

## AICTE Training and Learning (ATAL) Academy

All India Council for Technical Education (AICTE) established AICTE Training and Learning (ATAL) Academy with the vision to empower faculty to achieve goals of Higher Education such as access, equity and quality. ATAL academy supports technical institutions in fostering research, innovation and entrepreneurship through trainings, workshops, orientations and faculty development programmes in various thrust areas of modern technology.

### About the FDP

Internet of Things is the one of thrust areas of today's modern technology. IoT applications for agriculture are rapidly developing for smart farming. It is noted that 75 million IoT systems will get deployed for agricultural purposes up to 2025. There is need to study and develop AI and IoT for Agriculture that feeding billions of people.

### Objectives of the FDP

The objectives of the FDP are:

1. To equip the faculty members, researchers, and practitioners with understanding of recent developments of AI and IoT in sustainable agriculture practices.
2. To promote and implement the Digital Agriculture Initiatives, Computer Vision Techniques and sensing and data solutions for smart farming.
3. To discuss low power IoT technologies to develop agriculture applications.
4. To enable participants with the use of AI for predictive analytics, data analysis and interpretation to make informed agricultural decisions
5. To explore various research opportunities and challenges in the field of AI and IoT for Agriculture.
6. To demonstrate hands-on sessions on sensors and actuators to develop smart solutions for agriculture area.

### FDP Contents

- Sustainable Agriculture: Practices, Challenges and Opportunities
- Digital Agriculture Initiatives
- AI for Data Analysis, Prediction and Forecasting
- Revolutionizing Agriculture with Cutting edge technologies
- Mobile Based Seed Quality Detection
- Assisted Automated Driving towards Smart Farming
- Advances in Automation Devices
- Lower Power Wireless Technologies and IoT Networks for future precision farming
- Deep Learning Integration into Crop Disease Prediction
- Harvesting Future Farming – AI and IoT Integration Design Principles
- Rural Community Development through techno-social collaboration

### Outcomes of the FDP

After completion of this FDP, participants are able to:

1. Understand various research opportunities and challenges for the use of technological advancements in the field of sustainable agriculture practices.
2. Understand the Digital Agriculture Initiatives, Computer Vision Techniques and sensing and data solutions for smart farming.
3. Analyze agricultural data to make informed, prediction and timely decisions.
4. Perform hands-on practice to develop solutions using AI and IoT for smart farming.
5. Initiate use of IoT and AI in academic activities and develop projects for smart farming
6. Encouraged to start research in sustainable agriculture through integration of AI and IoT.



**Online Six Days**

**Faculty Development Program on**

**Leveraging Cutting Edge Technologies  
for Sustainable Agriculture Practices**

**02 – 07, December 2024**

**Sponsored by**

**AICTE Training And Learning (ATAL) Academy**



**Organized By**

**Electronics and Computer Engineering Department**

**CSMSS Chh. Shahu College of Engineering,**

**Chhatrapati Sambhajnagar, Maharashtra State, India – 431011**

## About Institute

The CSMSS Chh. Shahu College of Engineering, Chhatrapati Sambhajinagar, one of the premier institutes in the field of engineering, was established in 2013 by Chhatrapati Shahu Maharaj Shikshan Sanstha (CSMSS). It is affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad, recognized by AICTE, New Delhi and approved by DTE, Maharashtra State, Mumbai.

The Institute offers 8 Undergraduate engineering courses and 6 Postgraduate courses. It has a pollution free, secure, safe and peaceful campus. It is located in the educational environment having various colleges such as Dental, Ayurved, Agriculture, Polytechnic and Engineering. The institute has excellent physical facilities in the form of residential and academic buildings spread over neat, clean and green campus. The institute is involved in a number of technical and co-curricular activities encouraging students to broaden their horizons of thought, innovate and implement their ideas. The institute is considered as one of the best institute in the region and holds the strength to be accountable for the content and quality of education.

## About Department

The Department of Electronics and Computer Engineering has taken development as a continuous process and assured this through its mission. The department has all laboratories equipped with state of art - modern instruments and advanced software. The department has expertise in Artificial Intelligence, Internet of Things, Cloud Computing, Signal Processing and Database Management Systems. The department has MoUs with various industries for internship, training, sponsored projects, placements and consultancy work. The department has received funding from various industries and students received prizes in state and national level competitions.

## Certification

The certificates endorsed by ATAL academy shall be issued to those participants who will attend the FDP with minimum 80% attendance, scored minimum 60% marks in the test, and submission of online feedback on ATAL portal after completion of the FDP.

## Participants Eligibility

- Target Group: - Assistant Professors /Associate Professors / Ph.D. scholars /PG students / Industry persons

## Registration Fees

There is no registration fee to attend this FDP but registration to FDP on ATAL academy portal is mandatory.

## Course Duration

- Dates: 02-07, December 2024

## Resource Persons

The invited experts from Government Research Labs, Industry and Non-profit organizations those who are working in the field of Cutting Edge Technologies for Sustainable Agriculture Initiatives.

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