

KAMMAVARI SANGHAM (R) - 1952 K S GROUP OF INSTITUTIONS

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Think Beyond Imagination...

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APRIL 2017 VOL 6

IN THIS EDITION

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Our Vision:

"To strive continuously to impart quality technical education with ethical values, employable skills and research to achieve excellence"

Our Mission:

- To attract and retain highly qualified, experienced and committed Faculty.
- To create relevant infrastructure.
- Network with industry and premier institutions to encourage emergence of new ideas by providing R & D facilities to achieve excellence.
- To inculcate professional and ethical values among students with employable skills and knowledge acquired in transforming society.





Dr. T V Govindaraju PRINCIPAL/DIRECTOR

Dear Staff and Students,

I think it is a good time where we can reflect on what we have achieved/learnt/learning in this academic year. As you reflect, I hope the semester has been a fruitful one and you may want to consider how we can make it better in our future endeavor's.

This issue of News Letter apart from showcasing the academic pursuits also features how we have maintained harmonious relation in our campus. The commemoration and celebrations are important as part of our educational process, there are articles which show case on how we strive to developed various skills in our students, how we reached out to college and our involvement in community services.

The various features in this issue highlights our emphasis in continuously striving for the success of our staff and students. The highlighted success of our staff and students is a virtuous cycle that mutually motivates each other.

Successful Staff motivate students leading to Student Success.

"Future is not a gift, it is our achievement".

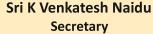
In light of this, I would like to encourage and wish my staff to continue the excellent work in achieving success for our students and ultimately ourselves.

I would also like to take this opportunity to wish everyone best wishes!



Sri Y Ramachandra Naidu President







Sri D Rukmangada Treasurer

After an interesting but tedious semester followed by a wellearned break, we welcome the new semester with our heads held high.

Our college has achieved new highs in various fields in the past semester. With great pride, we commend the efforts of the newsletter team for documenting and recording every such accomplishment. As we successfully establish the **sixth** edition of **'CHINTHANA MANTANA'** as the right platform for every acclaimed occasion, we thank our editorial team for all their efforts and hope to bring recognition to many such talents in the future.

GOOD LUCK

MANAGEMENT COMMITTEE



SITTING LEFT TO RIGHT: SRI R. LEELA SHANKAR RAO, SRI K. VENKATESH NAIDU, SRI K. SHIVA RAO, SRI Y. RAMACHANDRA NAIDU, SRI B. LOKANADHA NAIDU, SRI D. RUKMANGADA, SRI L. KRISHNAMURTHY



Department of Mechanical Engineering

ABOUT THE DEPARTMENT



The Department of **Mechanical Engineering** is one among the senior and old branches in the institution with many prides to its feather. The department has highly qualified faculty and well established laboratories. The teaching faculties in the department are of high academic caliber. The staff members have many International journal publications to their credit. The department is **recognized as a Research centre** from VTU and **12 research scholars** are carrying out their research in the various fields of Mechanical Engineering. The department is running a **library** of its own. The department has taken the leading role in the **IPR activities, IEDC activities, NSS,** sports and cultural activities of the institution. Our student **Mr. Hitesh Kumar** has received **7**th **Rank** in the recent **VTU Convocation**.

The department has the **tradition of securing Ranks** in the VTU examinations even in the previous years. The department has established a good interaction with the industries such as **M/s TUV Rhineland**, **M/s Avasarala Technologies Ltd.**, **M/s Sky Catcher Labs**, **M/s Exergy Heating Solutions Pvt. Ltd. and M/s Indo Qatar International Skills Development Centre**. These interactions are being used effectively by the staff and students of the department to prepare the Project Proposals, to take up the UG and PG industrial related projects and for organizing technical training programs. The department is in the forefront in organizing workshops related to the latest technologies of Mechanical Engineering such as **Renewable Energy Resources** and **Computational Fluid Dynamics**.

⇒ LATEST TECHNOLOGY

Urine byproduct battery

The latest development on this score comes from Stanford University with the introduction of an aluminum-ion battery that uses an electrolyte made of urea, the main component of urine (after water).



The original battery version used a chemical mixture known as EMIC (1-ethyl-3-methylimidazolium chloride) as its main electrolyte ingredient, which when mixed with aluminum chloride makes a liquid salt or ionic liquid. But EMIC is expensive, prompting the researchers to look for an alternative.

The new battery is mostly the same, except for the use of urea instead of EMIC, which is 100 times cheaper and produced commercially as a component in fertilizers. It doesn't have the same energy capacity of a lithium-ion battery (it's energy density is less by half), but the charge-discharge rate is higher, it's non-flammable, charges in 45 minutes, and is much cheaper. "Also, the Coulombic efficiency of the battery is very high, 99.7 percent, which suggests that the cycle life is very long. The Coulombic Efficiency is a measure of the amount of charge you get back from the battery, divided by the amount of charge you put in originally. This means the chemistry of the battery reaction is very reversible, which leads to long cycle life . For commercial viability, a grid storage battery would need to have at least a 10-year lifespan. The urea battery has reached 1,500 charge cycles in lab. Aluminum and graphite, the electrode materials, are also very cheap and would be negligible in the overall cost of the battery.

Triple threat

The researchers from the University of Oulu in Finland have discovered a crystal mineral material that is able to simultaneously generate energy from light, heat, and mechanical force, opening up a whole new range of possibilities for multisource electricity-generating devices.

The material used by the researchers is a **perovskite** material, a group of minerals that have the same type of crystal structure as that of the naturally-occurring mineral calcium **titanate** (CaTiO₃) and are known for their various abilities to help boost the conversion of sunlight to power in solar cells and even assist in creating hyper efficient light-emitting crystals. Different types of perovskite have the ability to harness different types of energy.

When a certain type of perovskite solar cell is exposed to light, for example, photons of light cause electrons in the crystal to jump across an "energy gap" and create an electric current. A similar effect occurs when thermal energy, or heat, is applied to a different type where the excitation of electrons causes an electric current to flow, known as the pyroelectric effect. Deforming the material also generates a current as the crystalline atomic structure flexes in perovskites in response to external stimuli, causing the magnetic dipoles of the electrons in the structure to be forced out of alignment, thereby inducing an electric current due to what is known as the piezoelectric effect. The material used by the University of Oulu team is capable of producing an electric current from all three of these types of energy.



⇒ EVENTS CONDUCTED

◆ "App Design and Prototyping Apple"



On 10th Feb 2016, a Technical talk was delivered by Mr. Mohit R Hegde, Director, Creative INFOTECH, Bengaluru on 'App design and Prototyping'. Students acquired knowledge on: app design and its applications, app usage for controlling the working of machines and importance of Internet of Things (IoT) and various platform used for app design.

◆ "Scope in Automotive styling"

On 11th February 2016, a Technical talk was delivered by Mr. M. Sugumaran, Business Manager, Institute of Industrial Design, Chennai on scope in automotive styling. Students Benefited by learning the following: Different styling software such as Autodesk Alias, how to give trending style and an attractive look to the automobiles and how to improve the Aerodynamics of vehicle.

♦ "Career guidance for higher education"



On 6thApril 2016, a carrier development program was delivered by Mr. Srinivas Belvi, Product Head, T.I.M.E Pvt Ltd, Bengaluru. Students of 6th and 8th semester are motivated and guided about the career opportunities after Bachelor's degree, he briefly covered topics regarding MS, MBA in abroad. The various exams to be taken to get into some of the reputed institutions, and highlighted about cost of living in different countries.

♦"Industrial Scenario of Heat Pumps"

On 19th October 2016 a seminar was delivered by Mr. S S Nikil, Energy Heating Solutions Pvt. Ltd, Bengaluru on industrial scenario of heat pumps. Students learned about working of different heat pumps, the design and analysis and manufacturing process involved. Also program was delivered on developments of heat pumps in industries and its applications.

♦ "N-CERAS"



From 20th-22nd Oct, 2016, 3 days workshop was conducted on "Non-Conventional Energy Resources and its application for the society" The students of UG, PG and faculties of different institute from all over the state participated in this work shop. This workshop made students and participants to acquire the information on development of new technology to enhance the utility of Non-Conventional Energy Resources. On the last day of the program, all participants had a very informative industrial visit to TUV Rhineland to get practical knowledge about solar modules and its testing process.

