## Electronic Modules available in Electronic Circuits Lab (Only for EE380/EE381 courses)

S. No.	Module Description	Image
1.	Arduino Nano v3.0 CH340	
	https://docs.arduino.cc/hardware/nano	
2.	Arduino Uno	UNO
	https://docs.arduino.cc/hardware/uno-rev3	
3.	Bluetooth Module HC05	
	https://wiki.iteadstudio.com/Serial Port Bluetooth Module ( Master/Slave): HC-05	
4.	Ultrasonic Sensor HCSR04	
7.	https://cdn.sparkfun.com/datasheets/Sensors/Proximity/HCSR	
	04.pdf	HC-SR01 10 5 6 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
5.	Character LCD 16x2	© !!!!!!! O
	https://www.sparkfun.com/datasheets/LCD/HD44780.pdf	ABCDEFGHIJKLMNOP abcdef9hijklmnop
6.	BUZZER 5-15V	
7.	Relay Module Dual Channel	

8.	Relay Module Single Channel	
9.	IR Sensor Module	
	https://5.imimg.com/data5/YT/KV/MY-1833510/arduino-ir-infrared-obstacle-avoidance-sensor-module.pdf	
10.	Moisture Sensor	
11.	IR LED & Photo diode	
12.	PIR Motion Sensor <a href="https://cdn-learn.adafruit.com/downloads/pdf/pir-passive-infrared-proximity-motion-sensor.pdf">https://cdn-learn.adafruit.com/downloads/pdf/pir-passive-infrared-proximity-motion-sensor.pdf</a>	
13.	Gas Sensor MQ135  https://www.olimex.com/Products/Components/Sensors/Gas/SNS-MQ135/resources/SNS-MQ135.pdf	
14.	LDR 5mm	

15.	ESP8266MOD Wifi Module <a href="https://www.espressif.com/sites/default/files/documentation/">https://www.espressif.com/sites/default/files/documentation/</a> <a href="https://www.espressif.com/sites/default/files/documentation/">https://www.espressif.com/sites/documentation/</a> <a href="https://www.espressif.com/sites/documentation/">https://www.espressif.com/sites/documentation/</a> <a href="https://www.espressif.com/sites/documentation/">https://www.espressif.com/sites/documentation/</a> <a 2="" 758="" datasheet="" dht11-technical-data-sheet-translated-version-1143054.pdf"="" href="https://www.espressif.com/sites/document&lt;/td&gt;&lt;td&gt;MOEL ESPEZAGONOO VEIDOOR AZ-TALIMER FC 158 2 - 25dig 902 - 115b/g/n&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;16.&lt;/td&gt;&lt;td&gt;ESP8266MOD Node MCU  https://cdn-shop.adafruit.com/product-files/2471/0A- ESP8266 Datasheet EN v4.3.pdf&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;17.&lt;/td&gt;&lt;td&gt;ESP8266 01 Module  https://www.microchip.ua/wireless/esp01.pdf&lt;/td&gt;&lt;td&gt;11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;18.&lt;/td&gt;&lt;td&gt;Temperature and Humidity sensor DHT11  &lt;a href=" https:="" www.mouser.com="">https://www.mouser.com/datasheet/2/758/DHT11-Technical-Data-Sheet-Translated-Version-1143054.pdf</a>	The state of the s
19.	Servo motor SG90 <a href="http://www.ee.ic.ac.uk/pcheung/teaching/DE1_EE/stores/sg90">http://www.ee.ic.ac.uk/pcheung/teaching/DE1_EE/stores/sg90</a> datasheet.pdf	
20.	Servo motor MG995  https://www.electronicoscaldas.com/datasheet/MG995_Tower -Pro.pdf	
21.	6VDC Water pump	

		WWW.PRO CO.IN
22.	BO Series Motor 100RPM, 3-12VDC	
23.	Matrix Keypad	2 3 4 5 G 7 8 9 * 0 #
24.	LED	
25.	https://www.openhacks.com/uploadsproductos/r307_fingerprint_module_user_manual.pdf	
26.	Solenoid 12VDC  8x8 LED Matrix using MAX7219	

	https://www.handsontec.com/dataspecs/module/MAX7219-4-In-1.pdf	
28.	Heart rate sensor Module	
29.	Solar Cell 4V/150mA	
30.	Camera Module-OV7670 http://web.mit.edu/6.111/www/f2016/tools/OV7670 2006.pdf	
31.	https://content.u-blox.com/sites/default/files/products/documents/NEO-6 DataSheet %28GPS.G6-HW-09005%29.pdf	
32.	Color Sensor TCS3200 <a href="https://www.mouser.com/catalog/specsheets/tcs3200-e11.pdf">https://www.mouser.com/catalog/specsheets/tcs3200-e11.pdf</a>	

33.	GSM Module SIM800	11
		SIM800A P.N. S2-1868B-ZIP64 SN. 1976616182743759 INET 186259262146119
34.	MPU 92/65	
35.	Piezo Buzzer	
36.	Speaker 8R	
37.	Condenser Microphone	
38.	Vibrator 3V	
39.	DC 3v Motor	
40.	Pressure Sensor BMP180	
41.	Flex Sensor	A Company of the Comp
42.	Flame Sensor	

43.	RF Module 433MHz	
44.	RF ID TAG RC522  https://www.nxp.com/docs/en/data-sheet/MFRC522.pdf	
45.	TCRT1000 IR pair https://www.vishay.com/docs/83752/tcrt1000.pdf	