

# One Week Certificate Course

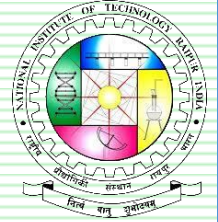
on

## “Robotics”

17<sup>th</sup> - 21<sup>st</sup> June-2024

Continuing Education Cell (CEC)

National Institute of Technology Raipur



### About the Course

**Objectives of Training Programme:** The main objective of this course is to help the participants understand the basics of robotics along with providing awareness of the recent advancement in the field of robotics. Participants will get some hands-on experience of basic robot building, and mobile robot navigation algorithms along with robotics simulation tools such as Robot Operating System (ROS) and Webots. One of the objectives of this program is also to inspire participants to pursue further education or careers in robotics or related fields by showcasing the diverse range of opportunities available in the field of robotics.

**Learning Outcomes (LO):** Upon successful completion of this Training Programme, the participant will be able to:

- **Introduction to Robotics:** Understand the fundamentals along with various applications in the field of robotics.
- **Understanding of Robotics Principles:** Participants will gain the understanding of the basic principles of robotics, including kinematics, electronics, and programming.
- **Hands-on Learning:** To build, program, and operate robots using robotics hardware and simulation software.
- **Problem-Solving Skills:** Develop participants' critical thinking and problem-solving abilities by presenting them with robotics challenges that require creative solutions.
- **Programming Proficiency:** To understand and use programming languages commonly used in robotics, such as Python or Arduino.

### Contact Details:

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Department of Mechanical Engineering

### Course Registration

Interested candidates can apply in the prescribed application form (Annexure-B) with applicable course fee:

Course Fee Details	
Students of NIT Raipur	₹ 1,500 + 18% GST
Outside Students (other than NIT Raipur)	₹ 2,000 + 18% GST
Faculty/ Industry Personnel	₹ 3,000 + 18% GST

The payment can be done either in the form of a Demand Draft (DD) in favour of “Director, NIT, Raipur” payable at Raipur or through online mode. **Account details for online transfer can be found in the last page of the following document:**

<https://nitrr.ac.in/downloads/events/STTP/2024/CEC%20Course%20Proposal%20-%20Robotics.pdf>

For online payment, the scanned copy of the application form along with the proof of payment should be sent to [cec\\_assistant@nitrr.ac](mailto:cec_assistant@nitrr.ac) in by the **due date (10<sup>th</sup> June 2024)**. For payment made through DD, the hard copy of the application along with the DD should be sent to the **Chairman, Continuing Education CELL, NIT Raipur, Raipur, Pin: 492010** by the **due date (10<sup>th</sup> June 2024)**. **After payment, participant is required to fill the following google form:**

<https://forms.gle/ZgTwmKSvHTXHgZ9z9>



For course details kindly refer to Annexure- A. Conduction of the course is subjected to enrolment of minimum number of students.