⇒ EVENTS ATTENDED

- ♦ Mr. M. Umashankar, Assoc. Prof, attended 2 days national workshop on National workshop on "Recent trends in Mechanical Engineering" organized by Madanapalli Institute of Technology from 20th to 21st Sept 2016.
- ♦ Mr. Balaji B, Assoc. Prof, attended 2 days workshop on "DST-SERB" organized by Madanapalli Institute of Technology & Science, AP, India from 19th to 20th Aug 2016.
- ◆ All faculty members from the department, attended 3 days workshop on "Non Conventional Energy Resources and its Applications" for the Society organized by the department from 20th 22nd October 2016.
- ♦ Mr. RANGANATH N Asst. Prof, attended 2 days workshop on "TIG and MIG Welded Material in National Conference on Emerging Trends in Mechanical Engineering & Technology" 2016 organized by IJERT on 19th and 20th Aug 2016.
- ♦ Mr. RANGANATH N Asst. Prof, attended a 2 days workshop National Workshop on "Accreditation Process for Technical Institutions" organized by JSS Academy of Technical Education, Bengaluru, in association with VTU Belagavi, ISTE, IIIE & QCFI on 26th and 27th Aug 2016.
- ♦ Mr. Mallikarjuna M R Asst. Prof, attended a 3 day National Workshop by "DUCOM Instruments Pvt. Ltd." Organized by NITTE Meenakshi Institute of Technology, Bengaluru and TEQIP Phase II held from 19th to 21st Sep 2016.

⇒ **ACHIEVEMENTS**

♦ Dr. K Rama Narasimha, HOD and Prof. published a paper titled "Effect of Rotation on Natural Convection in Differentially Heated Rotating Enclosure by Numerical Simulation" in the journal of Applied Fluid Mechanics (Vol.9, No.3,pp.1265-1272,2016.) ISSN 1735-3572, EISSN 1735-3645.

Management, Principal, HOD & Staff CONGRATULATE



Mr. Hitesh Kumar C (1KS12ME043) 7th Rank in the VTU Convocation 2016 (83.54%)

⇒ 100 % Results

Management & Entrepreneurship
Control Engineering
Experimental Stress Analysis
Non Traditional Machining
Non Traditional Machining
Mechanical Measurements
Economics
Elements of Mechanical Engineering
Total Quality Management
Theory of Plasticity
Computer Integrated Manufacturing
Manufacturing Process-1

Mr.B.V.Srinivasamurthy
Mr.M.M.M.Patnaik
Mr.M.M.M.Patnaik
Mrs.L.Nirmala
Mr.K.V.Manjunath
Mr.K.V.Manjunath
Mr.M.R.Mallikarjuna
Mr.Naresha.K
Mr.Naresha.K
Mr.Anil Kumar A
Mr.Harish.U
Mr.Harish.U

\Rightarrow KSIT CLUBS

◆Team Prodigy Racers has been reaching heights and raising bars. With an amazing performance in the event conducted by Vayuputra Motorsports in 2016, they have now taken up EcoKart series2017 as the next challenge. Supporting them has been Mr. Balaji B, Assoc. Prof. whose consistent help has added to the finishing of the go-kart. Prodigy Racers won the first prize in Virtual rounds of the first event. This year with higher expectations they have secured 4th amongst 116 teams in virtual rounds.



♦ BAJA SAEINDIA- Baja team (REDLINE RACING) under the guidance Mr. K Nagaprasad, Assoc. Prof, and Mr. Anil Kumar A, Asst. Prof. have successfully been able to build the off road buggy for the BAJA 2017 and are eagerly waiting to get their buggy on track



MAGAZINES



Turbomachinery International covers industries engaged in all forms of energy, including power generation, electric utilities and cogeneration, oil & gas refining, gas processing, compression, drilling and exploration.

Emphasis on various applications where gas turbines and related turbomachinery are used worldwide. Coverage includes the maintenance, overhaul and repair of gas turbines, steam turbines, compressors and all rotating equipment and turbomachinery.



Appliance design is devoted to providing solutions for design and engineering teams in the global, commercial, and medical appliance/durable goods industry.

Appliance design writes for design engineers in all of the appliance industry sectors: HVAC · Majors · Water Processing · Housewares · Commercial Appliances · Vending · Medical · Lab · Test & Measurement · Lawn and Garden · Electronics · Computers · Communications · Business Equipment.



Department of Computer Science & Engineering

ABOUT THE DEPARTMENT



The Department of Computer Science and Engineering offers B. E, M.Tech and also R&D center in CSE. The department has well qualified, experienced and committed faculty to provide qualitative, industry tuned education to students with whole-hearted support from the principal and HOD. The department infrastructure fulfils and supports learning skills on the latest technology in the industry. The students are molded with multi-dimensional skills covering all the required graduate attributes. Our mission is to inculcate strong, theoretical and practical knowledge for continuous learning, prepare students to find Computer Solutions for the society though

research and entrepreneurship with professional ethics also encourage team work in inter-disciplines and evolve as leaders with social concerns. It also has several active forums like CSI, ISTE and IEI where students learn to do projects, present technical papers and work together which imbibes teamwork and leadership qualities. Various workshops on programming skills, Android, carrier launcher and artificial intelligence, Internet of things (IOT) remain active throughout the year to enhance the skills of students and teachers. Our department has signed MOU (Memorandum of understanding) for providing membership account for industry-academia collaborative platform – iTrack and its respective events to all the B. E, M.Tech students and faculty members of our department.

-Dr. Rekha B Venkatapur

⇒ LATEST TECHNOLOGY

Cyber Physical Technology

CPS are smart systems that have cyber technologies, both hardzware and software, deeply embedded in and interacting with physical components, sensing and changing the state of the real world. In cyber-physical systems, physical and software components are deeply intertwined, each operating on different spatial and temporal scales, exhibiting multiple and distinct behavioral modalities, and interacting with each other in a myriad of ways that change with context.



These systems have to operate with high levels of reliability, safety, security and usability since they must meet the rapidly growing demand for applications such as the smart grid, the next generation intelligent air transportation systems, smart medical technologies, smart buildings and smart manufacturing, robotics, process control systems, etc. 2017 will be another milestone year in the development of these critical systems, which while currently being employed on a modest scale, don't come close to meeting the demand.

⇒ EVENTS CONDUCTED

♦"Programming skills"

On 08th August 2016 a Guest Lecture on was given by **Dr. A.M Padma Reddy**, Prof & Head, CSE, SVIT, Bengaluru. The students learnt about range and representation of signed and unsigned integer. The importance of how to understand the problem, think logically, frame an algorithm and then writing programs was learnt. It was an interactive-learning session for the students where he imparted his technical knowledge to the students.



♦ "Research review meeting"

On 27th August 2016, all Research scholars of CSE, R&D presented the progress in Research work. Organized with Evaluation panel members from Industry Expert **Dr. K Vasu**, System Architect, Huawei Technologies, Bengaluru, An Academic Expert **Dr. Rajashekhar**, Assoc. Professor, ISE Department, Dayanand Sagar College of Engineering, Bengaluru.

♦ "Android program"

On 7th August 2016, a workshop on "Applied CS with Android" was given by Ms. Amulya, final year CSE student. This session was intended to give the students an insight into the program also to get them started with Android Development using MIT App Inventor. MIT App Inventor is an innovative beginner's introduction to programming and app creation that transforms the complex language of text-based coding into visual, drag-and-drop building blocks. During the session, students were taught how to design, build and run apps using App Inventor tools.



"Young India Challenge on analytical skills"

On 20^{th} September 2016, Carrier Launcher had conducted a written level test – 1 on GK, creativity and global awareness for 3rd and 5th semester CSE Students.

◆"Artificial Intelligence"

On 29th September 2016, technical talk on "Artificial Intelligence" by Ms. Hima M Patel, research scientist in Shell Technology Centre, Bengaluru was organized by Anita Borg Institute (ABI) where students gained information on the various topics on AI.



◆ "30" CSI Karnataka student's Convention"



On 10th,11th,12thNovember 2016 the "30th CSI Karnataka student's Convention" was organized. The convention included both technical (including paper presentation) and non-technical events were held. This convention served a platform to portray the scholastic and cultural skill set of the students across Karnataka. The students also got to witness the cultural heritage of the country. More than 400 students from different colleges participated and were benefited. The Winners of the events were honored with prizes during valedictory attended by Ms.Sushama Shadakshari (Alumni) Dr. R Srinivasan, Mr.K.Venkata Rao, Mrs.Deepa from KSIT and Dr. Shantharam Nayak from CSI-BC.



