

Cryptex



Newsletter by the Department of
Electronics & Communication Engineering



पज्ञा प्रतिष्ठा

**SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

(A Unit of Shri Sode Vadiraja Mutt Education Trust®, Udupi)

Approved by AICTE, New Delhi; Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi
Vishwothama Nagar, Bantakal - 574115, Udupi District, Karnataka.

Newsletter of the Department of
Electronics & Communication Engineering, SMVITM, Bantakal

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EDITORIAL

A thought that has been enduring in mind when it becomes real; is truly an interesting and exciting experience. This newsletter is one such cherished work that had its roots in the persuasion. It would be a snapshot of the various activities and advancements for all associated with the Department of ECE, SMVITM. Proper communication plays a vital role in institution's development. This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us.

Usually we fail to appreciate the good deeds of many people and activities that happen around us. It could all change if we just pause to think of what is our contribution to the society from which we have been gifted with this blessed life. The progress of the department and thereby the institution mainly depends on many people who are working behind the scenes, overtime round the clock planning things to the smallest. This newsletter will be a medium to provide proper acknowledgement and respect to all these efforts and its results.

We are pleased to introduce Cryptex – the Departmental Newsletter, Volume 4, Issue 1, Jan 2019, before you. It covers the key developments in the department spanning across the last six months both within and beyond academics which kept the campus life abuzz with enthusiasm. The intent of Cryptex is to disseminate information about our department, and we hope that the readers find the issues informative and useful.

This newsletter will make you familiar with our impressive growth story with a glimpse of recent events on the road to provide quality education along with cutting edge research in the field of Electronics and Communication Engineering. This newsletter encapsulates the stories of cultural, academic and extra-curricular feats that the students, faculty and staff have earned with their efforts. The contents inside will give you a clear picture of how we started and how fast we are moving to the goal envisioned by our founders.

Our editorial team expresses its heartfelt thanks to Dr. Balachandra Achar H V, HOD, the faculty members and the students of the department for their support in fullest possible way in the growth of the department.

Editorially yours
Sachin S Bhat

Cover Design: Mr. Anantesh Rao, Mech

DEPARTMENTAL ACTIVITIES

1. Internship by CloudE



The department organized a 4-week internship cum training program for the benefit of final year students, by Cloud-E, Mysuru. Thirty-eight students participated in this program which started on 17 July 2018. Mr. Raghavendra Bhat and Mr. Mahesh Padyana were the resource persons from CloudE.

Inaugurating the program, Principal of the institute Prof. Dr. Thirumaleshwara Bhat said that value addition is important in technical education, which will increase the job prospects of the students. He said that a large percentage of students graduating from engineering colleges are not employable because of the lack of practical skills. Realizing this shortcoming, the university made it mandatory for all the students to undergo internship in industries or educational institutions. He also gave an insight into the various activities planned by the institution in the next academic year for the betterment of students and faculty members.

Mr. Raghavendra Bhat, partner of CloudE said that doing internship in industry has its own advantages and disadvantages. The disadvantage is that, the students do not get personal attention, and have to acquire the skills on their own. Whereas, when the same industry experts come to the college and conduct the internship program in the college, the students get more attention and can gain more knowledge and skills. He thanked the college for inviting him and his teammates to the college, and giving an opportunity to share their experiences.

Earlier, the HOD of ECE department Prof. Dr. Balachandra Achar gave a brief prelude to the program and welcomed the resource persons. Mr. Raghavendra Rao introduced the resource person, and Ms. Sowmya Bhat compered the inaugural session.

The valedictory function was held on 04 August 2018. The Principal of SMVITM presented mementos to the resource persons and thanked them for spending their valuable time in the college and training the students. Students Ravitej Rao and Nikitha Shetty gave their feedback about the internship.

2. Internship by CVC



The department organized a 4-week internship cum training program for the benefit of final year students, by Contemporary Verification Consultants (CVC) Pvt. Ltd., Bengaluru. Sixteen students participated in this program which started on 16 July 2018. Mr. Om Prakash L B, Mr. Rajesh H N and Mr. Alvin Varghese were the resource persons from CVC.

Inaugurating the program, Principal of the institute Prof. Dr. Thirumaleshwara Bhat said that mere text book knowledge is not sufficient for tackling industrial problems. Educational institutions can at the best provide good knowledge about engineering subjects to the students, but for gaining hands-on experience in solving real-world problems, they have to undergo internship under the able guidance of industry experts. He congratulated the ECE department HOD and faculty members for inviting eminent persons from reputed company like CVC, and providing the required hands-on training. He also congratulated the students for opting this internship and deciding to spend the vacation time fruitfully.

