OUR LADY of GOOD COUNSEL HIGH SCHOOL

STEM Program

LEARN MORE AT OLGCHS.ORG/STEM

Project Lead the Way National STEM Program Final Testing Scores:

PLTW is designed to expose students of varying abilities to STEM subjects. Therefore, acceptance to the STEM Program is independent from Honors Math and Science course placements.

88% of Good Counsel STEM students scored in the Distinguished or Accomplished range on the PLTW summative test

91% of our STEM students met the qualifications for college credit

Contact

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STEM Program Director
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Our Lady of Good Counsel High School's STEM Program introduces 60 students each year to engineering through a nationally recognized, hands-on, project-based curriculum called Project Lead the Way. **Good counsel has been recognized as a Distinguished Project Lead the Way School for eight years in a row— a distinction given to only 2% of qualified schools nationally.**

How do I apply for the STEM Program?

Students apply to the STEM Program prior to their Freshman year. The program is limited to 60 incoming first-year students. To be considered for acceptance to the STEM Program, complete the following required steps and submit all documentation to the Admissions Office by December 11, 2026:

- Complete the Our Lady of Good Counsel High School online application. Be sure to indicate that you are applying for the STEM Program and complete the writing prompt.
- Submit a recommendation form completed by your eighth-grade Science teacher.
- Participate in a personal interview with the PLTW staff in January 2027.

What are the components of the STEM Program?

Students take a series of engineering courses that span their four years at GC.

- **Year One: Introduction to Engineering Design**
  This course exposes students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students use 3D solid modeling design software to create solutions to proposed problems.

- **Year Two: Principles of Engineering**
  Students will learn about the key principles of physics involved in engineering and robotics. They will work in teams to demonstrate these principles and to apply their knowledge to the solution of a variety of problems. This program satisfies the GC Technology requirement.

- **Year Three: Electives**
  Aerospace Engineering: Aerospace curriculum addresses problems related to rocketry, propulsion, the physics and biology of space science, principles of aeronautics, and systems engineering.
  Or Civil Engineering and Architecture: Students use 3D software to design and construct residential and commercial building projects.

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60

incoming Freshmen accepted each year

To date, GC STEM students have traveled to:

- NIST
- Lockheed Martin
- Goddard Space Flight Center
- Carderock Naval Warfare Center
- Northrop Grumman
- A. James Clark School of Engineering
- Smithsonian National Air and Space Museum
- National Building Museum
- iFLY

- **Year Four: Capstone**
  In this PLTW capstone course, students will complete a year-long research project to create an innovation. Students will research justifications and patents for their chosen problems, create and test a working prototype and present their research to a jury panel of engineers.

What course credits will I cover in my STEM classes?

This program complements required courses in Math and Science. Students receive a .5 credit for the first three years and a 1.0 credit in their Senior year engineering course. Completing the four-year program provides a required Technology credit and one of three required Science credits.

Are there opportunities to gain real-world experience in the STEM Program?

The STEM Program emphasizes real-world applications and exposes students to potential STEM career paths. Students and their parents are informed of the many engineering programs, workshops and scholarship opportunities in our local area. Additionally, engineering students participate annually in on-site experiences to get a sense of what engineers do and what it takes to become one.

> *She finds it rigorous, but not over the-top-rigorous, and she just really enjoys the challenge of what she's doing.*

Debbie Keefe
Parent of 2025 STEM Program Graduate