

ELECTRONEWS

A Departmental Newsletter from

SMVITM

Department of Electronics and Communication
Engineering.

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SMVITM

ELECTRONEWS

From the editor's desk...

Warm greetings to the readers of ELECTRONEWS.

Welcome to this issue of Newsletter from the Department of Electronics and Communication Engineering. We are delighted to launch our Bi-Annual Newsletter "ElectroNews". This newsletter is a digital way for us to communicate with our students, faculty members, alumni and industrial partners. This newsletter will provide a glimpse of the departmental activities and achievements. Also, it enlightens the readers about the latest happenings in the department, focusing about different activities like placement, alumni, institutional club activities, student and faculty achievements. We look forward for more activities and achievements for the department to march towards excellence in the future. We would like to thank all teaching, supporting staff and our beloved students for their constant support.

Ranjith Bhat

DEPARTMENTAL ACTIVITIES

Lecture series, Talks and Webinars:

1. ISTE organized a "Adobe Internship- Domain Specific Round Preparation"

Department of Electronics and Communication Engineering of Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, in association with the Department of Training and Placement and ISTE organized a "Adobe Internship- Domain Specific Round Preparation" for 203 batch Adobe Internship aspirants of SMVITM on 4th October 2021.



Dr. Balachandra Achar H V, Professor, Department of ECE, Mr. Nagaraj Rao, Associate Professor, Department of ECE, Mr. Sachin Prabhu, Mr. Chetan R, Ms. Laxmi Shetty, Mr. Arun Upadhyaya and Mr. Ganesh Shetty, Assistant Professors, Department of ECE were the resource persons.

Faculties conducted sessions on various Electronics and Communication Engineering

domain specific subjects like Microcontrollers, Microprocessors, Digital Electronics, Network Theory, Analog Devices, Control Systems,



Communication Systems, Electrical Measurements and Instruments wherein they discussed on frequently asked questions and important websites to refer which helps students to crack the interview process.

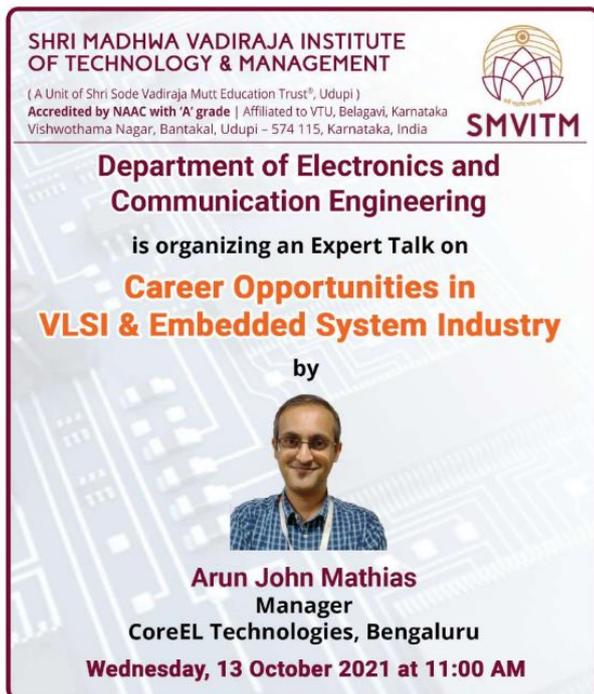


33 Adobe Internship aspirants from 2023 batch actively participated in the session.

All the students and faculties supported the event "Adobe Internship- Domain Specific Round Preparation" to become a success.

2. Talk on "Career opportunities in VLSI & Embedded System Industry "

Department of Electronics and Communication Engineering of Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, organized a technical talk on "Career opportunities in VLSI & Embedded System Industry " for the final year EC students of SMVITM on 13th October 2021. The resource person Mr. Arun John Mathias from CoreEL technologies addressed the students and highlighted the industry opportunity in the VLSI domain. He also explained the concepts of VLSI like ASIC and FPGA.



The poster is for a technical talk organized by the Department of Electronics and Communication Engineering at SMVITM. It features the institute's name and logo at the top, followed by accreditation details. The main text announces an expert talk on "Career Opportunities in VLSI & Embedded System Industry" by Arun John Mathias, Manager at CoreEL Technologies, Bengaluru. The event is scheduled for Wednesday, 13 October 2021 at 11:00 AM. The background of the poster shows a circuit board pattern.