⇒ EVENTS ATTENDED

- ♦ Mrs. Vaneeta M and Mrs. Mamatha A Asst. Prof's,. attended a 2 days FDP on "Matrix Laboratory for teaching and research" organized at Reva Institute of Technology and Management, Bengaluru on 04th and 05th July 2016.
- ♦ Mr.Harshavardhan.J.R, Asst.Prof, Mrs. Sougandhika Narayan, Asst.Prof, and Mrs. Imapana.K.P Asst.Prof,attended a 6 day FDP on "Cloud Computing Hands-On" organized at BNMIT, Bengaluru on 11th July 2016 to 16th July 2016.
- ♦ Dr. Rekha B Venkatapur, Prof & Head, attended a 4 day FDP on "Linear Algebra and its Applications in Computer Vision" organized at JSSATE, Bengaluru on 13th July 2016 to 16th July 2016.
- ♦ Mrs.Priyanga.P, Asst.Prof, and Mrs.S.Kokila, Asst.Prof, attended a 5 day FDP on "Data Science and Data Analytics" organized at JIT, Bengaluru on 18th July 2016 to 22nd July 2016.
- ♦ Mrs. Sangeetha. V, Asst.Prof, attended a 6 day FDP on "Advances and Research Challenge in the Application of Artificial Intelligence in Gaming, Medical Imaging and Bio-Informatics" organized at MSRIT, Bengaluru on 18th July 2016 to 23rd July 2016.
- ♦ Mr.Pradeep.K.R and Mrs.Priyanga.P Asst.Prof's, attended a one day workshop on "Big data Analytics for Health Care" organized at DSU School of engineering, Bengaluru on 24th August 2016.
- ♦ Mr.Pradeep.K.R, Asst.Prof, attended a 2 day workshop on "Accreditation process for Technical Institutions" organized at JSSATE, Bengaluru on 26th and 27th August 2016.
- ◆ Mr.Pradeep.K.R, Asst.Prof, attended one day workshop on "Emerging Technologies" organized at VTU Regional Center, Bengaluru on 26th September 2016.

⇒ **ACHIEVEMENTS**

- ♦ Mrs. Swathi.K, Asst.Prof, has published a textbook as a Co-Author titled "An Adoptive Model for Lean Software Development", in the LAMBERT Academic Publishing, Germany, 21st September 2016.
- ♦ Mrs. Priyanga.P, Asst.Prof, has published a paper on "Mining Health data using weighted approach", in International conference on Communications on applied Electronics(CAE) in ISSN:2394-4714 issue: Volume 5, No-10, Year-Sep-2016.
- ♦ Mr. Aditya Pai.H, Asst.Prof, has published a paper on "Modeling and Simulation of Cell Biological Systems on Heterogeneous Parallel Computing Platforms: A Review", in International conference on Advance Trends in Engineering, Science & Humanities (15th December 2016) in ISBN: 978-81-81693-07-5, PP 159-167, Year-sep-2016.

⇒ FACULTY REGISTERED FOR PhD:

♦ Mr.Kushalkumar B.N, Asst. Professor - VTU.

⇒ACHIEVEMENTS – STUDENTS:

- ♦ Apoorva Rai, Avvari Rachana, Manasa Gowri J, N Anushree of VII semester won 1st prize in CSI event guided by Mr. Pradeep Kumar.G .H for "Autonomous Car on Raspberry pi using OpenCV"
- ♦ Students of **VII semester** participated at **I-MEDIA** for project based summer internship program from 06.07.2016 to 22.07.2016.
- ♦ Student of II semester **Neha Kouser** selected to participate at "Catalyst for workshop and the Annual Convention 2016" from 25.07.2016 to 30.07.2016.
- ♦ Ananyasree H.B, Hrishikesh.C.V, Pooja Sreedhara Murthy, Aditya Shankar, Nancy Jallerndhara had participated in an E-Pravarthana 13th state level "ISTE student Annual Convention" held on 25th Aug 2016 in JSSATE, Bengaluru.
- ♦ Siddhanth.M, Abhishek M, Aditya Shankar.M, Sourab Kumar secured 1stplace in the event "TECH QUIZ" in 13TH state level ISTE students annual Convention held on 2ndAugust 2016 in JSSATE, Bengaluru.

Papers presented in the 30th CSI Convention:

- ♦ "METAPHRASE: Mobile application for Language Translation" guided by Mr.Kumar K, Asst.Prof, Shri Raksha N, Varsha R, Amulya K Murthy, Soumyashree.
- ♦ "Near Field Communications [NFC] Ordering System" guided by Mrs. Deepa S R, Asst.Prof, Aditya R, Anirudh K R, Karthik K S, Mahinder P.
- ♦ "Implementing Home Security for the Visually Impaired using RASPBERRY PI" guided by Mr. Pradeep Kumar G H, Asst.Prof, Sania Aslam, Shankha Shuvro Sinha, Srinidhi G, Vidya G.
- ♦ "Attack and Defense Strategies in Android Using MSF venom In Metasploit Framework Over Wide Area Network" presented by Sohan M V.
- ◆ "Cloud Assisted Video Recommendation System" guided by Mr.Sanjoy Das, Asst.Prof, Poornapragna Vadiraj, Chinmay S Watwe, Soham M V, Tejas BS.
- ♦ "A Survey on Graphical Password Authentication Methods" guided by Mrs. Vaneeta M, Asst.Prof, Aayush Kumar, Keshav Kumar, Siddharth Shekar Singh.
- ♦ "Survey on Efficient Accessing of Small Files in HDFS:TLB-MapFile" guided by Mrs.Siddu Tushara M S, Asst.Prof, Aparna P, Meghana Malini B V, T R Malini, Chaitra K.
- "Privacy Preserving Multi- Keyword Rank Search Over Encrypted Data" guided by Mr.K Venkata Rao, Asst. Prof, – Rashmi H
- ♦ "A Survey on Deblurring The Blurred Image" guided by Mrs. Vijayalakshmi Mekali, Asst.Prof, Pooja S, Vyshnavi R, Prathiksha M Nadgir, Zakiya Khanum.

- ◆ "A Survey on Web Application Supporting Vehicle Toll Payment System" guided by Mrs.Sougandhika Narayan, Asst.Prof, Prashanth B M, Rakshitha N G, Rashmi A, Samana A B.
- ◆ "Mitigating the Risk of Customer Chum" guided by Mrs.Kokila S, Asst.Prof,— Nithin P, Rahul Ganesh S, Prajwal Gowda B, Somashekhar M.
- ♦ "Wireless Communication based Advanced Irrigation Vehicle Operated using Smart Phone-AGRIBOT" guided by Mr.K Venkata Rao, Asst.Prof, — Mehtaz N Sidnale, Chandan V, Diksha, Kalpana G.
- ◆ "Secure Image Processing on the Cloud" presented by Maanasa N, Mamatha P N, Manasa M, Meghana R.

⇒ VARIOUS CLUB DETAILS

KSIT-Firefox Club

On the account of Engineers day on 15th September 2016, the KSIT FIREFOX CLUB known by the name **EQUINOX** was launched. It is being led by Shri Raksha N, Firefox Student Ambassador.



⇒ 100%RESULT

Design and Analysis of Algorithms
Unix System Programming
Compiler Design
Operations Research
Management & Entrepreneurship
Unix System Programming
Software Architectures
System Modeling and Simulation
Ad-hoc Networks
Services Oriented Architecture

Mrs. Siddu Tushara.M.S Mrs. Mamatha.A Mr. Harshavardhan.J.R

Mr. K.Venkata Rao Mr. Krishna Gudi

Mr. B.N.Kushal Kumar Mrs. Vijayalakshmi.M

Mrs. Rekha.B.Venkatapur

Mr. Raghavendrachar

Mr. Pradeep Kumar.G.H

⇒ <u>MAGAZINES</u>



PC Magazine is an American computer magazine published by Ziff Davis. Magazine provides reviews and previews of the latest hardware and software for the information technology professional.



Department of Electronics & Communication

ABOUT THE DEPARTMENT



The aim of our Department is to produce Engineers with self-discipline, high integrity, good personality and Industry ready by providing excellent training. The department organizes many technical workshops, seminars and Technical Talks to bridge the gap between the Industry and academics. The department has several student forums and professional bodies like **IEEE**, **ISTE**, **IETE** and **IEI**. These forums help students to take-up innovative projects, present technical papers and organize various technical events thereby receiving a broader perspective on the professional front by providing opportunities for teamwork, leadership and service.

The department also organizes Non-technical and Cultural events where in student are encouraged to showcase their talent. The department is blessed with very good sportsmen & women and our students have represented both VTU level and National level. The department works by the quote "Knowledge is Power and Education is most powerful weapon to change the world".

-Dr P.N.Sudha

⇒ LATEST TECHNOLOGY

Point of Care Diagnostics



The trials and Tribulations of Point of care (POC) Diagnostics-Engineering the Medical field. With the aging of the population and the increasing burden of chronic disease, new models of health care delivery are required to achieve the aim of improving the experience of care, improving the health of populations. POC testing allows patient diagnoses in the physician's office, an ambulance, the home, the field, or in the hospital.

TODAY-The development of sensor, microsystem and low-cost imaging technologies combine multiple analytical functions into self-contained, portable devices that can be used by non-specialists to detect and diagnose disease. Sensor technologies, biosensors enable the rapid analysis of blood samples for several critical care assays, including blood chemistry, electrolytes, blood gases, and hematology. Current developments in point-of-care testing are addressing the challenges of diagnosis and treatment of cancer, stroke, and cardiac patients.

