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Visakhapatnam-531113



Certificate Course

•

#### **5G and Wireless Communication for Beginners**

From 10th February 2020 to 15th February 2020



#### **ORGANIZED BY**

DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM (V), VISAKHAPATNAM-531113

#### **AVANTHI EDUCATIONAL SOCIETY**

Avanthi Educational Society under the Leadership of Sri M. Srinivasa Rao garu as chairman was started in the Year 1991. Within a short span of its establishment, the group has made a remarkable stride in the field of education offering various courses at Under Graduate, Post Graduate, Pharmacy & Engineering levels. This milestone is achieved as the institution carved itself to impart quality and career oriented education, countering the challenges of the modern world through planning, dedication, determination, prompt execution and with the innovative ideas of our advisory board.

Today, Avanthi Educational Society is proud to have a strength of over 16000 students with 15 institutions under its ambit. It is the path of glory towards the success during the last 19 years. The institution has been adjudged many times as the second best educational institutions in the twin cities and 16th best in all over India through the impartial survey made by the renowned magazine "India Today".

#### **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.



It is very near to Narsipatnam. Frequent bus facilities are available both from and to Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

## DEPARTMENT OF ELECTRONICS COMMUNICATION ENGINEERING

The ECE Department was established in the year 1999 with an intake of 60 students and this was increased to 120 students in the 2007 and increased to 180 students in the 2012. The department has an eminent faculty and well supported infrastructure and laboratories. The faculty keeps abreast with the latest advances in technology and ensures that hardware equipment and related software are upgraded to ensure its students are able to keep pace with current trends in technology and the industry.

The department also offers a Post – Graduate courses in DECS and VLSI Design. The students are encouraged to participate in workshops, industrial internship, industrial visits and seminars; along with the projects assigned during the course, these activities enable them to broaden their outlook and build in professionalism that makes their transition from college to industry smoother after graduation.

#### **ABOUT COURSE**

5G, the **5th Generation of Wireless Mobile Communication** has taken 2019 by storm! Some people are making optimistic expectations, some are making ridiculous theories while others are awaiting any and every update about 5G. If we look at a few decades in the past... 1G, 2G, 3G and 4G have changed our social, professional and personal lives drastically. Yet 5G is expected to be the biggest game-changer of all which is amazing but not surprising!

#### TOPICS TO BE COVERED

- ➤ **Day-1:** Introduction 1G is Where All of it Began
- **Day-2:** Going Digital with 2G
- ➤ **Day-3:** Expanding Mobile internet with 3G
- **Day-4:** Higher-Further-Faster with 4G
- > **Day-5:** Open up the Future with 5G
- **Day-6:** 5G Update -2020

For registration please contact Miss B.Maha Laxmi ,Assistant professor,ECE

#### **CHIEF PATRON**

Smt.M.Gnaneswari President, Avanthi Educational Society

#### **PATRON**

Dr. C P V N J Mohan Rao Principal, Avanthi Institute Of Engineering And Technology

#### **CHAIRMAN**

Sri. E. Govinda Head of the Department Electronics and Communication Engineering



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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CIRCULAR

Date: 06/02/2020

This is for informed to all the IV B.Tech ECE students that our department is planning to conduct one week course on "5G AND WIRELESS COMMUNICATIONS FOR BEGINNERS" scheduled from 10-02-2020 to 15-02-2020. It is directed to all the students of IV ECE to utilize this opportunity to enhance your technical skills. For more details about registration process and participation contact Course Coordinator Miss.B.Maha Laxmi, Assistant Professor, ECE.

#### Resource Person Details:

Ir. M.Rajan Babu,
 Professor,
 I epartment of ECE,
 I endi institute of engineering and technology,
 Vizianagaram.

2. Ir.PA. Nageswara Rao

A ssociate Professor,

I epartment of ECE,

Cayatri vidya parishad college, Rushikonda,

Visakhapatnam.

L. Govina

Head of the Department,

Copy to: Principal, AIET

HEAD OF THE DEPARTMENT DEPARTMENT OF ECE Avanthi Institute of Engg.&Tech. Makavarapalem, Visakhapatnam Dist-53\* 113.