Ms. Vimitha introduced the resource person to the gathering and proposed the vote of thanks.

Dr. Sachin Bhat, HOD of EC department coordinated the event. The staff and faculty members were present during the event.



3. Peer learning session on "Introduction to Mainframe Technology" by Ms. Sanjeetha Shetty

Department of Electronics and Communication Engineering in association with ISTE cell conducted peer learning session on "Introduction to Mainframe Technology". This session was held on 13 November, 2021, from 12:00pm to 1:00pm at the ECE department, SMVITM. Resource person for this session was Ms. Sanjeetha Shetty. She is our college alumna and currently working in Infosys Ltd. Bengaluru as a System Engineer. Around 60 Students from 2nd Year ECE participated and interacted with

Ms. Sanjeetha began the session by asking question to students about their interest towards programming and gave the information about which programming language is of prime importance in MNCs.



She continued the session by explaining the importance of mainframe technology and how it is advantageous over desktop. Also, she introduced Mocha software and showed how to allocate physical data set. Finally, she concluded her presentation by emphasizing about internship during students' education period.



Ms. Shreya M Tantry, 3rd Semester ECE student welcomed the resource person and audience.

Mr. Chetan ISTE coordinator, Ms. Akshatha Rao, Asst. Professor, ECE Dept. Dr. Sachin Bhat, HoD, ECE Dept. Mr. Ferdinand, CR of 7th Sem

ECE and Ms. Aishwarya ISTE Joint Secretary were present for the session. Mr. Adithya Prakash, 3rd Sem, ECE student proposed vote of thanks.

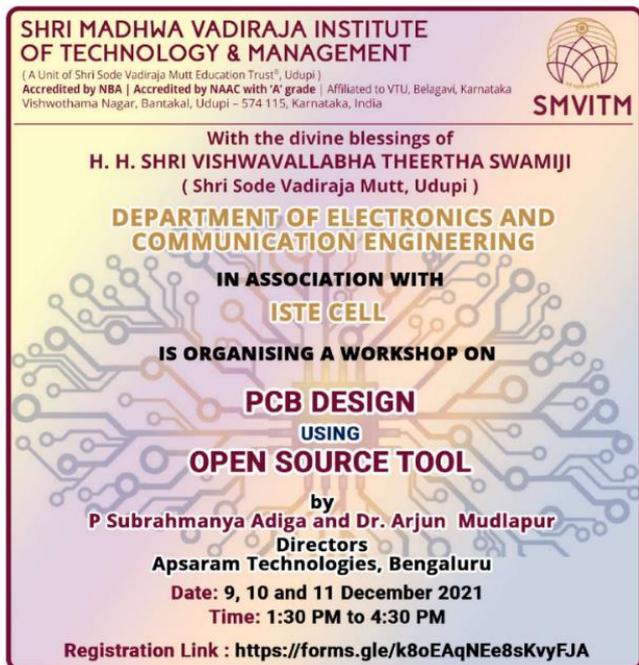
4. Three Day Hands-on Workshop on "PCB DESIGN USING OPEN-SOURCE TOOL"

Department of Electronics and Communication Engineering in association with ISTE Cell conducted a Three-Day Hands-on Workshop on "PCB DESIGN USING OPEN-SOURCE TOOL" held on Dec 9, 10 & 11, 2021 at the CCC Lab, 3rd Floor Admin Block, SMVITM. Resource persons for this session were Dr. Arjun Mudlapur and Mr. P Subrahmanya Adiga, Directors of Apsaram Technologies, Bengaluru. Around 55 students from 2nd Year & 3rd Year ECE participated and interacted with the resource person.



Resource persons started the session by introducing the PCB terminologies, features of KiCad software and listed the importance of

using open-source tools. The session continued with the hands-on mode of discussion and students got benefitted by implementing the electronic circuits. The session concluded by generating the Bill of Material (BoM) and GERBER File.



