

Photon

Pursuit of Innovation.

SGBIT

ECE Bi-Annual News Letter

Jan-June 2017

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The Electronics & Communication Engineering Department was started in the year 2008 and now conducts one undergraduate program and Ph.D program with affiliation to VTU. Highly qualified & experienced faculty members, support four core specializations (VLSI Design and Embedded Systems, Digital Communication & Network, Signal processing, Power Electronics) in the department.

UG students are encouraged to take up interdisciplinary research in various domains and students are placed in reputed companies like IBM, TCS, Infosys, Robert Bosch, Mind Tree. All the programs are outcome based, structured to meet the needs of Industry and Research. The program contents are upgraded with the involvement of industry and reputed research institutions.

DEPARTMENT VISION

The department of Electronics and Communication Engineering strives to develop responsive teaching-Learning methodology, research and employable skills in allied fields by empowering students to become globally competent and socially responsible citizens.

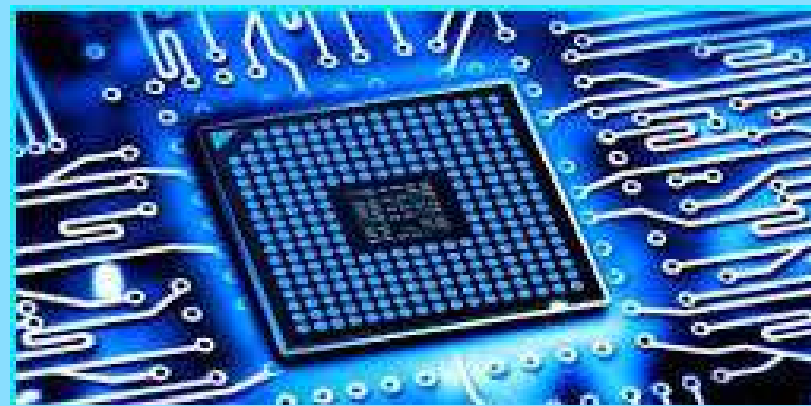
DEPARTMENT MISSION

M1: To develop an active learning environment that ensures participation of students in both curricular as well as co-curricular activities by adopting student centric approach catering to the diverse needs of the student community.

M2: To foster research, innovation and creativity among students by motivating them to have in- depth knowledge of Engineering fundamentals in respective fields.

M3: To encourage development of entrepreneurial skills amongst students by imparting quality Education and value added skills required for sustainable and holistic development.

M4: To inculcate amongst students team spirit, leadership qualities, positive attitude and effective communication skills to solve societal needs.



PEO's

PEO1: To reinforce the concepts and fundamentals in mathematics, science and engineering to cultivate problem solving skills and to enthuse for higher studies.

PEO2: To empower our graduates with comprehensive knowledge in the domain area.

PEO3: To provide an opportunity to enhance practical knowledge by developing conceptual and design skills with innovative ideas.

PEO4: To prepare graduates to use modern tools, techniques and skills to apply the technical skills in various pertinent topics of the domain area.

PEO5: To nurture graduates with knowledge of management and engineering disciplines that assists in strengthening entrepreneurial qualities, efficient communication skills and ethics needed for a professional career.

THREE DAYS NATIONAL LEVEL WORKSHOP ON IMAGE PROCESSING AND ITS APPLICATIONS

Three days workshop on “Image Processing and its Applications” was organized on 23,24 and 25 of January 2017. The Workshop was inaugurated by Chief guest Dr. P.S. Hiremath, Professor at Department of Computer Science, BVB University Hubli. The function was presided by the Principal Dr. S. S. Salimath. Workshop was coordinated by Dr. K Prabhushetty and Dr. Shilpa Shrigiri



Various salient topics of MATLAB and Image Processing were covered in workshop, imparting the exposure to participants from basics to recent advancements in the field of Image Processing and MATLAB.

