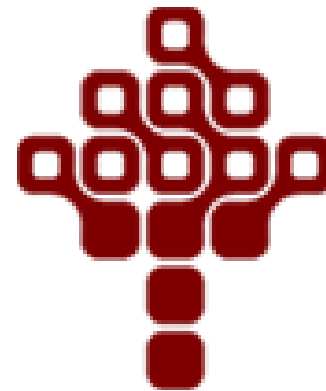


# Tutorial for AUTO-BOTS



**CHANDIGARH  
UNIVERSITY**

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# Types of robots need to be built

- Dirt Course Robot (*Wireless & Manually controlled*)
- Maze Course robot (*Autonomous*)
- Bridge Course robot (*Wireless & Manually controlled*)
- Flying Copter (*Wireless & Manually controlled*)

# Dirt Course Robot

*Wireless & Manually controlled*

- **Parts Required**

- Parts and videos listed below are just for reference. One can choose things according to his own wish and specifications listed in rules.

- Microcontroller Board (Arduino Uno etc.)
- Motors
- Wireless Module (Bluetooth, Wifi, Encoded RF etc.)
- Wireless Remote (Phone can also be used)
- Chasis
- Motor Driver for driving Motors (act as an interface between Microcontroller and Motors)

- **Sample video link for reference**

- <https://www.youtube.com/watch?v=xsJ7176fLNw>

# Maze course robot

*(Autonomous)*

- **Parts Required**

- Parts and videos listed below are just for reference. One can choose things according to his own wish and specifications listed in rules.

- Microcontroller Board (Arduino Uno etc.)
- Motors
- Proximity Sensor (Ultra Sonic, IR etc.)
- Chasis
- Motor Driver for driving Motors (act as an interface between Microcontroller and Motors)

- **Sample video link for reference**

- <https://www.youtube.com/watch?v=NpVbDDfYmdg>
- <https://www.youtube.com/watch?v=xSenMiXauYQ>

# Bridge Course Robot

## *Wireless & Manually controlled*

- **Parts Required**

- Parts and videos listed below are just for reference. One can choose things according to his own wish and specifications listed in rules.

- Microcontroller Board (Arduino Uno etc.)
- Motors
- Wireless Module (Bluetooth, Wifi, Encoded RF etc.)
- Wireless Remote (Phone can also be used)
- Robotic Arm Mechanism (Pre made kits, Home made etc.)
- Chasis
- Motor Driver for driving Motors (act as an interface between Microcontroller and Motors)

- **Sample video link for reference**

- <https://www.youtube.com/watch?v=Or-NjQRiFdA>
- <https://www.youtube.com/watch?v=0q97wHghIIA&t=40s>
- <https://www.youtube.com/watch?v=MPqUGUGXCVo>

# Flying Copter

*(Wireless & Manually controlled)*

- Pre made copter ranging from Rs 800 to Rs 1000 can be used
  - Can be purchased on websites like Amazon, Snapdeal etc.
- One can Build their own Flying Copter