



Report on
Joint FDP on Advanced Communication and Antennas
Organized by
E&ICT Academies of IIT Guwahati, NIT Patna and MNIT Jaipur

The E&ICT Academy, IIT Guwahati approved by the Ministry of Electronics and Information Technology (MeitY), Government of India is Organized Joint FDP on "Advanced Communication and Antennas" from 15th to 26th February 2020. From this FDP learner acquires the knowledge about Basic Communication System, Coding schemes, Antenna system, Wireless Channel Modeling and Matlab

In this FDP the following topics were explained in detail.

Day 1: Elements of Digital communication system, mathematical models for communication channels by Prof. Ratnajit Bhattacharjee Complex baseband representation of bandpass signals, signal space representation and Gram-Schmidt procedure by

Dr. Ribhu Digital modulation schemes and representation of digitally modulated signals by

Dr. Kalpana Dhaka

Day 2: Optimum receiver for AWGN: Correlation and Matched filter demodulation; Probability of error by Dr. Sudarshan Mukherjee Carrier and symbol synchronization by Prof. Ratnajit Bhattacharjee Fading channel representation and digital communication through fading channel by Dr. Salil Kashyap

Day 3: Digital Communication through band limited channels: Waveform design and Equalization by Prof. Ratnajit Bhattacharjee Hands on Session 1: Digital communication through AWGN and fading channel: BER, Receive Diversity on Matlab

Day 4: Channel coding: block and convolutional codes by Prof. Ratnajit Bhattacharjee Spread spectrum and DSSS by Dr. Kalpana Dhaka

Day 5: Diversity techniques for wireless communication by Dr. Sudarshan Mukherjee, MIMO and Massive MIMO for wireless communication Dr. Salil Kashyap

Day 6: Understanding of isolation improvement in MIMO Antenna System RG Hands on Session 2: Spread spectrum and coding (Platform: Matlab) and Quiz-1

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Day 7: Antennas for 5G millimetre wave communication systems GV 1.5 19. Emerging photonic and nano-antennas by Dr. Rakesh Ranjan, Basics of Antenna elements and arrays by Prof. P. K. Jain Waveform design and Equalization by Prof. Ratnajit Bhattacharjee

Day 8: Antennas for 5G mobile and portable devices by Dr. Mahima Arrawatia and Emerging millimetre wave communication systems by Prof. Ratnajit Bhattacharjee

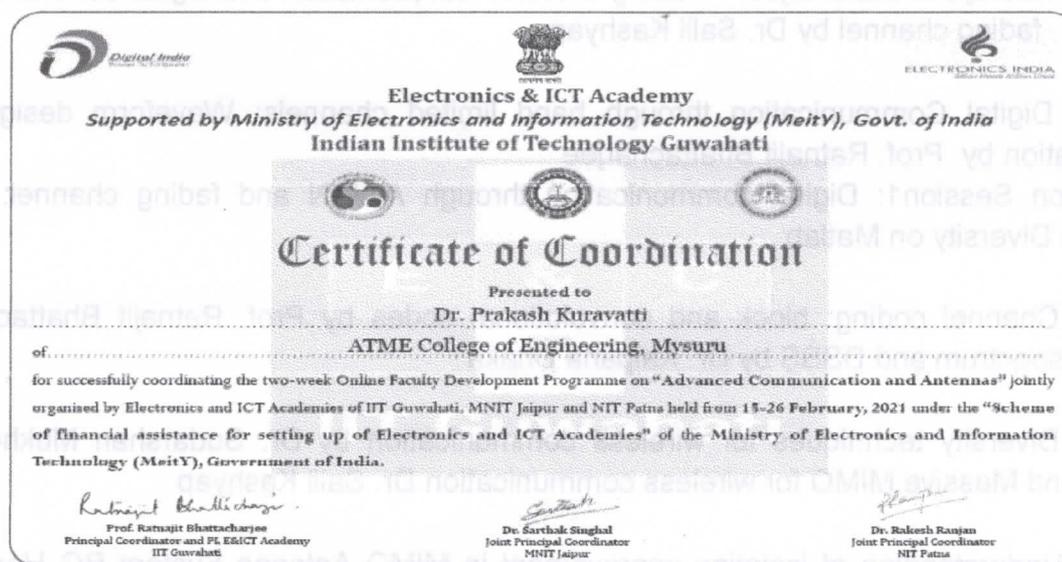
Day 9: Design and Realization Challenges in Active Phased Array Antenna by Dr. Veer Singh Gangwar and Hands on Session 3 : Antenna elements and Arrays (Platform: Matlab)

Day 10: Base station antennas: Antennas for cellular communication, WiFi and WPAN systems by Prof. Ratnajit Bhattacharjee and QUIZ-2 and Valedictory and Feedback

