About the FDP

The failure of all the structures deteriorate with time during mechanized progression for various reasons like fatigue, changing environment condition, earthquake, machinery faults etc. AI and ML have formed the driving force behind the fourth industrial revolution. Industry 4.0 features the development of smart machines and devices that can intercommunicate in a network, now evolved into the Internet of Things (IoT) and the Industrial Internet of Things (IIoT). AI is the foundation on which all these structures are based. Smart manufacturing is an integral part of Industry 4.0. It can integrate advanced intelligent systems into production processes. This saves time, improves quality and eliminates unnecessary waste. By using AI and ML to streamline and optimize these processes, with the emergence of Industry 4.0, the focus has shifted toward achieving an interconnected, digitized, automated manufacturing ecosystem. This FDP will bring together people from industry, academics and research institutes and share their knowledge, and expertise in the domain of Robotics, Automation, Control, Smart and Additive manufacturing with the implementation of AI, ML, IOT, Automation & Control and various NDT methods with the advancement of industry 4.0.

Topics to be covered

- Robot and Automation
- Underwater robot
- AI in Automotive vehicle systems
- Additive Manufacturing
- AI&ML in mining sector
- 3-D printing.
- IOT in manufacturing industry
- Optimization of mobile robot
- Advanced composite in Aerospace
- Optimization Methods
- NDT Techniques

Eligibility of Participants

The faculty members of AICTE approved Institutions, Research scholars, PG &UG students, participants form Government, Industry (Bureaucrats/ Technicians/Industry Experts etc.) and staff of host institutions is eligible to attend the program.

Registration Fee

There is no registration fee for participants

Registration Process

Interested participants who want to attend this online FDP need to make mandatory online registration on the ATAL Portal (https://atalacademy.aicte-india.org/login). Last date of online registration is 29/11/2024. Shortlisted candidates will be communicated through email by 1/12/2024.

Certification

A test will be conducted by coordinators at the end of the program. The certificates shall be issued to those participants who have attended the program with 80% attendance and scored minimum 70% marks in the test. A Digital Certificate will be issued by the ATAL Academy to the successful candidates.

AICTE Training and Learning (ATAL) Academy
Online Faculty Development Programme (FDP)
on
"Empowerment of Robotic, AI&ML and Additive Manufacturing in Industry 4.0
2nd -7th December, 2024

Coordinator

Dr. Shakti P. Jena

Organized by

Department of Mechanical Engineering
Nalanda Institute of Technology
Buddhist Villa, Chandaka
Bhubaneswar, Odisha-754005
www.thenalanda.com

AICTE-Teaching and Learning (ATAL) Academy

The main objectives of the ATAL Academy are

- To develop and assist in conveying quality technical education in the country.
- To maintain technical institutions in development of quality teaching, research, innovation and entrepreneurship through proper guidance in diverse emerging and advanced areas.
- To enhance the empowerment of knowledge, skills & technologies for faculties, researcher, students in technical institutions.
- To utilize SWAYAM platform and other resource for the delivery of trainings.
- To explore a range of opportunitiesfor training, exchange of knowledge, skills, experiences by conducting Workshops, STC, FDP & Orientations programs to monitor and explore both students and staff.
- To shore up strategy architect for incorporating ideas as per current need.

About The Institute

Nalanda Institute of Technology (NIT) was established by Balaji Educational Society-2007, Bhubaneswar, Odisha under the chairmanship of Sri. L.G. Rao .The institution is situated with an extent of 32 acres on Chandaka Square and approved by AICTE with NAAC A+, New Delhi and affiliated to BPUT and recognized by Govt. of Odisha. The Departments of Mechanical & Electrical Engineering are NBA accredited. The institute is always focusing on quality education by providing proper teaching, advanced training, development of academic infrastructure, exploration of research, innovations and start-ups etc. The Institute was also supported by Govt. of India with ATAL-Incubation Centre.

About The Department

The Department of Mechanical Engineering was established in the year 2007 with an initial intake of 60. The Department is running both UG and PG programs. The current intake of UG is 120 while that of PG is 18 (Thermal Engineering).

The Department is well equipped with laboratories with qualified staffs. Apart from the academic curriculum laboratories, the department also established advanced CAD Lab, Electrical Vehicle Lab and Packaging unit. The students are given proper training for future employment by keeping in view of the future demand.

The Department has requisite number of staff as per the AICTE. The department has faculty members as per the different domain expertise and faculty members have also PhD from reputed institutions of the country.

Resource Person:

1) Dr. YAP HWA JEN, University of Malaysia

2)Dr. Vamsi Krishna Rentala, Scientific Consultant, AV-NDT, Berlin, Germany

3)Dr. Nishanth Raja, IIT Madras Research Park

4)Dr. Jagdish Chandra Mohanta, MNIT, Allahabad

5)Dr. Y Ravi Kumar, NIT, Wrangal

6)Ms. Pragyan Patnaik ,Founder and CEO,AAVRTTI Technologies pvt ltd.

7)Dr. Dayal R Parhi, NIT, Rourkela

8)Dr. S Venu Kumar, NMDC Ltd, Jagdalpur

9)Dr. Mukes Kumar Singh, GS Central University, Raipur

10)Dr. Sudhir Kumar Kashyap, CSIR, Dhanbad

11)Dr. Kaushik Pal, IIT, Roorkee

12)Dr. Sisir Kumar Mantry, CSIR, Bhubaneswar

13)Mr. Tanay Kumar Mohanty, Renault Nissan Automotive India, Chennai

Chief Patron

Mr. Malaya Kumar Padhi
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