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With the divine blessings of
H. H. SHRI VISHWAVALLABHA THEERTHA SWAMIJI
(Shri Sode Vadiraja Mutt, Udupi)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IN ASSOCIATION WITH
ISTE CELL

IS ORGANISING A WORKSHOP ON
PCB DESIGN
USING
OPEN SOURCE TOOL

by
P Subrahmanya Adiga and Dr. Arjun Mudlapur
Directors
Apsaram Technologies, Bengaluru

Date: 9, 10 and 11 December 2021
Time: 1:30 PM to 4:30 PM

Registration Link : <https://forms.gle/k8oEAqNEe8sKvyFJA>

During the inauguration of the workshop Dr. Sachin Bhat, HoD of ECE Dept. welcomed the resource person, participants, and said students need to keep themselves engaging in active learning and update with the technological aspects. Dr. Ganesh Aithal, Vice Principal gave a presidential speech and motivated the students to be active in the workshop.

Ms. Akshatha Renjal, a student from the 3rd Year ECE Dept compered the program. Sr. Lab instructors Mr. Girish and Mr. Sandeep and Ms.

Aishwarya, ISTE Joint Secretary supported the event. Ms. Shashikala R, Asst. Professor (Sr.), ECE Dept. and Mr. Chetan R, ISTE Coordinator organized the workshop.

5. Webinar on Career Opportunities in VLSI and Semiconductor Industry

Department of Electronics and Communication Engineering has organised a webinar on "Career Opportunities in VLSI and Semiconductor Industry" on 29 December, 2021 from 9.00am to 10.00am. The resource person Dileep Kudwa gave clear insight on career opportunities in the VLSI domain.



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SMVITM

Department of Electronics and Communication Engineering

is organizing an Expert Talk on
Career Opportunities in VLSI and Semiconductor Industry

by



Dileep Kudwa
Senior Verification Engineer
Dialog Semiconductor Renesas, USA

Date: 29 December 2021 Time: 9:00 AM
Venue: Seminar Hall, Admin Block

Gmeet Link : <https://meet.google.com/kgz-mrni-xnp>

He introduced about Semiconductor/VLSI industry and told that VLSI industry can be of EDA company, ASIC design Company, FPGA design Company, Fab/Foundry company. He

explained that VLSI domain can be classified into front end flow design and back-end flow design. He also talked about various cadre in the field of VLSI like design engineer, verification engineer, EDA/CAD engineer, application engineer, technical support, reliability engineer, Fab engineer etc. He briefed about skill requirement for the various VLSI field employments. He concluded the session by stressing on career graph of VLSI engineering.



Dr. Sachin Bhat, HOD of ECE has organised the event. Ms. Shashikala R and Ms. Akshatha Rao coordinated the event. Ms. Sameeksha introduced the resource person and Ms. Chaitra Kulal proposed vote of thanks. Faculty members were present during the event.

6. Five Days Faculty Development Program on Electric Vehicles and Smart Grid

Department of Electronics and Communication Engineering and Mechanical Engineering in association with ISTE Faculty Chapter of Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Udupi organized a Five Days Faculty Development Program on “Electric Vehicle and Smart Grid” from 14th to 18th March 2022 in the college premises.

The inaugural ceremony of the program held on Monday 14 March 2022 at 9.30am. Dr Gajanan Anne, HoD of ME Dept. welcomed the august gathering. The Chief Guest of the program Dr. V.B Venkatesa Perumal, Professor, Dept. of Electrical and Electronics, NITK Surathkal.



In his inaugural address said that, in the next 5 to 10 years India will see big change in the transportation segment i.e., change in conventional IC engine vehicle to Electric Vehicle. Also, he has urged that future

engineers should be ready to cater the needs of end users.

Especially future engineers have to focus more on maintenance of EV than R & D work, maintenance like battery recharging, replacement and giving solutions to the situations like vehicle breakdown etc., Mr. Esakki Raja S, Sr. Application Engineer in VI solutions, Bengaluru was the resource person of the five-day faculty development.



He appreciated the management for conducting the sessions in blended mode and highlighted the importance of training the future engineers in the Electric Vehicle field.

Alumni talk:

Student - alumni interaction activity of alumna Ms. Ashwini Sheetal Dantis

The student - alumni interaction activity of alumna Ms. Ashwini Sheetal Dantis (2014-2018 ECE Batch) with 2nd year students of ECE branch was organized by Alumni Cell of Electronics and Communication Engineering

Department on 19th February 2022 in the admin block seminar hall of SMVITM.



