

ST JOH PAUL II CATHOLIC SCHOOL FALL 2024 AFTERSCHOOL WORKSHOPS PRE-K-6TH

Engineering Coding Robotics







Our mission at American Robotics Academy® is to excite, inspire, and motivate young people about the fun, importance, and impact of robotics technology in today's world including STEM/STEAM curriculum.

Crazy Action Contraptions Robotics (CACR) Grade(s) 3rd - 5th

Day of the Week: Monday OR Wednesday Time: 3:30-4:30 Start Date: MON-Sept. 9-Dec.16, 2024. WED-Sept.4-Dec.11, 2024.

Cost: MON \$295 or WED \$315 (More Instructional Weeks on WED) Open Enrollments Date: August 9, 2024

Your student will have the chance to be creative and get a little wacky! Students will be introduced in the first 5 weeks basic engineering concepts and create simple builds in weeks 6-14. LEGO Technic pieces that come together to create movable, steerable, controlled robots. Students will engage in a group of four with assigned roles that rotate weekly. Your student's imagination can go "wild" with ideas on how to create even more complicated, crazy, mechanical wonders. With motors, gears, pulleys, wheels of various sizes, and tons of other cool LEGO pieces. Students will be provided with a creative tool kit to design their bots and challenging activities!

Imagineers in Gear Grade(s)K-2nd

Day of the Week: Monday OR Wednesday Time: 3:30-4:30 Start Date: MON-Sept. 9-Dec.16, 2024. WED. Sept.4-Dec.11, 2024.

Cost: MON \$295 or WED \$315 (More Instructional Weeks on WED) Open Enrollments Date: August 9, 2024

Students will learn engineering key concepts and fundamentals building with LEGO elements from the creative tool kit. Learning as we go numeracy, literacy and much more. Students will be challenged to use LEGO pieces to create a structure or setting using LEGO elements. Students will engage in hands-on experience including fun and problem-solving activities and be encouraged to tell a story about their creations. Your students will be offered special pieces for their buildings to complete their story. Students will learn to identify build pieces and their function required to build structures towards the next step into Robotics. This program offers STEM-STEAM curriculum as well diversity, self-esteem, social competency, collaboration and more. Concepts and core values are taught to prepare students for life challenges.

NEW!!! Code SpHERO Coding - Crazy for Coding (CFC) Grade(s) 3rd - 6th

Day of the Week: Friday Time: 3:30-4:30 Start Date: September 6- December 13, 2024.

Cost: \$325 Open Enrollments Date: August 9, 2024

What is Sphero and how does it work? Sphero is an adorable, durable, interactive—you guessed it—spherebot. Don't let its size deceive you! Its functionality is almost boundless. Let's dig in. Students connect to provided tablets via Bluetooth, and dive into programming on day one! With a maze activity, kids learn to program their 'bots to navigate a maze—without touching the walls. Students will use the Sphero has a programmable 8x8 LED matrix, so students can code it to change colors when Sphero rolls, stops or starts, reaches a goal, or whenever else they'd like. Coding sounds hard, but our younger coders utilize what's called block coding. This means they're not typing out code by hand—which can be complicated for such an age group—but rather dragging visual blocks into the coding area and connecting them.

