



ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES

(Permanently Affiliated to AU, Approved by AICTE & Accredited by NBA)

Sangivalasa-531162, BheemunipatnamMandal, Visakhapatnam Dt.

Phone: 08933- 225084,226395

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DEPARTMENT QUARTERLY NEWS LETTER

[SEPTEMBER 2018 - NOVEMBER 2018]



A GUEST LECTURE ON "LATEST TRENDS IN DIGITAL COMMUNICATION INCLUDING FORWARD ERROR CORRECTION TECHNIQUES"

A Guest Lecture was jointly conducted by the Communication Research group of Department of ECE, IETE Student Forum and IEEE Student Branch of Dept of ECE, ANITS, on 08.09.2018 on the topic "**Latest trends in digital communication including forward error correction techniques**" by Dr.R.K.Goswami, Commodore, Indian Navy, Visakhapatnam. He discussed about inter symbol interferences, line coding techniques, information, entropy, digital modulation techniques, channel capacity theorems, block coding, convolution, OFDM and FBMC techniques.



A GUEST LECTURE ON "AVIONIC PACKAGES AND REALIZATION"

A Guest Lecture by Mr. K Murali KrishnaRao, Scientist-F, DRDL (DRDO), Hyderabad is arranged for the

benefit of students and faculty which is jointly organized by department of ECE in association with IEEE Student Branch, on "Avionic Packages and Realization", on November 21, 2018 during 1:00 PM to 02:30 PM in ECE Seminar hall at ANITS. The lecture is about various missiles and avionics subsystems onboard of missiles.



THREE DAY WORKSHOP ON "NI LABVIEW AND ITS APPLICATIONS"

A three day workshop on "**NI LabVIEW and Its Applications**" in association with Andhra Pradesh Information Technology Academy (APITA) was held at the Department of Electronics & Communication Engineering of Anil Neerukonda Institute of Technology and Sciences held on 11th,12th & 14th September 2018. The experts from NI, Bangalore will conduct the training sessions. 50 participants from 3/4 ECE A,B& C are attended this workshop. Topics covered in this workshop are Basic LabVIEW, VI, Data types, Boolean operation techniques, functions, loops, Multisim, DAQ systems, Digital Signal and Parameters, Analog Signal and Parameters, NI myRIO, myRIO Projects and ended with mini project. This workshop will introduce the fundamental principles of graphical system design using NI LabVIEW. Hands-on training with NI Hardware will also be given to the participants.

INDUSTRY INSTITUTE INTERACTION

➤ Texas Instruments Conducted a dristi online content in three phases. 2nd phase is conducted in the month of September 2018. In this 2nd phase contest, 750 students from 4 braches ECE, EEE, CSE & IT were appeared. The faculty coordinator Mr.N.Ram Kumar., Asst., Prof., ECE carried out this online exam and smoothly conducted the 2nd phase contest.

➤ Texas Instruments sponsored a lab (TI sponsored Lab) worth of 10lakhs. In the month of August 2018 The Texas Instruments released 5lakhs amount of components and the remaining amount will be sanctioned after completion of the 3rd phase contest.

TI Kits from STEPS Knowledge Services Pvt Ltd		
S.No	Description	Qty
1.	CC3200-LAUNCHXL	40
2.	MSP-EXP430G2ET	30
3.	MSP-EXP430F5529LP	10
4.	BOOSTXL-EDUMKII	9
5.	BOOSTXL-K350QVG-S1	4
6.	ASLK PRO Kit	6
7.	DRV8312-69M-KIT	1
8.	MSP-EXP430F5529 EXP	2
9.	ROBOT-BASIC-KIT	30

IC's from STEPS Knowledge Services Pvt Ltd					
S.No	Description	Qty	S.No	Description	Qty
1.	SN74HC00N	150	16.	LM324N	150
2.	SN74HC02N	150	17.	LM311P	75
3.	SN74AHC04N	150	18.	CD74HC283E	75
4.	SN74HC86N	150	19.	SN74HC151N	150
5.	SN74HC08N	150	20.	CD74HC147E	75
6.	SN74HC32N	150	21.	SN74LS145N	30
7.	NE555P	150	22.	SN74HC109N	150
8.	SN74HC138N	150	23.	SN74HC595	150
9.	SN74HC11N	150	24.	CD4015BE	150
10.	SN74HC74N	150	25.	CD4543BE	150
11.	UA741CP	150	26.	CD4063BE	150
12.	UA7805CKCT	150	27.	SN74HC112N	150
13.	UA7812CKCT	150	28.	CD4029BE	150
14.	UA723CN	75	29.	CD4017BE	150
15.	LM317KCT	150	30.	TI Breadboard	6



FACULTY SEMINAR

Every week faculty seminars were arranged to exchange knowledge on latest developments.