Mr. Rajesh H N, the design and verification engineer of CVC, thanked the college for inviting them to share their experiences. Earlier, the HOD of ECE department Prof. Dr. Balachandra Achar gave a brief prelude to the program and welcomed the resource persons. Mr. Sandesh Kumar introduced the resource persons, and Ms. Sowmya Bhat compered the inaugural session.

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3. Electronics-101 Workshop



The department in association with ISTE Student Chapter organized a 2-day workshop on the basics of electronics, for the interested students of ECE branch on 6 & 7 Oct 2018. Mr. Rayan Christ D'souza, Founder and CEO of The Freelancer Network, and alumnus of SMVITM was the resource person. He trained the students to build and test electronic circuits using discrete components. Inaugurating the session, Dr. Balachandra Achar, HOD of ECE, welcomed the resource person and congratulated the students for participating in the workshop.

Assistant Professors Mr. Vinay Kumar and Ms. Kusuma Prabhu coordinated the event.

4. Signing of MoU with CloudE



SMVITM signed a memorandum of understanding (MoU) with CloudE, a fast growing electronics & IT product & training solution provider, on 31 July 2018, in the institute premises. As per the MoU, both SMVITM and CloudE have agreed to work together to provide practical integrated training to students tailored for the industry needs, groom the students to become industry-ready, provide internships and assist the students in placements. CloudE has agreed to train the students of SMVITM in best industry practices and develop competency in one or more topics such as C-programming, Java, Python, IOT, Web design, PCB design, Embedded system design, Automation, VLSI, Robotics, etc.

Prof. Dr. Thirumaleshwara Bhat, Principal of SMVITM, signed the MoU on behalf of the college, whereas Mr. Mahesha Padyana, Founder and Managing Director of CloudE, signed on behalf of the industry. In his address, Mr. Padyana stressed the need for practical oriented education in engineering institutions, for better understanding of fundamental and advanced topics, and to make the students ready to tackle industry problems. Earlier Dr. Balachandra Achar, Head of E&C Engineering department, gave a prelude to MoU, and welcomed the gathering. The Heads of various departments were present on the occasion.

5. Industrial Visit to UPCL



The department organized an industrial visit to Udupi Power Corporation Limited (UPCL), Padubidri, on 29 & 30 August 2018. Ninety three students from the final year ECE branch participated in the visit and enhanced their knowledge through interaction with the engineers.

During the plant visit, Mr. Lalith Prasad Sharma, HR Admin of UPCL, explained the safety rules and procedures abided inside the premises, described the

process of power generation, and showed the respective plant units. Students got an opportunity to view the boiler section, turbine power generation system and digital commanding system.

Faculty members of the department Mr. Sandesh Kumar, Mr. Ganesh Shetty and Mr. Avinash N J accompanied the students and coordinated the visits.

6. Guest Lecture by Mr. Kumar Bhagavath



The Department in association with ISTE Student Chapter, organized a guest lecture on the topic “Fundamentals of PCB design” on 23 Oct 2018, for 5th semester ECE students and interested faculty members. Mr. Kumar Bhagavath, Founder & CEO of V-Cube Tech Solutions Bengaluru was the guest speaker.

Mr. Bhagavath, who had earlier worked in iWave Systems for 18 years, shared his vast knowledge about the topic with the students. He started with the basic components that are used in PCBs, and explained the importance of each component. He then described the different types of ICs, PCBs, layers, connectors, traces, etc. and explained the importance of each. Later he asked some viva questions to students that are usually asked in placement interviews and got answers from the students. Overall, the students got to know many things beyond syllabus about PCB from the resource person.