Resource Person for first session was Dr. P.S. Hiremath, Professor, Computer science dept., BVB Hubli. This session dealt with Introduction to MATLAB and its applications. Second session : Dr. K. Shridhar , Professor at ECE Department, BEC Bagalkot. discussed the use of arithmetic functions to solve the complex algebraic equations. For first session of day 2; The resource person Dr. Vijaya C discussed different image manipulations techniques. Second session of day 2; Dr. Prashnat Patavardhan, HOD ECE, GIT Belagavi, exposed the participants to the operations on Image processing. The first session of the third day; Dr. Ravindra Hegadi, focused on Morphological Image Processing. In the second session, Resource Person was Dr. Subhash Kulkarni, HOD, ECE, PESIT, Bengaluru discussed the various Image filtering techniques and Different types of noises.

Valedictory function was held on 25th of January 2017 upon successful completion of three days workshop.

ONE DAY WORKSHOP ON INNOVATION- PATENTS & PRODUCT DESIGN

An awareness program on Innovation- Patents & Product Design was organized on 22 nd February 2016. Mr. Nitin Awasthi, Vice President- Technical, Apsis Solutions, Bengaluru delivered a lecture on the said topic. Mr. Nitin is R& D Specialist with over 15 years experience in cutting edge technologies.



The program explored the possibilities of patents and mechanisms of patenting. This helped the students and researchers to get first hand information about patenting and the procedure of getting patent and new possibilities of for their research and innovative work in their domain. The Workshop was coordinated by Dr. Ravi Yadahalli (Dean Exams)

ONE DAY SEMINAR ON CRACKING THE CODING INTERVIEW

One Day Seminar on - “ Cracking the Coding Interview” was organized on 11th march 2017.

The Inaugural function of One Day Workshop was inaugurated by Subhash K. U. of Subhash Programming Classes, Bengaluru. Principal Dr. S. S. Salimath, in his preremarks suggested students to inculcate “ C- Programming skills “ to succeed in the interview. Dr. K. Prabhushetty, HOD ECE, welcomed the gathering and Dr. Ravi M. Yadahalli introduced the guest to the audience.



Resource person Mr. Subhash K. U. addressed the second and third year students of ECE, CSE and Electrical and EEE branches. In the Workshop Following topics were discussed such as Art of Programming, Need of Programming, 3- Dimensions of Programming, Conceptual Solving, Logical Solving and Debugging methods. Top ten mistakes committed during technical interview; Five ways to impress the interviewer.

The workshop was co-ordinated by Dr. Ravi M. Yadahalli and Prof. Jagadish Jakati

ONE DAY SEMINAR ON SYSTEM VERILOG FOR VERIFICATION

One day seminar on System Verilog for Verification was organized on 23rd March 2017 for 6th & 8th semester students. Dr. Meghana Kulkarni, Assoc. Prof. Center for PG studies VTU, Belagavi was the resource person for the seminar. She has 20 years of teaching experience. She is guiding PhD scholars and presented several papers and published papers in international journals.

Prof. Harsha H. K. introduced the chief guest of the function and Dr. Shilpa B. Shrigiri proposed vote of thanks. The Seminar was organized by Prof. Harsha K



WORKSHOP ON INTERNET OF THINGS (IoT)

Two days Workshop on “Internet of things (IOT) “ was organized on 1st and 2nd April 2017. The workshop was inaugurated by Mr. Gajendra Pratap Singh , Project Head of Sysro Technologies, New Delhi. Principal Dr. S. S. Salimath, in his presidential remarks suggested to make best use of this workshop. HOD Dr K . Prabhushetty, welcomed the gathering, Prof. Shilpa B. introduced the guest and Prof. Veeresh Hiremath proposed the Vote of Thanks



The 2 days workshop explored the possibilities of some consumer applications envisioned for IoT. Arduino board, Microcontroller and Arduino editor were discussed in detail. In the workshop Household gadgets were modified to work in an IoT system. Home automation systems projects were carried out and demonstrated in the workshop, at the same time participants had wonderful hands on experience. The workshop was organized by Prof. Veeresh Hiremath, Prof, Shilpa B and Prof. Sujay G.