TOMORROW-With the development of miniaturized devices and wireless communication, the way in which doctors care for patients will change dramatically. Health care will become more personalized through tailoring of interventions to individual patients. Low-cost diagnostic imaging devices can be used and be made available, particularly in remote or rural communities with small hospitals that do not have ready access to these technologies. A new method using an optical probe for cervical cancer detection and treatment could significantly lower the mortality rate worldwide.

⇒ EVENTS CONDUCTED

- ♦A visit to an orphanage- **BELAKU SHISHU NIVASA** on **31**st **July,2016** was organized by the office bearers of IEEE KSIT Students Branch.
- ♦ On 20th August 2016, a guest lecture on "Applications of Image Processing" was organized for final year students by Dr. Debabrata Samanta, Associate professor, Dept. of Computer Applications, Dayananda Sagar College of Arts, Science and Commerce, Bangalore.



♦ A two day workshop on **Digital Designing** was organized under IEEE in collaboration with **INVATI Media** on **20**th **and 21**th of **August 2016.**



- ♦ On 27th August 2016,Research Review Meeting was held for all research scholars of ECE R&D centre.All scholars presented the progress in their research work. Dr.A.M.Vijaya Prakash, Prof of ECE, BIT and Mr.Srinivas.A.N. M/S Tiny Chip Embedded Solutions were present for the meeting.
- ◆ A two day IETE workshop on "ARM CORTEX' by TENET TECHNETRONICS was organized by on 27th and 28th of August 2016

by Mr. Umashankar Shetty and his team from TENET TECHNETRONICS.



♦A three day workshop on RC Aircraft was organized under IEEE student branch in collaboration with Skyfi Education Labs Pvt.Ltd. on 30th September 1st, 2nd October 2016.



◆The **IEEE Day** celebrations was held on **4**th **October 2016.** It was fun filled technical day with various technical and non technical activities



◆The Raspberry Pi was conducted in collaboration with Vishwajyothi Technologies Pvt Ltd, Bengaluru for fifth semester students on 23rd &24t^h October 2016.



◆ A one day workshop on "Management and Entrepreneurship in India" was organized on 3rd November 2016 for the students of Vth semester. Mr.K.V. Omprakash, Founder & Director, Conscientia Law Associates, Bengaluru.

◆ A workshop on "Software Testing" was organized on 5th and 6th November 2016 at KSIT in collaboration with M/S Uniqual, Bengaluru. Mr.Anantha Somayaji, CEO, Mr.Sridhar Jois, Engineer, M/S Uniqual were the resource persons.

⇒FDP/WORKSHOP ATTENDED BY FACULTY

- ◆ Dr. Surekha B, Prof, Mr. Sampath Kumar S and Mrs. Lakshmi H R, Asst Profs, attended four days FDP on "Linear Algebra & its Applications in Computer Vision" at JSSATE, Bangalore from 13th to 16th July 2016.
- ♦ Mr. Sudharshan B, Asst Prof, attended two days National Workshop on "NBA" at JSSATE, Bangalore on 26th and 27th August 2016.
- ◆Mr. Sampath Kumar S, Asst Prof, attended two days workshop on "Research Methodology" at Cambridge institute of Technology, Bangalore on 21st and 22nd October 2016
- ◆ Dr. M.J Shanthi Prasad, Prof, Mr. Praveen A and Mrs. Anitha Senthil Kumar, Asst Profs, attended one day National Conference on "Cadence VLSI" at Chancery Pavilion, Bangalore on 6th December 2016.

⇒ <u>FACULTY ACHIEVEMENTS</u>

- ◆ Dr. P N Sudha Delivered a Technical Talk on "Coding techniques used in Wireless communication" at JSS on 30th August 2016.
- ◆ Dr. Surekha B has been Awarded with "Best Young Women Scientist" award in National Conference on "SMART SUMMIT-2016" organized by Pearl Foundation, Madurai on 10th December 2016.
- ♦ Dr. P N Sudha has been the reviewer for Malaysian International Journal "Journal of Engineering Science and Technology [JESTEC], 7th international Conference Science of Electronics, Technologies of Information and Telecommunications [SETIT-2016]held at Hammamet−Tunisia held on 18th to 20th December, International Journal on Advanced research [IJRC], IEEE Conference,ICEECCOT 2016
- ♦ Dr. Supriya V G and Dr. P N Sudha have been the reviewer for IEEE International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques (ICEECCOT-2016), 9th-10th December, 2016 held at GSSSIT, Mysore.
- ♦ Dr. Surekha B has been the reviewer for "Computer Standards & Interfaces (CSI)- Elsevier" and "Information Sciences (INS)-Elsevier", the 7th Springer International Conference on Sciences of Electronics, Technologies of Information and Telecommunications (SETIT 2016), Hammamet Tunisia, 18th 20th December 2016, IEEE International Conference on Electrical, Electronics, Communication, Computer and Optimization

Techniques (ICEECCOT-2016), 9th-10th December, 2016 held at GSSSIT, Mysore.

FACULTY COMPLETED Ph.D



♦ Dr. Supriya V.G has completed PhD from Jain University on the topic "Augmented Security based on Cancellable Biometry".

- ◆ Prof. Sangappa S B was the Guest of Honour at the 13th state level ISTE Students' Annual Convention "E-Pravarthana" held at JSSATE on 25th August 2016, FDP on "Educating the Educators" at BKIT, Bhalki on 1st July 2016.
- ◆ Prof. Sangappa S B attended the National Executive Council Meeting on 10th July 2016 at HVPMS—COET at Amaravathi, Maharashtra.
- ◆ Prof. Sangappa S B was Deputed as Inspection Committee member by ISTE New Delhi to VIT Vellore and visited on 29th August 2016.

⇒ PUBLICATIONS

Book Chapters

◆B. Surekha, S. Viswanadha Raju, Lakshmi H R, "Visual Cryptography based Lossless Watermarking for Sensitive Images", Springer series on Lecture Notes in Computer Science (LNCS), Vol. 9873, Chapter 3, pp.29-39, 2016. [Ebook ISBN 978-3-319-48959-9]

International Journal Publications

- ◆ Dr. P N Sudha, Srividya L, "Literature Survey on Recent Audio Encryption Techniques", International Journal of Electronics and Communication Engineering and Technology (IJECET), Vol. 7, No. 6, 2016, pp. 91-95, ISSN:0976-6472.
- ♦ Sangappa S B, Sanjeev Gupta, C.Keshavamurthy, "Cross Layered Network Condition Aware Mobile WSN Routing Protocol for Vehicular Communication System", International Journal of Computer Sceince and Information Security (IJCSIS), Vol. 14, No.9, 2016, pp.1114-1121, ISSN: 1947-5500.
- ♦ Vishalini Divakar, Dr. M. S. Raviprakasha, Dr. B. K. Keshavan, "A Survey on Methods of Evaluation of Reliability of Distribution Systems with Distributed Generation", International Journal of Engineering Research and Technology (IJERT), Vol. 5, No. 8, 2016, pp. 220-226, ISSN: 2278-0181.

◆Sahana Salagare, Dr. P N Sudha, Dr. Karthik P., "A Survey on Applications and Challenges of Underwater Wireless Sensor Node", International Journal of Engineering Trends and Technology (IJETT), Vol. 41, No. 4, 2016, pp. 201-204, ISSN: 2231-5381.

⇒ INTERNATIONAL CONFERENCES

- ◆ Dr. Supriya VG, "Logistic Map for Cancellable Biometrics, International Conference on Advanced Material Technologies ICAMT-2016, Dadi Institute of Technology, Vishakhapatnam, Andhra Pradesh, 27th -28th Dec 2016.
- ♦ D. V. Rajeshwari Devi, Dr. K. Narasimha Rao, "A Multimodal Biometric System using Partition based DWT and Rank Level Fusion", IEEE International Conference on Computational Intelligence and Computing Research, Agni College of Technology, Chennai, Tamil Nadu. 15th-17th Dec 2016.

