



AMRoC Fab Lab Educator and Student Programs
AMRoC Fab Lab – 2149 University Square Mall, Tampa 33612
AMROCTampaBay.com
Programs as of September 2019



Educators

Educator programs for up to 30 educators per day (minimum 10 educators in a session) – 15 educators per session. Up to two sessions can be scheduled on a single day. Sessions are 2-3 hrs each and listed cost is *per session*.

- **Design and Prototyping 101 – \$800**
- **Youth Robotics Team Management and Best Practices - \$600**
- **Robotics Team Materials, Tool Use & Safety - \$600**
- **Maximizing Experiential Learning - \$600**

Students

School Field Trips 2-3 hrs per session, minimum 10 students per session, maximum number of students per program show with each program.

3D Model and 3D Print –maximum 30 students, 2 shifts of 15 - \$40/student

Students will learn the fundamentals of 3D modeling and 3D printing by designing objects using CAD modeling software that is capable of transforming these designs to tangible 3-dimensional objects using additive manufacturing technology. Some student designed objects may be 3D printed depending on the design feasibility and time constraints.

Circuits –max 30 students, 2 shifts of 15 - \$40/student

Students will work with beginning electronics tools and resources to make simple circuits that produce sound, light and movement

Robotics – max 20 students/ 2 shifts of 10 - \$40/student

Students will explore concepts relating to coding and mechanical engineering using Block-based coding language for middle school, and simple java or other popular code languages for high school students,

Engineering challenge – max 24 students - \$50/student

During this 4 hr engineering challenge, students will be given open ended challenges and work together in teams of 5-8 students to design, prototype, and test their projects. Challenges are designed to use basic making materials, hand and small power tools and some digital fabrication tools, so that students are introduced to the software and hardware capabilities of the Fab Lab. Engineering challenges can be designed and modified for students in grades 5-12.

Fab Lab Buffet- max 30 students - \$30/student

During this three hour program, students learn about the maker movement and the importance of being able to craft solutions to challenges at the community level, tour the Fab Lab and learn about various equipment and tools, and work on some existing Fab Lab projects.

The Advanced Manufacturing & Robotics Center (AMRoC) Fab Lab is a program of the nonprofit educational organization, Foundation for Community Driven Innovation (FCDI). All programs serve our mission of supporting academic achievement, economic development and the spirit of innovation through inspiring programs and active learning projects. FCDI is a registered Hillsborough County Vendor. Visit FFCDI.org or AMROCTampaBay.com for more information.