Name of the Programme

3. <u>Signal Processing Techniques for Advance Wireless Communications Phase -III</u>

SUBMISSION OF REPORT
on

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

SPONSORED

SHORT TERM TRAINING PROGRAM(STTP)

"Signal Processing Techniques for Advanced Wireless Communications"

Online mode
(Phase-I to Phase-IV)

Organized by
Department of Electronics and Communication Engineering.
(Accredited by NBA)

JAYAMUKHI
INSTITUTE OF TECHNOLOGICAL SCIENCES

(UGC-Autonomous)
Affiliated to JNTUH,Approved by AICTE,Recognized under 2(f) and 12(B) Narsampet, Warangal rural - 506 332

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All India Council for Technical Education(AICTE) Sponsored
Short Term Training Programme(STTP)
Phase-II
Online Mode
On

" Signal Processing Techniques for Advanced Wireless Communication "

21th to 26th September 2020

Organized by
Department of Electronics and Communication Engineering
(Accredited by NBA)

Register Now:

or

https://bit.ly/2DCsldz

Our Speakers

Dr.Ch.Devender Reddy
Secretary & Correspondant
Jayamukhi Education Society
Narsampet, Warangal Rural

Sri.T.V.R.N.Reddy
Joint Secretary
Jayamukhi Educational Society
Narsampet, Warangal Rural

Prof.K.Kishan Rao
Rtd. Principal(REC Warangal)
Founder Principal and Advisor,
JITS

Prof.Arif Wasim
Professor of ECE,
NIT
Silchair

Prof.D.Srinivasa Rao
Professor of ECE,
JNTUCE
Hyderabad

Dr.H.C.Hadimani
Professor & Head,ECE
GMIT Davangere,
Karnataki

Dr.T.V.Ramana
Associate Professor,
Dept.of ECE,
Gitam University

Dr.S.Anuradha
Associate Professor
Dept.of ECE
NIT Warangal.

Dr.P.Krishna
Professor of ECE
JITS
Narsampet, Warangal Rural

Dr.Chhagan Charan
Dept.of ECE
NIT
Kurkshetra

Dr.M.Lokanadha Rao
Principal
JITS
Narsampet, Warangal Rural

Prof.P.Rangaiah
Director
JITS
Narsampet, Warangal Rural

Hameed Pasha Mohammad
Associate Professor and Head
Department of ECE
JITS

Dr.Ghanshyam Singh
Professor,
Department of ECE
JITS

Dr.S.Sandhya Rani
Associate Professor,
Department of ECE
JITS

Dr.M.Krishna Samy
Associate Professor,
Department.of ECE,
JITS

Dr.K.Sunil Kumar
Associate Professor,
Dept of ECE,
VITS

Nayanica Srivastava
Deptof Electronics Engineering,
Harcourt Butler Technical University,
Kanpur

Mr.M.Shashidhar
Associate Professor,
Dept.of ECE,
VCEW

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AICTE Sponsored

Short Term Training Program(STTP)
(Online Mode)
Phase - III

F.No : 34-65/193/RIFD/STTP/
Policy-1/2018-19 Dated 10.01.2020

Signal Processing Techniques for Advanced Wireless Communication Technologies

(26th to 31th October 2020)

Organized by
Department of
Electronics and Communication Engineering
(Accredited by NBA)

Chief Patron :
Dr.Ch.Devender Reddy,
Secretary and Correspondant

Patron :
Sri.T.V.R.N.Reddy, Joint Secretary
Dr.M.Lokanadha Rao, Principal
Prof.P.Rangaiah, Director.

