IN THE HEART OF NEW ENGLAND. WPI's beautiful 95-acre campus is located in a charming residential area of Worcester, Massachusetts. Affordable and accessible—less than an hour to Boston and 3.5 hours to New York—Worcester is home to more than a dozen colleges and universities and offers the plentiful and diverse cultural and social amenities of a great college town. In the heart of the New England technology corridor, WPI's location offers rich opportunities for collaborative research and rewarding careers.

ABOUT WPI

Worcester Polytechnic Institute, one of the nation's premier science- and engineering-focused universities, holds firm to its founding mission to provide an education that balances theory with practice. A dynamic and welcoming graduate community, world-renowned faculty mentors, a culture of collaboration, spectacular research facilities, and close relationships with industry make WPI an outstanding environment for graduate students preparing to be innovators, entrepreneurs, and leaders. Here, you will pursue cutting-edge, multidisciplinary research and contribute to breakthroughs that deepen our understanding of the world, engender new lines of inquiry, and meet the technological challenges facing the world today.

BEYOND WPI

The Community Climate Adaptation master's degree program supports graduates in acquiring theory and practice for jobs with NGOs, local/state governments, and other institutions or businesses.

Responding to actual and projected problems requires professionals who know how to navigate environmental, policy, socio-cultural, and built-environment constraints imposed by the reality of climate change.

These concerns are varied:

- infrastructure inadequacy
- potential loss of land and economic assets
- water resource and water quality impacts
- differential health and social impacts
- extreme weather events
- coordination with multiple agencies
- social conflicts about land and resource uses
- changing energy sources and infrastructure
- compliance with local/state/federal policy decisions

Addressing relevant issues requires innovative thinking about the technical, socio-cultural, ecological, and economic dimensions of both problems and solutions. This program is specifically designed to produce professionals trained for this 21st century career and who understand how to work with communities as they adapt to the impacts of a changing climate and move forward sustainably.

wpi.edu/+CCA

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MS PROGRAM

COMMUNITY CLIMATE ADAPTATION

WPI

ABOUT OUR PROGRAM

The Community Climate Adaptation MS degree program is a research-based, joint-degree program offered through WPI's Department of Integrative & Global Studies (DIGS) and Department of Civil & Environmental Engineering (CEE). As many existing global problems are intensified by climate change, communities are looking for immediate and long-term strategies to address widespread and erratic climate change impacts.

From Worcester to Cape Town, from Melbourne to Venice, communities are creating plans to help protect people and infrastructure from the impacts of a changing climate. The program's foundation in transdisciplinary project work brings together the varied perspectives and expertise of students, faculty members, community partners, and organizations seeking to help communities adapt. As a student in the program, you'll apply engineering, social science, and natural science expertise to understanding the complex network connecting resources, environment, climate, and people in a community or region.

The research and training in these areas will help fill an increasing need for professionals who approach climate change adaptation from a comprehensive systems perspective that recognizes the importance of addressing climate impacts in their local-to-global contexts, including social and environmental justice considerations as well as infrastructural and natural resource constraints.

DEGREE OFFERED

Community Climate Adaptation (MS)

HOW WE WORK

A Team-based Approach

Using WPI's distinctive interdisciplinary, project-based educational approach, teams will develop place-based adaptation and mitigation strategies for climate change. The work will align purposefully with the UN Sustainable Development Goals in service of positive impacts at the local scale.

With this approach, teams are better equipped to navigate the environmental, policy, and built environment constraints imposed by the reality of climate change. Students from diverse backgrounds and disciplines will build upon their knowledge together with faculty advisors and community partners to address the technical, socio-cultural, economic, and policy issues related to climate adaptation in a comprehensive and collaborative manner.

For more information about the Community Climate Adaptation degree, contact program co-directors Sarah Strauss, professor of anthropology in the Department of Integrative & Global Studies at sstrauss@wpi.edu or Jeanine Dudle, professor of civil & environmental engineering at jddudle@wpi.edu—or call 508-831-6883.

CURRICULUM

Students in the Community Climate Adaptation master's degree program will take three semesters with an option of study during one summer to complete the degree requirements:

- 20 coursework credits
- a 10-credit Graduate Qualifying Project (GQP)

The hands-on project work of the GQP allows students, faculty, and community participants to partner at community sites. This intensive project experience develops breadth and depth across disciplines, sectors, and scale.

RESEARCH

Research in the Community Climate Adaptation MS will be situated at field sites in Massachusetts and in communities around the world. Students who will thrive in this program might come from technical or nontechnical backgrounds, and those with a wide range of academic and practical experience will bring their own expertise and perspectives to these collaborative projects.

One-third of the credits in this graduate program will be earned with the GQP in which students engage with the global "Grand Challenge" of climate change.

This transdisciplinary approach to community climate adaptation includes different research emphasis options:

- water systems management
- global health
- energy systems
- sustainable agriculture
- collaborative resource and hazards management