\Rightarrow 100% RESULTS

RF & Microwave Design
Advanced Embeded System
DSP and Architecture
Optical Comm & Networking
Advanced Radar Systems &
Wireless Communication
Wireless Communication
Digital Switching System
Fundamentals of HDL
Wireless Communication & ECC
AVLSI Design
Network Security
Digital switching Systems

Dr.P.N.Sudha Mrs.Jayasudha BSK Mrs.D.V.Rajeshwari Mrs.Sahana Salagare

Dr. Surekha B

Mr. Sangappa S B Mr.B.Sudarshan Mr.B.R. Santhosh Kumar Mrs. Sangeetha V Mr. Praveen A Mr.Saleem S.Tevarmani Mrs.Lakshmi H.R

⇒ <u>STUDENTS ACH</u>IEVEMENTS

P M Rohith Babu of seventh sem has been awarded the "Best Student Award" at 13th State level ISTE student's annual convention "E-Pravarthana" held at JSSATE on 25th August 2016

⇒MAGAZINES



IEEE Potentials explores career strategies, the latest in research, and important technical developments. Through it articles, and it also relates theories to practical applications, high lights the technology's global impact, and generates international forums that foster the sharing of diverse ideas about the profession



Department of Telecommunication

ABOUT THE DEPARTMENT



It gives me immense pleasure and honour to pen down the efforts that were put in and the success achieved by the Department of Telecommunication to the college newsletter. I heartily congratulate students and the faculty for their achievements in various fields. We in the Telecommunication Department believe that learning is not complete within the walls of the classroom, therefore various workshops, industrial visits, seminars and guest lectures are organized to give students the necessary exposure to the real world. I believe that the same legacy will be continued in upcoming semesters as well. The Department as a

team is working with great dedication to make young minds future ready. We congratulate all students placed in various companies. We are proud that many student's projects have been submitted as proposals to various funding organizations. I would further like to appreciate the editorial team and extend my warm regards to them for their efforts in making of the newsletter and giving great recognition to the staff and students. I extend my best wishes to all the readers and hope you all keep up good spirits.

- Mrs. Chanda V Reddy

⇒<u>LATEST TECHNOLOGY</u>

Internet devices powered by Wi-Fi and other telecommunications signals will make small computers and sensors more pervasive.

Even the smallest Internet-connected devices typically need a battery or power cord. Not for much longer. Technology that lets gadgets work and communicate using only energy harvested from nearby TV, radio, cell-phone or Wi-Fi signals is headed toward commercialization.

The University of Washington researchers who developed the technique have demonstrated Internet-connected temperature and motion sensors, and even a camera, powered that way. Transferring power wirelessly is not a new trick. But getting a device without a conventional power source to communicate is harder, because generating radio signals is very power-intensive and the airwaves harvested from radio, TV and other telecommunication technologies hold little energy.



Shyamnath Gollakota, Asst. Prof. in University of Washington and his colleague Joshua Smith have proved that weak radio signals can indeed provide all an Internet gadget needs, using a principle called backscattering. Instead of generating original signals, one of their devices selectively reflects incoming radio waves to construct a new signal—a bit like an injured hiker sending an SOS message using the sun and a mirror. A gadget using the technique absorbs some energy from the signal it is modifying to power its own circuits.

⇒ EVENTS CONDUCTED

- ♦ IETE Workshop: A two day IETE Workshop on "ARM CORTEX" by Tenet Technetronics, was jointly organized by the department on 27th and 28th of August 2016. The students were exposed to open source platforms (open source Hardware and software). Hands on training sessions enabled them to do projects on their own. They also learnt about digital and analog sensor circuitry and its principle as well.
- ◆ Technical talk: A Technical talk on "Space Technology in India" was presented by Shri. H.L. Srinivasa, Scientist, ISRO, for 4th and 6th semester students on 23rd September 2016. They were briefed about SLV (Satellite Launch Vehicle), PSLV (Polar Satellite Launch Vehicle), and GSLV (Geosynchronous Satellite Launch Vehicle) and also different Satellites of India, their working and their uses. The students gained knowledge in the field of satellites, rockets, launching process and International Space Station. The technical talk provided an insight to the quality of research happening in the area of space technology in India.
- ◆ Vanquish: For skills and knowledge to be put at its best forth and to test the technical minds Vanquish-16 made its way. An annually celebrated event under the lights of Department. Vanquish fest for technical knowledge is organized in the month of September and is dedicated to honorary heads in various technical fields.



Vanquish-16 was dedicated to the respected Bharath Ratna awardee Prof. C.N.R. Rao who earned in the field of solid state and structural chemistry in the year 2014. The event was presided over and addressed by an eminent chief guest Shri. Narayanaswamy H.P who is a Program Manager in Embedded Systems Practice at TCS. Vanquish-16 was filled with many interesting rounds like "Krank your Kranium", Bulls Eye", "Alpha Triangle", "Tech Hunt" and many more. The event was a grand success adding another gem to the crown of the department.

⇒ EVENTS ATTENDED

- ♦ Mrs.Chanda V Reddy,Assoc. Prof.& Head, attended a four day Faculty Development Program on, "Analog, Power, Embedded System and wireless (IOT) Hands on Workshop" conducted jointly by Texas Instruments, Bangalore and SETPS Knowledge Services Pvt.Ltd. Coimbatore, held during 11th to 14th July 2016 at REVA University, Bangalore.
- ◆ Mrs. Suma Santosh and Mrs. Supriya V, Asst Prof, attended a five day workshop on, "Application of Matlab for Electrical Sciences" organized by Department of Electrical and Electronics Engineering in association with GAT-GLARE, held during 26th to 30th July 2016 at Global Academy of Technology.
- ◆ Dr. Manju V.C, Proffesor, attended a four day 7th International Symposium on, "Microwaves-2016(ISM-16) and Microwaves School" organized by IEEE Bangalore Section held during 19th to 22nd December 2016 at NIMHANS Convention Centre, Bangalore.
- ◆ Mrs. Srividya R, Asst Prof, attended one day National Symposium on, "Computer Technology and Networking", organized by Department of Computer Science and Engineering on 1st December 2016 at Malnad College of Engineering, Hassan.
- ♦ Mrs. Devika B and Mrs. Srividya R, Asst Prof, attended a five day Workshop on "NS-3 and its Advance Usage" organized by Department of Electronics and Communication Engineering sponsored by ISTE held during June 27th to July 1st at RNSIT Bangalore.
- ♦ Mr. Dileep J, Asst Prof, attended a two day Workshop on "Accreditation Process for Technical Institutions" organized by Department of Electronics and Communication Engineering held during 26th to 27th August 2016 at JSS Academy of Technical Education Bangalore.
- ♦ Mrs. Devika B and Mrs. Srividya R, Asst Prof, attended a five day workshop on, "NS-3 and its Advance Usage" organized by Department of Electronics and Communication Engineering sponsored by ISTE held during June 27th to July 1st at RNSIT, Bangalore.

- ◆ Mr. Dileep J, Asst Prof, attended a two day Workshop on "Accreditation Process for Technical Institutions" organized by Department of Electronics and Communication Engineering held during 26th to 27th August 2016 at JSS Academy of Technical Education, Bangalore.
- ♦ Ms. Sangeetha. D. B, Ms. Sanjana. A and Ms. Roopashree. R, students of 2nd year have attended a two day workshop on "Raspberry Pi", organized by the Department of Electronics and Communication Engineering on 27th and 28th September 2016 at K. S. Institute of Technology, Bangalore.
- ♦ Ms. Smitha B.P, final year student has worked as Intern in "3D Printer", organized by Live Creative NGO, Bangalore.
- ◆ Ms. Prajutha. M, Ms. Shreelakshmi. N. S and Ms. Suchithra. R.V, students of 2nd year have worked as Interns in the month of September on "3D Printer", organized by Live Creative NGO, Bangalore.
- ◆ Mr. Sudarshan Kumar.T and Mr. Vineeth. R, students of 2nd year have participated in Equinox (Mozilla) event on 23rd September 2016 organized by department of Computer Science Engineering, KSIT.

⇒ 100% Results

Optical Networking Mr. Senthil Babu K
Fuzzy logic Mrs. Chanda V Reddy

CSM Ma. Stirida B

GSM Ms. Srividya R Adhoc Wirelesss Network Mrs. Devika B

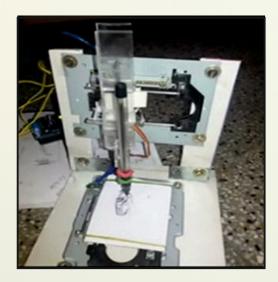
⇒ Achievements (Students)

- ♦ Mr. Pruthvi Raj and Mr. Thejas.S.B under the guidance of Prof. Srividya.R presented a paper entitled "Structural monitoring and Bridge Exploration", in one day National Level Symposium on Computer Technology and Networking organized by Department of Computer Science Engineering on 1st December 2016. Their paper was awarded as Best Paper of the session.
- ♦ Mr. Mohit Gowda. S, Mr. Mohith. H.B. and Mr. Sachin Kashyap. K, students of 3rd year have participated in Equinox (Mozilla) event on 23rd September 2016 organized by Department of Computer Science Engineering, KSIT, and have secured Second Place in the event.
- ◆ Mr. Anirudh. K. A. and Mr. Sumanth. K. S, students of 3rd year have participated in Vanquish-16 event on 15th September 2016 organized by Department of Telecommunication Engineering, KSIT, and have secured Second place in the event.

