SELF - BALANCING ROBOT

Component Required

	Component name	Quantity
	Component name	Quantity
1.	Arduino nano	1

https://robu.in/product/arduino-nano-v3-0-ch340-chip-mini-usb-cable/

| 2. | MPU6050 Gyro Sensor | 1 |

https://robu.in/product/mpu-6050-gyro-sensor-2-accelerometer/

| 3. | Nema 17 Stepper Motor | 2 |

https://robu.in/product/5-5-kg-cm-nema-17-stepper-motor-4-wire-bipolar-cnc-3d-printer-robotics/

| 4. | 150 mm wheels | 2 |

https://www.flipkart.com/invento-2pcs-70mm-x-40mm-plastic-robotic-wheel-durable-rubber-tire-6mm-hole-automotive-electronic-hobby-kit/p/itm07b6e5a72d437?pid=EHKGJVGGGNQBVBYY&lid=LSTEHKGJVGGGNQBVBYYKW0OOZ&marketplace=FLIPKART&fm=productRecommendation%2Fsimilar&iid=R%3As%3Bp%3AEHKGY3JWPQF5JZPG%3Bl%3ALSTEHKGY3JWPQF5JZPGEKQZMI%3Bpt%3App%3Buid%3A62885ec2-1152-11f0-b1f6-43cff919fb1e%3B.EHKGJVGGGNQBVBYY&ppt=pp&ppn=pp&ssid=2v8jrx7jcg0000001743770571686&otracker=pp_reco_Similar%2BProducts_5_37.productCard.PMU_HORIZONTAL_INVENTO%2B2pcs%2B70mm%2Bx%2B40mm%2BPlastic%2BRobotic%2BWheel%2BDurable%2BRubber%2BTire%2BWheel%2B6mm%2BHole%2BAutomotive%2BElectronic%2BHobby%2BKit_EHKGJVGGGNQBVBYY_productRecommendation%2Fsimilar_4&otracker1=pp_reco_PINNED_productRecommendation%2Fsimilar_Similar%2BProducts_GRID_productCard_cc_5_NA_view-all&cid=EHKGJVGGGNQBVBYY

| 5. | A4988 Stepper driver IC | 2 |

Buy A4988 driver Stepper Motor Driver- Good Quality at Best Price

| 6. | HC 05 Bluetooth module | 1 |

https://robu.in/product/hc-05-6pin-bluetooth-module-with-button/

| 7. | Lipo battery 4000mAh | 1 |

https://robu.in/product/pro-range-4200mah-3s-35c-11-1-v-lithium-polymer-battery-pack-lipo/?gad_source=4&gclid=Cj0KCQjwhr6_BhD4ARIsAH1YdjDurKqvvvpwlM36pKpFIyRYWVp4r2qgDxPgAbfkGwELZOaOx_0A4JAaAhqLEALw_wcB-Rechargeable-Replacement-Bluetooth/dp/B08YXK64K4

| 8. | 4mm MOF board | 6 |

https://www.amazon.in/dp/B0B7FGBRG4?psc=1&ref_=cm_sw_r_cp_ud_ct_69SFVPJDTNC26VEQHCES

| 9. | 150 mm M5 threaded road | 4 |

https://www.amazon.in/dp/B0925BXRWG?psc=1&ref_=cm_sw_r_cp_ud_ct_2ZTFZGF3D7Z8V0R4JWJ8

10. Some nuts and bolts   6
11. EasyMech Bracket BEND   2
    https://robu.in/product/easymech-bracket-for-nema-17-stepper-motor/

12. Pure copper cable   3
    https://robu.in/product/720mm-cable-with-connector-for-nema17-stepper-motor/

13. ESP32   2
    https://www.amazon.in/OceanLabz-ESP32-WROOM-32-Bluetooth-Pre-Loaded/dp/B0D2BB68S9/ref=sr_1_6?crid=1TW9X7SIFPL75&dib=eyJ2IjoiMSJ9.pHlThr6qfW1WTyNz3Fb6cXhNlIcyKxbORs6brEm51RvcW3HW3gNre-UB8MXvZXK6z1wagaFFltnJ6_cHOHAejxM14nHeyAe-CLH_O8W9SwYMLffzLg7COk7d3Rpr-hBoaznwtmmtU4hC5DnibWS0tQxm91dl1f6Svp5YCPTvplcCpmfjGmPAXPQeK2QegcAH_oYdwkx5VGLQFhNIvCQqPPi194SDKgExEMkr2Q11OPCxtmBfgS12KVeZMLIMQDLuFO5uS-RYjh7FK9QTpCmWmJuygQwqX_mq2JIq6nEMAmY.TQOZ9haMHykm5Ij3no3BabTlGU3kLgZEQ4clsGMxjyo&dib_tag=se&keywords=esp+32+wroom&qid=1743772053&sprefix=esp+32+%2Caps%2C282&sr=8-6

14. I2S mic   2
    https://robu.in/product/i2s-microphone-module/

15. I2S audio Amplifier   1
    https://robu.in/product/adafruit-max98357a-i2s-3w-class-d-amplifier-breakout-board/

16. IR sensor module   1
    https://robu.in/product/ir-infrared-obstacle-avoidance-sensor-module/

17. Jumper wire   40 pin
    Buy Male To Male Jumper Wires 40 Pcs 10cm Online at Robu.in