

## Registration

- Faculty members and research scholars from AICTE approved Engineering Colleges can apply.
- Selection is on “first come first serve” basis. Selection will be intimated through mail and selected participants should confirm their participation.
- Course Registration is free for all participants.
- On completion of the course an objective test/quiz based assessment of all participants will be done.
- Those who have an attendance of minimum 80 % and score more than 60% in the test will be issued a digital certificate by the ATAL Academy.
- Registration:  
***<https://atalacademy.aicteindia.org/login>***

## About the FDP

The aim of this FDP is to study how Machine Learning algorithms play a vital role in 5G networks. The 5G mobile networks are expected to provide ubiquitous, high data rate and seamless connectivity to mobile

subscribers. In recent times, Machine Learning techniques have created revolution in all the spheres of the science and technology. Such an impact is possible as a result of advanced models, large datasets and high computational powers of the machines. As the number of mobile subscribers increase year-after-year, the 5G mobile networks needs to handle a big data of the subscribers. Therefore, the ML algorithms play a significant role in solving problems of 5G networks. In this FDP, we provide an overview of how ML will impact the 5G mobile networks.

## About ATAL Academy

The objective of the academy is to train Faculty, students and research scholars on recent technological developments. In addition, the training will be mandatory for new teachers from 2019 and it will be necessary for existing teachers and assistant teachers while applying for promotions.

## Coordinator

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## Indian Institute of Information Technology, Design and Manufacturing Kancheepuram

A 5-day Faculty Development Programme (FDP) on

### Machine Learning Algorithms for 5G Mobile Networks

October 4-8, 2021



Indian Institute of Information Technology Design and Manufacturing Kancheepuram (IIITDM Kancheepuram) is a Centre of Excellence for technical education and research established in 2007 by the Ministry of Education, Government of India to pursue design and manufacturing oriented engineering education and research. More details at [www.iiitdm.ac.in](http://www.iiitdm.ac.in)

## Schedule of FDP on Machine Learning Algorithms for 5G Mobile Networks, October 4-8, 2021

Date	Session-1 (9.00 A.M.-11.00 A.M.)		Session-2 (11.30 A.M.-1.30 P.M.)		Session-3 (2.30 P.M.-4.30 P.M.)
<b>04/10/2021</b> <b>Monday</b>	<b>Machine Learning Algorithms for Wireless Communications</b> (begins with inauguration of the FDP) by Dr. SaiDhiraj Amuru Principal Research Engineer, WiSig Networks	Tea Break	<b>Overview of 5G Mobile Networks</b> by Prof.M.D.Selvaraj IIITDM Kancheepuram	Lunch Break	<b>Error Analysis of Wireless Systems</b> Practice Session By Dr.M.D.Selvaraj / Mr. S.Kirubakaran IIITDM Kancheepuram
<b>05/10/2021</b> <b>Tuesday</b>	<b>Overview of ML Algorithms-1</b> by Mr.Arunjit Chowdhury CEO, Enterprise Building Training Solutions		<b>Overview of ML Algorithms-2</b> By Mr.Arunjit Chowdhury CEO, Enterprise Building Training Solutions		<b>Network Algorithms Practice Session</b> by Dr.M.D.Selvaraj / Mr.S.Ravishankar IIITDM Kancheepuram
<b>06/10/2021</b> <b>Wednesday</b>	<b>Applications of ML algorithms on Image Quality Assessment</b> By Prof.V.Masilamani IIITDM Kancheepuram		<b>Artificial Intelligence for Visual Surveillance</b> by Prof.Rahul Raman IIITDM Kancheepuram		<b>Concurrent illumination and Communication- VLC</b> by Prof.V.V.Mani National Institute of Technology (NIT) Warangal
<b>07/10/2021</b> <b>Thursday</b>	<b>Spatial Modulation</b> by Prof.P.Maheswaran National Institute of Technology (NIT) Trichy		<b>Cooperative Communication</b> by Prof.A.Ananth Indian Institute of Information Technology (IIIT), Kottayam		<b>Yoga for Working People</b> By Dr.Alaguraj IIITDM Kancheepuram
<b>08/10/2021</b> <b>Friday</b>	<b>Aerial Platform based FSO 5G Systems</b> by Prof.R.Swaminathan Indian Institute of Technology (IIT) Indore		<b>In-Band Full-Duplex for Beyond 5G Wireless Communications</b> By Prof.Sudip Biswas Indian Institute of Information Technology, Guwahati		<b>Feedback and valedictory</b>