AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(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-531113

Certificate Course

on

Latest Trends In Laser Technology And Fiber Optic Communication

From 12th Oct 2020 to 17th Oct 2020

link :https://meet.google.com/wox-hhxi-myo

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 AND 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

Fiber optic systems area unit vital telecommunication infrastructure for world-wide broadband networks. Wide information measure signal transmission with low delay could be a key demand in gift day applications. Optical fibers give huge and un exceeded transmission information measure with negligible latency, and area unit currently the transmission medium of alternative for long distance and high rate transmission in telecommunication networks. This paper offers an outline of fiber optic communication systems together with their key technologies, and conjointly discusses their technological trend towards future generation..

TOPICS TO BE COVERED

- **Day-1:** Introduction to optical fibers
- **Day-2:** Signal degradation of optical fibers
- **Day-3:** Fiber optical sources and coupling
- **Day-4:** Fiber optic receiver and measurement
- **Day-5:** Optical Networks and system transmission
- **Day-6:** Optical amplifiers and networks

For Registration please contact Mr.K.Dhilli, Assistant Professor, ECE

CHIEF PATRON	PATRON	CHAIRMAN
Smt.M.Gnaneswari President, Avanthi Educational Society	Dr. C P V N J Mohan Rao Principal, Avanthi Institute Of Engineering And Technology	Sri. E. Govinda Head of the Department Electronics and Communication Engineering

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CIRCULAR

Date: 06/10/2020.

This is informed to all the IV B.Tech ECE students that our department is planning to conduct one week course on "**Latest Trends In Laser Technology And Fiber Optic Communication**" scheduled from 12-10-2020 to 17-10-2020. 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 Mr.K.Dhilli, Assistant Professor, ECE.

Resource Person Details:

1. Dr.K.Chandra Bhushana Rao
   Professor,
   Department of ECE,
   JNTU-GV College of Engineering,
   Dwarapudi, Vizianagaram

2. Dr.CB. Rama Rao,
   Professor,
   Department of ECE,
   NIT, Warangal, Telangana.

E. Govinda

Head of the Department,

ECE

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg.&Tech
Makavarapalem, Visakhapatnam Dist-531 113.

Copy to: Principal, AIET

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Latest Trends In Laser Technology and Fiber Optic Communication

From 12th Oct 2020 to 17th Oct 2020

SYLLABUS

- **Day-1:** INTRODUCTION TO OPTICAL FIBERS
- **Day-2:** SIGNAL DEGRADATION OPTICAL FIBERS
- **Day-3:** FIBER OPTICAL SOURCES AND COUPLING
- **Day-4:**FIBER OPTIC RECEIVER AND MEASUREMENT
- **Day-5:** OPTICAL NETWORKS AND SYSTEM TRANSMISSION
- **Day-6:** OPTICAL AMPLIFIERS AND NETWORKS

E. Govinda CHAIRMAN & Head of the Department Electronics and Communication Engineering	K.Dhilli Asst. Professor Coordinator

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg.&Tech.
Makavarapalem, Visakhapatnam Dist-531 113.

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Latest Trends In Laser Technology and Fiber Optic Communication

From 12th Oct 2020 to 17th Oct 2020

Schedule

Day-1 (12/10/2020)

09:00 to 10:00	Inaugural Session
10:00 to 12:00	Introductic n to fiber optic communication
12:00 to 01:00	Lunch Break
01:00 to 04:00	Principles · f fiber optics

Day-2 (13/10/2020)

09:00 to 12:00	Signal deg adation of fiber optic
12:00 to 01:00	Lunch Break
01:00 to 04:00	Evolution · f fiber optics communication

Day-3(14/10/2020)

09:00 to 12:00	Fiber optical sources and coupling
12:00 to 01:00	Lunch Break
01:00 to 04:00	Fiber optic basics

Day-4(15/10/2020)

09:00 to 12:00	Fiber optic receiver and measurement
12:00 to 01:00	Lunch Break
01:00 to 04:00	Polarization of fibre optics

Day-5(16/10/2020)

09:00 to 12:00	Optical and networks and system transmission
12:00 to 01:00	Lunch Break
01:00 to 04:00	Networks of fiber optic communication

Day-6(17/10/2020)