◆ Mr. Aditya. S and Mr. Srihari. N. V, students of 2nd year have participated in Equinox (Mozilla) event on 23rd September 2016 organized by Department of Computer Science Engineering, KSIT and have secured First Place in the event.



- ♦ Mr. Rukesh T, 2nd year student has represented KSIT dance team at BMS Institute of Technology, Global Academy of technology, RNS Institute of Technology and AMC College of Engineering. The team has secured Third Place at AMC College of Engineering, Bangalore.
- ◆ Ms. Prajutha. M, Ms. Shreelakshmi. N. S and Ms. Suchithra. R. V, students of 2nd year have developed a 3D plotter. It's a CNC machine made out of old cd drives which works on arduino ide, ink scape and processing 3 softwares. Arduino board and motor drivers were used to control the motion of X and Y axis. It can write text as well as draw the images. The text or an image is converted into g code using ink scape and then load it to processing 3 which actually executes the g code and moves the X and Y axis.



♦ Ms. Prajutha. M, Ms. Deepashree. R and Ms. Ranjitha H.N students of 2nd year have proposed a project called "Find my BMTC", an android application to IEDC Cell, Bangalore. This app helps the passengers in tracking the location of the bus and hence estimates the time of arrival.



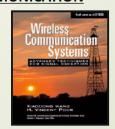
⇒ MAGAZINES

ELECTRONIC DESIGN



The magazine's feature sections include Technology Reports, Engineering Essentials and Engineering Features. While Technology Reports summarize specific product trends, the Engineering Feature covers larger industry happenings. Engineering Essentials helps designers stay on top of the latest standards. Among the magazine's most popular sections are the Design Solution and Ideas for Design sections. Design Solutions are contributed by field experts and Ideas for Design are innovative solutions from readers.

WIRELESS COMMUNICATION



Wireless communication generally works through electromagnetic signals that are broadcast by an enabled device within the air, physical environment or atmosphere. The sending device can be a sender or an intermediate device with the ability to propagate wireless signals.



It's amazing how as soon as you make the shift from "I CAN'T" to "WHY CAN'T I?" you go from defence to offense, and as everyone knows, the best place to score is always on offense.

- Gary Vaynerchuk

Department of Basic Science & Humanities

ABOUT THE DEPARTMENT



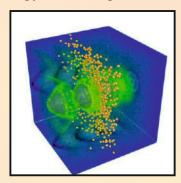
Science of today is the technology of tomorrow. All that mankind has accomplished in the field of technology is built around the basic concepts and theories of science. As aspiring engineers it is crucial for the students to understand and better acquaint themselves with the ideas that built this world. This conceptual understanding not only enables them to be better engineers but also provides them with the necessary groundwork to gain theoretical excellence and technological advancements. Physics, Chemistry and Mathematics have been the fundamental pillars of scientific education for longer than perceived by man. The faculty of the Basic science department have a complete understanding of

these core subjects and help every student in achieving a stronger insight into the world of science. They support the students in all their endeavors and provide them with a sufficient amount of motivation in order to attain excellence. The labs and research centers provide the perfect environment and equipment that aid the students in their journey to become successful and responsible engineers. The scientific outcomes and developments remain effective only when held within the boundaries of humanity. Hence this combination acts as the basic building block for future advancements in this field.

-Dr. K.R. Jayakumar

⇒ LATEST TECHNOLOGY

Laser energy after being fired into plasma



Study discovered that the same forces that produce a bubble in plasma in the laser-plasma wakefield accelerator produce two additional low-energy but high-charge electron beams simultaneously with a low charge high energy beam. These high charge beams can have a thousand times more charge than the high energy beam. Plasma, the state in which nearly all of the universe exists, can support electric fields that are 1,000 to 10,000 times higher than in conventional accelerators, simply by separating the positive and negative charged particles that makes up the plasma medium, which is quasi-neutral. This can easily be achieved using an intense laser pulse, the light pressure of which pushes electrons out of its way, leaving behind the much heavier ions which remain in place and exert an attractive force on the displaced electrons. The displaced electrons then oscillate around the stationary ions resulting in a wake behind the laser pulse, in a similar manner to the wake behind a boat. Because the laser pulse travels at a velocity close to that of light in vacuum, the wake can track and accelerate charged particles rapidly to very high energies, over extremely short lengths. Professor Dino Jaroszynski, of Strathclyde's Department of Physics, led the study. He said: "The intense laser pulse we used, and the acceleration of the wake it creates, lead to a very compact laser wakefield accelerator, which is millimetres long, rather than tens of metres long, for an equivalent conventional accelerator. The plasma wake forms into something like a bubble-shaped, laser-powered miniature Van de Graaf accelerator, which travels at close to the speed of light. Some of the laser energy is converted to electrostatic energy of the plasma bubble, which has a diameter of several microns. Conventional accelerators store their microwave energy in copper or superconducting cavities, which have limited power-carrying capability.

An interesting conundrum that has not been considered before is the question of where laser energy goes after being deposited in plasma. We know where some of this energy goes because of the presence of high-energy electrons emitted in a narrow, forward directed beam. One of these beams is emitted by a sling-shot action into a broad forward-directed cone, with several MeV (mega electron volt) energies and nanocoulomb-level charge. Paradoxically, another beam is emitted in the backward direction, which has similar charge but an energy of around 200 keV (kilo electron volt). These beams carry off a significant amount of energy from the plasma bubble. It is interesting to observe that answering a very basic question -- where does the laser energy go? -- yields surprising and paradoxical answers. Introducing a new technology, such as the laser-wakefield accelerator, can change the way we think about accelerators. The result is a very novel source of several charge particle beams emitted simultaneously...

⇒ EVENTS ATTENDED

◆ Dr. K. R. Jayakumar, Prof. attended a 2 day international conference where he delivered an invited talk on "The Basic Concepts, Equations and Non Dimensional Numbers in Boundary Layer Theory of Fluid Dynamic" on 23rd and 24th December 2016 at Don Bosco Institute of Technology, Bangalore.

⇒ <u>ACHIEVEMENTS</u>

<u>Papers Published</u> International Journal

♦ Mr. S. R. Kiran Kumar, Asst.Prof, Ms. G. P. Mamatha and Mr. H. B. Muralidhara published a paper titled "Synthesis and Characterization of Copper Oxide Nanoparticles: To Study Voltammetric Response of Biomolecules." in the International Journal of (Springer-ISSN 1068-3755) Surface Engineering and Applied Electrochemistry, Vol. 52, No. 5, 2016, Page numbers 469–474.

- ♦ Mr. S. R. Kiran Kumar, Asst.Prof, Ms. G. P. Mamatha and Mr. H. B. Muralidhara published a paper titled "Synthesis and characterization of ZnO-CuO nano-composites and its application in modified carbon paste electrode for electrochemical detection of Dopamine, Folic acid and Paracetamol" in the international Journal of Chemical, Biological and Physical Sciences Section-A, (Chemical Sciences), J. Chem. Bio. Phy. Sci. Sec. A, Vol.6, No.3, May 2016 July 2016; Page numbers 821-833.
- ♦ Mr. S. R. Kiran Kumar, Asst.Prof, Ms. G. P. Mamatha and Mr. H. B. Muralidhara published a paper titled "Synthesis and Characterization of Hierarchical Nickel Oxide (NiO) Nanoparticles and its application in Modified Carbon Paste Electrode for Electrochemical Detection of Biomolecules." in the Journal of Chemical and Pharmaceutical Research, 2016, Page numbers 633-639.

⇒ International Conference

- ♦ Dr.K.R.Jayakumar, Mr. B.S.Venkataramana, Ms. P. Jalaja presented a research paper titled "Laminar Boundary Layer Flow and Heat Transfer over a moving cylindrical rod with Suction (Injection) and an Applied Magnetic Field" in the International Conference on 23rd and 24th of December 2016 at Donbosco Institute of Technology, Bangalore.
- ♦ Dr.K.R.Jayakumar, Prof. Ms. P. Jalaja and Mr. B.S.Venkataramana Asst.Prof's, presented a research paper titled "The Effect of Heat generation and Absorption on MHD Laminar Boundary Layer Flow over a Flat Plate with an Exponentially Decreasing Velocity Distribution", in the International Conference on 23rd and 24th of December 2016 at Donbosco Institute of Technology, Bangalore.
- ♦ Dr.K.R.Jayakumar,Prof Mr. B. S. Venkataramana, Ms. P. Jalaja, Mr. Naveen.V Asst.Prof's and Dr.A.T.Eswara presented a research paper titled "The Effect of Heat Generation (Absorption) on Laminar Boundary Layer Flow Due To an Exponentially Stretching Sheet with an Applied Magnetic Field" in the International Conference (ISTAM) held between 11th to 14th of December 2016 at VIT, Vellore.
- ♦ Dr.K.R.Jayakumar,Prof Mr. B. S. Venkataramana, Ms. P. Jalaja, Mr. Naveen.V Asst.Prof's and Dr.A.T.Eswara presented a research paper titled "The Effect of Thermal Radiation on Laminar Boundary Layer Flow over a Flat Plate with an Exponentially Decreasing Velocity Distribution and an Applied Magnetic Field" in the International Conference (ISTAM) held between 11th to 14th of December 2016 at VIT, Vellore.
- ♦ Mr. Chowdappa, Asst Prof. Dr. M.R. Siddalinga Prasad and Dr.B.S.Seshikala presented a research paper titled "Nonlinear oberbeck electro convection in a poorly conducting couplestress fluid in a saturated porous channel" in the International conference (ISTAM) held between 11th to 14th of December 2016 at VIT, Vellore.