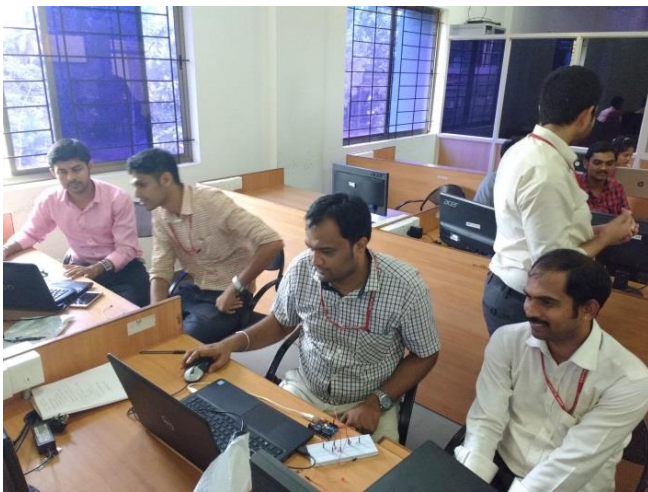
Akshatha Bhat of 5th semester welcomed the speaker and introduced him to the gathering. HOD Dr. Balachandra Achar thanked the speaker and handed over a memento as a token of respect. ISTE coordinators Mr. Vinay Kumar and Ms. Kusuma Prabhu coordinated the event.

7. Mini Project Exhibition



The department organized mini-project exhibition in the department block on 27 Nov 2018. 21 teams of students from 5th semester participated in the event and exhibited their mini projects carried out during the current semester. Assistant Professors Mr. Sachin Bhat and Mr. Avinash NJ evaluated the project works. Ms. Rajashree Nambiar and Ms. Vrunda Adkar coordinated the event.

8. Arduino Workshop for Faculty Members



The department conducted 2-day Robotics Workshop using Arduino Uno, for the faculty members on 3 & 4 Nov 2018. Assistant Professor Mr. Raghavendra Rao was the resource person. The workshop started with a briefing about the hardware description of Arduino UNO board, followed by coding simple programs. The hands-on session included LED blinking, LED fading, Traffic Light Controller and IR sensor program. Interested faculty members of ECE department participated in the workshop and enhanced their skills.

9. Talk by Dr. Asha C S



On 11 Aug 2018, the newly joined faculty Dr. Asha C S presented her research topic to the faculty members of the department. She explained about her research work and motivated other faculty members to take up research. She also gave many useful tips and information to the faculty members who have already registered for PhD.

10. Parent-Teacher Meeting



A meeting of parents of ECE students and faculty members was held on 30 Oct 2018 in the department premises, in the presence of the students. This meeting was part of the college-level PTA meeting held on the same day. The parents of slow-learning students expressed their concerns about their children with the faculty members and obtained feedback from them. Parents and teachers gave suitable advice to students to excel in academics.

11. Beat the Time



The department, in association with ISTE Student Chapter, organized a technical competition “beat the time” for the interested ECE students on 14 November 2018 in ECE block. Total 13 teams took part in the competition that had 3 rounds. The competition was organized to showcase the technical, logical and presentation skills of the participants.

Round 1 was technical presentation where students were asked to present their technical papers. 12 teams were selected for the next round based on their scores in the first round. Round 2 was rapid fire, in which the contenders were asked to answer the questions based on technical, logical and general knowledge within a span of 1 min. Round 3 was memory test, in which one member per team was shown around 30 components in the lab in 1 min, later he had to deliver the same to his team members.

Rahul Adiga and Sumanth S of 5th semester bagged first prize, whereas Adith Holla and Jeevan JA of 3rd semester won the second prize.

The entire event was organized and conducted by ISTE student coordinators VK Radheya and BM Shikha, Akshatha Bhat, Vaishnavi Pai, Pranav KR and Shrirama Acharya under the guidance and support of ISTE faculty coordinators Ms. Kusuma Prabhu and Mr. Vinay Kumar, and HOD Dr. Balachandra Achar. Assistant Professors Mr. Ganesh Shetty and Mr. Avinash NJ helped in judging the first round.

12. Technocrats Club Event



Technocrats Students Club in association with ECE Department and T&P Department conducted a competition “Loud Speakers - where the impact is louder than the voice” on 29 October 2018 from 12.00 to 1.00 pm. This competition provided a platform for the participating students to exhibit their oratory skills.

Competition had three rounds, round one was “Desire” wherein student had to personify a given nonliving thing, round two was “Brain Waves”- student had to construct the words through given letter collections & final round was “Flawless” where participants were given an oxymoron, these word had to be used frequently for sentence creation.

Students of third & final year ECE participated in this event. The competition was organized & conducted by technocrats club members Ms. Rushali Naik, Mr. Rahul Adiga from 5th Sem ECE, Ms. Pooja KR & Mr. Ravitej Rao Belle from final year ECE under the guidance of Ms. Laxmi Shetty Assistant Professor in ECE Department. Judges for the event were Mr. Raghvendra Rao & Ms. Sowmya Bhat Assistant Professor in ECE Department.

