Engineering Ambassadors



WPI Engineering Ambassadors program, sponsored by Raytheon Technologies (RTX) and Teradyne, engages middle and high school students in the exciting opportunities present in the science, technology, engineering, and mathematics (STEM) field. They work together as a team to challenge conventional ideas and promote opportunities available to future generations in the engineering field.

Engineering Ambassadors engage the younger generation through middle school tours, off-campus visits to schools and organizations, and on-campus events to engage others in the excitement of engineering. Ambassadors learn to effectively communicate technical information to a wide variety of audiences, providing valuable skills in the professional field.

During the program, Ambassadors develop leadership, presentation, and project management skills for their own educational and professional development. In addition, Ambassadors receive a \$1,500 stipend for their involvement and also qualify for the opportunity for a potential summer internship, plus a possible job in the future, with RTX, Teradyne, and other sponsoring companies.

WPI was one of the four founding schools of Engineering Ambassadors, developed in 2011 to address the challenges today's organizations face to recruit diverse, top-notch STEM engineering talent. The WPI program has grown from an original eight Ambassadors to over 40 today. WPI is exploring ways to expand the program beyond engineering to incorporate all STEM fields.

CONTACT

Location: Rubin Campus Center

Phone: <u>508-831-5291</u> <u>sao@wpi.edu</u>





Matt, Mechanical Engineering

I have always appreciated the help I have received from mentors over the years and I chose to apply for the EA position so I can reciprocate the same assistance. Having always been infatuated with engineering, I found the Engineering Ambassador program to be the perfect means of both mentoring younger audiences and expanding upon my knowledge of different engineering topics.



Miriam, Biomedical Engineering

I am very passionate about my future career as an engineer and being an Engineering Ambassador would allow me to share my passion to younger students. I am hoping that by being an Engineering Ambassador, I can inspire young girls to be interested in STEM.



Tyler, Mechanical Engineering

Engineering has been a huge impact in my life. By joining Engineering Ambassadors, I have the opportunity to share my passion for engineering with young students who are learning about different career paths.



Sydney, Industrial Engineering

I love to work with children. I did some STEM camps and events in middle school and it really opened my mind to the world of STEM. I became an EA because I hope that I can provide the same amount of insight that I had to the younger generation of STEM students.

Ambassadors give presentations and use hands-on activities to communicate how engineering and the STEM field is not just about strong math and science skills, but about creativity. It serves as a real eye-opener to children to learn how engineering impacts everything. A particular example involves younger kids making parachutes as part of an air-resistance demonstration.

Engineering Ambassadors meet weekly and engage in several trainings to enhance their communications and leadership skills. The first training takes place in the fall with the three partner universities: Penn State, Rensselaer, and the University of Connecticut. Trainings continue throughout the school year, incorporating tenets such as assertion-evidence slide theory, plus story structure and mapping techniques.



Most ambassadors have summer internships with sponsoring companies. Depending on the guidelines of sponsors, Ambassadors can participate in full- or part-time internship opportunities and/or co-ops during various times of the year. There are three levels of sponsorships companies can choose from for the program, and sponsors can determine guidelines to sponsor students, including major type, minimum GPAs, and more. Interested businesses or organizations can click here to learn more about the benefits of sponsoring an Ambassador program.

As the primary sponsoring company, Raytheon Technologies offers academic stipends and summer internships for many of WPI's Ambassadors. Fees that sponsors pay go towards providing students with stipends, materials for presentations to young children, and speakers to develop the skills of Engineering Ambassadors. WPI fully funds the program manager responsible for overseeing the program.

Kids Love the Engineering Ambassadors!

These quotes are from students who attended a Middle School tour at WPI conducted by Engineering Ambassadors.

Kids Love the Engineering Ambassadors!

What do you find rewarding about the experience as a project advisor?

I love all the work and the experience gained through GQPs. Students gain a unique experience working closely with stakeholders on their real problems. They learn how to tackle a real-world problem with messy and sparse data sets. They learn to give professional presentations, communication, and reporting—which are rewarding and essential for their successful future careers. My day is complete when I see students learn more and more every day and they gain more confidence because of it.

These are some of the great things about advising GQP projects.

I'm now e I'm now g join a few

Parker

Start Expanded

How to Apply

Students must be a first-year or sophomore student committed to outreach with desire to to share and educate the STEM field to children. WPI looks for students that can grow and improve public speaking and leadership skills. The time commitment is comparable to that of a job or extracurricular activity. Students will be required to attend trainings and meetings, a list of which is below

Application Requirements

- · Current first year or sophomore student (who will be a sophomore or junior during the upcoming academic year)
- In good academic and judicial standing with WPI
- · Available for a potential summer internship with Raytheon Technologies (RTX), EconoCorp, and Teradyne.
- Citizenship requirements vary from Sponsor to Sponsor
- 2025-2026 Engineering Ambassador Applications are now closed!

Required Trainings and Meetings

- Mondays from 6:00-8:00 pm: Weekly meetings throughout the academic year for Ambassadors to practice presentation skills and develop camaraderie.
- September 19-21, 2025: Required regional training workshop with partner universities from the Engineering Ambassador Network. Penn State will be the host school for the 2025 EAN Conference.
- October 16-19, 2025: Communications workshop to help Ambassadors get to know one another, bond as a group, and learn to
 manage successful hands-on classroom activities with youth. This will be an in-person workshop on campus.

• January 13, 2026: Training Workshop

Please contact James Guaragna at jguaragna@wpi.edu or 508-831-4900 with any questions.

A national Engineering Ambassador Network website links programs nationwide and can help participants with networking and job opportunities. If there are several WPI Engineering Ambassadors working at a particular company, current students can feel confident they will be strongly considered for a position at that company in the future.



Being an [EA] was one of [my] most rewarding experiences... I saw my communication skills improve. Our activities show[ed K-12 students] how they could impact communities in ways that most of them never imagined. 33

Emily Miner

WPI '14

American Society of Mechanical Engineers, "Next Generation of Engineers"