



AICTE Training and Learning (ATAL) Academy
One week Online Faculty Development Program (FDP)

on

**“Blockchain and Cyber Security : A
Technological Transformation for Smart City
Infrastructure”**

2nd Dec 2024 - 7th Dec 2024

Coordinator

Dr. Leena Patil

Associate Professor & HoD CSE, PCE

Organized by

**Department of Computer Science &
Engineering**

**Priyadarshini College of Engineering
(An Autonomous Institution)**

**Priyadarshini Campus, Near CRPF, Hingna
Road, Nagpur – 440 019, Maharashtra (India)**

AICTE – Training and Learning (ATAL) Academy the main objectives of the ATAL Academy are-

- To plan and help in imparting quality technical education in the country.
- To support technical institutions in fostering research, innovation and entrepreneurship through training in various emerging areas.
- To stress upon empowering technical teachers and technicians using Information and Communication Technology
- To utilize the SWAYAM platform and other resource for the delivery of training.
- To provide a variety of opportunities for training and exchange of experiences Such as workshops, Orientations, learning communities, peer mentoring, and other faculty development programs.

About Institute:

Priyadarshini College of Engineering, Nagpur, An Autonomous Institute - Affiliated to R.T.M. Nagpur University, is the Premier College of the LTJSS Sanstha with 32 years. Priyadarshini College of Engineering has been awarded with an A+ grade status with CGPA 3.45 by NAAC for a term of 5 years upto 2027. The institute runs 15 Undergraduate, 8 Post Graduate and 3 PhD Programs. The institute has also been conferred with grade A by Government of Maharashtra for Academic excellence.

The institute has successfully received accreditation for eight of its departments namely Civil Engineering, Mechanical Engineering, Electronics and Telecommunication Engineering, Electrical Engineering (Electronics & Power), Computer science and Engineering, Chemical Engineering, Biotechnology and Computer Technology, Electrical Engineering by National Board of Accreditation (NBA), New Delhi. The institute has received the grant of 66,947 Euros (Rs 59 Lakh) on CYBER SECURITY for All(CS4ALL) co-funded by European Commission's ERASMUS + programme. Project is headed by Dr. Vivek Nanoti. Team comprises of Dr. Manju Soni, Project Manager, Dr. Leena Patil, Project coordinator & Mr. Himanshu Taiwade as Researcher.

About the Department:

The Department of Computer Science and Engineering was established in 2002 with a view of imparting state of the art education in cutting edge technologies of the world. The sanctioned intake is 180 students. The Department has seen tremendous growth in all areas. The Computer Science and Engineering department is housed in an ultramodern complex, and has well equipped laboratories.

Computer Science and Engineering Department got AICTE approval for the Post Graduation Course, M.Tech in Computer Science and Engineering during the year 2011 with the intake of 18 Students per year.

Our Patrons:

Dr. Satish Chaturvedi,
Chairman LTJSS.

Smt. Abha Chaturvedi,
Secretary LTJSS.

Mr. Dushyant Chaturvedi,
Executive Director, LTJSS

Mr. Abhijit Deshmukh,
Director, LTJSS

Dr. Vivek Nanoti,
Director Engineering, LTJSS

Dr. S.A. Dhale,
Principal, PCE

Dr. G. M. Asutkar,
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Eligibility:

The faculty members, Research scholars & PG scholars of the AICTE approved Institutions & Industry personnel. The number of participants is limited to 100. ATAL FDP is completely free for participants. Selection of participants is based on First Come First Serve.

Registration: Registration has to be done only through <https://atalacademy.aicte-india.org/>

For more information please visit website <https://atalacademy.aicte-india.org/FAQs>

Criteria for Certificate:

It is mandatory for all the participants to have minimum 80% attendance and score minimum 70% marks in the test. Feedback must be given by the participants through portal available on their login.

Purpose of FDP:

The purpose of this FDP is to foster interdisciplinary and future-ready learning in Blockchain and Cyber Security, contributing to the development of secure and efficient smart city infrastructure, in alignment with the National Education Policy (NEP) 2020 goals.

Objectives of FDP:

1. To promote critical thinking and problem-solving in developing secure and efficient technological solutions for urban infrastructure challenges.
2. To encourage practical learning and hands-on training for professionals to effectively apply emerging technologies to real-world scenarios.
3. To support lifelong learning, enabling participants to continually update their knowledge and skills in this rapidly evolving field.

FDP Outcomes:

Faculty Development Program focuses on skill development, experiential learning and future-readiness. The participants will achieve the following outcomes:

1. Interdisciplinary Knowledge skill Development: Participants will develop cross-functional skills in Blockchain, Cyber Security, and smart city infrastructure—supporting NEP's vision of broad-based, multidisciplinary education.
2. Hands-on Application : Practical knowledge of leading Cyber Security & Blockchain platforms.

Topics covered:

- Introduction to Cyber Security in Smart Cities
- Design and Implementation of Ecosystem for Smart Cities using Blockchain
- Cyber Security Use Cases in Smart Cities
- Security Protocols in Cyber Security and Blockchain
- Role of Blockchain in Enhancing Cyber Security
- IoT and Blockchain Integration : Applications, Opportunities and Challenges
- Integration of Cyber Security and Blockchain for Smart Cities
- Tools and Techniques on Blockchain
- Tools and Techniques on Cyber Security
- Environment Sustainability for development of Smart City Infrastructure
- Data Integrity and Security for IoT devices in Smart Cities
- Cyber Threat Intelligence in Smart Cities
- Applications and Regulations of Cyber security for Smart Cities