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SAI VIDYA INSTITUTE OF TECHNOLOGY

Rajanukunte, Bengaluru - 560064

Department of Electrical & Electronics Engineering





MESSAGES

Forum



I am glad to note that the Department of EEE is going to bring out the News Letter comprising of all the activities of the Department. This is the first of its kind done in the Department.

I am glad that the department is doing a very good job in arranging industrial visits to Varahi and Shivanasamudra. I am glad to know that the Department is arranging MOU's with different Companies.

I am glad to mention that under the leadership of Prof. T G Manjunath, HOD, the Department is doing a wonderful job. Please try to continue the same trend

Wishing all the best

Prof. M R HOLLA Director, SVIT

I am extremely happy to know that the Department of EEE is bringing out its first volume of newsletter & this is an ongoing process portraying the various Departmental activities. It is great to find a considerable number of achievements in academic and non academic activities which certainly prove that our staff and students are adequately equipped and possess necessary skill-sets to bring laurels to the institution. I wish that this number may grow in the years to come.

My Congratulations to "e-power" team.

Dr. RAMESH BABU H S principal, SVIT





It is heartening to know that the Department of Electrical and Electronics has taken an initiative to bring out the News Letter which will Exhibit the talents of students & faculty of the Department. I wish them very best in their future Endeavors.

I wish good luck.

Prof. R C SHANMUKHA SWAMY Trustee, Professor & Dean (Administration)

Greetings! It is with immense pride that our Department is bringing out the very first issue of News Letter "e-power" which will become pioneer in our Institution. I sincerely hope this will Enlighten & Electrify our Engineers to upgrade and keep themselves abreast of the happenings in our Department. I would like to thank Principal and Management for their continuous support. I congratulate everyone for their being theme and substance for the contents of the" e-power" and Wish Best of Luck.

Prof. T G MANJUNATH HOD, EEE



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Dr. Ramesh Babu.H.S.

Principal, SVIT

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7th Sem, EEE

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VISION

To attain center of excellence in Electrical and Electronics Engineering and contribute professional Engineers

MISSION

Impart high quality education with a focus on fundamentals and practical applications of Electrical and Electronics Engineering concepts.

Inculcate professional knowledge on recent trends in Electrical and Electronics Engineering through Industry - Academic interactions and training

PEO'S

PEO 1- To provide a strong foundation in Electrical and Electronics Engineering fundamentals to understand and analyze with an intent to design and develop products / applications to address practical issues

PEO 2- To inculcate ethical attitude, effective communication skills, leadership qualities and team spirit for a successful professional career with concern for society

PEO 3- To encourage professional development and higher learning through training and research activities

FACULTY



B.Tech ,M.E ,(Ph.D) Assistant Professor and HOD

Prof. Shivaprasad H



B.Tech ,M.Tech, Assistant Professor



Prof. Amulya H G



B.Tech ,M.Tech, Assistant Professor





Prof. R C Shanmukha Swamy

B.Tech ,M.E ,M.I.S.T.E, Dean Administrator



Prof. Sukumar S J

B.Tech ,M.Tech, Assistant Professor



Prof. Sanjay S

B.Tech ,M.Tech, Assistant Professor



Prof. Rekha Murthy

B.Tech ,M.Tech, Assistant Professor



Prof. Shilpa Patil

B.Tech ,M.Tech, Assistant Professor

PROGRAM OUTCOMES

- **PO1**: Apply the knowledge of mathematics science engineering fundamentals and engineering specialization to the solution of complex engineering problems.
- <u>PO 2</u>: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusion using first principles of mathematics natural science and engineering science
- <u>PO 3</u>: Design solution for complex engineering problems and design system components are processed that meet the specified needs with appropriate consideration for the public health and safety and the cultural, societal, and environmental considerations.
- <u>PO 4</u>: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- <u>PO 5</u>: Create, select and apply appropriate techniques resource and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations
- <u>PO 6:</u> Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- <u>PO 7:</u> Understand the impact of the professional engineering solutions in societal and environmental contest and demonstrate the knowledge of and need for sustainable development.
- <u>PO 8</u>: Apply ethical principles and commit to professional ethics and responsibility and norms of the engineering practice.
- <u>PO 9</u>: Function effectively as an individual and as a member or leaders in diverse teams and multidisciplinary settings.
- <u>PO 10</u>: Communicate effectively on compels engineering activities with the engineering community and with society at large such as being able to comprehend and write effective reports and design documentation, make effective presentation and give and receive clear instructions.
- <u>PO 11</u>: Demonstrate knowledge and understanding engineering/ management principles and apply these to one's own work. As a member and leader in a team to manage projects and multi disciplinary environments.
- <u>PO 12</u>: Recognize the need for the preparation and ability to engage in independent and lifelong learning in broad cast context of technological change.

