Grade 5 to 8

2025 Summer Enrichment Schedule At-A-Glance

> AM: 9 to 12 PM only *(M-F)* or
> PM: 1 to 4 PM only *(M-F)* or
> Both *AM+PM*

	Wk1-4	6/23-27	7/7-12	7/14-18	7/21-25
	Wk5-8	7/28-8/1	8/4-8	8/11-15	8/16-22

		Week 1		Week 2		Week 3		Week 4		Week 5		Week 6		Week 7		Week 8	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM

Grades 5 to 8

ROBOTIC	**Robotics Projects** Levels Progression: B and up *AM or PM or AM+PM*

Week 1–8, AM & PM: ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑

Robotics FACE-OFF Contest
Levels Progression: I and up

Two 1-Week of Full-Day Program
9 AM to 3 PM, M-F

The two weeks will have different type of contest challenge.

Week 5 (AM & PM): **1 WK Full-Day** — Week 6 (AM & PM): **1 WK Full-Day**

Grades 6 to 9

ZeroRobotics Competition Groups

4 Weeks Duration with 3-time slots, M-F
In-person: 10 AM-12 PM & 1- 3 PM, Online 3:30 PM–5:30 PM

To Be Announced. If the competition takes place, classes will be weeks 1-4. ⏱

ISS Final. To see the latest update
– Visit the official
Zerorobotics.mit.edu
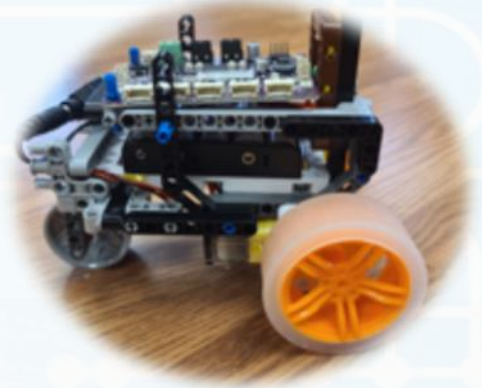
Robotics Projects

REGISTER NOW

Grade 5 to 8 • AM or PM • AM+PM • M–F

PROGRESSIVE LEVELS B, I, II

Characteristics

- Hands-on Robotics Projects everyday
- Adhere to Robotics Engineering Disciplines. Cultivate the habit in building portfolio.
- Position mathematics as a thinking tool—from Algebra, Geometry to Trigonometry for upper levels
- Focus full automation in all levels—problem-solving everyday.
- Approximately 80% software development (text-based programming), 20% mechanical development.
- Engage in active learning and higher order of thinking.
- Dive in Application-based, Open-ended but Goal-oriented Challenges.
- Performance Report:
  o Online reporting system to reflect daily progress.
  o Weekly Progress Report with Recommendation .

Each week is filled with various fun robotics projects interlaced with various important robotics and programming concepts. Here shows a short list:

- ✪ Don't Run Over the LEGO Man!
- ✪ Break The Secret Code!
- ✪ Pop The Robot-ballon!
- ✪ More ...
- ✪ Whack-a-Mole!
- ✪ Sumo Battle!
- ✪ Maze Runner!
- ✪ RoboRacing!
- ✪ Tomb Raider!
- ✪ Treasure Hunt!

Direct Benefit:

- Experience with true engineering process, and computational thinking mindset.
- To gain competitive edge for any STEM hands-on activities, especially robotics engineering at school
- Level II students will join the pre-competition group in the Fall.

Robotics Projects

Grade 5 to 8 • AM or PM • AM+PM • M–F

Learning Objectives

Level B: Exploratory/Beginner Level

- Learn the rudimentary programming concepts
- Familiarize with an Open-source hardware platform (non LEGO)
- Hands-on learning and build engineering mind-set: the process of breaking simple complexity and abstraction into simple small sub-tasks. Design with Flowchart.

Level I:

- Work with more varieties of important sensors and motors.
- Exercise more complex semantics & apply two single levels of abstraction and control structure.
- Design and develop increasingly complex projects.

Level II:

- With more sophisticated sensors such as Inertia measurement unit, time-of-flight, multiple I2C sensors via multiplexer.
- Gain more advanced robotics and programming techniques such as simple feedback control, designing state machine, multiple levels of abstraction & control structures design.
- Work with complex challenges from external robotics competition.

