

➔ 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.



➔ MS PROGRAM

# SCIENCE AND TECHNOLOGY FOR INNOVATION IN GLOBAL DEVELOPMENT

ABOUT WPI

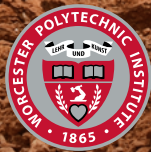
Worcester Polytechnic Institute, one of the nation's premier science- and engineering-focused universities, holds firm to its founding mission to provide an education that balances theory with practice. A dynamic and welcoming graduate community, world-renowned faculty mentors, a culture of collaboration, 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 Global School prepares true global problem solvers through undergraduate and graduate programs founded on the university's half-century of leadership in project-based learning. Its students and faculty go out into the world to address social, technological, ecological, and economic challenges through interdisciplinary, purpose-driven research. And, expanding on the local contacts WPI has cultivated through almost five decades of on-site project work at a network of over 50 sites around the globe, the school fosters strong and effective global partnerships.

➔ [wpi.edu/+STIGD](https://wpi.edu/+STIGD)

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# WPI





ABOUT OUR PROGRAM

*No one technology, discipline, or individual can resolve today’s urgent problems—it takes all of us to marshal the ideas and resources.*

WPI’s new master’s degree in [Science & Technology for Innovation in Global Development](#) offers a transdisciplinary graduate experience that fuses design thinking, technological expertise, and cultural knowledge for sustainable social innovation.

This program gives students opportunities to combine their passion for technological and scientific innovation with cross-cultural design thinking. Using their knowledge and extensive team-based project work at our domestic and global field sites, students in the program will address pressing challenges and create change that will impact people and communities around the globe.

Students with varied backgrounds and degrees can be successful in this degree program. As students gain specialized knowledge in a technical area and knowledge around development studies or business development, their work will revolutionize how they think about problem solving in the public interest, at home, or abroad.

RESEARCH

The work in this program prepares students with the global skills the workforce needs. Projects begin with defining a problem that is suitable for a scientific and technological intervention. Although we start with an approach grounded in science and engineering, we know the solution requires a team that blends and builds on their own expertise to arrive at something beyond a conventional engineering scope.

Through innovative classroom learning, collaborative research design projects with domestic and international partners, and an immersive field experience, students make new discoveries that contribute to science and technology and have meaningful impact for our project partners so students can continue to ***do good*** in the world.

HOW WE WORK

As a program in WPI’s [Institute of Science and Technology for Development](#), and as an integral part of WPI’s [Global Initiatives](#) and the work of [The Global School](#), the Science & Technology for Innovation in Global Development MS program offers opportunities to work alongside those with varied professional expertise, life experiences, and cultural wisdom and beliefs to define and solve problems. Students become part of a larger effort to co-design and co-create effective and culturally directed solutions to problems facing communities.

For more than 20 years, WPI’s scholars have partnered with local and regional experts to respond to global issues in collaboration with the communities they serve. The solutions we co-design and facilitate are shaped by the guiding principle of community self-sufficiency.

Our partners bring many levels of expertise and show us how the most effective solution isn’t necessarily the most technical solution. This transdisciplinary design approach fuses scientific, technological, cultural, and business expertise to bring self-sufficiency, dignity, and economic and ecological value to our collaborators.

Our teams have diverse expertise in

- |   |                           |
|---|---------------------------|
| • design                                | • behavioral economics    |
| • infrastructure                        | • organizational behavior |
| • biomedical devices                    | • development             |
| • environmental health and safety       | • climate change          |
| • chemical and biological interventions | • resilience              |
| • materials science and manufacturing   | • livelihoods             |

For more information about the Science and Technology for Innovation in Global Development MS program, contact [Rob Krueger](#), Professor of Human Geography, Social Science & Policy Studies and director of WPI’s Science and Technology for Innovation in Global Development program, 508-831-5110 or [krueger@wpi.edu](mailto:krueger@wpi.edu).

CURRICULUM

Whether students are looking for work in the United States or abroad, pursuing a traditional STEM career, or seeking something never imagined, the Science & Technology for Innovation in Global Development MS program’s design approach, project-based learning, and extensive field work opportunities are excellent preparation for future careers.

We have strategic partnerships with universities in Ghana, Nigeria, Zimbabwe, South Africa, Namibia, Mozambique, the UAE, China, Taiwan, Thailand, Mexico, Ecuador, and the United States. Through these collaborations, WPI and its partners offer thought leadership in the field of development studies, appropriate technology, community-led design, and policy development.

Our students learn essential, purpose-driven skills, including the following:

- integrating different perspectives and forms of expertise
- learning to design first with an eye toward social responsibility
- adapting to and incorporating different cultural norms into proposed solutions
- communicating in the “languages” of different disciplines and strategies—from systems modeling to human health and environmental protection to policy evaluation, and more

These skills expand students’ ability to think creatively, diversify their problem-solving skills, and open them up to empathize with other people and cultures.

DEGREES OFFERED

- Science & Technology for Innovation in Global Development (MS)
- Science & Technology for Innovation in Global Development (BS/MS)
- Science & Technology for Innovation in Global Development (Certificate)