



### Indian Institute of Technology Patna Department of Mechanical Engineering



### Continuing Education Programme On

# **Mobile Robotics**

# November 10-12, 2020

**Coordinator:** Dr. Atul Thakur, ME, IIT Patna

**Resource persons Dr. Atul Thakur, ME, IIT Patna and Dr. Raju Halder, CSE, IIT Patna** 

#### **Important Dates**

Course dates: November 09-11, 2020 Last date of Registration & Payment: 07<sup>th</sup> November 2020

### **Course Description and Content**

Mobile robots are now enabling human beings to physically reach explore and unchartered territories in the Universe. Be a place as distant as Mars, in abysmal depths of ocean, or shrouded by thick glaciers of Antarctic, mobile robots help exploring everything; yet this is just the beginning. Even in day to day life autonomous cars hold a potential to revolutionize transportation and domestic mobile robots help humans in cleaning, elderly help, etc. National defense is an area replete with the use of mobile robots. This course will present various aspects of design, motion planning, and control of intelligent mobile robotic systems. The key highlights of the course are:

- Bio-inspired robot locomotion
- Kinematics of mobile robots
- Sensing and perception in mobile robot
- **Robot localization algorithms**
- Robot motion planning algorithms
- Robot Operating System (ROS)
- Practical case studies of mobile robotics

# **Broad Scope**

The main objective of this course is to provide exposure to the current status and next-generation innovations of mobile robotics. The topics will focus on basics, advances, and applications to benefit different people from academic & research communities associated with the disciplines of Mechanical, Electrical, Electronics, Computer Science, etc.

### **Target Audience**

The course is suitable for third and fourth year of undergraduate engineering programs as well as Ph.D. students, Scientists in R&D organizations, Faculty Members, and professionals interested in the area of Mobile Robotics.

### **Fee Payment**

The participation fees is as follows: Faculty/Industry professional: Rs. 3000.00 Students\*: Rs 750.00 The fee for the CEP will be accepted only through e-transfer /RTGS/NEFT.

# **Registration Link**

#### https://forms.gle/ZUxP3PfkaHgvj8Gp8



Please note that registration form requires the screenshot of online payment

# Certificate

An Electronic Certificate of participation from IIT Patna will be awarded to all participants after successful completion of the course.

### **Contact:**

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