09:00 to 12:00	Optical amplifiers and networks
12:00 to 01:00	Lunch Break
01:00 to 04:00	Fiber optics communication futue trends

E. Govinda
CHAIRMAN
&
Head of the Department
Electronics and Communication
Engineering

K.Dhilli
Asst. Professor
Coordinator

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

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Latest Trends In Laser Technology And Fiber Optic Communication

From 12th October 2020 to 17th October 2020

IV BTECH ECE STUDENT ATTENDANCE LIST

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

33	16811A0433	LALAM REVATHI	✓	✓	✓	✓	✓	✓
34	16811A0434	MAKIREDDI RAMADEVI	✓	✓	✓	✓	✓	✓
35	16811A0435	MAKIREDDI VENKATA SIREESHA	✓	✓	✓	✓	✓	✓
36	16811A0436	MALLA PUSPARCHANA	✓	✓	✓	✓	✓	✓
37	16811A0437	MATA SAI LAKSHMI	✓	✓	✓	✓	✓	✓
38	16811A0438	MATURU MANIKANTHA	✓	✓	✓	✓	✓	✓
39	16811A0439	MOURYA SANDEEP	✓	✓	✓	✓	✓	✓
40	16811A0440	MUKTA VISHNU	✓	✓	✓	✓	✓	✓
41	16811A0441	MUNAGAPAKA LOVAKUMARI	✓	✓	✓	✓	✓	✓
42	16811A0442	MUNJETI UMA SRI	✓	✓	✓	✓	✓	✓
43	16811A0443	NABA SAILAKSHMI PRASANNA	✓	✓	✓	✓	✓	✓
44	16811A0444	NANDIPALLI SRI NAVYA	✓	✓	✓	✓	✓	✓
45	16811A0445	NEERUKATTU MAHESH	✓	✗	✓	✓	✓	✓
46	16811A0446	PALLA SRINIVAS	✓	✓	✓	✓	✓	✓
47	16811A0447	PEDIREDLA SAILAKSHMI	✓	✓	✓	✓	✓	✓
48	16811A0448	PENTAKOTA ALEKHYA	✓	✓	✓	✓	✓	✓
49	16811A0449	PILAKA VINEETHAREDDY	✓	✓	✓	✓	✓	✓
50	16811A0450	POUMERA GAJAPATHI	✓	✓	✓	✓	✓	✓
51	16811A0451	POOSALA VIJAYA BABU	✓	✓	✓	✓	✓	✓
52	16811A0452	PUSARLA SAI KEERTHANA	✓	✓	✓	✓	✓	✓
53	16811A0453	RACHAPATTI HAREESH	✓	✓	✓	✓	✓	✓
54	16811A0454	RAPETI BHARATH SAI	✓	✓	✓	✓	✓	✓

Coordinator

HOD

HEAD OF THE DEPARTMENT
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Makavarapalem, Visakhapatnam Dist-5

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Department of Electronics and Communication Engineering

Dt:21/10/2020

BRIEF REPORT

Avanthi Institute of Engineering and Technology had conducted a certification course on "Latest Trends in Laser Technology and Fiber Communication" From 12th Oct 2020 to 17th Oct 2020 in the Department of Electronics and Communication Engineering.

We had **Dr.K.Chandra Bhushana Rao, Professor, Department of Electronics and Communication Engineering, JNTU-GV College of Engineering, Dwarapudi, Vizianagaram** as a speaker to explain each and every detail about laser technology.He elaborated introduction to fiber optic communication, how the signal degradation in this communication and provides an outline of fiber optic communication systems similarly as their elementary technologies.

Dr. C B. Rama Rao, Professor, Department of Electronics and communication Engineering, National Institute of Technology, Warangal, Telangana, continued fiber optics is totally consisted with the information communication future, formerly this may grow into realism, issues in optical steering, and wavelength interchanging has got to be resolved.

K.Dhilli
Coordinator

Head of the Department

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Certificate of Participation

This is to certify that Mr./Ms._____ of _____ has participated in the Certificate Course entitled on Latest Trends in Laser Technology and Fiber Optic Communication conducted from 12-10-2020 to 17-10-2020 was organized by the Department of ELECTRONICS AND COMMUNICATION ENGINEERING at Avanthi Institute of Engineering and Technology.

Coordinator **HOD** **Principal**