

## CLIMATE SYSTEM SCIENCE AND ENGINEERING

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### Bachelor of Science in Climate System Science and Engineering (Course 1-12)

The Department of Civil and Environmental Engineering (<https://catalog.mit.edu/schools/engineering/civil-environmental-engineering>) and the Department of Earth, Atmospheric and Planetary Sciences (<https://catalog.mit.edu/schools/science/earth-atmospheric-planetary-sciences>) offer a joint undergraduate degree program leading to the Bachelor of Science in Climate System Science and Engineering (<https://catalog.mit.edu/degree-charts/climate-system-science-engineering-course-1-12>). The curriculum prepares students for an expanding set of emerging careers in climate change science and engineering, climate risk modeling as well as climate and sustainability practices, with the necessary tools, methods, and scientific and engineering principles to develop an understanding of Earth's climate systems as well as modern approaches to mitigation and adaptation.

The Bachelor of Science in Climate System Science and Engineering ensures a solid foundation of the necessary fundamental science, mathematics, physics, chemistry, and biology with advanced study in constructing quantitative models of complex Earth systems, analyzing large and diverse climate related data sets, and quantifying uncertainty in climate models used in setting policy and decision making. Students in the program are full members of both departments and of the two schools, Engineering and Science.

Student and advisor work together to select elective subjects in a broad range of disciplines in the social sciences that help students develop understanding in the political and social issues tied to addressing climate change. The program offers the option to build on a core of climate classes and pursue tracks of study for in-depth exploration of particular areas, such as climate mitigation and adaptation; computation and statistics; Earth systems; and policy strategies and economics. Undergraduates are encouraged to participate in specific research activities of the departments and in many cases obtain degree credit for such work.

Information about this program is available from the Civil and Environmental Engineering Academic Programs Office, Room 1-290, 617-253-7101, [cee-apo@mit.edu](mailto:cee-apo@mit.edu)