List of Faculty Members register for the FDP under the association of ATMECE

SI No	Name	Department	College
1	Dr. Prakash Kuravatti	ECE	ATMECE Mysore
2	Mrs. Lalitha N	ECE	VVIT, Mysore
3	Mr. Guruprasad K N	ECE	ATMECE Mysore
4	Mrs. Keerthi Kumabar	ECE	ATMECE Mysore
4	Mr. Manjunath K	ECE	ATMECE Mysore

Participants Certificates:



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Indian Institute of Technology Guwahati

Ref. no: EICT/2020-21/FPDP/ACA/030

Participation Certificate



Mr./Ms./Dr.
of

Dr. Prakash Kuravatti
ATME College of Engineering, Mysuru

has participated in a two-week Online Faculty Development Programme on "Advanced Communication and Antennas" jointly organised by Electronics and ICT Academies held from 15 - 26 Feb, 2021 under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" of the Ministry of Electronics and Information Technology (MeitY), Government of India. He/she has also taken part in the hands on sessions during the program. We wish him/her a very good luck for his/her future endeavor. This Faculty Development Programme is at par with other Quality Improvement Programmes*.

Ratnajit Bhattacharya

Prof. Ratnajit Bhattacharya
Principal Coordinator and PI, EICT Academy
Indian Institute of Technology Guwahati
Assam

Dr. Rakesh Ranjan

Dr. Rakesh Ranjan
Joint Principal Coordinator
National Institute of Technology Patna
Bihar

Dr. Sarthak Singhal

Dr. Sarthak Singhal
Joint Principal Coordinator
Malaviya National Institute of Technology Jaipur
Rajasthan

* As per minutes of the 2nd PRSG.



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Indian Institute of Technology Guwahati

Ref. no: EICT/2020-21/FPDP/ACA/031

Participation Certificate



Mr./Ms./Dr.
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Mr. Guruprasad K N
ATME College of Engineering, Mysuru

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Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India
Indian Institute of Technology Guwahati

Ref. no: EICT/2020-21/FPDP/ACA/018

Participation Certificate



Mr./Ms./Dr.
of

Prof. Lalitha N
Vidyavikas Institute of Engineering and Technology, Karnataka

has participated in a two-week Online Faculty Development Programme on "Advanced Communication and Antennas" jointly organised by Electronics and ICT Academies held from 15 - 26 Feb, 2021 under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" of the Ministry of Electronics and Information Technology (MeitY), Government of India. He/she has also taken part in the hands on sessions during the program. We wish him/her a very good luck for his/her future endeavor. This Faculty Development Programme is at par with other Quality Improvement Programmes*.

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[Handwritten Signature]

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IIT Bombay Remote Center Confirmation Inbox x prakash.k@atme.in x



NME-ICT IIT Bombay <nmeict.iitb@gmail.com>

Thu, May 23, 2019, 10:04 AM



to Prakash, Basavaraju, sOutreach

This is an auto generated email, do not reply to this email.

Send your reply to the email 'estudio@it.iitb.ac.in' or call on 022 25764924 for any clarification.

Respected Sir/Madam,

We are glad to inform you that all the formalities have been successfully completed for becoming a Remote Center. Now, we are confirming your Institute/College as a Remote Center of IIT Bombay.

You will be intimated time to time about our offering on courses/workshops and expecting your enthusiastic participation and support.

Following information will be required for further communication, details updation and A-VIEW Classroom.

Using the below URL, you may check your remote center details and update some of the information if required by using your new login details.

Remote Center URL : <http://www.nmeict.iitb.ac.in/nmeict/wsmng/allrc.php>

Important Note : Your previous login which had been allocated to you was only for testing purpose and it is expired now. you should use your new login details in future.

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Thanks & Regards
Studio Team
Train 10,000 Teachers Programme
NME-ICT IIT Bombay

Phone: +91 22 25764924
Email: estudio@it.iitb.ac.in

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About Remote Center

ATME College of Engineering, has been recognized as Remote center of IIT Bombay

Adding yet another feather in its step, The ATME College of Engineering, Mysuru, has been recognized as Remote Center of Indian Institute of Technology, Bombay (IIT-B) on 23rd May 2019 (**Remote Center Code: 1563**).

As IIT-B's Remote Center, ATME will host the faculty members to attend live online courses/workshops delivered by IIT Bombay's members. The participating faculty members would be attending lectures, tutorials, lab sessions and live interactions with the IIT-B faculty through distance mode using internet and advanced A-VIEW technology.

The Teaching Learning Centre (ICT) is organising workshops at IIT Bombay, a scheme of 'Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching' (PMMNMTT), an initiative of the Ministry of Human Resource Development, Government of India.

Methodology

Under the programme, IIT Bombay conducts ISTE workshops during the vacation period in summer and winter. Teachers attend the workshops at a designated Remote Center (RC), close to their own college. Lectures are delivered by faculty from IIT Bombay, while tutorials and lab sessions are conducted locally in the same RC. The lecture transmission and live interaction take place in a virtual classroom environment, using the AVIEW technology on the internet.