Coordinator :
Dr.Krishna Patteti, Professor of ECE

Organizing Committee:
Dr.Sriram Sandhya Rani
Dr.Ghanshyam Singh
Dr.M.Krishna Samy
Zulekha Tabassum M.Tech
Mr. Sk Masthan M.Tech, (Ph.D)
Mr. V. Madhu kumar M.Tech, (Ph.D)
Mr. S. Sunil M.Tech, (Ph.D)
Mr. M. Manoj kumar M.Tech, (Ph.D)
Mr. D. Prasad M.Tech, (Ph.D)
Mr. N. Sukumar M.Tech
Mr. M. Sridhar M.Tech
Mr. S. Kalyan M.Tech
Mr. A. Govind M.Tech

Convener:
Hameed Pasha Mohammad
Associate Professor and Head
Department of
Electronics and Communication Engineering
ecehod@jits.in
hameedjits@gmail.com
+91-94903 77766

Registration Fee :
Free online STTP Sponsored by AICTE

Register Now:

Or

Important Dates:
Last date for Registration : 21th Oct 2020
Notification of Selection : 23rd Oct 2020

Venue: After registration, selected participants will get online session details through registered emails.

Certificates will only be issued to those participants who have attended regularly and qualify in the exam with minimum 60% marks.

Benefits to Participants:

This STTP on Signal Processing Techniques for Advanced Communication Technologies is a new technological development in the era of Communication. Your association will benefit with an outstanding exposure to the technology incorporated in advances in signal processing and communication.

Level of Participants
Faculty working in AICTE approved institutes having a zeal to rigorous research In the field of signal processing for wireless communication, industry and academia persons are eligible.

About Jayamukhi

Sponsored by the Jayamukhi Educational Society, the Jayamukhi Institute of Technological Sciences came into being in 2001 to provide quality and contemporary education with social relevance in the engineering faculty with an ultimate vision to maintain global standards in higher learning and research. The Institute has the approval of AICTE and recognized by the Government of Telangana. It is permanently affiliated to Jawaharlal Nehru Technological University (JNTU), Hyderabad,UGC Autonomous & accredited by NBA.

The Institute has come upon 40 acres of green pastures in Narsampet, about 30km away from the historic city of Warangal and presents a picturesque and panoramic view. JITS offers a four-year B.Tech. Programme in the disciplines of CSE, ECE, EEE, CIVIL and ME. M.Tech Programme in Computer Science and Engineering, Embedded Systems, Power Systems and Control Automation, and CAD/CAM.

Department of ECE

Department of Electronics and Communication Engineering has set vision "To be a premier department for education in Electronics and Communication Engineering in state of Telangana, moulding students into professional engineers".The department imparts state of the art education and encourages cutting edge research. It offers UG program, PG programs in VLSI and ES.Well equipped Laboratories have been facilitated for the Students, research Scholars and the 50 Lakhs of funds generated from AICTE under various schemes like MODROBS, FDPs, STTPs. Received TEQIP-III fund from JNTU Hyderabad. Established two laboratories namely Internet of Things(IoT) and Robotics sponsored by Texas Instruments USA.
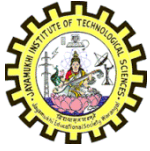
Resource Persons:

1. Prof.K.Kishan Rao, Professor of ECE, Advisor JITS
2. Sri.B.Jaipal Reddy, Chief Managing Director, Apollo Computing Laboratories
3. Dr.Indumati T S, Professor of ECE, VTU Belagavi
4. Dr.A.Rajani, Associate Professor,Dept.of ECE,JNTUCEH.
5. Dr.M.Gangadharappa, Professor of ECE, AIACTR New Delhi
6. Dr.H.C.Hadimani, Professor and Head, GMIT Devangare, Karnataka.
7. Dr.S.Anuradha, Associate Professor, Dept.of ECE, NIT Warangal.
8. Dr.P.Krishna, Professor and Coordinator STTP.
9. Dr.Ghanshyam Singh, Associate Professor, Dept.of ECE, JITS
10. Dr.S.Sandhya Rani, Associate Professor, Dept.of ECE, JITS
11. Dr.M.Krishna Samy, Associate Professor, Dept.of ECE,JITS
12. Dr.K.Sunil Kumar, Associate Professor, Dept.of ECE, VITS, Hasanparthy
13. Mr.M.Shashidhar, Associate Professor,Dept.of ECE, VCE Warangal
14. Mr.A.Madhu Sudhan, Senior Application Engineer.

