



**AICTE Training and Learning (ATAL)
Academy Sponsored Online One-Week
Faculty Development Program
on**

**Artificial Intelligence & IoT
in Industry 5.0: Shaping the
future of Smarter Industries**

February 03 to 08 2025



Organized by

**DEPARTMENT OF COMPUTER NETWORKING
PSG POLYTECHNIC COLLEGE**

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(Govt. Aided Institute & ISO 9001:2015 certified)

CHIEF PATRON
Shri. L. Gopalakrishnan
Managing Trustee

PATRON
Dr. B. Giriraj
Principal,
PSG Polytechnic College

COORDINATOR



Dr. S. Brindha
HoD
Dept. of Computer Networking
PSG Polytechnic College

CO-COORDINATOR



Ms. D. Priya
Lecturer
(Senior Grade)
Dept. of Computer Networking
PSG Polytechnic College



**AICTE Training And Learning(ATAL)
Academy Sponsored Online One-Week Faculty
Development Program
on**

**Artificial Intelligence&
IoT in Industry 5.0:
Shaping the future of
Smarter Industries**

**February 03 to 08 2025
Time: 6.00 pm to 9.00 pm**

Registration:

**No charge for Registration, Course
and Certification**

Participants can sign up and register for
the program in AICTE ATAL website
links:

<https://www.aicte-india.org/atal>

OR

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

Last date for receipt of applications: **28.01.2025**

Intimation to selected candidates: **31.01.2025**

Address for Communication

Ms. D. Priya

Lecturer (Senior Grade)
Dept of Computer Networking
PSG Polytechnic College
Coimbatore

Contact No: 9944478888

Email.ID: dpm.dcn@psgpolytech.ac.in

ATAL Academy:

AICTE Training and Learning (ATAL) Academy is established with the vision “To empower faculty to achieve goals of Higher Education such as access, equity and quality”. 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. Council understand that there is a need to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies

About Polytechnic College:

PSG Polytechnic College, established in the year 1939, a pioneer institute in the field of Technical Education and Research is a Government aided, ISO 9001 certified institution with Autonomous status from 1976. This aids it to have a flexible curriculum and updated syllabi. The Polytechnic College has signed MoU with leading International Glasgow University (UK). The industry attachment Programme, compulsory for all courses provides the students an exposure for current industrial practices. The college is located in the same campus as the PSG Industrial Institute

About the Department:

The Department of Computer Networking was started in the year 1998 and accredited by NBA in the year 2011. This Department offers 3 years Diploma Programme in Computer Networking. The Department is well equipped with Computer Networking Laboratory, Wireless Networks Laboratory, PSG-ETS IoT Laboratory and Artificial Intelligence Laboratory with experienced faculty members. The department organizes various continuing education Programmes for students and Industrialists. The department also provides consultancy for various industries.

About the FDP:

The fusion of Artificial Intelligence (AI) and the Internet of Things (IoT) represents a significant advancement in industrial technology, often referred to as "IoT 5.0." This cutting-edge integration harnesses the combined capabilities of AI and IoT to develop smarter, more efficient, and responsive systems, fundamentally transforming industries. By optimizing operations, enhancing decision-making through data-driven insights, and advancing automation, IoT 5.0 is set to revolutionize how industries manage resources, ensure safety, and build infrastructure.

In tandem, this Faculty Development Program (FDP) is designed to elevate the teaching, training, communication, and leadership skills of faculty members. The program focuses on helping participants understand and adapt to the evolving roles and responsibilities of educators in a technology-enhanced educational environment. By fostering an awareness of these changes, the FDP prepares educators to effectively navigate and lead in a rapidly advancing technological landscape.

Objectives of the FDP:

- To enhance understanding of AI and IoT
- Support Continuous Professional Development
- Address Ethical and Regulatory Issues
- Promote Practical Skills and Application
- Build Collaborative Networks

Topics Covered:

- Introduction to Industry 5.0
- Augmented Reality (AR) and Virtual Reality (VR) in Industry 5.0
- Role of AI and IoT in Smart Manufacturing
- Implementing AI-Based Security Solutions in IoT Devices
- Advanced Data Analytics and Machine Learning
- Hands-on: Predictive analysis on a dataset from an industrial application
- Introduction to GenAI and RAG
- Hands-on: Let's build a GenAI chatbot
- Security in AI and IoT
- Hands-on: Implementing AI-Based Security Solutions in IoT Devices
- AI-Driven Robotics and Automation
- Hands-on: Simulate a Robotic Process
- Future of AI & IoT 5.0 in Healthcare

Target Participants

Faculty members from AICTE approved institutions, Research Scholars, Industry personnel & PG students
Participants from the Government and Industry

Max No of Participants: 200 Nos.

