


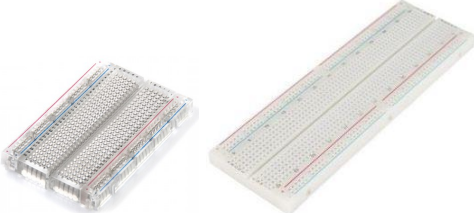




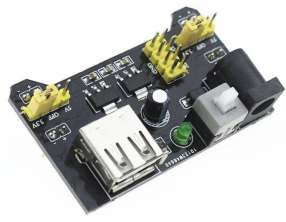


Shopping List for ME461

The items in the following list should be purchased by each group, **NOT by individuals**.

Recommended list of items are given below. For most of these items I do encourage you all to go to Konya Sokak, (*that's why the list contains remarks in Turkish*). Prior to your visit to Konya Sokak, make sure that you have checked their prices online.

	ITEM	#	Price Est.
1	Arduino UNO R3 	1	~35-150+
2	 An economy RC servo motor – regular size is better	1	25-1000+
3	 ESP8266 – Lower cost Node MCU V3 recommended ES32 series should be ok as well	1	40-100+
4	Breadboard: <i>Small Size is acceptable but not always sufficient</i> 	1	5-25
5	220, 1K, 2.2K, 10K, 47K 1/4W ohm resistors	min 10 each	5-10
6	QRD1114 to start with	3	15-20
7	7805 Regulator	2	2
8	Motor driver circuit: L293D – make sure that it had the “D” !	1	5-10
9	Microswitch / pushbutton suitable for Breadboard	2	1-3
10	LED - better if you have couple of different colors	10	5
11	10K Pot for Breadboard–blue rectangular prism package is better for precise adjustment, and metal body is better for quick tests 	Min 2 each	3-10+
12	Jumper wires (<i>jumper kablo</i>): male-male, male-female, female-female, These are generally sold in bundles of 20 or more. Get 40 each	A handful	10-25

	 <p>Or</p> <p>A bundle of Single strand wire (<i>tek damarlı kablo</i>) for breadboard prototyping - such wires can also be extracted from network cables <i>get at least 4 different colors</i></p>		
13	<p>Croc clips (<i>Krokodil kablo</i>) - each at a different color</p> 	3-5	10-20
14	<p>1x40 Male headers that fits to the breadboards <i>Breadboard'a uygun 40'lı erkek header</i></p> 	3	1-7
15	Multimeter (<i>multimetre</i>) (Current, Resistance and voltage measurement is enough)	1	50-2000+
16	Tweezers (<i>Cımbız</i>)	1	8-20
17	Wire cutter (<i>Yan Keski</i>)	1	15-50
18	<p>7~12 V min 500 mA voltage adaptor to begin with- anything compatible you find at home might work, it is better if you do not buy but make use of an idle adaptor. Breadboard specific power supplies are also handy such as:</p> 	1	-
19	<p>Toolbox to carry all these and potentially more (<i>Alet çantası</i>) (At least 2x2 coke cans should fit in) Various plastic containers perfectly work as a toolbox such as yogurt plastic containers (the hard ones). You are not to buy anything but find and utilize something that will enable you to securely carry everything you bring to the lab, that's all that matters.</p>	1	-
21	Arduino Proto Shield: <i>Not a must</i> , but will help you get organized	1	15-25
22	Soldering Iron and solder (<i>Havya - mümkünse ince uçlu ve lehim teli - pastalı tel tercih edilir, gene de bir kutu pasta alınabilir</i>) – not urgent until you need one	1	30-2000+