Glasses for the Visually Impaired

**Lesson Description**

This course is an introduction to Arduino circuit building and programming. The targeted age group for this course is students between 12 to 16 years old. Students will be learning open source prototyping of Techtronic’s platform. Students will create interactive electronic objects using an Arduino board, micro controllers and so on.

Prerequisite

The student must have completed VEX EDR

Instruction Method

Lectures, Videos, Labs and Discussion.

Schedule

Other Information

**Parts**

* Ultrasonic Sensor
* Buzzer
* 100 Ohm resistor
* Glasses (sunglasses)
* F-F Jumper Wires
* M-F Jumper Wires
* Small Breadboard

**Procedure**

* Connect the power (Vin) and ground of the ultrasonic sensor to the Arduino 5V and Ground
* Connect the ECHO and TRIG pins of the ultrasonic sensor to digital pins on the Arduino
* Connect the positive pin of the buzzer to a digital pin on the Arduino using the resistor
* Connect the negative pin of the buzzer to Arduino ground
* Use the tone() function to play sound from the buzzer