

Engineer Your World's Engineering Applications of Computer Science Course Kit Contains:	Small Kit Quantity	Medium Kit Quantity	Large Kit Quantity
Beach Ball	1	2	3
Raspberry Pi 3 Model B+	4	8	12
MakerBeam starter kit	1	2	3
microSD card	4	7	11
6700mAh Portable Charger External Battery Pack	4	7	11
Hex socket driver, for M3 nuts	2	4	6
MakerBeam brackets, 90-deg, 4-hole (12 pack)	1	2	3
Continuous rotation servomotor, SM-S4303R	2	4	6
MCP3008 I/P - 8-Channel 10-Bit Analog to Digital Converter	2	4	6
6" Jumper wires, M-F (100 pack)	1	2	3
6" Jumper wires, M-M (100 pack)	1	1	1
12" Jumper wires, M-M (10 pack)	1	2	3
220 ohm resistors (100 pack)	1	1	1
3.3K ohm resistors (100 pack)	1	1	1
4.7K ohm resistors (100 pack)	1	1	1
Light-dependent resistor, 4K-11K ohm @ 10 lux, 5.1mm (25 pack)	1	1	1
Bright White LEDs (25 pack)	1	2	3
Assorted color LEDs (20 pack)	1	2	3
Piezo speaker	2	4	6
Ultrasonic distance sensor, HC-SR04	8	16	24
Breadboard- White, 400 tie pts	5	10	15
Mini breadboard, 170 tie pts	3	6	9
Cutting mat, 12"x18", reversible	4	7	11
Rubber bands, pack of various sizes	1	1	1
Box cutter/utility knife	4	7	11
Hot glue gun, GR10	4	7	11
Hot glue, 4", dual temp, 24 pack	1	2	3
C-clamps, 3"x 2" OR 3" x 4.5" [(opening)" x (width)"]	4	8	12
Small screwdriver, Phillips/cross head	2	3	4
Webcam USB 2.0	5	10	15
Fabric, stretch (nylon/cotton) 1 yd	2yd	4yd	6yd
Braided Elastic bands, black, 3/4" wide x 3 yards	1	1	1
Flexible tape measure	1	2	3
Velcro, 2 sided, 0.75", black, sew-on 30"	2	4	6

Needle & thread kit	1	1	1
Black butcher paper, 100' x 3' wide roll	1	1	1
Turtle - 2WD Mobile Robot Platform	4	7	11
Thin and flexible HDMI cable - 15ft (2-pack)	2	4	6
Motor HAT	4	7	11
Battery Charger w/ 4 AA Batteries	4	7	11
Red - 22 gauge Solid Copper Wiring Insulation - 100ft roll	1	2	3
Black - 22 gauge Solid Copper Wiring Insulation - 100ft roll	1	2	3
White - 22 gauge Solid Copper Wiring Insulation - 100ft roll	1	2	3
Green - 22 gauge Solid Copper Wiring Insulation - 100ft roll	1	2	3
Yellow - 22 gauge Solid Copper Wiring Insulation - 100ft roll	1	2	3
Miniature Snap Action Switches with Long Lever - Model 30-2040	12	21	33
Brass M2.5 Standoffs 16mm tall - Black Plated - Pack of 2	19	32	50
Brass M2.5 Standoffs 11mm tall - Black Plated - Pack of 2	11	18	30
(4) AA cell Battery Holder w/ Standard Snap Terminals	4	7	11
Standard Snap Battery Terminal [9V battery Connector]	4	7	11
Velcro 3/4 in (2cm) wide [Sticky Back Tape, .75in x 5ft]	1	1	2
Stacking Header for Pi A+/B+/Pi 2/Pi 3 - 2x20 Extra Tall Header	4	7	11
Electrical Tape 3/4" x 66'	1	1	1
3/32" Heat Shrink Tubing (4 feet)	2	4	6
Water Rocket Launcher System	1	1	1
Bike 2 Floor Pump	1	1	1
Altimeter	2	2	2
18 in. x 24 in. x .157 in. White Corrugated Twinwall Thick Plastic Sheets (15-Pack)	1	1	1
PL Premium 10 fl. oz. Polyurethane Construction Adhesive	2	4	5

Caulk gun (empty)	2	3	4
Thin and flexible USB extension cable - 15ft	4	7	11
300 ft Measuring Tape	1	1	1
Mass scale, 0-1000g	1	1	1