

Participants

The faculty members of the AICTE approved institutions, Ph.D. scholars, PG students, members from Government & Industries, and Staff of host institutions, are eligible to attend the programme. Participants interested to attend this program need to make compulsory online registration. Last date of online registration is **04/11/2023**. Shortlisted candidates will be informed through their email within a week after registration is closed.

Accommodation

Selected out station participants will be provided accommodation at the University hostels / guest houses on payment basis as per the University tariff during the programme.

Registration

There is no registration fee to attend this program. Program will be in **offline**. Registration must be done only through AICTE-ATAL academy. The interested members must visit <https://www.aicte-india.org/atal>, register themselves by providing all their personal and student/ employment details. This procedure requires uploading of colour photo, Signature, ID Card (for students), and Consent letter (for employees) from their employers in JPEG format.

Certificate

Certificate will be provided by ATAL Academy after successful completion of FDP. Minimum 80% attendance and 60% marks in assessment conducted at the end of the program are required to earn the certificate.

Connectivity

Annamalai University is located near Chidambaram Town which is well connected by Road and Rail. It is 200 km south of Chennai, 70 km south of Pondicherry and 150 km north of Tiruchirappalli.

ORGANIZING COMMITTEE

- Chief Patron** : **Dr. RM. Kathiresan**,
Vice Chancellor, Annamalai University.
- Patron** : **Dr. R. Singaravel**,
Registrar i/c, Annamalai University.
- Vice- Patron** : **Dr. C. Karthikeyan**,
Dean, FEAT, Annamalai University.
- Conveners** : **Dr. D. Venkatasekhar**,
Professor & Head,
Department of Information Technology
- : **Dr. S. Vaithyanathan**
Professor & Head,
Department of Mechanical Engineering
- : **Dr. C. G. Saravanan**
Professor of Mechanical Engineering
Director, Mining Engineering

Important Dates:

- Last date for Registration : **04.11.2023**
Selection Notification : **10.11.2023**
FDP Duration : **20.11.2023 to 25.11.2023**

Address For Communication

Dr. J. SASIKALA
Associate Professor
Department of Information Technology
Faculty of Engineering and Technology
Annamalai University, Annamalaiagar-608002
Chidambaram (Tk), TAMIL NADU
☎ 09944481791

Dr. B. PREM ANAND
Associate Professor
Department of Mechanical Engineering
Faculty of Engineering and Technology
Annamalai University, Annamalaiagar-608002
Chidambaram (Tk), TAMIL NADU
☎ 09843678233

Email: rdiaevt2023@gmail.com

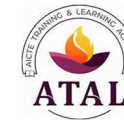
ANNAMALAI UNIVERSITY



(Accredited with 'A+' Grade by NAAC)



AICTE Training and Learning (ATAL) Academy



Sponsored Faculty Development Program (FDP) on

"Recent Developments on Intelligent Algorithms and Electric Vehicle Technologies"

20-25 Nov. 2023



Coordinators

Dr. J. SASIKALA
Associate Professor
Department of Information Technology

Dr. B. PREM ANAND
Associate Professor
Department of Mechanical Engineering

Organized by

**Department of Information Technology
Department of Mechanical Engineering**



**Faculty of Engineering and Technology
Annamalai University
Annamalai Nagar – 608 002
Chidambaram (Tk), Tamilnadu**

website: annamalaiuniversity.ac.in

About the Institute

Annamalai University, a NAAC 'A+' graded institute, is one of India's largest public residential universities with 10 Faculties and 49 departments of study. The university spreads around 1000 acres with several innovative teaching programmes carried over the years. The university lies within an appreciable rank band under each specializations. Among the 49 departments 10 departments have attained the status of UGC-SAP and DST-FIST sponsored department.

About the Faculty

The Faculty of Engineering and Technology (FEAT) was established in the year 1945, as the Second Engineering College of the then composite Madras State. The FEAT proudly celebrated its Golden Jubilee in the year 1996 and Diamond Jubilee in the year 2005. The FEAT has eleven departments of study namely Chemical Engineering, Civil Engineering, Civil & Structural Engineering, Computer Science & Engineering, Electrical Engineering, Electronics and Communication Engineering, Electronics & Instrumentation Engineering, Information Technology, Mechanical Engineering, Manufacturing Engineering and Pharmacy.