⇒ National Conference

- ♦ Dr. Ranjana Jain attended 3 rd National Conference on "Advances in Mechanical Engineering NCAME 16 on Thermal Spray Coatings Evaluation Techniques on A16061; Gray Cast Iron (GCI) Substrates" at KSSEM Bangalore.
- ◆ Dr. Ranjana Jain attended the workshop on "Non-Conventional Energy Resources and its Application for the Society" held at KSIT Bangalore on 20th − 22 nd October 2016.
- ◆ Dr. Ranjana Jain attended the National Conference on "Recent Advances in Applied Science (RAAS-2016)" at AMC Engineering College Bangalore and presented paper on "Systhesis & Characterization of Nano-particles"
- ♦ Dr.K.R.Jayakumar, Prof. B.S.Venkataramana, Prof. P. Jalaja and Prof. Naveen.V, presented a research paper titled "The Effect of Heat Generation (Absorption) on Unsteady Forced Convection Boundary Layer Decelerating Flow and Heat Transfer over a Plate with an Applied Magnetic Field" in the National conference on 24th August 2016 at National College, Bangalore.
- ♦ Dr.K.R.Jayakumar, Prof. P. Jalaja, Prof. B.S.Venkataramana and Prof. Naveen.V presented a research paper titled "Thermal Radiation Effect on Unsteady MHD Forced Convection Accelerating Boundary Layer Flow over a Flat Plate " in the National Conference on 24th August 2016 at National College, Bangalore.

⇒ Faculty registered for Ph.D

- ♦ Mr. Sunil Kumar, Department of Physics VTU
- ♦ Mr. Naveen K, Department of Mathematics VTU
- ♦ Mr. Shylaja K R, Department of Chemistry VTU
- ♦ Mr. Anantha M S, Department of Chemistry VTU

⇒ MAGAZINES



COVER: Illustration of a hypothetical yeast genome structure model encompassing all synthetic chromosomes (gold) completed to date (white, native chromosomes). One-third of the chromosomes in the yeast genome have now been designed and synthesized by the Synthetic Yeast Genome Project (Sc2.0). A three-dimensional model of the chromosomes was generated with the Hi-C method.

Training & Placement

ABOUT THE DEPARTMENT



It gives me an immense pleasure to pen down few words for the college newsletter Chinthana Manthana. Today education means much more than merely acquiring knowledge. It is acquisition of knowledge and skills, building character and improving employability of our young talent, the future leadership. Measures initiated by the Hon. Management, steps taken by the college administration, the willing contribution teaching and non-teaching staff and over whelming response and enthusiastic participation of our students in the college activities in the recent past all vouch for this. When all the constituents come together and work in unison, the expected results are bound to flow.

- Dr. Ranjana Jain

⇒ PERSONALITY DEVELOPMENT TRAINING

◆ KSIT Life Skills Institute: A initiative to develop Lifeskills for our students.

KSIT has formed a forum "Life Skills at KSIT" to enhance employability skills and students undergo training in Quantitative Aptitude, Logical Reasoning, Technical, Soft Skills & Verbal ability skills to have a 360 degree enhancement in LSRW [BEC standards]. Students of 6th, 4th & 2nd sem have undergone for the training program from 06thFebruary 2017 to 23rd February 2017.

♦ Online Assessment Test for Campus Selection:

On every Monday students of 7th semester undergo Online Assessments at our Online Examination Lab exclusively designed for Online Assessments so far have solved more than 30000 questions to crack the aptitude test of top most companies.

♦ Campus Induction Program was arranged for 1st sem students on 4th & 5th August 2016.

Students actively participated and have a gained confidence to face challenges ahead. Training programme was very helpful for students to develop their self esteem and communication skills, and student who wants to grow, develop and become more employable for a effective career.

⇒ PROMINENT DRIVES WHERE STUDENT GOT PLACED

- ♦ INFOSYS Conducted On Campus Recruitment Drive on 21st & 22nd September 2016 and recruited 45 students.
- ◆ NTT DATA has recruited 18 students from our college
- ◆ **TECH MAHINDRA** has recruited 90 students from K. S. Group of Institution, highest recruitment so far happened on a single day.
- ◆ MIND TREE conducted campus recruitment drive and hired 4 students.
- ♦ **CLEAN MAX SOLAR** recruited many mechanical students with a package of 4.0 Lakh.
- ◆ AMAZON recruited 08 students from our college.
- ♦ Many students have got placed in SAP LABS, INDIAN NAVY, ALPHA 9 MARINE, HP, ARTECH INFOSYSTEM, IBM, V-TIGER, GLOBAL AUTOMATION, TAYANA SOFTWARE, Q-SPIDERS.

⇒ Students have also got various opportunities to appear for high pay Package Company's campus drive like:

Direct I Campus (12 Lakh Package) Six Sigma lab for mechanical students (7.0 Lakh Package), Adobe (20 Lakh Package) Yodlee Campus Drive

- ⇒ MOU'S with Corporates: For Various Online Examination & Providing Platform for the students to Pursue Higher Education.
- ♦ KSIT has entered into a MOU with **Merit Trac. Ltd Services Pvt.**To conduct the Various Online Exam like SMU examinations, NIMHANS PG Entrance Test, All India CAT Examination, PSU assessments, etc.
- ◆ KSIT has tied up with **Siffy Technologies Pvt Ltd** to conduct their screening process on behalf of various clients. So far we have conducted various assessment tests.
- ♦ KSIT has tied up with **TCS-ion** to conduct various online assessments for their clients viz., GATE, IBPS, J2EE, AIEEE, LIC, UII, SBI, CMC Vellore, AIIMS, JIPMER assessments etc.
- ♦ KSIT has tied up with **EDUQUITY** to conduct various online assessments for their clients such as HAL, CMC Vellore , JIPMER assessments, etc.
- ◆ KSIT has tied up with **Q-Spiders & J-Spiders** to conduct various Campus Recruitment Drive for various companies.

⇒ Awards

♦ Dr. Ranjana Jain was awarded "Performance Award" by Aspiring Minds in Career Guru Awards Ceremony for outstanding effort and constant contribution towards Training and Placement.

⇒ Achiever



VIVER B
DEPARTMENT OF COMPUTER SCIENCE

Heartiest Congratulations for getting placed in Samsung R & D with a package of 7.5 LPA

Some Prominent Drives @ KSIT











Placed Students

Infosy



ADITHYA.R - CS





LATHA ESHAPPA -





NAVYASHREE.D.P -CS



AMULYA.K.MURTHY APOORVA.T.M - CS



ARJUN.D - CS



DIKSHA - CS



SANDHYA.A.B - CS



SANDHYA.B.R - CS



SHRAVYA.S KARANTH - CS



NIDHI MITTAL - CS



NISHIGANDHA SHIRISH **KULKARNI - CS**



PRASHANTH.B - CS



SAMANA.A.B - CS



SINDHU.V.L - CS



SURYAKANT - CS



VARSHA.R - CS





ZAKIYA KHANUM -



AKHIL.G.S - EC



DIVYA.R - EC



KUSHAL.N - EC



MEGHANA MANJUNATH - EC



NAGARJUN.J - EC

AND MANY MORE...



