IMPORTANT INFORMATION FOR PARTICIPANTS

• Faculty Development Programme is ICT based sponsored by AICTE Training and Learning (ATAL) Academy, will be conducted Offline.

• Restricted to Faculty, Research Scholars, Post Graduate Students from AICTE approved institutions and Personnel from Government & Industry pertaining to the relevant discipline.

• The mode of the FDP is OFF-LINE.

• **No Registration fee** and Participants will be admitted on first-come first-serve basis, limited to 60 participants only.

• Participants on selection will be informed through email and later correspondence will be done by creating WhatsApp Group.

• Continuous Comprehensive Assessment of Candidates shall be carried out and **CERTIFICATE** would be issued up on achieving at least 70% to receive over all in following aspects in the weightage mentioned below

✓Attendance – minimum 80% attendance- weightage 20%
✓One assessment, - combination of MCQs/short answer type/reasoning based, etc. – weightage 10%
✓ Two Page Article Summary/per Team – weightage 30%
✓Teaching Practice -weightage15 %
✓Report/outcome of Industrial visit- weightage10%
✓ Reflective journal - weightage15% will be issued a certificate by the ATAL Academy.

• Registration link : https:/www.aicte-india.org/atal/

How to register?

Step 1. One can Register them-selves with an email id(signup). If one has already registered, then login.
Step 2. Click on Workshops FDPs.
Step 3. Search by type "ATAL" and Month "December" from above dropdown box.
Step 4. Click the RED (+)plus butt on to register.
Step 5. A short notification "successfully course registered" appears.
Step 6. One can also check their registration by clicking on the Applied Workshops (after successful registration)

For Queries Contact

Dr. G. Kishor Babu, Professor, EEE
Mobile: +91 9849933405,
drgkishorbabu@khitguntur.ac.in

ORGANIZING COMMITTEE

CHIEF PATRONS
Sri. Kallam. Mohan Reddy, Chairman
Dr. M. Uma Sankara Reddy, Secretary

PATRONS
Sri Hara Mohan Bharadwaj Kallam, ED
Sri. Kallam Navya, ED

CONVENOR
Dr. B.S.B. Reddy, Principal

COORDINATOR
Dr. Gunti Kishor Babu, Professor, EEE

CO-COORDINATOR
Dr. K. Siva Krishna, Associate Professor, IT

ADVISORY COMMITTEE
Dr. R. Srinivasa Rao, Registrar, JNTUK
Dr. N. Renugadevi, Registrar(i/c), IIIT Trichy
Dr. L. Shanmukha Rao, Dean Academics & CoE
Dr. M. Satish Kumar, HOD, CE
Dr. K. Hari Krishna, HOD, EEE
Mr. G. Raju, HOD, ME
Dr. S. Satheesh, HOD, ECE
Dr. G. Joel Sunny Deol, HOD, CSE
Dr. K. Siva Rama Prasad, HOD, IT
Dr. B. Prakash, HOD, CSE_AI&ML
Dr. A. Hanumat Prasad, HOD, CSE_AI&DS
Dr. G. Sreenivasulu, Dean- Freshman Engineering
Dr. Sk. Irshad, HOD, MBA
Dr. Md. Umar Khan, HOD, MCA
Dr. D. Venkata Rao, Dean- Diploma
Dr. P. L. Madhava Rao, Dean- T&P

ORGANIZING COMMITTEE
All the Faculty Members of Department of EEE and IT

One Week

AICTE Training and Learning (ATAL)

Academy Sponsored

Faculty Development Program

on

Cybersecurity in Cyber-Physical Systems and Secure IoT for Critical Infrastructure Protection

during

December 7-12, 2026



Organised by

Department of Electrical & Electronics Engineering and Information Technology

KALLAM HARANADHAREDDY INSTITUTE OF TECHNOLOGY
(Autonomous)
(Approved by AICTE and permanently affiliated to JNTUK, Accredited by NBA and NAAC with 'A' grade)
NH-16, Chowdavaram- 522019
Guntur District, Andhra Pradesh, India.
Tel: +91 89777 06100 +91 89777 06101

ABOUT THE INSTITUTION

Kallam Haranadhareddy Institute of Technology (KHIT) was established in the year 2010 under the Chairmanship of Sri Kallam Haranadhareddy. It has come up in an area of 12 acres with a built up area admeasuring 3 lakh sq. ft. with lush green environment with an aim to impart quality education to students in Engineering & Technology. The college is located just 10 Km from Guntur City on NH-16. The institute is accredited by NAAC with 'A' grade and has a rich tradition of soaring high, with academic excellence & overall personal growth of students. This is achieved by providing excellent academic environment and infrastructure with the help of dedicated, highly qualified and experienced faculty members having M.Tech. and Ph..D qualifications. The Institution offers B. Tech in CIVIL, EEE, ME, ECE, CSE, IT, AI&ML, AI&DS, DS, MBA, MCA, M.Tech in CIVIL, ME, ECE & CSE and Diploma in EEE, ECE, CSE and AI&ML. The College Central Library provides rich collection of University prescribed books, reference books, digital library, E-Journals and Journals from IEEE, International and National sources.