Faculty coordinators are appointed at each remote centre, to handle the technology infrastructure and other operational logistics. Additionally, for each workshop, there is a workshop faculty coordinator for that subject who will help in the conduct of labs and tutorials at that center. We invite expert faculty from various remote centers to a five-day Coordinators training workshop which is held in IIT Bombay, at least two months before the main workshop. These Coordinators then act as Workshop Coordinators during the main workshop, liaising between the participants at their Remote Centers and IIT Bombay from where the workshop is transmitted live. During the main workshop, the Workshop Coordinator at every center supervises the conduct of tutorials and Labs. All the lectures and tutorial sessions are recorded. The final edited audio-visual contents, along with other course material are released under Open Source. These contents can be freely used later by all teachers and students.



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Programs Organized by the Remote Centre of ATME College of Engineering

S.No.	Name of the Event	Conducted by	Dates	Participants
1	Python Workshop – Coordinators	IIT-Bombay	25 May -25 May2019	1
2	Python Workshop – Teachers	IIT-Bombay	22 June- 22 June 2019	14
3	eSim Workshop – Coordinators	IIT-Bombay	27 July -27 July 2019	1
4	Linux Workshop- Teachers	IIT-Bombay	23 Aug -23Aug 2019	17
5	eSim Workshop – Teachers	IIT-Bombay	21 Sep – 21 Sep 2019	14
6	R- Workshop – Coordinators	IIT-Bombay	12 Oct – 12 Oct 2019	1
7	Rerun of R- Workshop – Teachers	IIT-Bombay	17 Dec -17 Dec 2019	4
8	LaTeX for Students , Engineers and Scientists	IIT-Bombay	24 Sep – 11 Nov 2019	13
9	Rendezvous with Lori Beer, CIO of a leading financial Institution in USA	IIT-Bombay	5 Nov 2019	150

Achievements

- There are 9 faculty members secured **A⁺ grade in LaTeX course**

Contact Information



Dr. Prakash Kuravatti

Associate Professor, Dept. of ECE,
Remote Centre Coordinator, IIT Bombay.

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Mellahalli Mysuru-570 028

Expression of Interest (EOI) form

1. Name of the Institute ATME college of Engineering
2. Address 13th KM, Mysuru-Kanakapura-Bangalore Rd.
Mysuru-570028
3. Affiliated to AICTE and Accredited by N.B.A
4. Institute AICTE / UGC ID L-7334961
5. Branch of Engineering/Science Course Student Strength
 - a) ECE/EE ECE- 302, EE- 141
 - b) CSE/IT CSE- 333
 - c) ME ME- 313
 - d) CIVIL ENGINEERING CE- 213
 - e) Applied Sciences (1st Year) I- year - Admission ongoing.
 - f) Other (if any)
6. Name of the Director / Principal Dr. L Basavaraj
7. Email Principal@atme.in Tel/Mobile: 9448285641
8. Details of the Proposed Nodal Coordinator

Name: Trej Kumar, J Dept. Mechanical Engg.
Email Id: trejkumar.j@atme.in Mobile: 974421194
9. Certified that
 - a) The institute is a Central/State University or institute approved by AICTE / State University.
 - b) The institute has necessary and adequate infrastructure and strict adherence to the standard laid down lab procedures and cyber-security laws will be followed.
 - c) Virtual Labs connectivity can be withdrawn / stopped without giving any prior notice or reasons.
 - d) This EOI for Virtual Labs usage is valid up to six months from the date of approval, if not got renewed thereafter by us.
 - e) The institute is not a Nodal Center under any other Participating Institutes of Virtual Labs.
 - f) The institute won't charge anything to students for using Virtual Labs.

Date: 07/10/2020


7/10/2020

Signature

(Head of the Institution)

PRINCIPAL
(With Official Stamp)

ATME College of Engineering
13th KM, Mysuru-Kanakapura-Bangalore Road
Mallahalli Mysuru-570028

Expression of Interest (EOI) form

1. Name of the Institute ATME College of Engineering
2. Address 13th Kilometer, Mysore - Kanakapura -
Bengaluru Road, Mysore - 28
3. Affiliated to AICTE & Accredited to NBA
4. Institute AICTE / UGC ID 1-7334961
5. Branch of Engineering/Science Course Student Strength
 - a) ECE/EE ECE-305 EE-156
 - b) CSE/IT CSE-307
 - c) ME ME-326
 - d) CIVIL ENGINEERING CE-203
 - e) Applied Sciences (1st Year) 1st year-317
 - f) Other (if any)
6. Name of the Director / Principal Dr. L. Bejavaraaj
7. Email principal@atme.in Tel/Mobile: 9448285641
8. Details of the Proposed Nodal Coordinator

Name: Thejkumar J Dept. Mechanical Engg

Email Id: thejkumar.j@atme.in Mobile: 9741421194
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Date:


 Signature
 (Head of the Institution)
 ATME College of Engineering
 (with official stamp)
 13th KM, Mysuru - Kanakapura - Bangalore Road
 Mellahalli Mysuru - 570028