ABOUT STTP

This STTP aims at providing strong theoretical background along with practical experience in the field of signal processing techniques in wireless communications. Signal processing Techniques, algorithms and architectures have an increasingly important role to play in meeting the central challenges faced in the design of advanced wireless communication systems. In Wireless Communication:Signal Processing Perspectives, leaders in the field describe state-of-the-art research in applying signal processing methodologies in the context of tomorrow's most important wireless applications, ranging from next-generation cellular telephony and personal communication services, to nomadic computing and wireless multimedia.

Major Course Contents:

1. Introduction to wireless communications: Wireless Channels and Fundamental limits in wireless Transmission.
2. Diversity combining Techniques, Space time coding.
3. MIMO Transmission and Detection Techniques.
4. Channel Estimations and Equalization Techniques
5. Digital Modulation Techniques Wireless Communications.
6. Multicarrier Modulation Systems.
7. Signal Processing techniques for 4G and 5G Communications.

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Phase-III
(Online Mode)
Offer letter F.No : 34-65/193/RIFD/STTP/Policy-1/2018-19 Dated:10.01.2020.

Signal Processing Techniques for Advanced Wireless

Communications
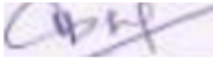
26th to 3st October 2020

Organized by

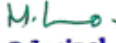**Department of Electronics and Communication Engineering**
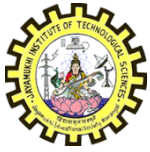
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Schedule- online STTP Phase-III
Online mode platform: GOOGLE MEET

S.No	Date & Day	Session-I 10.00 A.M to 12:00 P.M		Session-II 2:00 P.M to 4:00 P.M
1.	26-10-2020 (Monday)	**Inaugration Ceremony & Introduction to Wireless Communications Prof.K.Kishan Rao, Rtd.Professor of ECE, NIT Warangal & Advisor JITS**	**L U N C H**	**Research Challenges in Wireless Communication and Networking Prof.P. Krishna, Professor of ECE & Coordiator STTP**
2.	27-10-2020 (Tuesday)	**MIMO Transmission and Detection Techniques** Dr.H.C.Hadimani, **Professor & Head, Dept.of ECE** GMIT-Davangere(Karnataka)		**Simulation of Space Time Trellis Codes Design with simple Decoding for MIMO communication Systems using MATLAB Dr.M.Krishna Samy Associate Professor, JITS ECE**
3.	28-10-2020 (Wednesday)	**Signal Processing Techniques for 4G and 5G Communication** Dr.H.C.Hadimani **Professor & Head, Dept.of ECE** GMIT-Davangere(Karnataka)	**B R E A K**	**Channel Estimation and Detection Mr.K.Sunil Kumar** Associate Professor VITS Hasanparthy
4.	29-10-2020 (Thursday)	**Dr.Indumathi T S** Professor of ECE, VTU Belagavi **Wireless Optical Communication- emerging technology**		**Fading Channel Modeling Dr.S.Anuradha Associate Professor, Dept.of ECE,NIT Warangal**
5.	30-10-2020 (Friday)	**Beamforming in MIMO communication Dr.A.Rajani Professor of ECE, JNTUH**		**Dr.Gangadharappa** Professor of ECE, AIACTR NewDelhi President IIC cell under MHRD
6.	31-10-2020 (Saturday)	**Dr.T.V.Ramana** Professor of ECE GITAM University		**Demonstration Signal Processing and Communication Tools by Sri. Madhusudhan, Sr.Apllication Engineer followed by** Online Test, Feedback on STTP and Valedictory

Coordinator
Dr.Krishna Patteti
Professor of ECE
CO-ORDINATOR

Convener
Hameed Pasha Mohammad
HoD-ECE

Principal
Jayamukhi Institute of Technological Sciences
Narsampet,Warangal.-506332.
Principal
Dr.M.Lokanadha Rao

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Short Term Training Programme(STTP)
Online Mode
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Accredited by NBA
26th to 31st October 2020
AGENDA
26.10.2020 at 10:00AM