1. Dr.D.EswarChaitanya, Asst.,Prof., ECE delivered a lecture on **“Machine Learning- an Introduction”** as a part of faculty Seminars in seminar hall, Dept of ECE on 01.09.2018.
2. Dr.K.Murali Krishna, Prof., ECE delivered a lecture on **“5G MASSIVE MIMO”** as a part of faculty Seminars in seminar hall, Dept of ECE on 08.09.2018.
3. Mr.A.LakshmiNarayana, Asst.,Prof., ECE delivered a lecture on **“PAPR Reduction in OFDM”** as a part of faculty Seminars in seminar hall, Dept of ECE on 15.09.2018.
4. Mr.B.KiranPatrudu, Asst.,Prof., ECE delivered a lecture on **“Channel estimation in MIMO-OFDM”** as a part of faculty Seminars in seminar hall, Dept of ECE on 22.09.2018.
5. Mr.VVK.Raju, Asst.,Prof., ECE delivered a lecture on **“Genetic Algorithm”** as a part of faculty Seminars in seminar hall, Dept of ECE on 06.10.2018.
6. Mr.S.Balarama Murthy, Assoc.,Prof., ECE delivered a lecture on **“Hardware Security”** as a part of faculty Seminars in seminar hall, Dept of ECE on 13.10.2018.



INDUSTRIAL VISIT

The department of ECE has organized an Industry visit for the 3/4 B.Tech ECE students on 17th & 18th September 2018 to All India Radio-Visakhapatnam and Anganampudi. Total 78 students avail this opportunity.

FACULTY ACHIEVEMENTS

1. Dr. B.Somasekhar Associate Prof., ECE has been accepted as an author for one chapter in a book titled **“Wavelet transforms and Complexity”** by Intech Open publishers in September 2018. 
2. Mrs. M. Nirmala, Asst.Prof.,ECE Completed 3 NPTEL online Certification courses
 - ❖ GOLD Certificate for Digital Circuits course with a consolidated score of 90% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks). 

- ❖ ELITE Certificate for Outcome based pedagogic principles for effective teaching course with a consolidated score of 66% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
- 3. Mr. J.BhaskaraRao, Asst., Prof., ECE
 - ❖ Selected as **editorial member** for an international journal of SCIREA Journal of Computer in October 2018.
- 4. Mr.N.Ram Kumar., Asst., Prof., ECE appreciated by the Department with cash prize of 5000/- rupees for conducting the dristi online contest to the students in the month of September 2018. 
- 5. Mr.G.ViswanadhRaviteja, Asst.Prof.,ECE has been reviewer for the article titled **“Design and Optimization of microwave filters using the cuckoo search algorithm”** of an international Jordanian Journal of Computers and Information Technology (JJCIT-2018-09-023) on 22nd September 2018.
- 6. Mr.J.BhaskaraRao, Asst.Prof., ECE has been selected as a active review member of International Journal of Emerging Technologies and Innovative Research on 27th November 2018.
- 7. Mr.J.BhaskaraRao, Asst.Prof., ECE has been selected as a **outreach committee member** for 6th International Conference on Recent Challenges In Engineering And Technology (ICRCET-18) organized by Institute For Engineering Research and Publication (IFERP) in Nagpur 24th - 25th November 2018.
- 8. Mr.J.BhaskaraRao, Asst.Prof., ECE has been appointed as the reviewer of American Journal of Science, Engineering and Technology in November 2018.
- 9. Mr.J.BhaskaraRao, Asst.Prof., ECE has been selected as **editorial member** for an international journal of SCIREA Journal of Electrics, Communication in October 2018.
- 10. Mr.J.BhaskaraRao, Asst.Prof., ECE got **International Association of Engineers-IAENG membership** with number: 211867 in September 2018.
- 11. Mr.J.BhaskaraRao, Asst.Prof., ECE has been selected as a **member of National Advisory Board** for International Conference on Applied Science, Engineering, Technology and Management (ICASETM-18) organized at Bangalore during 24th - 25th November 2018
- 12. Dr.D.EswarchaitanyaAsst.Prof.,ECE has been **reviewer** for the article titled **"Pedestrian Localisation in the typical Indoor Environments"** for International Journal of Communication Systems in June 2019.