Winners of the Competition were, first prize was bagged by Ms. Shubha Kotian of 5th Sem ECE & runner up of the competition was Ms. Pooja Nair of 5th Sem ECE. HOD dept. of ECE Dr. Balachandra Achar, Placement officer Ms. Vidya Bhat and faculty members of ECE were also present to encourage the student participants.

13. Tessolve Mock Interview



The Placement Coordinators, Mr. Raghavendra Rao, Ms. Laxmi Shetty and Ms. Sowmya Bhat conducted a mock interview for eligible and

interested final year ECE students for Tessolve Semiconductor placement drive from 12 noon to 1:45 pm on 1st October 2018.11 students were present for the session.

Ms. Sowmya Bhat briefed about the interview process taking place in actual Tessolve Placement drive and the important concepts like digital electronics, basic electronics, network analysis, linear IC's ,which the students need to concentrate, in order to crack the technical aptitude and technical interview. Mr. Raghavendra Rao conducted mock technical aptitude test for the students and finally highlighted on the most frequently asked questions in the interview process and how to solve those problems in a best possible way, especially complex problems in network analysis.

Ms. Laxmi Shetty and Ms. Sowmya Bhat conducted mock technical and HR interview for the eligible students on 6th October 2018 and explained the dos and don'ts in answering interview questions.

14. Cadence & iWave Placement Preparation



The department placement coordinators, Ms. Sowmya Bhat and Ms. Laxmi Shetty conducted a session on “How to prepare for Cadence and iWave placement drives” for eligible final year ECE students from on 19 Sep 2018. 25 students were present for the session.

Ms. Sowmya Bhat conveyed the importance of active participation by the students in pre-placement talk to create the first best impression, suggested students to go through company's profile and know its mission, vision, products, services, latest technologies and rewards followed by the discussion of frequently asked technical questions on basics of MOSFETs, pass transistors, transmission gates, schematics and layouts, different CMOS logic structures, its optimization, memory cells, ADC, DAC, PLL, Mentor Graphics tool used in back end VLSI design, etc., and how to crack technical interview questions on the above topics.

Ms. Laxmi Shetty verified the Resumes of eligible students and suggested the dos and don'ts in Resume writing and interview process.

15. Mock GD and Interview

The Placement Coordinators of the department conducted mock group discussion session for interested final year students of ECE and CSE branches. A briefing about the GD round format conducted during various campus placement, etiquettes to be followed during GD and the tips to represent effectively were conveyed to participants by Ms. Laxmi Shetty.

This session was followed by conduction of parallel mock GD, wherein all the members actively participated and contributed their thoughts on various topics. The Group discussion was moderated by Mr. Raghavendra Rao, Mr. Ranjith Bhat, Ms. Sowmya Bhat & Ms. Laxmi Shetty. At the end the

moderators shared their observations with individual student.



16. Talk by alumnus Ms. Shiraksha Acharya



The department in association Training & Placement Cell, arranged a Talk by old student of 2014-18 batch, Ms. Shiraksha Acharya, on 3-Sep 2018. The students of final year ECE attended the Talk, which was held in the Admin Block Seminar Hall.

Ms. Shiraksha, who is currently working in Citrix Systems Pvt. Ltd, started her session with an activity wherein participants experienced the importance of 'out of the box thinking'. Later Ms. Shiraksha shared her experience about the college placement activities, and about the preparations that are needed to crack the interview, expectations by the industry, importance of being active participant in all college activities. She motivated the students to grab all the opportunities they will get and try best to succeed, and insisted not to lose hope and keep trying.

ECE Placement team coordinated the event. In-charge HOD for Mr. Nagaraj Rao presented memento to the guest speaker and Ms. Laxmi Shetty compered the program.

17. Talk by alumnus Ms. Phebe Samuel



Ms. Phebe Ann Samuel, alumna of the Department of Electronics and Communication Engineering, SMVITM, addressed the 2nd year ECE students on 27 August 2018. She is currently pursuing M.Tech in Power Electronics and Drives at MIT, Manipal.

Ms. Phebe shared her experience in the department of ECE during her engineering at SMVITM. She spoke about the importance of ECE branch and the subjects in it. She explained how to prepare for internal and external exams. She guided the students to approach faculties whenever they have doubts. Also she said how the faculties guided and helped her in clearing her doubts.