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## 5G and Wireless Communication for Beginners

From 10-02-2020 to 15-02-2020

#### **SYLLABUS**

- Day-1: INTRODUCTION 1G IS WHERE ALL OF IT BEGAN
- Day-2: GOING DIGITAL WITH 2G
- Day-3 :EXPANDING MOBILE INTERNET WITH 3G
- Day-4: HIGHER-FURTHER-FASTER WITH 4G
- Day-5: OPENING UP THE FUTURE WITH 5G
- Day-6: 5G UPDATE -2020

E.Govinda
CHAIRMAN
Asst. Professor

Whead of the Department
Electronics and communication Ent ineering

HEAD OF THE DEPARTMENT DEPARTMENT OF ECE Avanthi Institute of Engg.&Tech. Makavarapalem, Visakhapatnam Dist-53-113.



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#### **5G and Wireless Communications for Beginners**

From 10-02-2020 to 15-02-2020

#### **Schedule**

#### Day-1 (10/02/20)

09:00 to 10:00	Intent Behind 1G
10:00 to 12:00	Understanding Frequency Modulation
12:00 to 01:00	Lunch Break
01:00 to 04:00	Issues of 1G

#### Day-2 (11/02/2020)

09:00 to 12:00	Going digital v ith 2G	
12:00 to 01:00	Lunch Break	
01:00 to 04:00	Securing 2G	

#### Day-3(12/02/2020)

09:00 to 12:00	Intention Behind 3G
12:00 to 01:00	Lunch Break
01:00 to 04:00	Understanding cellular call hand-offs

#### Day-4(13/02/2020)

09:00 to 12:00	Intention Behind 4G
12:00 to 01:00	Lunch Break
01:00 to 04:00	Understandin Circuit based switching and Packet-switched net orks

## Day-5(14/02/2020)

09:00 to 12:00	The Intention behind 5G
12:00 to 01:00	Limeh Brenk
01:00 to 04:00	Understanding 5G new Radio

#### Day-6(15/02/2020)

5G standards
Lunch Break
Software Defined Networking and Infrastructure as Code

Edovinda CHAIRMAN

Head of the Department Electronies and communication Engineering ) IS,Maha Lazmi Asst. Professor

Coordinator

HEAD OF THE DEPARTMENT DEPARTMENT OF ECE

Availth Institute of Englished & Toch.

Makayarapalem, Visakhapetham (2021-53) 113



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## 5G and Wireless Communications for Beginners From 10th February 2020 to 15th February 2020