Ms. Ashwini, Cloud Engineer, Niveus Solutions Pvt. Ltd. |Google Partner, Udupi, started interaction with her experience as a student in the Electronics and Communication Engineering branch. She addressed the gathering about how her life was at SMVITM during her engineering days. Ashwini spoke about the arrangements made by the college and department for students benefits, also its importance in curriculum and placements. She mentioned the necessities currently needed by an IT and core companies and along with that she also mentioned how students should study few programming languages and the importance of creating GITHUB account. She gave an insight on the current technological trends in the field of Electronics and IT. She mentioned the more importance to seek a better internship while pursuing graduation.

She explained about projects and its weightage in the resume.



Ms. Ankitha Bhat from 2nd year B.E of ECE department welcomed the gathering and introduced the speaker to the audience. Dr. Balachandra Achar gave a memento to Ms. Ashwini Dantis in this occasion and thanked her for being a part of this fruitful interaction. Ms. Rajashree Nambiar, Senior Assistant Professor, Department of ECE, coordinated the event.

FACULTY & STUDENT ACCOMPLISHMENTS

A. Faculty Research Presentations and Publications:

1. Sachin S Bhat, Rajashree Nambiar published a paper titled "Building Dataset and Deep Learning based inception model for the Character Classification of Tigalari Script" in Advances in Intelligent Systems and Computing, Springer.

2. Sachin S Bhat published a paper titled "Parts of Speech Tagging and Extractive Summarization Techniques for Kannada Documents" in Lecture Notes in Electrical Engineering.

3. Sachin S Bhat published a paper titled Character Recognition of Tulu script using Convolutional Neural Network Advances in Artificial Intelligence and Data Engineering.

4. Sachin S Bhat published a paper titled "Palladium metal embedded on mesoporous graphene oxide as an efficient heterogeneous catalyst for Suzuki coupling reaction" Materials Today.

B. Achievements

1. Dr. Raghavendra Rao was awarded with Ph.D. from NITK, Surathkal for the thesis "Investigation of Control Algorithms for PV System under Partial Shading Conditions and their effect on the efficiency of DC-DC Converter".
2. Dr. Sachin S Bhat and Dr. Nagaraj Bhat received 10 lakhs funding from VTU under Competitive Research grant for the proposal 'Digitization of Halegannada Manuscripts'.
3. Dr. Sachin S Bhat received 25,000 funding from KSTA under Small Grants scheme for 'Application of NLP for Indian Languages'.
4. Dr. Sachin S Bhat received 2 fundings from KSTA under Short term studies scheme for 'Study of OCR for Kannada Language' as PI & 'Text Summarization for Kannada documents' as supervisor.
5. Dr. Sachin S Bhat received Best Paper Award for the paper 'Grammatical Tagging of Kannada text using Bidirectional Long Short-Term Memory 'in IEEE Discover, NMAMIT-Nitte, Nov 2021.
6. Dr. Sachin S Bhat received Best Paper Award for the paper 'Secure Image Processing using Deep Neural Network 'in Springer CISCON, MIT Manipal, Dec 2021.

7. Dr. Sachin S Bhat received Best Research Award in International Conference on Engineering, Science and Medicine 2021, Chennai, Dec 2021.
8. Dr. Sachin S Bhat, Shreeraksha, Shamitha Shanbhogue, Chaitra and Namratha Rao received Best Paper award for the paper 'Design of a Transliteration Application for Kannada Signboards' in IEEE DELCON 2022, Netaji Subhash University of Technology, New Delhi, in Feb 2022.
9. Research proposal of Dr. Sachin S Bhat and Mr. Sunil Haldankar titled 'Sensor based device for predicting safe bearing capacity of soil' selected for faculty grant scheme of KSCST worth 1.5 lakhs.
10. Dr. H V Balachandra Achar received best paper award for the paper 'Enhancing the performance of Wireless Sensor Network by integrating with Optical Fiber Communication' in ICAECT-2022 at Vidyalkar Institute of Technology, April 2022.
11. Incubation proposal by Dr. Sachin S Bhat named 'Decibel dB' awarded 2nd prize in Elevate Unnati 2021, organized by Karnataka Innovation & Technology Society, Dept. of Electronics, IT BT & ST, Govt of Karnataka, Sept 2021.

