

# ROBOTICS ADVANCE



eLearning Course Title: **ROBOTICS (ADVANCE)**

eLearning Course Type: **Paid**

Registration Fee (including GST):- **Rs. 1499/-**

Course conducted by Group/ Regional Directorate Name:- **HRM & CoE Group**

Name & Designation of Course Coordinator: **Mr. Yadu Kr. Yadav, Assistant Director**

Course Coordinator Contact Details: **+91-9958748893**

About eLearning Program (Brief One para): -

Robotics is an interdisciplinary field that integrates computer science and engineering. Robotics involves design, construction, operation, and use of robots. The goal of robotics is to design machines that can help and assist humans.

eLearning Course Coverage (Specify Module details) :-

MODULES	Advance Level
1	What are Robotic Manipulators?
2	Motion Planning in Robots
3	What are embedded systems?
4	ATmega328p Introductions
5	Embedded Programming C - Basic C language
6	Embedded Programming C- Timer ,Interrupt, ADC
7	Embedded Programming C- PWM , UART ,I2C , SPI
8	ATmega328p Configurations
9	Atmega328p- Arduino pin Diagram
10	Sensor Interface
11	Sensor data and Conditions
12	Motor Driver

13	H-Bridge
14	Programming For Motor Driver
15	Forward and Backward Kinematics
16	Wirless Robotics
17	Radio Frequency
18	Bluetooth
19	Robotic ARM manipulator
20	Degree of Freedome through MATLAB
21	Attaching everything
22	Geared Motor – clamp- chassis
23	Ultrasonic sensor with motor
24	Obstacle Avoiding Testing
25	Line follower Robot
26	Bluetooth Robot
27	RF Controlled robots

Register to learn (Key Learnings' in bullet points):

Robots produce more accurate and high quality work. Robots rarely make mistakes and are more precise than human workers. They can produce a greater quantity in a short amount of time.

- ✓ Mundane Tasks are Reduced
- ✓ Reduction in Labour
- ✓ Safety
- ✓ Consistency
- ✓ Precision
- ✓ Increased Output

Thanks & Regards

NPC Team