## IV B.Tech ECE STUDENTS ATTENDANCE LIST

S.NO	Regd No	Name of the Student	10/02	11/02	12/02	13/02	14/02	15/02
1	16811A0401	ADDEPALLI NAVYA SRI	/	1	1	~	1/	1
2	16811A0402	ALLA LAKSHMI	1	<b>/</b>		1	$\checkmark$	~
3	16811A0403	BAILAPUDI TARUN KUMAR		/	~			
4	16811A0404	BALIREDDI MOHANKUMAR			/	/	/	
5	16811A0405	BANTUPALLI BHASKAR RAO		/	/	/	/	/
6	16811A0406	BATHI SAI PRASANNA	/	/	/	/	/	
7	16811A0407	BATTALA DILEEP KUMAR		1	/	/	/	/
8	16811A0408	BATTULA USHA	./	0	V	/	/	/
9	16811A0409	BIKKAVILLI SAMBASIVA RAO		./	1	./	/	/
10	16811A0410	BOBBILI VAMSI	V	./	/	5/	7/	/
11	16811A0411	BODDEDA SAIRAM	1/	/	/		1/	V
12	16811A0412	BOLEM VENKATA RAVI TEJA	1	1	./			1/
13	16811A0413	BOMMALI LEELAMOHAN	V	/			1	/
14	16811A0414	BURRI MANASA		/	/			1
15	16811A0415	CHADARAM MOUNIKA NOOKA ADI KUMARI	/	/	/	/		/
16	16811A0416	CHINNI HEMANAGESWARA RAO	1	/	/	/	~	
17	16811A0417	DATLA LAXMI SIVA SAHITHI		-/	~	/	/	-
18	16811A0418	DIMILI RENUKA	1	V	1	V/	·//	-
19	16811A0419	DODDI GIRIDHAR SAI		V	/			V
20	16811A0420	GANGARAPU MANIKANTA RAJA VARA PRASAD	1	V	/		/	/
21	16811A0421	GANGUPAM MOUNIKA	1./	1			./	
22	16811A0422	GARAGA YUGA SRI	1./	1	7	/	~	~
23	16811A0423	HITHESHI SANJAY HAZARNIS		1/	-	/		V
24	16811A0424	KAKI LALITHA	1	1		V	7	-
25	16811A0425	KOLLI JAYASRI	N/	7	1	V	V	V
26	16811A0426	KONCHA ARJUNAMMA	/		V	V	V	V
27	16811A0427	KOSANA ASWINI	1	V	V	V_	V	
28	16811A0428	KOTA CHITTIBABU		X _	-	_		
29	16811A0429	KOYILADA V V PARASURAM		1	V			
30	16811A0430	KUNDRAPU SUSEELA	1		V		V	/
31	16811A0431	KUPPILI CHANDAN MEHER		1/	V	/	/	/
32	16811A0432	KURACHA MADHU TRINADH	V	V	V	/	/	~
33	16811A0433	LALAM REVATHI	1		V		6	/
34	16811A0434	MAKIREDDI RAMADEVI			1/	/	/	V
35	16811A0435	MAKIREDDI VENKATA SIREESHA	/	V	V		/	~
36	16811A0436	MALLA PUSPARCHANA	1	1	/			
		DEAT OBT ARCHANA	V	V	V	/	./	/

110								. /
			, /	/	1/	1	V	V
37	16811A0437	MATA SAI LAKSHMI	1	1	-	1	1	V
38	16811A0438	MATURU MANIKANTHA	IV	1	1	1	1	1
39	16811A0439	MOURYA SANDEEP	1/	10	-	1/	1	1
		MUKTA VISHNU	1	1	1	1	V	V
40	16811A0440	MUNAGAPAKA LOVAKUMARI	1	1	1	1	1/	1
41	16811A0441	MUNJETI UMA SRI	1/	V	1	1	1/	/
42	16811A0442	NABA SAILAKSHMI PRASANNA	10	1	1	10/	./	/
43	16811A0443	NANDIPALLI SRI NAVYA	1	V	1	1	/	1
44	16811A0444	NEERUKATTU MAHESH	1	0		Y	y	1
45	16811A0445	PALLA SRINIVAS	/	1	1		/	V
46	16811A0446	PEDIREDLA SAILAKSHMI	1/	1	/	1	-	1
47	16811A0447	PENTAKOTA ALEKHYA	1	V	V	1		./
48	16811A0448	PILAKA VINEETHAREDDY	1/	/	V	1	/	-/
49	16811A0449	POLIMERA GAJAPATHI	1	/	V		/	-
50	16811A0450	POOSALA VIJAYA BABU	1		V	V	~	7
51	16811A0451	PUSARLA SAI KEERTHANA	11/	./	/	<b>'</b>	/	V
52	16811A0452	RACHAPATTI HAREESH	1	1	/	V	/	1
53	16811A0453	RACHAPAT IT HAREESIT	1./	/	/	V	/	V
54	16811A0454	RAPETI SRINIVAS	1./	V	/	V.	V	1
55	16811A0455	SAPPA KOMALI	1/	1/	V	V	/	1
56	16811A0457	SARAGADAM MANEENDRA	1	./	/	$\checkmark$	/	1
57	16811A0458	SUNDARAPU SURYAKALA	1	1/		V	/	V
58	16811A0459	SURLA ROHINI	1	1/	V	V	/	1
59	16811A0461	THAMADA RAASI	V	/	V	/	1	/
60	16811A0462	TOGARU KRANTHI	V	V	/	/	V	1
62	16811A0463	UDDANDAM MADHAV KUMAR	1	/	/	/	/	1
63	16811A0464	VARADA KUMAR	V	V	/	/		1
64	16811A0465		1		/	V		1
65	16811A0466		/	V	/	~	/	
66	16811A0467	VIVEK PATNAIK						1
67	16811A0468	VOMMI SAEBHA RANI	/	/	/	/	/	/
68	16811A0469	VYAKARANAM LALITHA	1./	-	/	/		/
0.8	ALTHUR DEADNESS AND	MOUNIKA	V	~	V			
69	16811A0470		V	/	V	~	/	1
70	15811A0448		W	1	~	~		1
71	17815A0401	+	-	/	1	~	V	-
72	17815A0402		V	1	/	/	/	/
73			/	V	/	/		/
74	17815A0404	CHUKKA SRINIVAS	/	1	V		1	1
75	17815A0405	CHUKKALA NANDINI	V	V	/	./	/	/
76	17815A0406	DALIYA NAGESWARARAO	V	V	V	V	./	/
77	17815A0407	KADIMISETTI MANIKANTA	V	./	V		V	
78	17815A0408	KAMIREDDI SWATHI	+ -	V	•	V	V	/
79			V	V	V	~	/	/
80			1	V	V		V	V
81	17815A0411		1	V	V		/	1
		THE THE ROWAR	V	V	V	V	/	/

