

Oakland City University
The ABCs of Robotics
Workshop Description and Learning Outcomes
Fall 2020

Date & Time: T, TH; 3:30 PM - 5 PM from 9/15/20 - 10/22/20

Format: Online via Zoom, synchronous

Instructor: Atiat Alsaaidh

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Workshop Description:

This workshop is designed to prepare elementary teachers to dedicate to building robots, programming robots, and assembling the track for robots. The workshop will include all instructions as pre-recorded videos. Therefore, online videos will allow individual outreach as well as a flexible work speed for the teachers. No previous knowledge of building robots is required.

Teachers will be provided with:

- 1 Vex IQ Full Field & Game Element Kit per classroom: This will feature all the required field parts, competition goals, and competition pieces needed for practice.
- 1 Super Kit: Contains all necessary parts to build and control the competition robot. This kit will be a 1 per team, with 4 students ideally on a single team. These kits are able to create multiple robot styles allowing for alternative uses that would benefit after school clubs.

As the teacher begins to work with the students, their role will be to guide the students alongside the video presentations on building the robot from the kits and instruction booklets provided. Following along with the schedule to program the robot for the directional input and wireless controllers. The students can then become familiar with how to control the robots and engaging in inter-team play. This is also an ideal time to adjust teams, discover who works best with each other, and even have some fun with elimination style mini-tournaments.

Workshop Outcomes:

- Teachers will gain a knowledge of the basics of building robots of introductory level.
- Teachers will gain a knowledge of programming a robot.
- Teachers will gain a knowledge how to assemble a track for a robot.
- Teachers will practice moving robots.