

Equipment List for IoT Workshop

The list is configured for 8 "Pods"

The optimal is for 2 students / pod, but the labs could be done with 3 students / pod

1	Computers	
	Option 1	16
	Option 2	8
2	Raspberry Pis	8*
	MCE Remotes	
	Mini wireless keyboard	
3	DD-WRT Routers w/OpenVPN	8
4	Headphones w/Mics	16
5	Webcams	16
6	Hard Phones (Linksys SPA942s)	8
7	IP Cameras (Dlink, Polycom, etc)	8
8	PoE Switches	8
9	iPads / Android Tablets	8
10	Hue Lighting Sets	8
11	GE Wink Sets	8
12	Osram Lightify Sets	8
13	Thermostats **	5
	Honeywell - 1	
	Nest - 1	
	Ecobee - 1	
	Carrier Cor - 1	
	Allure - 1	
14	Samsung Smart Things Hub	8
15	Door Locks	8
16	Motion Sensors / Door Sensors	8
17	Ring Doorbell	8
17	Amzon Echo / Dots	8
18	Logitech Elite Remotes	8
19	Media Servers **	1 set
	Roku - 2	
	Amazon Fire TV - 2	
	Chromecast - 2	
	Apple TV - 2 (optional)	
20	Monitors w/HDMI Support	8
	Ether TV or Computer	
21	HDTV Antennas w/Amp Splitter	1
22	HD HomeRuns	8
23	AV Amplifiers	2 ***
24	Stereo Speakers	2 ***
25	Bluray Player	2 ***

Option 1

2 computers needed per pod @ 4GB each

One computer to act as a server where the drive can be reformatted & different OS's installed

One computer to act as a client with Win7 and students install different software

Client computer can be a laptop or Surface tablet

Option 2

1 computer needed @ 8GB minimum (16-32GB preferred)

Computer will be installed with VMware Workstation and act as client and server

* There are so many cool things to do with Raspberry Pi's, you may want more than one

** These parts could be shared by the groups and rotated around for the labs

For example, one group can setup the Honeywell thermostats, while another works with the Nest and the third works with the Echobee, etc. In the same way a couple of groups work with the Roku while another works with the Amazon FireTV. If funding permits, more units can be purchased.

*** Since the AV equipment is expensive and only used for a few of the labs, you could have 2 sets and then alternate the student groups through the labs however, funds permitting, you could have more sets

Note for Raspberry Pi's

There is a cool product called a SmartPi Touch Stand. It holds a Raspberry Pi and a 7" Touchscreen. It makes an excellent choice for the Raspberry Pi labs.

Parts needed:

Smartpi Touch Stand

7" Raspberry Pi Touchsreen Display