C. Conference presentation:

| Name of the faculty | Title of the paper | Name of the conference |
|---|--|---|
| Chetan. R | Providing Knee Movement Assistance using Android and IOT | ICOSEC 2021 |
| Avinash, Krishna, Ramamoorthy, Ashwini, Chetan R, Sowmya Bhat | Android App and RFID based smart ration distribution system | ICMNWC 2021 |
| Balachandra Achar H V | Enhancing the performance of Wireless Sensor Network by integrating with Optical Fiber Communication | ICAECT-2022 |
| Sachin s Bhat | Classification of Plant Leaves of Western Ghats using Deep Learning | IEEE DISCOVER |
| Sachin s Bhat | Grammatical Tagging for the Kannada Text Documents using Hybrid Bidirectional Long-Short Term Memory Model | IEEE DISCOVER |
| Sachin s Bhat | Secure Image Classification using deep learning | Springer CISCON |
| Sachin s Bhat | Design of a Transliteration Application for Kannada Signboards | IEEE DELCON |
| Sachin s Bhat | Evaluation of Support Vector Machine and Binary Convolutional Neural Network | 2nd Springer International Conference on Information Technology |

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|-----------------|---|---|
| | for automatic medicinal plant species identification | |
| Sachin s Bhat | An SVM based approach for the quality estimation of Udupi jasmine | 2nd Springer International Conference on Emerging Trends and Technologies on Intelligent Systems |
| Yogeshwary B. H | Node Localization Techniques in Underwater Sensor Networks | 2022 IEEE International Conference on Sustainable Computing and Data Communication Systems (ICSCDS) |
| Sowmya Bhat | Design of Low Power Full Adder with Minimum number of Transistors for Application | ICGCP-2021 |

D. Faculty Development Programme & Workshops:

| Name of the faculty | Title of the FDP/Workshop | Venue |
|---------------------|--|--|
| Laxmi Shetty | "Industrial Applications of Machine Learning and Artificial Intelligence | Manipal University Jaipur |
| Chetan R | IOT with Machine Learning & Artificial Intelligence | ITS Engineering college |
| Chetan R | FPGA Design and Verification | Sandeepani School of Embedded System Design, Bangalore |
| Balachandra Achar | Applied Machine Learning, AI and its Applications using Python | Edu-x-Labs, online |
| Laxmi Shetty | "Industrial Applications of Machine Learning and Artificial Intelligence | Manipal University Jaipur |
| Chetan R | IOT with Machine Learning & Artificial Intelligence | ITS Engineering college |
| Chetan R | FPGA Design and Verification | Sandeepani School of Embedded System Design, Bangalore |
| Balachandra Achar | Applied Machine Learning, AI and its Applications using Python | Edu-x-Labs, online |

YouTube channels of faculty members

| S.I. | Faculty Name | YouTube Channel Link |
|------|--------------------|---|
| 1 | Ms. Laxmi Shetty | https://www.youtube.com/user/05laxmishetty |
| 2 | Mr. Arun Upadhyaya | https://www.youtube.com/c/ArunUpadhyaya/ |
| 3 | Mr. Nagaraja Rao | https://www.youtube.com/channel/UC68SV57xMPfk7tj1I_2Rjw/ |
| 4 | Mr. Ranjith Bhat | https://www.youtube.com/user/Ranjithbhat444 |
| 5 | Ms. Sowmya Bhat | https://www.youtube.com/channel/UCfMfti5ejWCmv7Pvh33lbUw/ |

