

Robotics project checklist

From idea to measured prototype

01 Define the task

What should the robot do? Where? With what accuracy and speed?

02 Draw a system diagram

Identify sensors, controller, motor drivers, motors and power supplies.

03 Estimate constraints

List sizes, loads, available voltage, pin count and safety margins.

04 Build a small test

Verify one subsystem at a time: sensing, movement, communication.

05 Measure and improve

Record results, investigate errors and compare alternative designs.

Before you build:

- ☐ Clear requirement ☐ Block diagram ☐ Power plan
- ☐ Component table ☐ Test procedure ☐ Measurement log