit.edu*) is to address the opportunities and challenges of the computing age—from hardware to software to algorithms to artificial intelligence (AI)—by transforming the capabilities of academia in three key areas:

- **Computing fields**: Support the rapid growth and evolution of computer science and computational areas of allied fields such as electrical engineering, as reflected notably in the rise of AI.
- **Computing across disciplines**: Facilitate productive research and teaching collaborations between computing and other fields, rather than place one field in service of another.
- **Social and ethical aspects of computing**: Lead the development of and changes in academic research and education, and effectively inform practice and policy in industry and government.

In order to deliver on its mission, the college is designed to take MIT's computing programs to the next level by facilitating the rapid evolution of computing education and research programs, improving collaboration between computing and other disciplines, and advancing the study and practice of social and ethical responsibilities of computing.

The college's unique structure is at once both cross-cutting across all of MIT and a focused home for computer science and AI education and research, strengthening the computing fields and more effectively and creatively connecting AI and computing to every discipline.

Organization

The organizational structure of the MIT Schwarzman College of Computing brings together MIT programs in computing and cross-cutting educational and research programs.

Academics

- Department of Electrical Engineering and Computer Science (*https://catalog.mit.edu/schools/engineering*) (joint with School of Engineering)
- Institute for Data, Systems and Society (*https://catalog.mit.edu/schools/mit-schwarzman-college-computing/data-systems-society*), including the Technology and Policy Program (*https://catalog.mit.edu/interdisciplinary/graduate-programs/technology-policy*) and Statistics and Data Science Center (*https://stat.mit.edu*)

- Center for Computational Science and Engineering (*https://catalog.mit.edu/mit/research/center-computational-engineering*)
- Operations Research Center (*https://catalog.mit.edu/mit/research/operations-research-center*) (joint with Sloan School of Management)

Research

- Abdul Latif Jameel Clinic for Machine Learning in Health (*https://www.jclinic.mit.edu*)
- Computer Science and Artificial Intelligence Laboratory (*https://www.csail.mit.edu*)
- Laboratory for Information and Decision Systems (*https://lids.mit.edu*)
- MIT-IBM Watson AI Lab (*https://mitibmwatsonailab.mit.edu*)
- Quest for Intelligence (*https://quest.mit.edu*)
- Sociotechnical Systems Research Center (*https://ssrc.mit.edu*)

Cross-Cutting Programs

- Social and Ethical Responsibilities of Computing (*https://computing.mit.edu/SERC*)
- Common Ground for Computing Education (*https://computing.mit.edu/cross-cutting/common-ground-for-computing-education*)

Degrees Offered in the MIT Schwarzman College of Computing

Computational Science and Engineering

SM	Computational Science and Engineering [1]
PhD, ScD	Aerospace Engineering and Computational Science [1,2]
PhD, ScD	Chemical Engineering and Computation [1]
PhD, ScD	Civil Engineering and Computation [1]
PhD, ScD	Computational Earth, Science and Planetary Sciences [1]
PhD, ScD	Computational Materials Science and Engineering [1]
PhD, ScD	Computational Nuclear Science and Engineering [1]
PhD, ScD	Environmental Engineering and Computation [1]
PhD, ScD	Mathematics and Computational Science [1]
PhD, ScD	Mechanical Engineering and Computation [1]
PhD, ScD	Nuclear Engineering and Computation [1]

Data, Systems, and Society

SM	Technology and Policy
PhD, ScD	Social and Engineering Systems
PhD	Social and Engineering Systems and Statistics
PhD	Aeronautics and Astronautics and Statistics
PhD	Cognitive Science and Statistics
PhD	Economics and Statistics

PhD	Mathematics and Statistics
PhD	Mechanical Engineering and Statistics
PhD	Neuroscience and Statistics
PhD	Physics, Statistics, and Data Science
PhD	Political Science and Statistics

Electrical Engineering and Computer Science (Course 6)

SB	Artificial Intelligence and Decision Making
SB	Computer Science and Engineering
SB	Electrical Engineering with Computing
SM	Electrical Engineering and Computer Science
SM/MBA	Engineering/Management—dual degree with Leaders for Global Operations Program [1]
MEng	Computer Science, Economics, and Data Science
MEng	Electrical Engineering and Computer Science
Electrical Engineer	
Engineer in Computer Science	
PhD, ScD	Computer Science
PhD, ScD	Computer Science and Engineering
PhD, ScD	Electrical Engineering
PhD, ScD	Electrical Engineering and Computer Science

Operations Research

SM	Operations Research [1]
PhD	Operations Research [1]

[1] See Interdisciplinary Programs (https://catalog.mit.edu/interdisciplinary).

[2] Students who matriculated in the Department of Aeronautics and Astronautics doctoral program and the Computational Science and Engineering (CSE) doctoral program in academic year 2023–2024 or earlier can choose eitherPhD/ScD in Computational Science and Engineering or the PhD/ScD in Aerospace Engineering and Computational Science. AeroAstro/CSE students who matriculate in academic year 2024–2025 or later will receive the PhD/ScD in Aerospace Engineering and Computational Science.

Admissions

The selection process at MIT is holistic and student-centered; each application is evaluated within its unique context. Selection is based on outstanding academic achievement as well as a strong match between the applicant and the Institute.

Undergraduate applicants do not apply to a particular school, department, or program. Although the application asks about a preferred field of study, admitted undergraduates are not required to choose a major until their sophomore year. Admissions information for regular and transfer applicants (https://catalog.mit.edu/mit/undergraduate-education/admissions) is provided in the

Undergraduate section (https://catalog.mit.edu/mit/undergraduate-education), as well as on the undergraduate admissions website (https://mitadmissions.org).

Applicants for graduate study apply directly to their particular department or program of interest. See the individual department and program descriptions for specific requirements.

Office of the Dean

Daniel Huttenlocher, PhD
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