The mission of the Worcester Polytechnic Institute (WPI) Cape Town Project Centre is to engage students, faculty and local partners in shared “action learning” projects, which are supportive of sustainable development in historically disadvantaged communities.

Since 2007, WPI has sent two dozen students and two faculty advisors annually to work on locally sponsored projects. Past projects include sustainable water and sanitation, urban planning and mapping, youth and early childhood development, energy and stormwater management, micro-entrepreneurship, multimedia communications, and sport and recreation. We have worked in communities including Monwabisi Park, Khayelitsha, Maitland Garden Village, Mitchell’s Plain, Oude Molen Eco-Village, the Cape Town CBD, and Stellenbosch Municipality.

Our students learn how to plan and execute a real world project, while project sponsors benefit by having a team of students, with on-site faculty guidance, working fulltime to analyze and develop responses to issues of the sponsor’s choosing. Projects often involve “community co-researchers,” local people who work closely with student teams as project developers with deep knowledge of local conditions and practices, and a keen interest in advancing community well-being. Our aim is to foster “Shared Action Learning” so that all parties – WPI students and faculty and local partners – all learn from one another. Ongoing, two-way communication with sponsors is integral to project success.
Sponsoring a project

Sponsoring organizations have included government agencies, non-profit and community-based groups, businesses and educational institutions. Sponsors are not charged to participate in the programme; students pay for their own travel and housing expenses and receive no financial compensation. WPI and sponsors may collaborate on funding proposals to support local initiatives.

WPI’s role:

- Students are selected based on previous academic performance, the ability to work in teams, relevant background, motivation, independence and adaptability.
- Student teams are multidisciplinary across engineering, science, management, arts and humanities; they work in teams of four on one of six projects.
- Students receive two months of intensive preparation in Worcester and prepare a formal written proposal for the project sponsor before arriving in Cape Town.
- In South Africa, teams work fulltime, or approximately 1,400 hours per project.
- Students provide an extensive project report and website, including process, results, and recommendations for future work or sustainability.
- Two experienced WPI professors reside in Cape Town for the duration of the projects to advise students and liaise with sponsors.

Sponsor’s role:

- Sponsors identify a project with a suitable scope with a brief description of what they expect the students to achieve and what support the sponsor will provide.
- A project liaison must be available to provide guidance, resources and information, and assure that projects are safe and appropriate.
- The sponsor provides a place for meetings and research, and where possible, assistance with direct project-related expenses and student travel logistics.

Examples of WPI Cape Town projects

- **Upgrading in Langrug Informal Settlement:** with community members and local partners built a novel water and sanitation facility and planned for reblocking and a community centre.
- **Settlement Upgrading in Flamingo Crescent:** worked with community members, City of Cape Town, CORC and ISN on reblocking and other initiatives.
- **Sustainable Livelihoods Through Beekeeping:** helped Manenberg residents create a business plan and launch the Cape Flats Honey cooperative into operation.
- **Improving Community Spaces Through Collaborative Building:** helped residents of Monwabisi Park renovate a meeting hall and install an innovative sanitation system at another community facility.
- **Strengthening Spaza Shops:** surveyed and mapped spazas in Monwabisi Park and helped shopkeepers access training programs and cooperative purchasing opportunities.
- **Early Childhood Development:** assessed ECD needs in Monwabisi Park and proposed new ways to support children and families as an integral part of community development.