



**JAYAMUKHI INSTITUTE OF TECHNOLOGICAL SCIENCES**

**UGC - AUTONOMOUS**

Permanently Affiliated to JNTUH, Accredited by NBA, Recognised Under UGC 2 (f) & 12 (b)

NARSAMPET, WARANGAL - 506332

*Name of the Programme*

**4. Signal Processing**  
**Techniques for**  
**Advance Wireless**  
**Communications**  
**Phase -II**



**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)**



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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 ”

21<sup>th</sup> to 26<sup>th</sup> 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,  
JTS

Prof.Arif Wasim



Professor of ECE,  
NIT  
Silkheir

Prof.D.Srinivasa Rao



Professor of ECE,  
JNTUCE  
Hyderabad

Dr.H.C.Hadiman



Professor & Head,ECE  
GNIT Durgam,  
Kamatak

Dr.T.V.Ramana



Associate Professor,  
Dept.of ECE,  
Gham University

Dr.S.Anuradha



Associate Professor  
Dept.of ECE  
NIT Warangal.

Dr.P.Krishna



Professor of ECE  
JTS  
Narsampet, Warangal Rural

Dr.Chhagan Charan



Dept.of ECE  
NIT  
Karkhata

Dr.M.Lokanadha Rao



Principal  
JTS  
Narsampet, Warangal Rural

Prof.P.Rangaiah



Director  
JTS  
Narsampet, Warangal Rural

Hameed Pasha Mohammad



Associate Professor and Head  
Department of ECE  
JTS

Dr.Ghanashyam Singh



Professor,  
Department of ECE  
JTS

Dr.S.Sandhya Rani



Associate Professor,  
Department of ECE  
JTS

Dr.M.Krishna Samy



Associate Professor,  
Department of ECE,  
JTS

Dr.K.Sunil Kumar



Associate Professor,  
Dept of ECE,  
VITS

Nayanika Srivastava



Dept of Electronics Engineering,  
Harcourt Butler Technical University,  
Kanpur

Mr.M.Shashidhar



Associate Professor,  
Dept.of ECE,  
VCEW

Registration Fee :

Free online STTP Sponsored by AICTE

Register Now:



or <https://bit.ly/2DCsldz>

Important Dates:

Last date for Registration : 17<sup>th</sup> Sept 2020

Notification of Selection : 19<sup>th</sup> Sept 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.

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<sup>M.Tech</sup>  
Mr. Sk Masthan<sup>M.Tech, (Ph.D)</sup>  
Mr. V. Madhu kumar<sup>M.Tech, (Ph.D)</sup>  
Mr. S. Sunil<sup>M.Tech, (Ph.D)</sup>  
Mr. M. Manoj kumar<sup>M.Tech, (Ph.D)</sup>  
Mr. D. Prasad<sup>M.Tech, (Ph.D)</sup>

Convener:

Hameed Pasha Mohammad  
Associate Professor and Head  
Department of  
Electronics and Communication Engineering  
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AICTE Sponsored

**Short Term Training Program(STTP)  
Phase - II  
(Online Mode)**

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

**Signal Processing Techniques for  
Advanced Wireless Communication  
Technologies**

(21<sup>st</sup> to 26<sup>th</sup> September 2020)



Organized by  
Department of  
Electronics and Communication Engineering  
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## 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, Rtd.Principal, RECW(NITW)
2. Prof. Arif Wasim, Professor of ECE, NIT Silchar
3. Prof. D. Srinivasa Rao, Professor of ECE, JNTUH
4. Dr.H.C.Hadi Mani, Professor of ECE, VTU Belagavi
5. Dr.S.Anuradha, Associate Professor, Dept. of ECE, NIT Warangal.
6. Dr.T.V.Ramana, Associate Professor, GITAM UNIVERSITY
7. Dr. P. Krishna, Professor of ECE, JITS
8. Dr.K.Sunil Kumar, Assistant Professor, Dept. of ECE, VITS.
9. Mr.M.Shahsidhar, Associate Professor and Head, ECE,VCE, Warangal.
10. Dr.M.Krishna Samy, Associate Professor, Dept. of ECE, JITS
11. Dr.S.Sandhya Rani, Associate Professor, Dept. of ECE, JITS.
12. Ms.Nayanica Srivastava, Assistant Professor, Harcourt Butler Technical University, Kanpur
13. Mr.A.Madhu Sudan, Senior Application Engineer, Hyderabad.

### ABOUT STTP

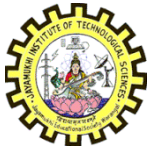
This STTP aims at providing strong theoretical background along with practical experience in the field of signal processing techniques in wireless communications. Signal processing Techniques, algorithms and architectures have an increasingly important role to play in meeting the central challenges faced 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.

