

GO TEC IT & MAINTENANCE DEPARTMENT REQUIREMENTS

1. Scratch
 - a. Required Browser
 - i. Google Chrome
 - ii. Mozilla Firefox
 - iii. Microsoft Edge
 - b. Internet Access: <http://www.scratch.mit.edu>
 - c. Account is Optional
2. VEX
 - a. Download and Install
 - i. VEX IQ:
 - ii. <https://www.vexrobotics.com/vexiq/resources/programming>
 - b. Web-based access
 - i. <https://codeiq.vex.com/>
3. Dobot Magician
 - a. Dobot Lab - Web Based Control
 - i. <https://dobotlab.dobot.cc/#/>
 - ii. Web-based control software requires installation of Dobot Link
 1. <https://www.dobot-robots.com/service/download-center?keyword=&products%5B%5D=316>
 - b. Dobot Lab – Local Install
 - i. <https://www.dobot-robots.com/service/download-center?keyword=&products%5B%5D=316>
 - ii. Local Install requires the installation of Dobot Link
 1. <https://www.dobot-robots.com/service/download-center?keyword=&products%5B%5D=316>
 - c. Dobot Lab - Chromebook Compatible
 - i. <https://dev.wasm.dobot-robots.com/dobotlab/#/blockly>
4. Arduino Uno's
 - a. Connectivity
 - i. USB Port
 - ii. Arduino IDE
<https://www.arduino.cc/en/software>
5. Dremel 3D Printers
 - a. Download and Install
 - i. Dremel Digilab 3D Slicer

<https://www.dremel.com/gn/en/digilab/software>

6. Muse Full Spectrum Laser Cutter
 - a. Connectivity Options
 - i. Connectivity Options
 1. Connect Laptop to Laser Cutter Via Lab Network
 - a. Wired
 - b. Wireless
 2. Direct Connect Laptop to Laser Cutter
 - a. IP Addresses Must Be Manually Assigned
7. Tinkercad
 - a. Google Chrome (recommended)
 - i. Teacher account
 1. Student accounts created and managed under teacher account
8. Pitsco Structure Tester
 - a. Optional Data Collection Software
 - i. <https://www.pitsco.com/Structures-Testing-Instrument-2>
9. Backyard Brains
 - a. Spike Recorder Software
 - i. <https://backyardbrains.com/products/filter/Software>

Electricity Requirements

1. All equipment is standard 120 Volt AC compatible.
 - a. Laser Cutter and system supporting equipment (i.e. fume extractor and water pump/chiller)
 - i. It is recommended that a dedicated 120 Volt 20 Amp receptacle be installed at the permanent location for this equipment. There have been several instances of this equipment (with other equipment in use on the same circuit) causing 20 Amp breakers to trip due to overcurrent.
 - b. Student Stations – Many equipment pieces that interface with the student desktop stations will require to be plugged into a nearby receptacle. Plan room layout and receptacle accessibility accordingly.