Ms. Phebe requested students to prepare for GATE and Aptitude right from third semester. She suggested the audience to take part in different club activities and explained how it will help in overcoming their stage fear. She also discussed about the various opportunities available for ECE students after graduation.

It was an interactive session and the students were greatly benefited by this session. All the second year ECE students of attended the program. Nivedita Hebbar of 2nd year ECE hosted the program. Dr. Balachandra Achar, HOD, presented memento to Ms. Phebe. Alumni coordinators Ms. Shareen Noronha and Ms. Rajashree Nambiar coordinated the program.

18. Activity under Atal Tinkering Lab



Assistant Professor Mr. Avinash N J, Lab instructor Mr. Sandeep K R and students Rushali Naik and Suraksha actively participated in Atal Tinkering Lab sessions at Govt. PU Colleges Hiriadka and Brahmavara.

Atal Tinkering is a flagship initiative set up by the NITI Aayog India to promote innovation and entrepreneurship across the length and breadth of the country. As per this initiative, the team of little mentors comprising of Rushali, Suraksha and two other students from CSE department took classroom sessions and hands-on lab sessions to PU students.

19. Farewell to Mr. Rajesh Nayak



The department bid farewell to Mr. Rajesh Nayak on 14 Dec 2018. Mr. Rajesh who was a part of SMVITM family right from its inception, served the institution with dedication for 8.5 years. He resigned for better prospects, and will be relocating to Bengaluru shortly.

Speaking on the occasion, Principal Dr. Thirumaleshwara Bhat said that Mr. Rajesh served the institution to the best of his capacity, and

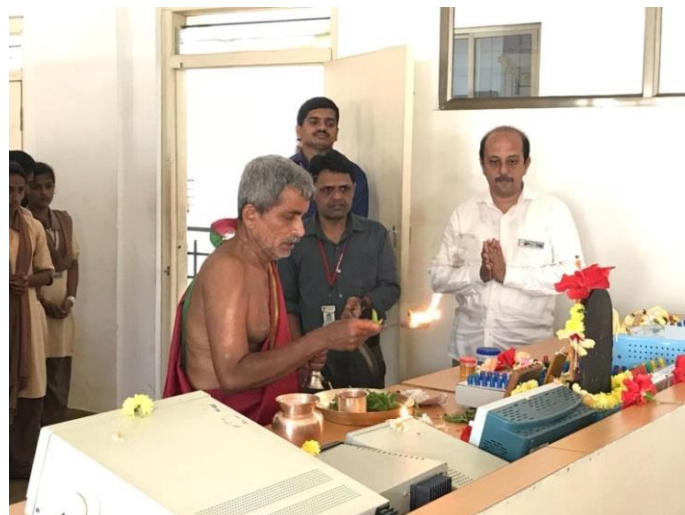
executed all his responsibilities with a calm mind. He wished him best of luck in his future endeavors, and requested him to remain in touch with SMVITM family through e-means. Faculty members shared their sweet memories working with Mr. Rajesh.

Principal handed over a gift and college memento to Mr. Rajesh as a token of remembrance. In his speech, Mr. Rajesh thanked all the previous and present Principals and ECE HODs for their constant support and encouragement in discharging his duties. He wished all the best to the institution.

20. Ayudha Pooja

The annual Ayudha Pooja and Saraswathi Pooja in the department were held on 17 Oct 2018 in the

department laboratory. Purohit Shri Hayavadana Bhat performed the pooja in the presence of HOD, faculty, staff and students, and blessed all.



PLACEMENTS

During the current odd semester, 17 ECE students got placed in 10 different companies; two of them got placed in two companies each. The department congratulates all the successfully placed students, and wishes them all the best in their future.

<i>Sl.No.</i>	<i>Name of the student</i>	<i>Name of the companies in which placed</i>
1	PAVAN AITHALA P N	Robosoft Technologies Pvt Ltd.
2	CHAITRA BHAT	iWave Systems Technologies Pvt Ltd.
3	PUNEETH S KUMAR	iWave Systems Technologies Pvt Ltd.
4	ARAVINDA UPADHYA K	Tayana Software Solutions
5	ASHLESH P K	Tata Consultancy Services Ltd.
6	K GIRISH RAO	Tata Consultancy Services Ltd.
7	SHETTY NIKITHA NARENDRA	Tessolve Semiconductor Pvt. Ltd.
8	KIRAN	Tessolve Semiconductor Pvt. Ltd.
9	KIRAN	KARMIC Design Pvt. Ltd.
10	RAJESH	KARMIC Design Pvt. Ltd.
11	RASHMI K H	PathFront
12	VAISHAKH	Accord Global Tech Solutions Pvt. Ltd.
13	ABHINAYA S	Access6 Technologies
14	ANEESHA R SANIL	Access6 Technologies
15	B M SHIKHA	Access6 Technologies
16	KARTHIK KAMATH	Access6 Technologies
17	POOJA K R	Access6 Technologies
18	SUPREETH G RAO P	Access6 Technologies
19	POOJA K R	Wipro Ltd.

