About the Institute

Aditya University is a State Private University formed under the Andhra Pradesh Private Universities Act, 2016. It has evolved from the well-established Aditya Engineering College in Surampalem, Kakinada District, Andhra Pradesh. Aditya University is committed to provide quality higher education with global standards. This University is accredited by National Assessment and Accreditation Council with A++ Grade. This University has grown up to the extent of enrolling 7000 students and 450 Faculty. The University proudly offers 11 UG and 5 PG programmes in Engineering, MCA, MBA, MBAI, and Ph.D. The six UG programs (CE, EEE, ME, ECE, CSE, IT) are accredited by NBA under Tier I for 3 Years. The University is ranked in the band of 201-300 in Engineering category as per National Institutional Ranking Framework (NIRF) - 2024, Ministry of Human Resource Development (MHRD), Govt. of India. Besides, the University has added many feathers in its cap which include AAA+ Grade by Careers 360, 29th Rank out of top 50 Engineering Colleges Survey by the Academic Insights, etc. The memorandum of understanding with foreign universities usher a new era of international academic excellence, fostering a vibrant, globally engaged educational community at Aditya University leading to joint degree certifications and joint research programmes.

ABOUT AICTE ATAL

ATAL Academy was established with a vision to empower faculty to achieve goals of Higher Education such as access, equity and quality. ATAL Faculty Development Programme (FDP) has been designed to fulfill the need to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. The objectives of ATAL FDP are:

- ► To support technical institutions in fostering research innovation and entrepreneurship through training.
- ➤ To stress upon empowering technical teachers & technicians using ICT.
- ➤ To provide a variety of opportunities for training and exchange of experiences such a workshops, orientations, and learning communities.

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A One Week FDP on

Al & ML Empowerment in Energy Storage & Advanced Robotics

Sponsored by
AICTE TRAINING AND LEARNING
(ATAL) ACADEMY



09th to 14th Dec. 2024



DEPARTMENT OF MECHANICAL ENGINEERING



(Formerly known as Aditya Engineering College)

ADB Road, Aditya Nagar, Surampalem-533 437, Kakinada District, AP.

Web: adityauniversity.in

About the Department

The Department of Mechanical Engineering offers B. Tech in Mechanical Engineering, M.Tech in Thermal Engineering and Ph.D in Mechanical Engineering. The Department of Mechanical Engineering is accredited by NBA (Tier-I) for 3 years. The department has earned a place of high repute through its quality teaching rendered by highly qualified and experienced faculty with remarkable number of research publications in reputed journals like ASME, ELSEVIER, SPRINGER etc. The Department has conducted the rigorous practical training creating an ambience of excitement in all the stages of study. The department provides the hands-on training with the support of simulation packages. The academic activities include guest lectures, industrial visits, workshops, seminars, technical festivals VEDA, collegiate club of the Society of Automotive Engineers (SAE) and Institute of Engineers (INDIA) (IEI). The projects received appreciation in various events. organized at state and national level are Go-Kart, Quad bike, M-Baja and e-Baja.

Target Group

Faculty / Ph.D. scholar's / PG students
Min/Max Limit- 30/50 participants from the
Higher Education Institutions/ Industries.

Registration Process

Online Registration must be done in the

ATAL Portal Through

https://atalacademy.aicte-india.org/login

For more information, kindly visit

https://aicte-india.org/sites/de-

fault/files/ATAL/FAQ%20Participants.pdf

Free Registration for all Participants

Resource Persons

Dr. P.V. Manivannan, Asso. Prof., IIT Madras.

Dr. T. Karthikeya Sharma, Asst. Prof., NIT AP.

Dr. N. Sendhil Kumar, Asso. Prof., NIT Puducherry.

Dr. P. Senthilkumar, Asso. Prof., MIT Anna University.

Mr. M. Ghouse, General Manager, Sri Lalita Power

Plant Industries.

Dr. Thiyagarajan R, Asst. Prof., IIT Tirupati

Dr. Ravi Kumar Mandava, Asst. Prof., IIITDM Kurnool.

Dr. V. Pandu Ranga, Prof., IIT Bhubaneswar.

Mr. Sanjay Babu Baswa, Project Leader,

Titan Engineering and Automation Limited.

Mr. G. Ragesh Kumar, Product Manager, Igus India Pvt ltd

Topics to be Covered

- ► Hybrid Autonomous Vehicles
- ► Machine Learning in Energy Storage Devices and Systems
- ► Issues & Challenges in Concentrated Solar Power System
- ► Hydrogen Storage Systems
- ► Power Plant Energy Storage
- ▶ Underwater Robotics: Challenges in Design and Control
- ► Introduction to AI and ML in Robotics
- ► Gait planning and control of biped robot using neural networks
- ► How robots transforming industry
- ► Low-Cost Automation

About the FDP

The objective of this FDP is to provide a common platform for researchers, academicians & Industry persons to enhance their knowledge. AI & ML applications in energy storage and advanced robotics aim to improve efficiency, reduce costs, optimize performance, enhance sustainability, and support the integration of renewable energy sources into the energy ecosystem. These technologies play a crucial role in transitioning to a more sustainable and greener energy future. ML algorithms can analyze data from energy storage systems and advanced robotics infrastructure to predict when maintenance is needed. This helps to optimize maintenance schedules, reduce downtime, and increase the lifespan of equipment.

FDP Mode & Venue

The FDP is conducted offline for one week from 09th to 14th December 2024 at Aditya University.

Schedule 9.30 AM - 5.30 PM

Contact Details

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Associate Professor

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