82	17815A0412	NANDARAPU HARI BHANU PRASAD	1./	/	/	1	/	/
83	17815A0413	NARAPUREDDY JOSHNARAMYA	1	_	1	_/	1	Y
84	17815A0414	NUKARAPU SAIRAM	V	V	V	~	V	1
85	17815A0415	PEELA YAMINI	1	V,	V	-	V	1/
86	17815A0416	RONGALA GANESH	V	/	V	1	1	1
87	17815A0417	SAMOJU SATISH	V	V	V	V	1	1
88	17815A0418	SUNNAM SAI KUMAR	V	V	V	-	V	1/
89	17815A0419	TAKASI GANESH	V	V	V	-	7	1/
90	17815A0420	MUMMDIDISETTI RATNA SAI GUPTA	~	V	/	V	V	

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HEAD OF THE DEPARTMENT DEPARTMENT OF ECE Avanthi Institute of Engg. & Tech. Makayarapalam, Visakhapatnam Dist-53-113.

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# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING A Course on

#### **5G AND WIRELESS COMMUNICATION FOR BEGINNERS**

Dated -: 10/02/2020



Coordinator



# AVANTHI

## INSTITUTE OF ENGINEERING AND TECHNOLOG

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada, ACCREDITED BY NAAC and Recognized under 2(f) &12 (b) by UGC, New Delhi)

Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-53111

# **Certificate of Participation**

This is to certify that Mr./Ms.	of_	has
participated in the Certificate Course entitled on 5G A	AND WIRELESS COMMUNI	CATION FOR BEGINNERS
conducted from 10-02-2020 to 15-02-2020 was organ	nized by the Department of ELE	ECTRONICS AND COMMUNICATION
ENGINEERINGAL Avanthi Institute of Engineering and Te	echnology.	

**Coordinator HOD Principal** 



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

#### Department of Electronics and Communication Engineering

Dt: 21/02/2020

#### **BRIEF REPORT**

Avanthi Institute of Engineering and Technology had organized a certificate course on "5G and wireless communication for beginners" From 10<sup>th</sup> Feb 2020 to 15<sup>th</sup> Feb 2020 in Department of Electronics and Communication Engineering

We had Dr. M. ajan Babu, Professor, Department of EC, Lendi institute of engineering and technology, Vizianagaramas a speaker to explain what exactly is 5G and 5G is like an entry pass for some of the following technologies to comfortably take over the commercial market

Dr.PA.Nagesv ara Rao, Associate Professor, Department of ECE, Gayatri vidya parishad college, Rushikonda, Visakhapatnam concluded 5g wireless is meant to deliver higher multi gbps peak data speed ultra low latency, more reliability, massive network capacity, increased availability and more uniform user experience to more users, higher performance and improved efficiency empower new user experiences and connects new industries.

Coordinator

HOD

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg. & Tech.
Makavarapalem, Visakhapatnam Dist-53-113.