**LIST OF SPEAKERS:**

1. Prof.K.Kishan Rao, Professor of ECE, Rtd.Principal, RECW(NITW)
2. Prof.Arif Wasim, Professor of ECE, NIT Silchair
3. Prof.D.Srinivasa Rao, Professor of ECE, JNTUH
4. Dr.H.C.Hadimani, Professor and Head,ECE GMIT, Davangere, Karnataka
5. Dr.S.Anuradha, Associate Professor, Dept.of ECE, NIT Warangal.
6. Dr.P.Krishna,Professor of ECE,JITS
7. Dr.K.Sunil Kumar, Assistant Professor, Dept.of ECE, NIT Warangal.
8. Mr.M.Shahsidhar, Associate Professor and Head, ECE,VCE, Warangal.
9. Dr.M.Krishna Samy, Associate Professor, Dept.of ECE,JITS
- 10.Dr.S.Sandhya Rani, Associate Professor, Dept.of ECE,JITS.
- 11.Ms.Nayanica Srivastava, Assistant Professor, Harcourt Butler Technical University, Kanpur
- 12.Mr.A.Madhu Sudan, Senior Application Engineer, Hyderabad.



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SCIENCES**

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Narsampet, Warangal – 506 332(Telangana)



**All India Council for Technical Education(AICTE) Sponsored**

**Short Term Training Program(STTP)  
Phase-II**

(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***

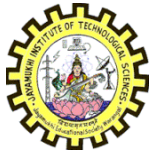
***Communications***

21<sup>st</sup> to 26<sup>th</sup> September 2020

Organized by

**Department of Electronics and Communication Engineering**

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# JAYAMUKHI INSTITUTE OF TECHNOLOGICAL SCIENCES



Schedule- AICTE Sponsored online STTP

## “Signal Processing Techniques for Advanced Communications”

Online mode platform: GOOGLE MEET

S.No	Date & Day	Session-I 10.00 A.M to 12:00 P.M	L U N C H  B R E A K	Session-II 2:00 P.M to 4:00 P.M
1.	21-09-2020 (Monday)	Inaugural Session of STTP Session by <b>Prof.Arif Wasim</b> Professor of ECE, NIT Silchair		Introduction to Wireless Communication <b>NAYANICA SRIVASTAVA</b> Department of Electronics Engineering, Harcourt Butler Technical University, Kanpur
2.	22-09-2020 (Tuesday)	MIMO Transmission and Detection Techniques. <b>Dr.H.C.Hadimani, Professor of ECE, VTU Belagavi</b>		Multiple Access Techniques for 5G <b>Dr.P.Krishna</b> Professor of ECE
3.	23-09-2020 (Wednesday)	Cognitive Radio networks a enabling technology for next gen wireless communications <b>Dr.Chhagan Charan</b> NIT Kurkshetra		<b>Coding Techniques</b> Dr.S.Anuradha Associate Professor Dept.of ECE NIT Warangal.
4.	24-09-2020 (Thursday)	Signal Processing Techniques for 4G and 5G Communications <b>Dr.H.C.Hadimani, Professor of ECE, VTU Belagavi</b>		<b>Issues and Challenges in Wireless Networks</b> <b>Prof.D.Srinivasa Rao</b> Professor of ECE, JNTUCE Hyd.
5.	25-09-2020 (Friday)	Channel Estimations <b>Dr.K.Sunil Kumar</b> Associate Professor,ECE, VITS		Equalization Techniques <b>Mr.M.Shashidhar</b> Associate Professor, Dept.of ECE, VCEW
6.	26-09-2020 (Saturday)	<b>Dr.T.V.Ramana</b> Multicarrier Modulation Techniques(OFDM)		Senior Application Engineer, Hyderabad Online Exam, Feedback and Valedictory Session of STTP

Coordinator  
Dr.Krishna Patteti  
Professor of ECE

**COORDINATOR**

Convener  
Hameed Pasha Mohammad  
HoD-ECE

Principal  
Jayamukhi Institute of Technological Sciences  
Narasaraopeta, Warangal-506332.

Dr.M.Lokanadha Rao





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**AICTE Sponsored**

Short Term Training Programme(STTP) Online Mode

**“Signal Processing Techniques for Advanced Wireless Communication”**

**21<sup>st</sup> to 26<sup>th</sup> September 2020**

**Valedictory Proceedings**

**26.09.2020**

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 <b>Signal Processing Techniques for Advanced Wireless Communication Technologies”</b>	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	<b>Introduce the Guest of Honor : Prof.K.Kishan Rao</b>	Zulekha Tabassum
7.	3:45	Address by Guest Honor	Prof.K.Kishan Rao
8.	3:50PM	<b>Introduce the Chief guest Dr.T.V.Ramana, Professor, GITAM University Vizag</b>	V.Madhu Kumar Associate Professor,ECE
9.	3:55PM	Valedictory Address	Dr.T.V.Ramana
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  
Technical Support : Zulekha Tabassum, Associate Professor  
S.K.Mastan, Associate Professor  
D.Prasad, Assistant Professor  
S.Sunil, Assistant Professor