

## **Avondale Middle School Robotics Club**

Robotics is an engaging way to integrate all STEM education components into a for-fun competitive learning club. We utilize the Vex robotics platform to engineer and design unique robots to complete a competitive task. The Vex IQ robotics kit features a powerful sensing and controls system, an adaptable structural system, and a wide range of motion components suitable for a wide variety of mechanisms.

## Benefits of Robotics Club include:

- Early exposure to engineering as a lifelong hobby and career opportunity
- Fun and engaging activity that connects students with like-minded peers and coaches
- Competition options that are exhilarating and engaging and channel a competitive spirit, much like athletics
- Environment that encourages development of "soft skills" including brainstorming, problem solving, communication, teamwork, and good work ethic

	Team	Club	Camp
Season	Fall/Winter (Enrollment open through October)	Spring (Enrollment open March through April)	Summer (Enrollment open March through June)
Description	Groups of 3-4 students will work together as a team to design, build, and program a robot to compete in the VEX IQ challenge. Teams will compete in officially sanctioned events for the opportunity to earn a spot at state and world level championships. In addition to the robot, teams will also develop an engineering notebook that spotlights their design process.	Students will be exposed to each facet of engineering through a different mini challenge each week. Participants will also develop their individual skills through a merit-badge style achievement system that will provide a solid foundation for future robotics experiences.	Participants will have the opportunity to "choose their own adventure" through a selection of activities in five different blocks each day. Categories will feature each aspect of competitive robotics, as well as a selection of fun summer activities to add variety to the program.
Time Commitment	13-15 meetings, once per week for 2 hours one of four sessions (Mon 4-6, Mon 6-8, Thurs 4-6, Thurs 6-8) AND 2-4 competition events on Saturdays	10-12 meetings, twice per week after school for about 2 hours	Choice of seven one-week sessions, half and full day options.
Fee	\$275/youth	\$50/youth	Full day: ~\$225/youth Half day: ~\$125/youth
What's Included?	Coaching staff, team shirt, use of equipment for the duration of the season, team fees, and event fees.	Coaching staff, club shirt, and use of equipment for the duration of the program.	Coaching staff, camp shirt, and use of equipment for the duration of the progra
More Information?	Send an email to head coach Allison Kneisler at allison@nrgyf.com or attend parent meeting/open house night any Tuesday in October at 7pm in the RoboJacket workshop (the TV room) at Avondale High School.	Send an email to head coach Allison Kneisler at <a href="mailto:allison@nrgyf.com">allison@nrgyf.com</a> to be added to the email distribution list for when more information is available.	