Mode of Delivery: Live web Session through Online Platform

Resource Person



Session-1:

Ms. Ponsana David
CEO,
Thai Green power Solution
Company Limited, Thailand
Years of Exp: 12



Session-2:

Mr. Gift Selvin T
Director for Learning & Innovation,
Maxbyte Technologies, Coimbatore.
Years of Exp: 24



Session-3:

Dr Brindha S
HoD,
Department of Computer
Networking,
PSG Polytechnic College
Years of Exp: 24



Session-4

Dr Subramanian K
Technical Lead,
Enthu Technology Solution India
Pvt.Ltd,
Years of Exp: 14

Resource Person



Session-5 & 6:

Ms. Santhana Lakshmi M
Senior System Analyst,
Refinement Software Solutions,
Coimbatore.
Years of Exp: 11



Session-7 & 8:

Mr. Selvaraju M
Head of Data Science,
Kovai.co
Years of Exp: 15



Session-9 & 10:

Mr. Mathan Kumar R
Sr. Software Engineer,
Amazon Development
Years of Exp: 10



Session-11 & 12:

Mr. Arun Rajeev
Managing Director,
Irobochakra, Coimbatore.
Years of Exp: 11

Resource Person



Session-13:

Ms. Natchathra Partheepan Senior
Unified Communications
Engineer,
Stanford Medicine, California
Years of Exp: 12

Requirements to get E-Certificate

- Smart phone with good Internet facility
- Minimum 80% attendance is required for the whole course
- Minimum 60% marks should be obtained in the Final test to be conducted online at the end of FDP

ATAL Online 6 Days Faculty Development Programmes 2024-25 Schedule

No Charge for Registration, Course and Certification

FDP Thrust Area: Manufacturing & Industry 4.0

FDP Title : Artificial Intelligence & IoT in Industry 5.0: Shaping the future of Smarter Industries

Start Date : 3.02.2025

End Date: 8.02.2025

Day 1	Day 2	Day 3	Day 4	Day 5	Day6
6:00 PM to 6:30 PM Inaugural Session	6:00 PM to 7:30 PM Session3 Topic: IoT 5.0 Architecture Name of the Expert: Dr S Brindha Designation & Organization: HoD of Department of Computer Networking & PSG Polytechnic College Years of Exp:24	6:00 PM to 7:30 PM Session5 Topic: Advanced Data Analytics and Machine Learning Name of the Expert: Santhana Lakshmi M Designation & Organization: Senior Security Analyst & Refinement Software Solutions Years of Exp:15	6:00 PM to 7:30 PM Session7 Topic: Introduction to Gen AI and RAG Name of the Expert: Selvaraaju M Designation & Organization: Head of data Science & Kovai.co Years of Exp:15	6:00 PM to 7:30 PM Session9 Topic: Security in AI and IoT Name of the Expert: Mathankumar R Designation & Organization: Sr.Software Engineer & Amazon Development Center Years of Exp:10	2:00 PM to 3:30 PM Session11 Topic: AI- Driven Robotics and Automation Name of the Expert: Arun Rajeev Designation & Organization: Managing Director & Irobochakra Years of Exp:11
6:30 PM to 8:00 PM Session1 Topic: Introduction to Industry 5.0 Name of the Expert: Ponsana David Designation & Organization: CEO & Thai Green power Solution company Limited, Thailand Years of Exp:12	7:30 PM to 9:00 PM Session4 Topic: Role of AI and IoT in smart manufacturing Name of the Expert: Dr. K. Subramanian Designation & Organization: Technical Lead & Enthu Technology Solution India, Pvt.Ltd Years of Exp: 14	7:30 PM to 9:00 PM Session6 Topic: Hands-on: Predictive analysis on a dataset from an industrial application Name of the Expert: Santhana Lakshmi M Designation & Organization: Senior Security Analyst & Refinement Software Solutions Years of Exp:15	7:30 PM to 9:00 PM Session8 Topic: Hands-on: Let's build a GenAI chatbot Name of the Expert: Selvaraaju M Designation & Organization: Head of data Science & Kovai.co Years of Exp:15	7:30 PM to 9:00 PM Session10 Topic: Implementing AI-Based Security Solutions in IoT Devices Name of the Expert: Mathankumar R Designation & Organization: Sr.Software Engineer & Amazon Development Center Years of Exp:10	3:30 PM to 5:00 PM Session12 Topic: Hands-on: Simulate a robotic process Name of the Expert: Arun Rajeev Designation & Organization: Managing Director & Irobochakra Years of Exp:11
8:00 PM to 9:30 PM Session 2 Topic: Augmented Reality (AR) and Virtual Reality (VR) in Industry 5.0 Name of the Expert: Gift Selvin T Designation & Organization: Director for Learning & Innovation & Maxbyte Technologies Years of Exp:24					5:00 PM to 6:30 PM Session13 Topic: Future of AI & IoT 5.0 in Health care Name of the Expert: Natchathra Partheepan Designation & Organization: Senior Unified Communications Engineer & Stanford Medicine, California Years of Exp:15
					6:30 PM to 7:30 PM Online test & feedback
					7:30 PM to 8:00 PM Valedictory Session