FACULTY ACHIEVEMENTS

Details of Journal Publication by Faculty of EEE Department

Faculty: Prof T.G. Manjunath

1. Title : Universal Battery Module Synchronizer

Publication: IJLRET 2454-5031

2. Title : Multilevel Inverter fault Diagnosis using Optimized radial basis neural

Network- A novel Performance Enhancement

Publication: ICEECCOT-IEEE 978-1-5090-4697-3

3. Title : Fault Diagnosis and Reconfiguration of Multi level Inverter switch failure

A Performance perspective

Publication: IJECE 2088-8708

Faculty: Prof Sukumar S J

1. Title : Application of PLC for speed control of DC motor-A Novel Approach

Publication: IJAEMPE

2. Title : Implementation of Network Reconfiguration Technique for Loss

Minimization Using Harmony Search Algorithm on an 11KV Distribution

of M.R.S Shivamogga- A CASE STUDY

Publication : IJEPSE

Faculty: Prof Praveen B.R

1. Title : Design and Implementation of H bridge Cascaded Multilevel Inverter

Publication: IJLRET 2454-5031

Faculty: Prof Rekha Murthy

1. Title : Gesture Based Smart home automation system using real time inputs

Publication: IJLRET 2454-5031

Faculty: Prof Prashanth.N

1. Title : Design of High Performance Master/ Slave Memory Controller

of Gray scale image Transfer

Publication : ISBN 9738-1-5090-3704-9/17

★ MOOC Certification: Four Faculties of the department has got the MOOC certification in Different subjects.

List of workshops attended by faculties of EEE department:

- 1) Three days FDP on "Simulation hands on experience for power electronic circuits using MATLAB, PSIM, PSCAD, SEQUEL" conducted at RRCE, Bangalore.
- 2) One day workshop on "OP-AMP and Linear IC's" conducted at MSCE, Bangalore.
- 3) "Recent trends in Power electronics and drives" at SVIT, Rajanukunte.
- 4) "Emerging trends in Embedded systems with Microcontroller" conducted at SVIT, Rajanukunte.
- 5) One day workshop on "MATLAB for research" conducted at SVIT, Rajanukunte.

★ STUDENTS ACHIEVEMENTS:

MOOC Certification:

- Two students from 6th sem EEE have got MOOC certification in the following course
- Abhishek.G ELITE certificate.
- Nayaab ahmed .N Completion certificate.

Students of Department presented various papers in National conferences organized by other Institutions in Bangalore.

♦ TITLE : Design and Development of Cascaded H-Bridge Multilevel Inverter and its Fault Detection.

♦ VENUE : BMSIT, Bangalore

♦ TITLE : Underground Cable fault detection

and alert.

♦ VENUE: BMSIT, Bangalore

♦ TITLE : Building management system usin

PLC-SCADA

♦ VENUE: BMSIT, Bangalore

★ Funded Projects in the Academic year 2016-2017

♦ TITLE : Fuzzy Logic based MPPT for grid

connected PV systems

Guide : Prof.Sukumar.S.J Funded By : KSCST,Bangalore

SPORTS:

- Three students from the department, Ranjith.M.S, Mustafa.M.D and Micheal meetei had been part of the college team for the VTU football tournament.
- The Football and Kabbadi teams of the department have won "SECOND PLACE" in the college sport activities.

★ DEPARTMENT ACTIVITIES

Faculty Development Program on Recent Trends in Power Electronics & Drives

The department organized a 3-day Faculty Development Program on "Recent Trends in Power Electronics & Drives" (With hands-on Matlab/Simulink) in association with Viswajothi Technologies Pvt Ltd, Bengaluru during 18th, 19th and 20th July, 2016.

