ALVAS COLLEGE OF ENGINEERING AND TECHNOLOGY
(A UNIT OF ALVA'S EDUCATION FOUNDATION, MOODBIDRI)

E-NEWSLETTER 2017-18

Department of Electronics and Communication Engineering

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

Dr .D V MANJUNATHA
HOD,DEPT.OF ECE

The Department of Electronics and Communication Engineering (ECE) was established in the year 2008 to meet the needs of the emerging IT industry and research. The department has 24 teaching staff including HOD. The ECE department at AIET prepares students for careers in this constantly evolving discipline. Equipped with highly advanced labs, this department cultivates young minds and provides them the appropriate launching stage to grow and excel in the technical world. The department encourages and guides the students of the pre-final year to carry out the mini-projects in the trending fields of technology, enhancing their knowledge for the future. "Evionics", The Tech-Forum, helps the students in building their interpersonal skills and communication skills which are much needed in this competitive world.

I am glad to release the department Newsletter for the year 2017-18

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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VISION

Centre of Excellence to Empower the young minds in the field of Electronics and Communication Engineering with research focus and skill development through Transformative Education catering to the needs of the Society.

MISSION

- To create Learning Environment to enable the Students for Excellence in the field of Electronics and Communication Engineering.
- To Empower the Students with necessary Skills for Solving the Complex Technological Problems.
- To Inculcate Research Culture among Teaching-Learning Group by guiding them towards Research Activities to bridge the gap between Industry and Academia.
- By Imbibing the Students with Human Values and Ethics through Transformative Education and make them Socially Responsible Professionals.

PROGRAMME OUTCOMES

Our graduates will be able to

1. Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. 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.

5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communicate effectively on complex 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 presentations, and give and receive clear instructions.

11. Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

Program Specific Outcomes (PSO'S)

PSO 1: Understand and apply the principles of Science and Engineering in the field of Electronics and Communication.

PSO 2: Ability to design and implement systems using the concepts of Analog & Digital Electronics, Communication & Networking, Signal Processing, Embedded Systems & Semiconductor technology to solve complex problems

PSO 3: Develop proficiency to use modern Hardware & Software tools in the area of Electronics and Communication Engineering.

Programme Educational Objectives (PEO's)

- PEO1: Apply Mathematical, Scientific and Engineering fundamentals for problem solving.

- PEO2: Expose to Emerging Technologies and pursue higher studies or do research.

- PEO3: Become Competent and Employable with necessary skills.

- PEO4: Inculcate Professional and Ethical attributes and contribute to Society as responsible Citizen.

ACADEMICAL EVENTS

FACULTY DEVELOPMENT PROGRAM (FDP)

A two day national level workshop on Advanced Industrial Automation was organized by Electronics & Communication Engineering Department, Alva's Institute of Engineering and Technology, Moodbidri on 18th and 19th January 2016.Mr. Himanshu Kumar, Director from Indwell Automation, Pune, gave an an introduction about Programmable Logic Controller. The basic concepts about Ladder Logic, coding using ladder logic, toggle switch, push button, flags and timers was explained in detail. The afternoon session started with a hands-on session on Codesys.
 Few simple programs were explained and practiced. Later coding related to Mitsubishi controller was explained.

ACADEMICAL EVENTS

TECHNICAL TALKS

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was formally inaugurated on 3rd March 2017 by the head of the department Prof. D V Manjunath and also welcomed the resource person Mr. V.D.Kulkarni, Senior Consultant, Entuple Technologies. The talk was given on tthe topic"Latest Trends in VLSI Design

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was formally conducted on 6th March 2017. The head of the department Prof. D V Manjunath welcomed the resource person Mr. Manjunatha Visweswaraiah Senior Research and Development Engineer, Synopsis Incorporation, Bangalore, Prof Pathipati Srihari delivered the talk on the topic "Physical synthesis of ASIC design".

ACADEMICAL EVENTS

TECHNICAL TALKS

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was formally inaugurated on 23rd August, 2016 by the head of the department Prof. D V Manjunath and also welcomed the resource person Dr. Basavaprabhu Sheeparamatti, Professor, Basaveshwar College of Engg., Bagalkot.

