

About the University

O. P. Jindal University (OPJU), established by the Jindal Education and Welfare Society, is a premier institution committed to academic excellence and innovation. Continuously achieving new milestones, OPJU was recently awarded the prestigious NAAC "A" Grade accreditation, becoming the first private university in Chhattisgarh to attain this distinction in its first accreditation cycle. Founded with a vision to provide world-class education, OPJU integrates a cutting-edge curriculum, innovative teaching methodologies, and a distinguished faculty to nurture talent. As a multidisciplinary institution, the university is dedicated to developing young professionals and future leaders who will drive progress at both the national and global levels. At the heart of OPJU's philosophy is the belief that learning is most effective when students engage with real-world challenges and gain insights from both industry experts and academicians. The university fosters an environment where every student's innate potential is recognized, cultivated, and transformed through quality education and mentorship.

About the Department

The Mechanical Engineering Department is well known for its quality of teaching and supportive environment provided to the students. The state-of-the-art laboratories, highly qualified, experienced and dedicated faculty members in all specializations of Mechanical Engineering, make this Department a vibrant place to study. Our programs provide flexible curriculum enabling the students to achieve their goals and make them industry ready. Presently department is active in various thrust areas of research in Mechanical Engineering and allied branches.

The Department organizes number of short term training programs, workshop and seminars from time to time for faculties and students for sharing and updating their technical knowledge in a regular and periodic manner. The programs are not only imparting technical expertise to the students but also are intended to provide a professional experience through industry linked projects, in-plant trainings, industry personnel expert lectures and industrial visits. The Department fosters a culture of innovative teaching methodologies to improve the skills required for the student's career.

Organising Committee



Chairman
Dr. R. D. Patidar

Vice-Chancellor
O. P. Jindal University, Raigarh



Course Coordinator
Dr. Mahesh Bhiwapurkar

Professor (Mechanical Engineering)
O. P. Jindal University, Raigarh



Course Co-Coordinator
Dr. Saroj Kumar

Sr. Assistant Professor (Mechanical Engineering)
O. P. Jindal University, Raigarh

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ATAL-AICTE Sponsored Faculty Development Program (FDP) on **THE ROLE OF ROBOTICS & AI IN INDUSTRY 4.0**

August 04-09, 2025



OPJU

Organised by
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Objective of FDP

The Faculty Development Program (FDP) on "The Role of Robotics and AI in Industry 4.0" aims to provide an in-depth understanding of the latest advancements in Robotics and Artificial Intelligence (AI) and their transformative impact on Industry 4.0. The program will focus on equipping faculty members with knowledge of smart manufacturing, autonomous systems, IoT integration, and AI-driven decision-making. Participants will gain insights into real-world industrial applications, challenges, and future trends, enabling them to enhance their teaching and research capabilities in this emerging domain.

Possible Topics

- Fundamentals of Robotics in Industrial Automation
- Introduction to Industry 4.0 and Smart Manufacturing
- Artificial Intelligence and Machine Learning for Smart Factories
- Internet of Things (IoT) and Industrial Connectivity
- Digital Twin Technology for Real-Time Industrial Optimization
- Computer Vision and AI-Based Quality Control in Industry 4.0
- Soft Computing-Based Intelligent Optimization for Supply Chain Management
- Additive Manufacturing and AI-Driven 3D Printing
- Reverse Engineering in context of Industry 4.0
- Unlocking AI for Good

Eligibility for Participants

The faculty development programme is open to faculty members, research scholars, students and industry personnel belonging to engineering/ science disciplines.

Note:

Registration Fee:

There is no registration fee for the participants.

Registration

The applicants are requested to get themselves registered through the following link and steps to be followed:
<https://atalacademy.aicte-india.org/login>

Note:

Min/Max Limit- 30/50 participants from the Higher Education Institutions. Participants should be nominated by the respective Heads of Institutions.

Certification

Candidates would be eligible to receive a certificate upon achieving at least 70% cumulated weightage in the following aspects in the weightage mentioned.

- Attendance – minimum 80% attendance essential. 100 % attendance - (individual) - weightage 20%
- One assessment, - combination of MCQs/short answer type/reasoning based, etc. -(Individual) - weightage 10%
- 2 Page Article Summary/per Team - (Team & Individual)-- weightage 30%
- Output of practical sessions -(Individual)- weightage 15 %
- Report/outcome of Industrial visit- (Team) at the last session -weightage 10%
- Reflection Journal - (Individual) - at the last session - weightage 15%



Eminent Resource Persons

Mr. Vaibhaw Chandra Kesarwani

Head – Centre of Excellence
(Business Transformation)
JK Lakshmi Cement, New Delhi

Dr. BBVL Deepak

National Institute of Technology, Rourkela, Odisha

Dr. Somak Datta

Birla Institute of Technology, Mesra, Ranchi

Dr. Bappa Acherjee

Birla Institute of Technology, Mesra, Ranchi

Mr. Avinash Roy

Sr. Manager (State Head Services), TATA Motors

Mr. Shahul Chiwande

Geometric Technologies, Nagpur

Mr. Sandeep Dahake

Precisurg Pvt. Ltd. Nagpur

Dr. Atul Kumar Sahu

Guru Ghasidas University, Bilaspur

Dr. V. Pandu Ranga

Indian Institute of Technology, Bhubaneswar