3 DAYS WORKSHOP ON MICROCHIP'S PROCESSORS & PERIPHERALS

Three days Workshop on "Microchip's Processors & Peripherals" was organised during 7-9 April 2017. Mr. Nitin Awasthi, Vice President- Technical, Apsis Solutions, Bengaluru was the resource person.

The workshop covered the topics like Introduction to Embedded Systems, Hands On Basic peripherals on Day 1, Emphasis on C, Coding Styles on Day 2 and the workshop was end up with discussion on "Advanced Line / Light / Wall Following Robot".

The inaugural function of the 3 day workshop was presided by Dr S S Salimath, Principal, SGBIT and Mr. Nitin Awasthi was the guest of honor.



The valedictory function, was held on 9 April 2017 and presided by Poojya Dr. Siddhrama Swamiji, President, SSET, Chief Guest of the valedictory function was Mr. Jagan Jothivel, Microchip University Program Manager, Bangaluru. Students of Nidasoshi and AGM Rural Engg College attended the workshop. The 3 day work shop was coordinated by Dr Ravi M Yadahalli and Mrs. Arati B S. The workshop Certificates Prizes were sponsored by Microchip US

5 DAYS INTENSIVE TECHNICAL WORKSHOP ON CRACKING THE CODING INTERVIEW

Five days workshop on "Embedded C Programming" during was organized during 14-16 and 22-23 April 2017. The resource person of the workshop is renowned author, speaker and programmer Mr. Subhash K. U, who is founder of Subhash Programming Classes



The workshop focused on Introduction to C Programming, Declaration, Definition, Macros on Day 1, Operators, Conditional Statements & Loops on Day 2, Functioning with Functions, Storage Classes on Day 3, Pointer Basics, Arrays & Pulling the Strings on Day 4 and Building Structures, Unifying Unions & Top 10 mistakes in an interview and Tips on cracking the Interview on last day. After the workshop, the participants were able to develop their own applications with hardware. This workshop helped the students to strengthen their resumes to increase their chances of success in their job interview.

About 100 students from SGBIT and various other Engineering Colleges of Belagavi region participated in the workshop. The workshop was coordinated by Dr Ravi M Yadahalli, Dean (Examinations), Mr. Narayan A.Badiger and Mrs Arati B S.

ONE DAY GUEST LECTURE ON "RANDOM PROCESS AND VARIABLES"

One day guest lecture on "Random Process and Variables" in the course of Principles of Communication System on 17/4/2017.



Mr.Kiran Kumar B , Asst.Prof. Dept of E&CE,BEC, Bagalkot was the resource person for the event. The concept of Probabilities, Random Process, Gaussian Law and its Applications were discussed. The seminar was coordinated by Prof.Sidramayya M and Prof. Sunil.S H

2 DAYS INTERCOLLEGIATE SKILL FEST 2017



Two days intercollegiate skill fest 2017 was organized in association with RiiIT, Mysuru on 25th and 26th of April 2017. 65 final year student's including students from Jain Engineering College and other Engineering College registered for the skill fest. Mr. Venkatesh SV, Managing Director, RiiIT delivered talk on "WHAT NEXT" and also interacted with 6th semester students. It opened eyes of students with regard to understanding of their life and carrier goal. The session was very enjoyable and had motivational videos.

TWO DAYS GUEST LECTURE ON STABILITY ANALYSIS IN CONTROL SYSTEM

Two days guest lecture on "Stability Analysis in Control System" was organized on 17/4/2017 to expose the students to new avenues in world of Control System. The resource person was Prof. Sanjeev Deshpande, Electrical Department of Al Musanna College of Technology, Muscat. The lecture dealt with the basics of the control system, different methods to analyze the stability, Nyquist plot, Bode plot and Root Locus. Research



Dr. K. Prabhushetty introduced the Resource person. The guest lecture was coordinated by Prof. Veeresh Hiremath,

FAREWELL FUNCTION 2017

A farewell function for final year students was organized on 23rd of may 2017. The chief guest for this function was Dr. Deepak Dhane (Assistant professor , IIIT Pune) in his guest speech motivated the students by narrating his own life story.



