Temperature Sensor

**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**

* TMP36 Temperature Sensor
* LCD Text Display
* F-F Jumper Wires
* M-F Jumper Wires
* Arduino UNO
* Breadboard

**Procedure**

* Connect the text display to the Arduino according to the circuit diagram
* Connect the positive pin of the temperature sensor to 5V
* Connect the ground pin of the temperature sensor to ground
* Connect the output pin of the temperature sensor to an analog pin
* **Voltage at pin in milliVolts = (reading from Analog pin) \* (5000/1024)**
* **Centigrade temperature = [(analog voltage in mV) - 500] / 10**