About the Departments

Information Technology: The Bachelor of Engineering in Information Technology Programme was started by the Department of Computer Science and Engineering in 1999. The Department of Information Technology has been bifurcated from the Department of Computer Science and Engineering in May 2017. The main objective of the department is to impart quality and career – oriented engineering education in order to produce bright technologists. It currently offers Doctor of Philosophy (PhD), Masters in Information Technology (M.E) and Bachelors in Information Technology (B.E) Degree Programmes. The department is equipped with excellent laboratory facilities with state-of-the-art equipment in addition to comprising a team of young, dynamic and dedicated faculty members with specialization in the domains of intelligent algorithms, speech, image and video processing, big data analytics, networking, data mining, cloud and mobile computing.

Mechanical Engineering: The Department of Mechanical Engineering was established in Jul 1945. It currently offers Doctor of Philosophy (PhD), Masters (M.E) and Bachelors Degrees (B.E) programmes in Mechanical Engineering. It recently started a new programme "Diploma in Mining Engineering" in collaboration with NLC India Pvt. Ltd. The department, recognized as DST-FIST sponsored department, is well equipped with the state-of-art equipment like boilers, steam engines, turbines and condensers. It has successfully completed many research projects funded by UGC, DST, Ministry of Environment & Forest, NLC India Ltd. and MNRF. The department comprises a team of experienced, dynamic and dedicated faculty members with specialization in the domains of Alternate fuels, IC engines, solar-energy, bio-gas, bio-mass, composite materials, engine emission control, refrigeration, and fluid dynamics.

About the ATAL

The Government of India in association with All India Council for Technical Education (AICTE) launched the AICTE Training and Learning (ATAL) academy with a vision to empower faculty to achieve goals of higher Education such as access, equity and quality. ATAL Academy have started unique Faculty Development Programs in various thrust areas of modern technology. More than 1100 such programs have already been conducted in various AICTE approved institutions benefitting the faculty, Research Scholars and PG Students around the nation.

About the FDP

With the increasing innovation, trend and environmental awareness, there is a major shift of focus from the traditional gasoline powered vehicles to Electric Vehicles (EV) in recent years. These EVs have several benefits over conventional petrol and diesel vehicles. They are (1) Cheaper to run, (2) Cheaper to maintain, (3) Better for Environment with renewable energy, better eco-friendly materials, less pollution etc., (4) Energy independence and (5) Quieter.

Moreover, our state and central governments are encouraging the manufacturers and users to switch-over to EVs by subsidies and other incentives.

The recent advancements in Artificial Intelligence have evolved Fuzzy Logic (FL), Artificial Neural Networks (ANNs) and Nature Inspired Optimization Algorithms (NIOAs). These approaches are inspired from the human's thought process, human's learning mechanism, swarm intelligence and nature's evolutionary process. These algorithms must be effectively utilized in designing and operating EVs.

The faculty members are to be facilitated to learn the state-of-the-art methodologies in the domain of Artificial Intelligence, Power Electronics, and EVs. The proposed faculty development programme thus aims to offer lectures and hands-on-training on FL, ANNs and NIOAs and their applications on the design of EVs to the faculty members.

FDP Contents

- ✓ Recent Technologies in EVs
- ✓ Nature Inspired Optimization
- ✓ Power Train Modules in EVs
- ✓ Li-Ion Batteries/Charging Systems
- ✓ DC-DC / DC-AC Converters
- ✓ Choice of Motors in EVs
- ✓ Super Capacitors and Batteries
- ✓ Advanced Fuel-Cell Technologies
- ✓ Optimal Design and Control of EVs
- ✓ EV's Regulations
- ✓ National educational Policy (NEP) 2020

Speakers

The resource persons for the program shall include faculty members and renowned researchers from higher education & research institutions, and Engineers from Industries. The forum paves way for budding researchers to pass through innovative techniques.