open only to Robotics and Python graduates

Where all the magic happens…

For most graduates who want to keep learning past graduation, the Alumni Workshop provides an incredible opportunity for students to apply their technical skills and work on bigger robotics projects

It is an environment designed to accelerate personal growth resulting from working leading edge projects and learning skills such as conducting research, submit budgets and timelines essential for real-world success

The idea of a workshop where engineers mentor students to develop the coolest projects was the original vision of Exceed Robotics…the Robotics curriculum was created afterwards as the means to this end

WORKSHOP OVERVIEW

In the workshop, students start to develop project management skills, learn to use the engineering development process to turn an idea into a working prototype, introduce project budgets, timelines and facilitate collaboration amongst other alumni. Below are some key points about the workshop:

- Students work on robotics projects under the mentorship of the workshop manager for 1.5 hours per week
- Students research and select their own projects at each level (see project levels below)
- The Workshop has no start or end date. Students join the workshop, projects are assigned continuously, students can pause or discontinue their memberships at any point
- Students have access to 3D printers, tools and equipment to work on their creations
- Annual workshop showcase event where students present projects to parents and Exceed team
- Students get to keep their Build-to-Print and Best-In-Class creations and sign out Team and Innovation projects
- A workshop membership fee is charged every four weeks and covers all required supplies and equipment

Level 1: BUILD-TO-PRINT PROJECTS

Average Project Duration: 2 – 4 months

Build to print projects have students use online resources to research project ideas based on defined project requirements. Students 3D print, assemble and code their own robots in addition to learning to managing their project. At the end of the project, students take home and keep their robots

Learning Objectives:

- Discover online resources
- Develop research skills
- Project planning
- Introduction to using the 3D printer
- Students keep their creations

Level 2: BEST-IN-CLASS PROJECTS

Average Project Duration: 4 – 8 months

This broad category of independent projects involves students selecting a build-to-print project and adding an improvement or new feature to create a "best-in-class" device. This level of project requires students to explore a new technology and start thinking about how to improve existing robots or devices

Learning Objectives:

- Explore and learn new technology
- Introduction to the engineering development process
- Research skills
- Project planning and budgeting

Level 3: TEAM PROJECTS

- Students keep their creations

Average Project Duration: 4 – 12 months

Team projects will have a group of 5-10 students working to complete a single robotic device from start to finish. The workshop manager will assign students their own portion of the team project when the student is ready and when a team project is available

Learning Objectives:

- Collaboration with other students on a larger project
- Real-world, hands-on project experience
- Realize your capabilities and discover your strengths
- Learn new areas in technology

Level 4: INNOVATION PROJECTS

Average Project Duration: 4 – 16 months

Innovation projects involve the development of new robot ideas following the engineering development process. This involves research, brainstorming, concept selection, creating a prototype, testing and improving the design. Students will be complete a sales pitch and prepare a presentation of their work during Workshop showcase events

Learning Objectives:

- Product innovation
- Engineering development process
- Project management skills
- Sales pitch & product presentation