Learning Tools:

- PICO—microcontroller
- Arduino programing IDE

Half-Day Sessions

AM: 9-12   PM: 1-4

Weeks: 6/23, 7/7, 7/14, 7/21, 8/4, 8/11, 8/18. Choose only one week, or multiple weeks when students will continue to progress and advance to high levels at their own pace.

ZeroRobotics Competition

Grade 6 to 9 • 10-12 or 1-3 or 3:30-5:30 • M-F • TBA

SATELLITE PROGRAMMING COMPETITION (RUN BY MIT/NASA)

Zero Robotics / middle school program is a 4—week summer highly competitive programming competition in which middle school students program miniature satellites inside the International Space Station.

2023 FIRST PLACE Winning Team SR Quark Charm Junior

🎯 What do students do in the competition meetings

- Develop Strategy development in the realm of Space Engineering. Write program to navigate the Astrobee satellites simulators to complete a mission developed based on NASA's current research.

- Develop program in C language using the online IDE provided thru MIT.

- Face off in the semi-finals in a national tournament.

- At the ISS FINAL, astronauts load student-developed code onto the satellites onboard the ISS. Astronauts then serve as referees in the FINAL. Event is streamed LIVE to student viewers on Earth.
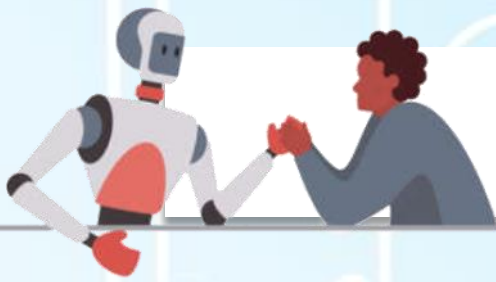
Learn More: https://www.stormingrobots.com/prod/mitZero-ms.html

To Be Announced:

To Be Announced. If this competition takes place, classes will

be 4 weeks of 2-hr daily (M-F) sessions from Week 1 through 4.

More information will be shared when we get it.

Robotics FACE-OFF Weeks

Grade 6 to 9 • 9-3 • M-F • 7/7 & 8/4

Two Daily Winners earn prizes!

Embark on a daily adventure of discovery and innovation with our exciting programming and robotics challenges!

AM: Join us for a thrilling programming session where you will dive into the world of coding, encountering errors that await you to uncover and fix. *It's a journey filled with learning, collaboration, and problem-solving*.

DEBUG

PM: Brace yourself for the mystery of the secret robot challenge. Face a malfunctioning robot and unleash your creativity to unravel its mysteries. *Tackle the unexpected, think on your feet, and find innovative solutions to make the robot come to life*.

ANALYSIS

The thrill of competition awaits as you strive to be one of the two daily winners,

Are you ready to take on the challenge, elevate your programming skills, and become a master of robotics?

Join our daily sessions, and let the excitement unfold as you conquer the daily secrets that await you. Sign up now to unlock your potential and embrace the world of coding and robotics!

Two Weeks Full-Day Program

July 7 to 11 & August 4 to 8: 9AM to 3PM Choose one or both weeks.

https://summer.stormingrobots.com • (908) 595-1010 • office@stormingrobots.com

PAYMENT AND CANCELLATION POLICY

All staff assignment and classes preparation work has been completed according to registration by May. This refund policy is put in place in order to conduct proper coordination of staff and classes management.

- Minimum Deposit: $100 deposit is required to reserve a seat.
- $50 from the deposit is *non-refundable* portion ; but $100 fully applicable towards tuition.
- the remaining balance can be paid in full, or broken into monthly installments until one week before class .

Regarding Switching classes: No Workshop/Week Transfers are allowed within two weeks prior to your scheduled workshop.

Regarding withdrawal / Cancellation:

Notification Received	Refund Deadlines
Prior to May 15th	100 % minus $50 non-refundable deposit.
May 15th to June 15th	50 % minus $50 non-refundable deposit
After June 15th	**No Refund***
	***The only Exception:** "unforeseeable" medical reason. Letter of verification from your child's doctor is required.*

Important NOTES:

- "No show" does not negate your obligation of payment.
- If a participant repeatedly violates the code of conduct or commits serious disciplinary offenses, participation will be terminated at the administration's discretion without refund.