



MITRE and Worcester Polytechnic Institute: People in Partnership

As a not-for-profit operator of Federally Funded Research and Development Centers (FFRDCs) for the U.S. government, The MITRE Corporation's mission is to serve the public interest through technical excellence and partnership. In order to address the problems of the present and future, MITRE endeavors to bring expertise to bear from academia and to cultivate a pipeline of highly skilled students.

Worcester Polytechnic Institute (WPI), an internationally-renowned engineering school whose approach to education is through project-based learning, and MITRE have been collaborating across a broad set of challenging engineering problems for decades. The level of engagement has increased significantly since 2012 when MITRE and WPI established an undergraduate project center.

WPI and MITRE's research collaborations yield creative solutions to some of the U.S. government's current problems while helping faculty and staff shape curriculum that better prepares WPI students for the workforce for the future. At the same time, collaborative project experiences help MITRE to identify, evaluate, and recruit top students while providing them with opportunities to make real-world impact.

Direct project collaboration has been the foundation of the MITRE-WPI relationship since 2012. Over that time, they have collaborated on over 15 projects ranging from topics of power simulation for electronics security, to advanced architectures for ground-penetrating radar, to cryptographic protocol analysis. In addition to undergraduate projects, MITRE and WPI have worked together to develop a novel program for sponsored graduate research which has yielded some excellent work and highly skilled new hires. Results from WPI collaborations have delivered solutions still used by sponsors and, in some instances, saved the government significant time and money.

Recent WPI-MITRE collaborations have helped to increase the number of high-quality new hires, but WPI alumni have a long tradition of high-impact roles at MITRE. Alumni are represented within MITRE staff at every level, from interns to the CEO. This partnership further prepares WPI alumni for MITRE's culture of technical excellence, collaboration, and service in the public interest. Post-graduation, MITRE provides WPI graduates a creative outlet to develop professional skills and deliver meaningful solutions toward a better world. WPI alumni at MITRE ultimately serve to advance the goals and bolster the reputations of both institutions.

There are several contributing factors to the success of the MITRE-WPI partnership including:

- MITRE and WPI sharing a culture that values thoughtful application of technology to achieve lasting impact. They both seek pragmatic solutions that consider the proposed technology in the context of human factors;
- MITRE's goal of bringing the best and brightest minds to bear on problems of national importance is satisfied by WPI's goal of increased positive impact through corporate engagement; and
- MITRE's Bedford campus and WPI being in close proximity to each other allows for frequent face-to-face meetings.

To bring the partnership even closer, WPI and MITRE are launching an initiative entitled "The MITRE Collaboratory @ WPI" which is an innovative space on WPI's campus designed to foster collaboration. This space will feature configurable enclaves that can be used for lab space, VTCs, brainstorming, independent work, and other meetings between MITRE and WPI representatives.

Through the decades, MITRE and WPI have built a relationship on mutual trust, respect, and admiration. As they look ahead, MITRE is excited to continue their long tradition of partnership to bring the best minds and resources to bear on the government's most challenging problems.

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