PLACEMENTS

| Placed Student Details Batch 2021-22 | | |
|--------------------------------------|--|---------------------------|
| SI.NO | COMPANY NAME | STUDENT NAME |
| 1 | Palle Technologies, Bengaluru | ASHISH SUVARNA U |
| | QuEST Global Trivandrum | |
| 2 | Capgemini Technology Services India Limited, Bengaluru | VAISHAK V PRABHU |
| 3 | Sasken Technologies, Bengaluru | ABHINANDANA M NAIK |
| 4 | Sasken Technologies, Bengaluru | AISHWARYA |
| 5 | Sasken Technologies, Bengaluru | AKASH |
| 6 | Tata Consultancy Services Ltd., Bengaluru | BHOOMIKA J S |
| | Wipro Limited, Bengaluru | |
| | InSemi Technology Services Pvt. Ltd., Bengaluru | |
| 7 | Tech Mahindra Cerium Systems (P) Ltd., Bengaluru | CHAITRA B R |
| | Infosys Ltd., Bengaluru | |
| 8 | Tata Consultancy Services Ltd., Bengaluru | DEEPTHI M POOJARY |
| | Infosys Ltd., Bengaluru | |
| | InSemi Technology Services Pvt. Ltd., Bengaluru | |
| 9 | Tata Consultancy Services Ltd., Bengaluru | FERDINAND ALICK CASTELINO |
| | Wipro Limited, Bengaluru | |
| | Infosys Ltd., Bengaluru | |
| 10 | Palle Technologies, Bengaluru | GURUPRASAD H SUVARNA |
| | Skolar Bengaluru | |
| 11 | Tata Consultancy Services Ltd., Bengaluru | KARTHIK R SHETTY |
| 12 | Destination Technologies, Bengaluru | KARUNYA |
| 13 | Sasken Technologies, Bengaluru | NAMAN |
| | Infosys Ltd., Bengaluru | |
| 14 | Tech Mahindra Cerium Systems (P) Ltd., Bengaluru | NAYAK ADITHYA RAVINDRA |
| | Hexaware Technologies Bengaluru | |

| | | |
|----|--|------------------------|
| 15 | Infosys Ltd., Bengaluru | NAYAK DHANASHREE ASHOK |
| 16 | Destination Technologies, Bengaluru | NEHA KINI |
| | Capgemini Technology Services India Limited, Bengaluru | |
| 17 | Tata Consultancy Services Ltd., Bengaluru | NIHARIKA BALTHILLAYA |
| 18 | Sasken Technologies, Bengaluru | POOJA C SHETTY |
| 19 | InSemi Technology Services Pvt. Ltd., Bengaluru | RAJESH C |
| 20 | Techologics Global Pvt. Ltd., Bengaluru | RIYA PRABHU |
| | InSemi Technology Services Pvt. Ltd., Bengaluru | |
| | HCL Technologies Limited, Noida | |
| 21 | Capgemini Technology Services India Limited, Bengaluru | SAGAR SHETTY |
| 22 | Tata Consultancy Services Ltd., Bengaluru | SHREYA S NAVELKAR |
| 23 | Sasken Technologies, Bengaluru | SHREYA T KOTIAN |
| | Tata Consultancy Services Ltd., Bengaluru | |
| | Infosys Ltd., Bengaluru | |
| 24 | HCL Technologies Limited, Noida | SINCHANA L SHETTY |
| 25 | Cognitive Clouds Software Pvt. Ltd., Bengaluru | SOWMYA |
| | Palle Technologies, Bengaluru | |
| 26 | Tata Consultancy Services Ltd., Bengaluru | SRIRAKSHA K |
| | Wipro Limited, Bengaluru | |
| 27 | Sasken Technologies, Bengaluru | SUDARSHAN U L |
| 28 | Destination Technologies, Bengaluru | SURAJ REVANKAR |
| | CodeCraft Technologies Pvt Ltd., Mangaluru | |
| 29 | Tata Consultancy Services Ltd., Bengaluru | TEJAS S R |
| 30 | Capgemini Technology Services India Limited, Bengaluru | VIKAS N RAO |

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



VISION

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

MISSION

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 centre by having rapport with industries.
4. To foster ethical and value-based education with credibility by promoting activities that have societal impact.

PROGRAMME EDUCATIONAL OBJECTIVES

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

1. Exhibit essential knowledge of applied sciences, mathematical modelling, 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.

PROGRAMME SPECIFIC OUTCOMES

Graduates of Electronics & Communication Engineering will be able to:

1. Focus on developing and exposure to alternative/ advanced technologies: Understand the concepts of Electronics & Communication Engineering and its application in the fields of signal processing, control systems, embedded systems, VLSI design, networking, and communication.
2. Extension of knowledge and testing facilities for the society: Apply domain-specific knowledge to design, analyse, synthesise and validate real-time problems in Electronics & Communication Engineering.



Brought to you by

The Newsletter Committee,
Dept. ECE, SMVITM