FACULTY ACCOMPLISHMENTS

1. Elite+Gold Certification from NPTEL



Faculty members Mr. Krishna Kumar, Mr. Ganesh Shetty and Ms. Vrunda Adkar bagged Elite Gold certification from NPTEL in the respective course studied by them.

2. Conference presentation

Mr. Sachin Bhat presented his work “Phase coherence based binarization of inscription manuscripts and its performance evaluation methods”, in IEEE International Conference on Circuits and Systems, held at Kottayam, during 20-22 Dec 2018.

3. Guest Lecture by Mr. Avinash N J



Assistant Professor Mr. Avinash N J delivered a guest lecture on ARM Cortex M3 Processor, at SNM Polytechnic, Moodubidre, on 29 Oct 2018.

Mr. Avinash explained about Thumb-2 technology, Applications of ARM, Architecture of ARM Cortex M3, Debugging support, General Purpose Registers, Special Registers, Exceptions, Interrupts, Stack operation, Reset sequence and other details. Students of final year ECE diploma and faculty members of SNMP attended the session and enhanced their knowledge.

STUDENT ACCOMPLISHMENTS

1. Darshan Raj of 7th semester won first prize and gold medal in the “Best Physique” (70 kg category) event as part of “19th VTU single zone inter collegiate Weight Lifting and Best Physique competition 2018-19” held at Global Academy of Technology Bengaluru, on 30 & 31 Oct 2018.
2. Rachana D Shetty of 5th semester and Adith Holla of 3rd semester ECE bagged the Hayavadana Prashasti for their best performances during the previous academic year of 2017-18.



3. Pranav K R and Adith Holla of 3rd semester won second place in Technical Quiz competition as part of 15th ISTE State Level Student Convention-2018, held at MITE Moodubidre on 6 Oct 2018.



4. Ravitej Rao Belle of 7th semester and Shreesha Dasa of 3rd semester won second place in Folk Orchestra event, as part of VTU youth fest held at BKIT Bhalki from 2 to 4 Nov 2018.



WORKSHOPS PARTICIPATED BY FACULTY MEMBERS

1. Mr. Sachin Bhat participated in the workshop “Machine Learning for presictive modeling and data analytics using Python”, at Reva University, Bengaluru, from 23 to 27 July 2018.
2. Mr. Raghavendra Rao participated in the workshop “Design, Analyses and Hardware Implementation of Switched mode Power Converters”, at NMAMIT Nitte, from 23 to 28 July 2018.
3. Mr. Sachin Bhat participated in the workshop “Advanced topics in Machine Learning and Applications in Engineering & Technology”, at NMAMIT Nitte, from 26 to 28 Oct 2018.

GROUP PHOTOS



Talk to yourself at least once in a Day. Otherwise you may miss a meeting with an EXCELLENT person in this World...

VISION OF THE DEPARTMENT

To emerge as an excellent technical education center and be an integral part in the development of advancing technologies and global challenges, in the field of Electronics and Communication Engineering.

MISSION OF THE DEPARTMENT

1. To facilitate an ambience conducive to the excellence in technical education.
2. To provide a platform that will ensure the exchange of ideas and dissemination of knowledge.
3. To establish a research oriented center by having rapport with industries.
4. To foster ethical and value based education with credibility by promoting activities that have societal impact.

PROGRAM EDUCATIONAL OBJECTIVES

The graduate of Electronics and Communication Engineering should be able to:

1. Exhibit essential knowledge of applied sciences, mathematical modeling, logical interpretation and virtual realization to resolve real-time problems in the field of Electronics and Communication Engineering.
2. Work productively as an Electronics and Communication Engineer, including supportive and leadership roles on multidisciplinary teams.
3. Inculcate effective communication skills to excel in professional growth.
4. Take part in lifelong learning in pace with the advancing technological society.