Also discussed the job opportunity es available in the public sector companies and also about higher studies and research in IIT's.

Dr. K. Prabhushetty, HOD, ECE welcomed the gathering and at the same time suggested the students to take up job in product based companies.



The function was presided by Principal Dr. S. S. Salimath, in his presidential remarks, mentioned the importance of Guru (teacher) in the student life. Some of the students shared their four years of wonderful experience in the college campus.

Prof. Virupaxi Dalal introduced the guest to the audience. Prof. Shankargouda Patil proposed the vote of thanks and Prof. Jagadish Jakati read the report of activities. The function was coordinated by Prof. Shankargouda Patil and Prof. Jagadish Jakati and The function was concluded with various entertaining and encouraging cultural activities performed by the

juniors.

Newsletter Editorial Committee :

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Dr. Ravi. M Yadahalli.

Editor :

Prof. Sujay Gejji

Editorial Committee Members :

Prof. Viresh M. Hiremath
Prof. Vinayak H
Prof. Sidramayya M.
Prof. Shankar P.

Student Members :

Mr. Akshay Patil
Mr. Irfan U

work and job opportunities in the domain of control system were also discussed. 120 students of fourth semester attended the guest lecture. .

FACULTYS' ACHIEVEMENTS

- Dr. Shilpa Shrigiri Prof. Narayan Badiger Prof. Yogita Hiremath Prof. Harsha Kakaraddi attended Workshop on CMOS Mixed Signal & Radio Frequency VLSI Design conducted by IIT Kharagpur held at GIT and KLE Belagavi from 30/01/17 to 04/02/2017
- Prof. Shankargouda P and Prof. Sujay Gejji registered for Ph.D in Janaury 2017 under VTU .
- Prof. Veeresh H, Prof. Jagadish Jakati, Prof. Veena P Prof. Mahadevappa M attended seminar on Advances in Wireless Nano Sensor Networks and Communication held at Jain college Belagavi 15th & 16th Feb 2017

STUDENTS' ACHIEVEMENTS

- Akshay G V and Shivkumar of 4th semester presented paper on Li Fi Technology in Technical Fest conducted at KLEMSSCET, Belagavi on 26/4/17
- Ajay Shirali of 4th semester won the Bronze medal (50 meters) in archery competition organized by Karnataka State Olympics held at Dharawad on 4-5 February 2017
- Ajay Shirali of 4th semester participated in All India inter University Competition in Archery held at Machalipattanam , Andra Pradesh.held at Dharawad on 15-17 February 2017
- The project “ Design of low cost asset tracking system” carried out by Divya S. Salimath and Madiha M of 8th semester was selected for the grand finale of **Smart India Hackathon-17** which was held on 1st and 2nd of April 2017
- The project “IOT based Smart Garbage Management” carried out by Vijaylaxmi M of 8th semester was selected for **Smart India Hackthon-17**.
- The final year project “IOT Based Accident Detection and Prevention” carried out by Divya S. Salimath, Jyoti M Akshay P., Kartik R under the guidance of Prof. Jagadish J has been selected for state level project competition **KSCST -17 and Shristi17**
- The final year project “An Electromechanically actuated text to Braille converted refreshable Display” carried out by Kaveri G,Madiha, Kirti C, Megha C under the guidance of Prof. Vidya Abdulpur has been selected for state level project competition **KSCST -17 and Shristi17**.
- The final year project “Smart Cart” carried out by Mahantesh K, Naveed ,Laxmi B, Kaikasha under the guidance of Prof. Virupaxi Dalal has been selected for state level project competition **Shristi17**.

Toppers :

I Sem	III Sem	V Sem	VII Sem
			
Poornima S P (8.83 SGPA)	Vinanti Hiroji (8.14 SGPA)	Fayaz Aravalli (82.22%)	Divya S. Salimath (82.77%)