- 13. Mr.P.DeviPradeepAsst.Prof., ECE acts as a **mentor** for NPTEL course titled **“hardware modeling using verilog”** for july-oct-2018.
- 14. Ms.D.NagamaniAsst.Prof., ECE acts as a **mentor** for NPTEL course titled **“Digital Circuits”** from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).

NPTEL CERTIFICATION COURSES

Mr. P. Devi Pradeep and Mr. R. Chandra Sekhar have been awarded with cash prize of Rs: 2000/-per candidate for doing more number of NPTEL Certification courses.



1. Dr.V.Rajyalakshmi, HOD, ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 60% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
2. Dr.V.Rajyalakshmi, HOD, ECE Completed NPTEL online Certification course in Microwave theory and Techniques with a consolidated score of 75% from IIT Bombay in the duration Aug-Sep 2018 (12 weeks).
3. MrP.DeviPradeep, Asst.Prof., ECE Completed NPTEL online Certification course in Stress management with a consolidated score of 55% from IIT Madras in the duration Aug-Sep 2018 (4 weeks).
4. MrN.Srinivas Naidu, Asst.Prof., ECE Completed NPTEL online Certification course in Introduction to research with a consolidated score of 82% from IIT Madras in the duration Aug-Sep 2018 (8 weeks).
5. Ms.B.Deepa, Asst.Prof., ECE Completed NPTEL online Certification course in Introduction to research with a consolidated score of 72% from IIT Madras in the duration Aug-Sep 2018 (8 weeks).
6. MrS.Balarama Murthy, Assoc.,Prof., ECE Completed NPTEL online Certification course in Introduction to research with a consolidated score of 84% from IIT Madras in the duration Aug-Sep 2018 (8 weeks).
7. MrS.Balarama Murthy, Assoc.,Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 65% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
8. MrS.Somasekhar, Assoc.,Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 56% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
9. Ms.B.Deepa, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 66% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
10. Ms.M.Nirmala, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 66% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).

11. Ms.M.Nirmala, Asst.Prof., ECE Completed NPTEL online Certification course in Digital Circuits with a consolidated score of 90% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).
12. Ms.D.Nagamani, Asst.Prof., ECE Completed NPTEL online Certification course in Digital Circuits with a consolidated score of 74% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).
13. Mr.P.DeviPradeep, Asst.Prof., ECE Completed NPTEL online Certification course in Digital Circuits with a consolidated score of 84% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).
14. Mr.P.DeviPradeep, Asst.Prof., ECE Completed NPTEL online Certification course in Hardware Modeling using Verilog with a consolidated score of 66% from IIT Kharagpur in the duration Aug-Oct 2018 (8 weeks).
15. Ms.PSM.Veena, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 66% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
16. Ms.K.Yashoda, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 74% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
17. Ms. K.Yashoda, Asst.Prof., ECE Completed NPTEL online Certification course in Digital Circuits with a consolidated score of 75% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).
18. Mr.J.BhaskarRao, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 64% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
19. Dr.S.Srinivas, Assoc. Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 77% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
20. Ms.P.Chaya Devi, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 67% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
21. Ms.Ch.Anoosha, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 73% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
22. Ms.Ch.Anoosha, Asst.Prof., ECE Completed NPTEL online Certification course in Digital Circuits with a consolidated score of 74% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).
23. Ms.Ch.Padmasree, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 70% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
24. Mr.A.Siva Kumar, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 60% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
25. Ms.G.Gayatri, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 57% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
26. Ms.D.Nagamani, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 74% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
27. Dr.D.EswarChaitanya, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 69% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
28. Mr.B.Jena, Asst.Prof., ECE Completed NPTEL online Certification course in Digital Image Processing with a consolidated score of 83% from IIT Kharagpur in the duration July-Oct 2018 (12 weeks).
29. Mr.V.V.K.Raju, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 67% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
30. Ms.M.Syamala, Asst.Prof., ECE Completed NPTEL online Certification course in Outcome based pedagogic principles for effective teaching with a consolidated score of 44% from IIT Bombay in the duration Aug-Sep 2018 (4 weeks).
31. Mr.R.chandraSekharAsst.Prof., ECE Completed NPTEL online Certification course in Switching Theory and Logic Design with a consolidated score of 78% from IIT Kanpur in the duration July-Oct 2018 (12 weeks).
32. Mr.R.ChandraSekharAsst.Prof., ECE Completed NPTEL online Certification course in Principles of Signal Estimation for MIMO/OFDM wireless communication with a consolidated score of 72% from IIT Kanpur in the duration July-Oct 2018 (12 weeks).