ABOUT THE DEPARTMENTS

The Departments of Electrical and Electronics Engineering (EEE) and Information Technology (IT) are accredited by the NBA and the institution is accredited by NAAC with an 'A' Grade. The departments offer four-year B.Tech. degree programme supported by a team of highly qualified and experienced faculty members, including 7 Ph.D. holders and 10 faculty members pursuing Ph.D. The departments actively promote research and innovation in emerging areas such as Renewable Energy Sources, Internet of Things (IoT), and Cyber-Physical Systems (CPS) Security. The departments continuously strive to enhance the quality of education, encourage research and development, and maintain their position of excellence and leadership in Engineering and Technology.

ABOUT THE AICTE-ATAL

AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development e.g., SWAYAM, MOOCs, Start- up Initiatives, Prime Minister Kaushal Vikas Yojana (PMKVY), Sansad Adarsh Gram Yojana (SAGY), Swachh Bharat/Unnat Bharat Abhiyan, Yoga Activities etc.

There is an urgent need to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. It was felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies.

ABOUT THE FDP

Cyber-Physical Systems (CPS) integrate computational intelligence, communication networks, and physical processes, playing a critical role in modern infrastructure such as smart grids, industrial automation, healthcare systems, and transportation networks. With the rapid growth of IoT-enabled devices, these systems are increasingly exposed to cyber threats, data breaches, and security vulnerabilities.

This Faculty Development Program aims to provide participants with comprehensive knowledge of cybersecurity techniques, secure communication protocols, intrusion detection mechanisms, and protection strategies for critical infrastructures. The program will focus on real-world cyber threats and defense mechanisms in sectors such as power grids, industrial control systems, and IoT networks.

The FDP will combine theoretical concepts, case studies, and practical demonstrations to equip faculty members and researchers with the skills required to design secure cyber-physical and IoT systems.

OBJECTIVE:

- To provide a fundamental understanding of Cyber-Physical Systems and IoT architectures.
- To explore cybersecurity challenges and vulnerabilities in CPS and IoT networks.
- To study secure communication protocols for cyber-physical infrastructures.
- To understand intrusion detection and prevention techniques in CPS environments.
- To discuss security solutions for critical infrastructures such as smart grids and industrial control systems.
- To introduce emerging technologies like AI-based cybersecurity and blockchain for secure systems.
- To encourage research and innovation in cybersecurity for engineering applications.

MAJOR CONTENTS(Modules):

- Introduction to Cyber-Physical Systems
- Cybersecurity Fundamentals
- Secure Communication Protocols
- Intrusion Detection and Prevention Systems
- Security in Critical Infrastructure
- Emerging Technologies for CPS Security

RESOURCE PERSONS

Sibi Chakkaravarthy S
Professor, School of Computer Science and Engineering
VIT-AP University
Dr. Ch. Durga Prasad
Assistant Professor, Department of Electrical Engineering
SRKR Engineering College, Bhimavaram
Dr.Md.Sirajuddin
Associate Professor, School of Computer Science and Engineering (SCOPE),VIT-AP University
Mr. S. Ajinkya
CTO & Founder of Ditto security, Hyderabad
Mr. Podili Sunilgopi
Security Engineer, Vault infosec, Chennai
Mr. Santosh Chaluvadi
Founder & CEO Supraja Technologies, Vijayawada
Mr. S Pradeep Kumar, Software and Hardware Developer
Director– Smart Home & Industrial Solutions, Vijayawada

OUTCOME:

- Understand the architecture and functioning of Cyber-Physical Systems and IoT networks.
- Identify cybersecurity threats and vulnerabilities in CPS environments.
- Implement secure communication and authentication techniques.
- Apply intrusion detection and prevention mechanisms in real-world systems.
- Develop security strategies for protecting critical infrastructures such as power grids and industrial networks.
- Explore advanced research opportunities in CPS and IoT cybersecurity.
- Integrate cybersecurity concepts into engineering curriculum and research activities.