

ATAL Academy
Faculty Development Programme

On
IoT Enabled Sensor Technology for
Industry 5.0

(4th – 9th November 2024)

Topics to be covered in FDP

1. IoT: Introduction, Applications, and Research
2. Role of IoT in industry 5.0
3. Essential Concepts in Designing Non-invasive RF Sensors
4. Evolution of sensor technologies for aerospace applications
5. Wireless technologies in industrial automation: enabling IoT & Industry 5.0
6. IoT and ML enabled water quality sensing platform
7. IoT enabled sensors in the perspective of air navigation
8. Digital Design through Arduino
9. CMOS sensors and front end circuits
10. Research methodology

FDP Registration: No Registration Fee

Registration can be done only through AICTE-ATL portal.

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

“Sign Up” and create a login as “Participant” Login using your newly created login credentials, update your profile and click on “FDPs” Link. You can register by clicking on the “+” sign on FDP on ‘IoT Enabled Sensor Technology for Industry 5.0’. It is required to upload scanned copy of your ID Card and NOC from Head of the Institution at the time of online registration.

Organizing Committee

Chief Patron
Sri. N Subash
President, CBIT

Patron
Prof. C. V. Narasimhulu
Principal, CBIT

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Prof. P Ravinder Reddy
I/C Director & Head-R&E, CBIT

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HoD, Dept. of ECE, CBIT

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A One Week
AICTE Training and Learning
(ATAL) Academy



Faculty Development Programme

On
IoT Enabled Sensor
Technology for Industry 5.0
(4th – 9th November 2024)

Organized by
Department of
Electronics and Communication
Engineering

Chaitanya Bharathi Institute of
Technology

(Autonomous under UGC)
Affiliated to Osmania University
Kokapet (Village), Gandipet,
Hyderabad – 500075
Telangana State, India.
www.cbti.ac.in

About the Institute

Chaitanya Bharathi Institute of Technology (CBIT) is one of the premier Engineering Institutes in India, pioneer in Telangana State, which is at idyllic surroundings of Gandipet Lake, Hyderabad. The college offers 12 UG and 10 PG programs. It has been standing as a temple of knowledge for the past 45 years by producing Eminent and skillful Graduate Engineers, who are successful in their Careers, serving all over the Globe. CBIT Students are prepared and perfected to secure Placements in reputed MNCs. The Institute has been accredited by NAAC – UGC with 'A++' Grade and various programs are accredited by NBA – AICTE. The UGC has granted Autonomous Status from the Academic Year 2013-14 onwards. Stringent Academic Standards, Industry Compliant Teaching Methodology, Research Projects from reputed organizations / Industries and Consultancy Practice, enabled the Institute to establish its Identity in Technical Education and is ranked as one of the best amongst Private Engineering Colleges in both the Telugu Speaking States.

About the Department

The department of Electronics and Communication Engineering offers two UG programmes and two PG programmes. One of the UG program is accredited six times and PG program in Communication Engineering twice by NBA. PG program in ES&VLSI is accredited once. The Department is recognized as "Research Centre" by Osmania University for pursuing doctoral studies. Out of 45 faculty, 34 are doctorates. So far our faculty have guided 35 PhD scholars and 50 scholars are pursuing PhD under the supervision of our faculty. The department has successfully executed sponsored research and consultancy projects from prestigious organizations such as AICTE, DST, ISRO, DRDO etc. Currently the department is executing research and consultancy projects from funding agencies such as MeitY, DST, AICTE, MSME, ISRO.

About the FDP

The advancements in sensor technology are driving innovations in various industries, including smart devices, autonomous vehicles, industrial automation, healthcare, agriculture, and more. The FDP is designed to help the participants explore the frontiers of sensor technology in terms of the variety of sensors, multimodal sensors, wireless connectivity of sensors, advanced navigation, imaging and vision sensors, IMUs etc. Elaborate sessions for discussion on latest articles in this area will be conducted. Latest articles such as ML algorithms for sensor data interpretation and processing will be discussed at length. Exclusive laboratory sessions are planned. Industrial visit to near-by laboratories is planned.

Resource Persons

The resource persons are from renowned Institutes/organizations such as IITs, IIITs, NITs, Defense laboratories.

Eligibility

The faculty members, Research scholars & PG Students of the AICTE approved institutions, Industry professionals nominated by Heads of the Institutions

Registration Fee / TA / DA

- ❖ Program is fully sponsored by AICTE. There is No Registration Fee.
- ❖ TA of Rs. 1,600/- (lump sum) per External Participant payable only for those with $\geq 90\%$ attendance and traveling beyond 20 km one side.
- ❖ Accommodation will not be provided.
- ❖ Refreshments and working lunch will be provided to the participants.

Certification

A test shall be conducted at the end of the program. Candidates would be eligible to receive a certificate up on achieving at least **70% cumulated weightage** in the several aspects such as Attendance, One assessment, 2 Page Article Summary, Output of practical sessions, Report/outcome of Industrial visit, Reflection Journal.

ATAL Academy

AICTE Training And Learning (ATAL) Academy recognized the need to train the young generation in skill sector, faculty & technicians in their respective disciplines. Also, AICTE felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Thus, AICTE Training and Learning (ATAL) was established with a mission to empower faculty to achieve goals of Higher Education such as access, equity and quality. ATAL Academy has started unique faculty development programs in various thrust areas of modern technology. 475 such programs have been sanctioned to various institutions for the year 2024-2025, which will be benefitting several faculties, research scholars & PG students.



CBIT



R&E Hub, CBIT