WORKSHOPS/ SEMINARS/ FDPS ATTENDED BY FACULTY

1. Mr.P.DeviPradeep, Asst.Prof., and Dr.S.Srinivas, Assoc.Prof.,Dept. of ECE has attended a three day workshop on “**Custom Analog & Digital IC Design Using Mentor EDA Tools (ADICD-2018)**” in technical associated with CoreEL Technologies, Bangalore, India organized by the department of electronics and Communication Engineering, GaytriVidyaParishad College of Engineering for Women during 27th -29st September 2018.

FACULTY PAPER PUBLICATIONS IN JOURNAL

1. Dr.V.Rajyalakshmi, HOD, ECE has published a paper titled **“Angle of Arrival Estimation in Smart Antenna for Wireless Communication”** in an international journal of Engineering and technology, vol 7, no 4.7, PP:136-140, September 2018.
2. Mr.R.Sundar, Asst.Prof.,ECE has published a paper titled **“Determination of characteristic impedance of a stripline ”** IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) e-ISSN: 2278-2834,p- ISSN: 2278-8735.Volume 13, Issue 5, Ver. I, PP 13-17, Sep.-Oct. 2018.
3. Dr.S.Srinivas, Assoc.Prof., ECE has published a paper titled **“Cut-less Technology Mapping Using Shannon Factor Graph with on-the-fly Size Reduction”** in an international journal of low power electronics, Volume:14, number 3, September 2018., PP:448-457, DOI: 10.1166/jolpe.2018.1573.
4. Ms.M.Nirmala Asst.Prof.,Ms.Ch.AnooshaAsst.Prof., and Ms.Ch.PadmasreeAsst.Prof., ECE has published a paper titled **“Design of Multiband Rectangular Microstrip Antenna for DCS and WLAN Applications using RFTOOL in MATLAB”** in an International Journal of Management, Technology and Engineering IJMTE, Volume 8, Issue 11, PP:973-979, November 2018.
5. Mr.V.V..Raju, Asst.Prof., has published a paper titled **“Implementation of Process Variation Tolerant and Low Power Consumption Schmitt Trigger Based SRAM”** in an international Journal of Research in VLSI Design Tools and Technology, Volume 3, Issue 3, November 2018, PP:13-26.
6. Dr.V.Rajyalakshmi, HOD and Ms.P.Devi, Asst.Prof., has published a paper titled **“Slotted Circular Shaped Wide Band Antenna for Wi-Max Application”** in an International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-7 Issue-4, PP: 310-312, November 2018.

FACULTY PAPER PRESENTATIONS IN CONFERENCES

1. Dr.V.Rajyalakshmi,HOD, ECE, Mr.N.Ram Kumar, Asst.Prof., Mr.V.V.K.Raju, Asst.Prof., and Mr.Murugapandiyan Asst., Prof has published a paper titled **“DC Characteristics of AlN Spacer Based AlXGa(1-X)N/GaN HEMT for High Power Applications”** International Conference on Emerging Trends on Engineering Science, Technology and Management (ICETESTM-18) organized by Aditya Institute of Technology and Management, Tekkali and Institute For Engineering Research and Publication (IFERP) during 29th – 30th November 2018.
2. Dr.V.Rajyalakshmi,HOD, ECE, and Ms.P.Devi Asst., Prof has published a paper titled **“Slotted Circular Shaped Wide Band Antenna for Wi-Max Application”** International Conference on Emerging Trends on Engineering Science, Technology and Management (ICETESTM-18) organized by Aditya Institute of Technology and Management, Tekkali and Institute For Engineering Research and Publication (IFERP) during 29th – 30th November 2018.

