

BlueStamp Engineering Student Bill of Materials (BOM)

Please fill this out for all parts that will be required for your project.

If you cannot find information, move on and ask your instructor when emailing this to them.

Item #	Description	Vendor	Part Number	Qty	Unit Cost	Total Cost	Link to Where to Purchase
	32 feet of 1.5x1.5 wooden poles (four 8-foot sections)						To be purchased locally
	2 foot x 2 foot 1/4 inch plywood (4 pcs)						To be purchased locally
	16 feet 0.75 x 1.5 wooden poles (two 8 foot sections)						To be purchased locally
1	Photoresistors (5mm) for light sensing	Amazon		1	\$5.89	\$5.89	https://www.amazon.com/eBoot-Photoresistor-Sensi
2	Arduino Uno Elegoo	Amazon		1	\$11.86	\$11.86	https://www.amazon.com/Elegoo-EL-CB-001-ATme
3	12V DC motor with encoder 10rpm	Amazon		1	\$23.99	\$23.99	https://www.amazon.com/uxcell-Motor-Encoder-10R
4	DC motor driver 12/24V	Amazon		1	\$15.99	\$15.99	https://www.amazon.com/DROK-Industrial-Controlle
5	Metal L brackets for fastening the wood	Amazon		1	\$16.99	\$16.99	https://www.amazon.com/LB-1-ZP-Corner-Brace-Br
6	3/4 inch wood screws for the brackets	Amazon		1	\$7.99	\$7.99	https://www.amazon.com/HomeDone-Wood-Screws
7	Alloy steel socket head screws	McMaster-Carr	90044A131	1	\$8.73	\$8.73	https://www.mcmaster.com/#machine-screws/=1cxe
8	Stainless steel washer for 1/4 screw	McMaster-Carr	90107A029	1	\$8.25	\$8.25	https://www.mcmaster.com/#standard-washers/=1cx
9	Medium strength steel hex nut	McMaster-Carr	95505A601	1	\$3.26	\$3.26	https://www.mcmaster.com/#hex-nuts/=1cxeckp
10	Rubber feet for bottom of frame	Amazon		1	\$8.29	\$8.29	https://www.amazon.com/20PCS-Square-Shape-Ru
11	2" wide by 15' long industrial sticky back velcro	Amazon		1	\$17	\$17	https://www.amazon.com/VELCRO-Brand-Industrial
12	Male cigarette lighter extension cord	Amazon		1	\$7	\$7	https://www.amazon.com/Carviya-Cigarette-Lighter-
	3" philips head screws (pack of 25)			1			To be purchased locally
	2.5" philips head screws (pack of 25)						To be purchased locally
13	12" long by 1/2" thick threaded rod	Amazon		2	\$11.47	\$22.94	https://www.amazon.com/Stainless-Threaded-Threa
14	1/2-13 Finished Hex Nuts, Stainless Steel 18-8, Plain Finish, Quantity 25	Amazon		1	\$9.83	\$9.83	https://www.amazon.com/Finished-Stainless-Steel-F
15	Hex head bolt, 1/4" thick, 6" long, thread type 20 (pack of 4)	Amazon		1	\$7.16	\$7.16	https://www.amazon.com/Hard-Find-Fastener-01497
16	1/4" split lock washer, pack of 25	Amazon		1	\$14.35	\$14.35	https://www.amazon.com/Prime-Line-9082058-Split-
17	3/4" by 10 feet Metal hanger strap	Amazon		1	\$7.62	\$7.62	https://www.amazon.com/Sioux-Chief-524-1022PK2
18	3 inch x 3 inch square hinge w/ screws	Amazon		1	\$16.11	\$16.11	https://www.amazon.com/Deltana-SS33U32D-Stainl
19	#9 by 1 inch wood screws (pack of 24)	Amazon		1	\$10.95	\$10.95	https://www.amazon.com/Satin-Nickel-Wood-Screws
20	6 foot male to female USB 3.0 extension cable	Amazon		1	\$6.49	\$6.49	https://www.amazon.com/Cable-Matters-Extension-f
21	Assorted cable ties (pack of 500)	Amazon		1	\$12.99	\$12.99	https://www.amazon.com/Tosman-Assorted-Locking
22	High quality bearings	Amazon		1	\$11.90	\$11.90	https://www.amazon.com/Everlong-Precision-Skateb
23	mc4 to 8mm adapter cable	Amazon		1	unknown	unknown	https://www.amazon.com/Goal-Zero-Solar-Adapter-c
24	Goal Zero Yeti 400 Portable Power Station	Amazon		1	\$449.95	\$449.95	https://www.amazon.com/Goal-Zero-Portable-Gener
25	10K resistors, 1/4 watt, 5%, pack of 25	Amazon		1	\$5.80	\$5.80	https://www.amazon.com/Projects-25EP51410K0-10
26	Solid core wire, 22 gauge, 6 colors	Amazon		1	\$18.95	\$18.95	https://www.amazon.com/Electronix-Express-Hook-1
27	Sheet of black acrylic plastic, 12" by 12"	Amazon		1	\$8.49	\$8.49	https://www.amazon.com/MIFFLIN-Plexiglass-Projec
28	I used flexible proprietary solar panels, that combined put out 58W 30V in full sun	Anonymous					They aren't available to the public
29	m3 lock nuts (nylon inserts), pack of 100	Amazon		1	\$9.48	\$9.48	https://www.amazon.com/Fullerreg-Self-Locking-St
30	m3 bolts 50 mm long (pack of 60)	Amazon		1	\$9.83	\$9.83	https://www.amazon.com/Stainless-Steel-Phillips-Sc

					Total in \$:	758.08		
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