

Workshops

Sensors - intro

Sensors - advanced

Entach

Mechanical motion + ramps and bases

Mini engineering process

TeleOp explanation

Intro to Sensors

intro

- Main instructor: Ben W.
- Description: This workshop covers how each legal sensor in FTC works and how to access their values in RobotC. It's a helpful intro to RobotC and autonomous programming.
- Sensors covered

Ultrasonic	Sound	Touch	Accelerometer	Color V2
EOPD	IR seeker	Compass	Magnetic	Light
Encoder				

Advanced Sensors

advanced

- Instructors: Spencer, Ben W.
- This course is exploratory meaning both students and teachers learn together. Here teachers and students will explore sensor integration (combining the input of multiple sensors to achieve one goal). This may lead to new autonomous programs and/or autonomous features in driver mode or maybe something unexpected!

Entach advanced

- Main instructor: Ben W.
- Description: This workshop tells the tale of Entach from beginning to present. There will quite a few mini activities that recreate some discoveries and experiments done during the Entach process. It's purpose is to bring those with basic RobotC, sensor, and trigonometry knowledge up to speed with Entach so that they may continue the project.

- Activities:

- Accelerometer in depth
- The Entach algorithm
- Compasses and external magnetic fields

Mechanical Motion - Linear intermediate

- Main instructor: Spencer, David
- This workshop is exploratory meaning both experienced and less experienced people are learning together. Both parties will explore how to make fluent rotational to linear systems like the more developed teams out there.

The mini engineering process intro

- Instructors: Ben W. Spencer, Laura
- Description: This workshop gives introductory overviews in the form of activities and mini one-to-two session projects much like the one during preseason
- Activities:

Writing a driver program intermediate

- Instructor: Ben W.
- Description: this workshop goes over the skills and processes involved in programming a robot for driver period. It includes basic concepts from Object Oriented Programming (taught in AP CS) and concepts covered in intro to sensors. As well as looking at how to write a driver program, we will also look at how NOT to write a driver program!

Bases intro

- Instructors: David, Spencer
- Description: This course is exploratory. It will cover new possibilities in base design and offers an intro to building with tetrix.

Roster

Sensors -intro

Josh, Aidan, Will, Robert, Alex, Ben P.

Sensors -advanced

Charlie Josh, Aidan, Will, Robert

Entach

Josh, Aidan, Will, Robert Alex, Roger

Mechanical motion + ramps and bases

Laura, Sydney, Alex, Roger Josh, Aidan, Will, Robert

Mini engineering process

Aidan, Will, Laura, Lorraine

TekOp explanation

Roger, Charlie, Syd

Josh, Aidan, Will, Robert

Bases

Josh, Aidan, Will, Robert

Charlie