FACULTY STUDENT JOINT PAPER PUBLICATIONS IN JOURNAL

1. Mr.G.ViswanadhRaviteja, Asst.Prof.,ECE, Mr.I.Lakshman, Ms.B.YogithaSaiSruthi, Mr.B.Manish Kumar and Ms.K.SarojiniAnuradha IV/IV ECE-A has published a paper titled **“Defected ground Structured microstrip Patch antenna with Quad L-Shaped Slot for Gain enhancement at 4.8GHz Frequency”** in international journal of Communication on Applied Electronics, volume 7, Number 21, Pages : 1-5, ISSN: 2394-4714, October 2018.
2. Dr.D.EswarChaitanya, Asst.Prof., Mr.B.KiranPatrudu, Asst.Prof and Mr.K.V.N.M.Pavan Kumar IV/IV ECE has published a paper titled **“A New Energy Efficient Algorithm Based on LEACH Protocol”** in an International Journal of Management, Technology and Engineering IJMTE, Volume 8, Issue 11, PP:1743-1748, November 2018.

STUDENT SPECIAL ACHIEVEMENTS

1. Mr.M.HariVamsi IV/IV ECE-B has selected for The European Innovation Academy (EIA) 2019 Summer Program in October 2019. It is an intensive, hands-on, one-of-a-kind entrepreneurshipstudyabroad program that provides the resources, connections, and mentors necessary to build a successful startup. 
2. Mr.M.HariVamsi IV/IV ECE-B appointed as a director of marketing for Visakhapatnam Division for APROS (Academy for Professional Skills) in November 2018.
3. Ms.Ch.Venkata Lakshmi II/IV ECE-B Achieved **Prathibha Award** in excellence in her Diploma degree by State Government of Andhra Pradesh in the month of October 2018.
4. Ms.S.L.N.Sameera and Ms. T. Abhigna II/IV ECE-B have won **2nd prize** in “The Hindu Elocution” competition in a State level inter- college competition organized by GMRIT Rajam on 20th Sept 2018.
5. Mr. Pavan Kumar IV/IV ECE won **Bronze Medal** in AU Intercollegiate Body Building Championship held at Dr. L.B. College, Visakhapatnam during 10th to 11th October 2018.
6. Mr. Ch.Sai Kishore III/IV ECE-A won **Silver Medal** in AU Intercollegiate Body Building Championship held at Dr. L.B. College, Visakhapatnam during 10th to 11th October 2018.
7. Mr. Ch.Sai Kishore III/IV ECE-A won **Silver Medal** in AU Intercollegiate weight lifting Championship held at

Dr. L.B. College, Visakhapatnam during 6th to 7th November 2018.

CLUB ACTIVITIES



ECO GANESHA EVENT

Green club of department of ECE had organized an event on the eve of Ganesh chaturthi in association with “ParyavaranamargadarsiVaisakhi” organization on 12th September 2018. In this event we had sold 240 Eco-Friendly Ganesh Idols made with Clay & medicinal seeds in it, which after nimajjan a plant grows from it, at a nominal price of 20/- each. 16 students and faculty were participated in this event.

SPORTS CLUB ACTIVITIES



AU INTERCOLLEGIATE WEIGHT LIFTING, POWER LFTING & BEST PHYSIQUE CHAMPIONSHIP

Mr. Ch.Sai Kishore III/IV ECE-A won **Silver Medal** in AU Intercollegiate Body Building Championship held during 10th to 11th October 2018 and one more **Silver Medal** in AU Intercollegiate weight lifting Championship held during 6th to 7th November 2018 at Dr. L.B. College, Visakhapatnam.

Mr. Pavan Kumar IV/IV ECE won **Bronze Medal** in AU Intercollegiate Body Building Championship held at Dr. L.B. College, Visakhapatnam during 10th to 11th October 2018.