

GOAT Bill of Materials (BOM)

Module	Item	Qty	Cost	Link
Controller	Raspberry Pi	1	\$30.00	https://www.raspberrypi.com/products/raspberry-pi-3-model-b-plus/
Controller	Arduino board & breadboard	1	\$27.88	https://www.amazon.com/dp/B09RDZBY9G/?coliid=I3S6JAN2HXWRTB
Vision	Webcam	1	\$20.46	https://www.amazon.com/dp/B08FDM4DHF
Robot Arm	MG996R Servos	4	\$21.87	https://www.amazon.com/4-Pack-MG996R-Torque-Digital-Helicopter/dp/B07MFK266B
Robot Arm	MG90S Servos	2	\$16.40	https://www.amazon.com/Compatible-Raspberry-Project-Helicopter-Airplane/dp/B09BV5D7MD
Robot Arm	M4 x 25 mm bolts	multiple	\$7.65	https://www.amazon.com/dp/B07WZN44LD/?coliid=IHKHJWUJNJN12
Robot Arm	Force sensor	1	\$8.19	https://www.amazon.com/dp/B08CY33BRF/?coliid=I18GKDD7XXVBU0
Robot Arm	Double-sided tape	1	\$4.57	https://www.amazon.com/gp/product/B00004Z47L
Motion	NEMA 17 stepper motors	4	\$47.03	https://www.amazon.com/dp/B07TJWMZZY/?coliid=INNN6BMRDEABR
Motion	Stepper motor driver kit	1	\$12.02	https://www.amazon.com/Organizer-Expansion-Stepper-Heatsink-Arduino/dp/B07TT3C3HB
Motion	3 mm steel rods	40	\$15.20	https://www.amazon.com/dp/B0879JQL18/?coliid=I1KZIO4N1C02YF
Motion	M3 bolts	16	\$12.00	https://www.amazon.com/gp/product/B07CYNKLT2
Motion	M3 washers	80	\$6.55	https://www.amazon.com/dp/B075GVHLQ4/?coliid=I2RODNKB2LSIEL
Motion	M4 x 45 mm bolts	16	\$7.65	https://www.amazon.com/M4-0-7x45mm-Stainless-Machine-Eastlo-Fastener/dp/B07X3V7Z17
Motion	M4 washers	1	\$7.26	https://www.amazon.com/dp/B07KP4KQ5M
Motion	M4 lock nuts	16	\$6.55	https://www.amazon.com/dp/B07BCZY4P5/?coliid=I8TDGJH4Z4YYB
Parts	M3 lock nuts	multiple	\$7.65	https://www.amazon.com/gp/product/B08LMQC765?th=1
Parts	Connector cables 40 cm	multiple	\$13.12	https://www.amazon.com/gp/product/B07GD1TH2K
Power	Cables (various)	1	-	
Power	12V battery	1	\$29.08	https://www.amazon.com/12V-Security-Scooters-Emergency-Lighting/dp/B09P8155ZV
Power	12V to 5V DC converter	1	\$13.11	https://www.amazon.com/dp/B08Q3LZBZH/?coliid=I1BWP9C9Y8M8IQ
Power	Switches	3	\$7.65	https://www.amazon.com/DaierTek-Rocker-Switch-Household-Appliances/dp/B07S1MV462
Platform	Wooden board 30x45 cm	1	-	
Platform	White paint	1	\$7.63	https://www.amazon.com/dp/B07NP5156W
Total			\$329.51	