



**Five Days Online  
Faculty Development Program  
on  
Introduction to Artificial  
Intelligence and Recent  
Developments**

**November 02-06, 2020**



**Sponsored by:**



AICTE, NEW DELHI  
Under  
AICTE Training & Learning (ATAL) Academy

**ORGANIZED BY**

Department of Computer Science and  
Engineering  
National Institute of Technology Meghalaya  
Bijini Complex, Shillong-793003

**Patron**



**Prof. B. B. Biswal**  
Director  
NIT Meghalaya

**Advisory Committee**



**Prof. G. Panda**  
Dean (AA)  
NIT Meghalaya



**Prof. H. C. Das**  
Dean (FW)  
NIT Meghalaya



**Dr. A. Banerjee**  
Dean (SW)  
NIT Meghalaya



**Dr. G. K. Dutta**  
Dean (R&C)  
NIT Meghalaya



**Dr. C. Marthong**  
Dean (P&D)  
NIT Meghalaya



**Dr. Y. Thakran**  
HoD (CSE)  
NIT Meghalaya

**Coordinator**



**Dr. Bunil K. Balabantaray**  
Assistant Professor, CSE  
NIT Meghalaya

**Co-coordinators**



**Dr. Vipin Pal**  
Assistant Professor, CSE



**Dr. Satyendra Singh Yadav**  
Assistant Professor, ECE



**Dr. Deepak Kumar**  
Assistant Professor, CSE



**Dr. Akhilendra Pratap Singh**  
Assistant Professor, CSE

**Organizing Committee**

<b>Dr. D. S. Roy</b>	Associate Professor, CSE
<b>Dr. S. Thokchom</b>	Assistant Professor, CSE
<b>Dr. A. Chakrabarty</b>	Assistant Professor, CSE
<b>Dr. S. Moulik</b>	Assistant Professor, CSE

**Key Speakers**

<b>Prof. S. K. Patra</b>	Director, IIIT Vadodara
<b>Dr. Pallab Maji</b>	NVIDIA, Bengaluru
<b>Dr. Deepak K. Panda</b>	Mercedes Benz, India
<b>Mr. Kalinga K. Patra</b>	Accenture, Bengaluru
<b>Dr. Sanjaya K. Panda</b>	NIT Warangal
<b>Dr. B. Balabantaray</b>	NIT Meghalaya
<b>Dr. Dushmanta Das</b>	NIT Nagaland
<b>Dr. Munesh Singh</b>	IIITDM, Kanhepuram
<b>Prof. H. R. Mishra</b>	Freelancer

**Registration Process**

- ✓ No registration fee will be charged from the participants.
- ✓ **To register, please visit:**  
<https://www.aicte-india.org/atal>
- ✓ **More Info:** <https://www.aicte-india.org/atal>
- ✓ Due to limited seats, applications will be considered on First Come First Serve basis.

## About the Institute

National Institute of Technology (NIT) Meghalaya is one among the thirty-one NITs in India established under the NIT Act 2007 (Amended 2012) of the Parliament of India as Institutes of National Importance with full funding support from the Ministry of Human Resource Development, Government of India. NIT Meghalaya was established in 2010 and started functioning from its temporary campus in Shillong in 2012. Its permanent campus is currently under development at Cherrapunjee. Presently the institute has nine (9) Departments and eight (8) Centres with a combined strength of 68 regular faculty members and 07 Trainee Teachers. All the departmental laboratories are well equipped with advance equipment/ instruments and experimental set-up.

The institute has been ranked among the top 100 engineering institutes in India by NIRF ranking for the last four years. The institute also bagged 28th rank among top 25 engineering institutes of the country under India Today Ranking.

NIT Meghalaya is committed to basic long-term research in frontier areas. The goals are in the pursuit and advancement of scientific and technological research. The institute aspires to be a leading centre with research focus on achieving better scientific and technological mechanisms, discovering, and exploring new technologies, and improving technological standards through its core programmes.

NIT Meghalaya has made concerted efforts to align its R&D focus with the national goal of achieving technological self-reliance. Since its inception, NIT Meghalaya has been striving to be a prime hub for research and consultancy in advanced and industry-relevant areas. It has, therefore, forged collaborations with National Laboratories and Research Institutes to enable NIT Meghalaya faculty to meaningfully situate their theoretical knowledge in actual research work. The institute has ongoing academic and research collaborations with many national and international universities, governments, and industries in order to keep pace with expanding frontiers of knowledge and global developments. Its pre-eminent position at the cutting-edge of research is reflected in its impressive list of research projects, consultancy projects and research publications. Our collaboration with the industries has yielded the invaluable opportunity for faculty to engage in research projects with industrial relevance.

## Detailed Schedule

Dates	10:00 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 1:00 PM	1:00 PM to 2:00 PM	02:00 PM to 4:00 PM	4:15 PM to 4:45 PM
02.11.2020 (Monday)	Registration and Inauguration	Break	<b>Session 1</b> Introduction to Artificial Intelligence	Lunch	<b>Session 2</b> Introduction to Python	Discussion
03.11.2020 (Tuesday)	<b>Session 3</b> AI: Characterization of Learning Problems and issues	Break	<b>Session 4</b> AI PROJECT CYCLE: Data Acquisition, Visualization and Modeling	Lunch	<b>Session 5</b> Hands on Program development for AI using Python-1	Discussion
28.05.2020 (Wednesday)	<b>Session 6</b> Introduction to Fuzzy and Genetic algorithm.	Break	<b>Session 7</b> Fundamentals of Artificial Neural Network and mathematics behind it	Lunch	<b>Session 8</b> Hands on Program development for AI using Python-2	Discussion
29.05.2020 (Thursday)	<b>Session 9</b> Introduction to Human-Machine Interactions	Break	<b>Session 10</b> Introduction to Decision Tree and Related Examples	Lunch	<b>Session 11</b> Hands-on Session on Real Case Studies	Discussion
30.05.2020 (Friday)	<b>Session 12</b> Introduction to Natural Language Processing	Break	<b>Session 13</b> Life management skills during pandemic	Lunch	<b>Session 14</b> Hands-on Session on Real Case Studies and Quiz	Discussion

## Broad Scope

The topics to be covered in the course will range from preliminaries, basic of Artificial intelligence and machine learning along with the mathematics behind it, application of it in different domains and to solve several real-life case studies. The course features theory lectures as well as hands-on laboratory session on the development of various AI/ML based algorithms to solve real- world problems.

## Mode of FDP

It is purely an online workshop

## Targeted Audience

The course is suitable for CBSE School Teachers

## Contact Details

**Dr. B. K. Balabantaray** [bunil@nitm.ac.in](mailto:bunil@nitm.ac.in)  
9485185916

**Dr. S. S. Yadav** [satyendra@nitm.ac.in](mailto:satyendra@nitm.ac.in)  
9692975494