The program gave an insight on the various techniques used to control the modern power electronic drives along with hands-on sessions of Matlab to inculcate the need to simulate and verify design parameters before the actual hardware prototype can be developed. The goal of this FDP was to provide a platform for research and development in the field of renewable energy and to create awareness on intelligent techniques for the control of power electronic drives



★ MOU with Prolific Systems

Department of Electrical and Electronics has signed MOU with Prolific Systems Pvt.Ltd on 11th May 2017 to bridge the gap between industry and academia.



★ Industrial Visit to Varahi Power Plant:

Learning becomes fun and interesting when students taken to outdoor and for industrial visits. These activities enhance the curiosity and learning of the students.

The Department has organized the Industrial visit to Sharavathi valley project, Jog falls and Varahi hydro power plant, Hosangadi for the students of 5th and 7th Semester on 13th and 14th of October 2016 to explore the practical knowledge of the students with four Faculty Members. The students acquired practical exposure in the field of Generation, Transmission and Distribution.





★ Workshop on VFD:

A Two-Day Workshop on "VARIABLE FREQUENCY DRIVE" for 6th and 4th semester students was held on 28th and 29th April 2017



★ Industrial visit to Shivanasamudra (Solar and Hydel Power Plant):

The Department of Electrical and Electronics Engineering has organized the Industrial visit for 4th Semester EEE students to Shivanasamudra (Solar and Hydel Power Plant) on 13th April 2017. Since students study subjects such as Power Generation & economics and Transmission and distribution in their curriculum this visit was very helpful in gaining practical exposure in this domain.



★ Alumni Meet 2017:

The alumni meet was held on 08-04-2017 in the institute and many alumni of department participated and gave the valuable inputs. They expressed about the college and the department positively





★ Guest Lecture on Interprenureship:

The Department conducted Interprenureship program on 07.03.2017 for 6th Semester EEE students by Vasuki Power systems.

★ Skill Development/Internship Program

Department of Electrical and Electronics has organized 3-Day skill development and internship program for final year students on 11th, 12th and 13th May 2017 by National Power Training Institute (Ministry power, Govt of India). During this program students visited 66/11Kv substation at Padmanabnagar, Bangalore and also Transformer manufacture company KAVIKA Ltd. Bangalore.





★ IISc OPEN DAY:

In view of IISc Open day on 04-03-2017 the students of 6th and 8th semester of department accompanied by all the staff members visited the HV lab at IISc where four different experiments were demonstrated by Professor and advisory board member of our department Dr.B.S.Rajanikanth. The professor was taken special interest in guiding and demonstrating the concepts of High Voltage Engineering for our students. Later all the students and staff visited the other departments of IISc.



★Workshop on PLC-SCADA

Automation was organized by the Department during 9th – 11th February 2017 in association with prolific systems & Technologies Pvt. Ltd. Workshop was conducted for final and pre final year students of the department was inaugurated by Mr.Shivashankar, Branch Manager, Prolific systems & Technologies Pvt. Ltd., honorable Director Prof.M.R.Holla, & Principal H.S.Ramesh Babu.

The Programme was aimed at providing exposure about the basics of programmable Logic Controllers and also about SCADA Automation system. SCADA stands for supervisory control and data acquisition. It is an industrial control system where a computer system monitoring and controlling a process. The workshop also gave hands on training to the students



★ Toppers Meet

In order to encourage the students to score good score in their academics the depart conducted the toppers meet on 10-03-2017. The toppers from 2nd, 4th, 6th and 8th semester were called along with all the faculty members of EEE department. Prof. T.G.Manjunath, Associate professor HOD, Dept of EEE motivated the students to score well in the upcoming exams. Some of the final year students addressed the juniors and given some inputs to improve the academic performance.





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Message from Best Outgoing Student of the department for Academic year 2016-2017

The Electrical Department is proud to have a very enthusiastic faculty ably headed by Prof. T G Manjunath. The Dean of the department Prof. R C Shanmukha Swamy is an able educationist and a staunch Nature Lover. The Department boasts of 3 Laboratories which are very well equipped with the latest gadgets, machines and measuring devices. The college library is also well stocked with both books as well as digital media, thereby handsomely complementing the lectures. The Department also organises various cultural and technical events at National and State levels in which the students actively take part and make the events more colourful and enjoyable. The students in the department are trained well towards both Technical research and Industrial orientations.



Mr.Vignesh B