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was formally conducted on 17th September, 2016. The head of the department Prof. D V Manjunath welcomed the resource person Dr. Pathipati Sridhar, Assistant Professor, E & CE Department, National Institute of Technology Karnataka. Prof Pathipati Srihari delivered the talk on the topic "Radar Communication".

ACADEMICAL EVENTS

TECHNICAL TALKS

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was conducted on 18th ,March, 2017. the resource person Dr. K Krishnamoorthy, Asst. professor, Dept. of ECE, NITK Surathka, delivered the talk on the topic "Meta-Materials and Its Application in Antenna Design".

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was conducted on 1st ,April, 2017. the resource person Dr. N. Shekar V. Shet, Associate Professor, Department of E&CE, NITK Surahkal delivered the talk on the topic "Wireless communication and Internet of Things (IoT)."

The Technical Talk of the academic semester for the year 2016-17 under the Department of ECE was conducted on 29th September, 2016. The head of the department Prof. D V Manjunatha welcomed the resource person Mr. Himanshu Rangadhol, Head of Design and Innovation, Oscki Labs, Bangalore. Mr Himanshu Rangadhol delivered the talk on the topic "Innovations in MEMS and Heavy Duty Drones".

The Technical Talk of the academic semester for the year 2016-17 under the Department of E&CE was conducted on 01st October, 2016. The head of the department Prof. D V Manjunatha welcomed the eminent resource person Dr. M M Nayak, Visiting professor, Indian Institute of Science, (Former Scientist of ISRO), Bangalore. Dr M M Nayak delivered the talk on the topic "Applications of MEMS".

ACADEMICAL EVENTS

PRE – PLACEMENT TRAINING OF FINAL YEAR ECE STUDENTS

BSNL TRAINING

Five days workshop on BSNL Training from Aug 16. 2016 to Aug 23. 2016 was organized by Dept.of ECE . The training covered Fundamentals of Electronics Exchange,Digital Switching, CDOT Architecture Concept of V5.2, Rax Architecture & MDE and NGN & IP TAX

The department of Electronics and Communication Engineering conducted a pre placement training for final year students from 01/08/2016 to 14/08/2016. The goal of the Pre-Placement training and its benefits to the students were addressed by Mr. Vivek Alva, Managing Trustee, A.I.E.T. The main goal of the program is to make the students comfortable with the placement activities.

The Pre-Placement training covered the training on programming in C and C++ ,Automation training on PLC ,complete information about the selection, identifying the problem and implemen tation of the project, the report writing in LATEX, basics of c, computer networks, The other domain areas of ECE like VLSI, HDL and microcontro- ller with hands on ,Finally, training on personality development was given .

DAAN UTSAV

As part of Daan Utsav, a group of students from the final year had spent a day at St.Mary's Old age Home, Suratkal on 24th September, 2016. They interacted with the people of the old age home, spent quality time and gave them some essential items that they required.
A group of students had also spent a day with the students of Chetana Special School, Karkala on 6th October, 2016.

In order to raise money for the DaanUtsav program, money was raised by conducting a few games and competitions in the college campus after class hours. A total amount of Rs. 63,925/- was raised. A formal function of Daan Utsav was conducted in the college campus on 8th October, 2016 from 11:00 am onwards at the MBA Seminar Hall, AIET. students of AIET also entertained the guests by a dance and skit performance.

STUDENT ACHIEVEMENTS

1. HarshitSommanna, Anushree Shettighar and Ashok Singh Rajphorith Secured 1st Place in KAUSHALA 2017 Skill Development System for Workforce, Engineers and Managers for the project " Module on Embedded systems & various others modules" hels at AIET,Moodbidre.

2. Ranjith, Shreekanth, Sandesh and Praveen Kumar Secured 3rd Place in KAUSHALA 2017 Skill Development System for Workforce, Engineers and Managers for the project"Module on Embedded systems".

3. Ranjit, Shreyas, Sudhina K and Shreya J Fransics Secured 2nd Place in INSEF-2017 for the project " Automatic Navigation alert system for fisherman using GPS & GSM techniques"

4. Akshaykumar V B,Anuraj,Kadappa and MadanGopal Secured 2nd Place in INSEF-2017 for the project "Automatic railway crack detection "

5. Shivaleela published a paper "Comparative study on capacitive pressure sensor for structural health monitoring application with Coventor ware" in the top indexed International Journal IJESC Vol-7 Issue No. 5, ISSN 2395-0056.