S.No	Time	Item	Speaker
1.	9:45AM	online link to Participants for joining the STTP	Dr.S.Sandhya Rani
2.	10:00AM	Welcome address by, Joint Secretary- Jayamukhi Education Society	Sri.T.V.R.N.Reddy
3.	10:05AM	Report on AICTE sponsored STTP on **Signal Processing Techniques for Advanced Wireless Communication"**	Dr.Krishna Patteti Coordinator, STTP
4.	10:10AM	Address by Head of the Department	Hameed Pasha Mohd
5.	10:15AM	Address by Director	Prof.P.Rangaiah
6.	10:20AM	Introduce the Guest of Honor and Key note Speaker	Zulekha Tabassum
7.	10:25 AM	Keynote Address about STTP	Prof.K.Kishan Rao
8.	10:35A.M	Introduce the Chief Guest	Zulekha Tabassum
9.	10:40AM	Inaugural Address about STTP by Chief Guest :	Sri.B.Jaipal Reddy
10.	10:50AM	Presidential remarks by Principal	Dr.M.Lokanadha Rao Principal, JITS
11.	11:00AM	Vote of Thanks	Dr.S.Sandhya Rani

Online Mode   :   Google Meet

Link for the meeting :   https://bit.ly/31DdGYw

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26th to 31st October 2020

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Inauguration

Inaugural Address by
Sri.B.Jaipal Reddy,
Chief Managing Director,
Apollo Computing Laboratories

Keynote Address by
Prof.K.Kishan Rao,
Professor of ECE,
Advisor JITS

Welcome Address by
Sri.T.V.R.N.Reddy,
Joint Secretary,
JITS

Address by
Prof.M.Lokanadha Rao,
Prinicipal and President of
Inaugural Function

Address by
Prof.P.Rangaiah,
Director
JITS

Coordinator Report
Dr.Krishna Patteti,
Professor of ECE
JITS

Organizer
Mr.Hameed Pasha Mohammad
Head of ECE Dept
JITS

Organizer
Dr. Sandhya Rani
Associate Professor
Dept of ECE, JITS

Join us:

https://bit.ly/31DdGYw

26th October 2020, 10:00 AM (IST)

Resource Persons:

1. Prof.K.Kishan Rao, Professor of ECE, Advisor JITS
2. Sri.B.Jaipal Reddy, chief Managing Director, Apollo Computing Laboratories
3. Dr.Indumati T S, Professor of ECE, VTU Belagavi
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AICTE Sponsored
Short Term Training Programme(STTP) Online Mode
PHASE-III
"Signal Processing Techniques for Advanced Wireless Communication"
26th to 31st October 2020
<u>Valedictory Proceedings</u>
31.10.2020

S.No	Time	Item	Speaker
1.	3.00PM	Welcome the Participants, Guests and other Dignitaries	Dr.S.Sandhya Rani Associate Professor, ECE
2.	3.05PM	Report on AICTE sponsored STTP on **Signal Processing Techniques for Advanced Wireless Communication Technologies"**	Dr.Patteti Krishna Coordinator, STTP
3.	3:10PM	Feedback from the Participants	Participants
4.	3:30PM	Address by Director	Prof.P.Rangaiah
5.	3:35PM	Address by Sri.T.V.R.N.Reddy	Joint Secretary-Jayamukhi Educational Society
6.	3:40PM	**Introduce the Guest of Honor : Prof.K.Kishan Rao**	Zulekha Tabassum
7.	3:45	Address by Guest Honor	Prof.K.Kishan Rao
8.	3:50PM	**Introduce the Chief guest Dr.M.Gangadharappa, Professor of ECE. President IIC under MHRD**	Zulekha Tabassum
9.	3:55PM	Valedictory Address	Dr.M.Gangadharappa
10.	4:00PM	Presidential remarks by Principal	Dr.M.Lokanadha Rao Principal, JITS
11.	4:05PM	Vote of Thanks	Hameed Pasha Mohammad Head, Dept.of ECE

Online Mode : Google Meet

Host by : Dr.S.Sandhya Rani, Associate Professor
Organizing Team :
Dr.Ghanshyam Singh, Professor of ECE
Dr.M.Krishna Samy, Associate Professor
Zulekha Tabassum, Associate Professor
S.K.Mastan, Associate Professor
V.Madhu Kumar, Associate Professor
Technical Support : Mr.S.Naveen B.Tech IV Year