

## ROBOTICS SYLLABUS

### Micro Degree in Robotics

Sessions 1 - 12

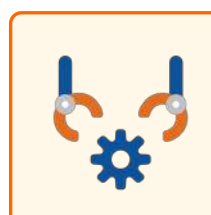
### Advanced Degree in Robotics

Sessions 1 - 24

#### Robotics Mechanism

1

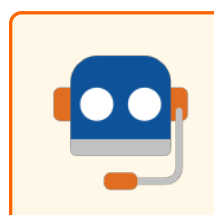
- ✓ Electronic
- ✓ Algorithms
- ✓ Mechanism
- ✓ Functioning



#### Robotics Communication

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- ✓ Serial Interface
- ✓ Data Exchange
- ✓ Connecting h/w
- ✓ Transceive Modelling



#### Unboxing Advanced Kit

13

- ✓ Unboxing kit and understand various modules and sections in the kit



#### Home Automation Design

19

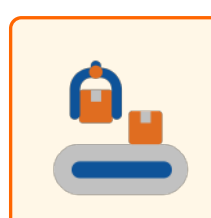
- ✓ Design a home automation project and control home applications smartly



#### Robotics Components

2

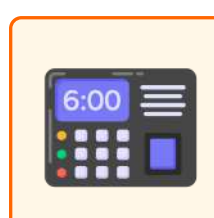
- ✓ Robotics Parts
- ✓ Protocols
- ✓ Interfaces
- ✓ Specifications



#### Student Attendance System

8

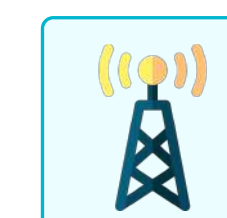
- ✓ Design digital students attendance system to replace manual attendance



#### Wireless Communication

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- ✓ Learning & interfacing various wireless modules such as WIFI, Bluetooth etc.



#### Door Security System

20

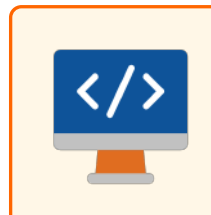
- ✓ Implement door security with the help of automation



#### Robotics Programming

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- ✓ Programming
- ✓ Logics
- ✓ Algorithm
- ✓ Programming Models



#### Traffic Lights Designing

9

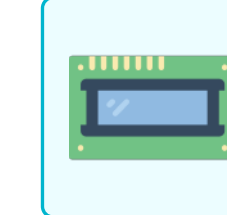
- ✓ Design traffic light and understand its working with logic



#### LCD Interfacing

15

- ✓ Interface LCD and check the display mechanism



#### IOT Interfacing

21

- ✓ Design IOT mechanism for applications



#### Robotics Hardware

4

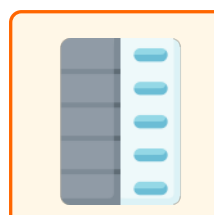
- ✓ Mechanism
- ✓ Functioning
- ✓ Interface
- ✓ Logics



#### Electronic Voting Machine

10

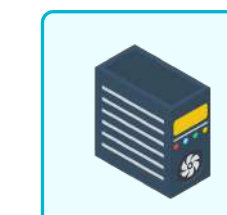
- ✓ Design electronic voting machine and understand the voting mechanism



#### Relay Interfacing

16

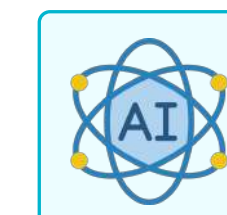
- ✓ Interface relay and check various auto switching operations



#### AI Interfacing

22

- ✓ Implement AI interfaces to make automation products smart



#### Robotics Applications

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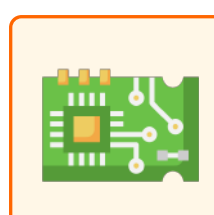
- ✓ Robot Basics
- ✓ Domain Uses
- ✓ Applications
- ✓ Requirement Analysis



#### Digital Notice Board Design

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- ✓ Design a digital notice board and display message remotely



#### Wi Fi Interfacing

17

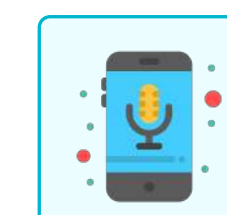
- ✓ Interface WIFI module and design IOT operations



#### Voice Controlled Apps

23

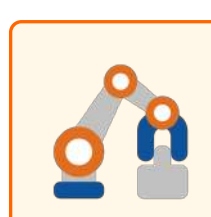
- ✓ Design and control automation application using voice commands



#### Robotics Simulation

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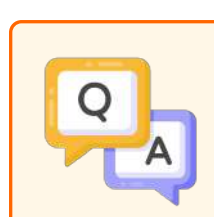
- ✓ Model Design
- ✓ Error Simulation
- ✓ Testing s/w
- ✓ Virtual Model Designing



#### Quiz Competition Design

12

- ✓ Design quiz competition and perform fastest finger first



#### Bluetooth Interfacing

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- ✓ Interface bluetooth module and design wireless bluetooth technology control applications



#### Skillovation Research

24

- ✓ Learn many advance and live projects with skillovation