SUSHMITHA PREM -



VARSHA.S.BHAT -



AISHWARYA PAI SHIRVANTE - TC



SAHANA.K - ME

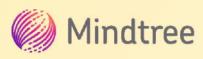


PAVAN.D - ME



HARIKISHAN.B - ME







HIMANSHU PRASAD -CS



N.ANUSHREE -CS



ANUSHA.B.N - TC



NIVEDITHA ARVIND-CS





AMIT.N - CS



NITHIN.P - CS



P.ASHITHA - CS



RUDRANI GHOSH **ROY - CS**



VANDANA.B.R - CS

Placed Students

Tech







APARNA PUTTEGOWDA-CS



APOORVA RAI - CS





DIKSHA - CS



HIMANSHU PRASAD - CS



KARTHIK GOPADI SUBRAMANYA - CS



LATHA ESHAPPA -



MANJUNATHA.S -



MITHUN.K - CS



NESAR MOHAN -



NIDHI MITTAL



NUZHATH ZAIBA



P.ASHITHA



POORNAPRAGNA **VADIRAJ**



RASHMI.A



SAMANA.A.B



SANDHYA.B.R





SUSHMA SHET - CS



UTSAV.K.P - CS



VIVEK.B - CS



ANUSHA.N - EC



KUSHAL NAGRAJ -EC



PRADITHA RADDY S SUMAN - EC



SAI PRAMOD.R -



SINDHU.H - EC



SPOORTHI.K.V - EC



SURAJ **BHARADWAJ - EC**



VANDANA SHREE.S - EC



VARSHA.S.BHAT -



VINUTHA.R - EC



AKSHATHA.A.RAO - TC



AKSHAY.B.P - TC



ANKITHA.A.JAIN -TC



GAYATRI VISHWANATH- TC



NANDINI **RAJKUMAR.R - TC**



NAYANA.M - TC



RAKSHITHA.K.R - TC



RANJITHA SRINIVAS - TC



SHRUTHI.B - TC



SHARANYA - TC



SNEHA M - TC



ADITHYA HOLLA MANOOR - ME



ADITHYA L KULKARNI - ME



AMITH.H.R - ME

Placed Students



SETHURAM - ME



GOWRAV SHARMA HARIKISHAN.B - ME KAUSHAL.V.PATIL -





ΜE



KESHAV KUMAR.B.S - ME



MUCHELI MOHAN SAI - ME



NIKHIL.N - ME

AND MANY MORE...



PIYUSH VERMA -



PRAVEEN.R - ME



RAKSHITH.K - ME



SHASHI KUMAR.B.P





SUHAS.J.RAM - ME SUHAS.V.KHATOKAR





AISHWARYA.C.G -



SANDHYA.B.R - CS



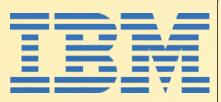
TEJASWI.Y.J - EC



NEHA.C.KEERTHI -



KUSHAL.M.KOTHAR



AVVARI RACHANA - CS



HARSHITHA.C.A -





MAHINDER.P - CS





INDIAN NAVY



ABHISHEK KUMAR OHJA - ME



KOUSHIK.K - ME



RITHUL.K - ME



RAGHAPRIYAN.G -



APOORVA.T.M - CS



ATISH KUMAR - CS



MEGHANA MALINI.B.V - CS



SHRI RAKSHA.N -



HUZAIFUDDIN - ME





SUMUKH.K.S - ME



Srinivasa.S.C - ME



HARSHA VARDHAN.G - EC



EC



SUNIL KUMAR.S -EC



H.HARSHAVARDHAN NAIDU - EC

Placed Students - 2K17

LIST OF PLACED STUDENTS IN VARIOUS COMPANIES

SI. No	Company	cs	EC	тс	ME	Total
1	INFOSYS	22	7	2	14	45
2	NTT DATA	13	5	-NA-	-NA-	18
3	INDIAN NAVY	6	5	1	23	35
4	TECH MAHENDRA	25	11	11	20	67
5	MINDTREE	4	-NA-	-NA-	-NA-	4
6	WESTLINE SHIPPING	0	8	0	21	29
7	ALPHA 9 MARINE	-NA-	7	-NA-	12	19
8	SAP LABS	1	0	0	0	1
9	PRIME MOVERS	-NA-	-NA-	3	-NA-	3
10	CGI	1	0	1	0	2

SI. No	Company	cs	EC	тс	ME	Total
11	IBM	5	1	4	1	11
12	IBM DEVELOPMENT	1	0	0	0	1
13	VEE TECHNOLOGIES	1*	0	3*	0	4*
14	THASMAI	0	0	1	0	1
15	42 HERTZ	2*	0	0	0	2*
16	AMAZON	2	1	1	4	8
17	TAYANA SOFTWARE	0	2*	1*	0	3*
18	ARTECH SOFTWARE	2	0	4	1	7
19	Q - SPIDERS	4	4	3	0	11
20	GLOBAL AUTOMATION	11*	7*	3*	0	21*

Library and Information Center

ABOUT THE DEPARTMENT



KSIT Library is a resource center for teaching, learning and research. Being the heart of the academic center, is a home for all the information services. It provides continuous access to Knowledge and information in the Library to the students and faculty of the institute for achieving excellence in their chosen disciplines. Library has spread over two floors with 250 seating capacity, state of art digital library, Discussion room, Stack Area, Reference Section, Circulation Counter, OPAC Search, Journals/Magazines and Newspaper Section are made available.

- Dr. V. Bharathi

COLLECTIONS

Books					
Under - Graduate					
Volumes 34129					
Titles	4085				
Post - Graduate					
Volumes	582				
Titles	171				



The Library holds a collection of printed as well as electronic resources which includes books, journals, CDs/DVDs, e-books, e-journals, previous years question papers, Bound Volumes and Project Reports. The Library subscribed e-Resources through VTU Consortium and also availed DELNET membership for resource sharing purpose.

E-RESOURCE FOR THE YEAR 2017

Publisher	No. of E-Resource		
IEL Online (IEEE)	273 Journals 6514 Conf. Proc. 3043 Standards		
Springer E- Journal	680 Journals 12125 e-Books		
Elsevier Science Direct	228 Journals		
Taylor and Francis	535 Journals		
Pro - Quest	3900 Journals		
	7800 Abstracts		
K - Nimbus: Digital Library Platform	12000+		



SPORTS







"Apart from education, you need good health, and for that, you need to play sports."

- Kapil Dev

With this thought in mind, our college has always encouraged students to take part in different fields of sports. Adding on to this, without comprising on their education students put their best efforts to take KSIT to the peak in the field of sports.

♦ Cricket

Cricket tournament was organized at the RVCE Bangalore from 17th to the 20th September 2016. Our students team qualified for the quarter-finals.

Our team of faculties participated in a two day **Faculty Cricket Tournament** held during 15th to 16th October 2016 organized by **Sri Venkateshwara College of Engineering, Bangalore.** on 11th December 2016 organized by **Atria Institute of Technology, Bangalore.**





♦ Throw Ball

PESU throw ball tournament was organized from 4th to the 6th October 2015 at the **PES Institute Of Technology**. Our college girls team secured **second place**. They were also qualified for semi finals that was organized at Jyothi Institute Of Technology Bangalore.

◆ Basket Ball

Basket ball tournament for boys was organized for the VTU affiliated colleges on 6^{th} and 7^{th} September 2016 at the GAT Bangalore. Our college team participated and was qualified for the quarter-finals.

◆BADMINTON

Deekshitha H.B. from CSE has participated in VTU Bangalore South Zone Inter College Badminton Tournament 2015 held on 21 st and 22 nd September 2016 at SJBIT, Bangalore.

♦ Swimming

Karthik Narayan of 1^{st} sem, Telecommunication Department participated in a two day swimming tournament organized by the GAT Bangalore on the 24^{th} and 25^{th} of August 2016.

◆ Power Lifting

Bhavya P of 7^{th} semester, Electronics and Communication participated in VTU Power Lifting competition held on 11^{th} and 13^{th} of November 2016 at the GAT Bangalore.

⇒ Sports Achievers





SHREYASHWINI V of 1st Sem ECE and **K SUSHMITAR** of 1st Sem TCE represented VTU Cricket (W) team in South zone interuniversity Cricket (W) tournament 2016-17 held at Sathyabama University Chennai (TN) from 10th to 15th October 2016



Our College secured Runners UP in the PES University INTER collegiate throw ball (Women) Tournament 2016 held on $4^{\rm th}$ to $6^{\rm th}$ October 2016.



Inauguration - 2016

A well arranged inauguration is a promising start. With this at heart, the much awaited Inauguration ceremony began. The pleasant morning of 3rd August 2016 presented itself in a mild and grand fashion. As our honorary chief guests, **Justice Santosh Hegde and Mr. Sudhir Mishra** were welcomed with a soothing invocation song, a gathering of students and parents alike were left waiting in anticipation for information on the 4 year journey that was to ensue. Following this was an award ceremony for our laudable faculty, thanking them for their exemplary efforts in the betterment of our education. After an illuminating and influential speech by Justice Santosh Hegde, Mr. Sudhir Mishra informed us about the various opportunities that the world has in store for us and briefed us on the system of job placements. Gathering us in after a wholesome lunch, the IEEE student group presented a small, factual talk on the merits of the association.

Our principal presented us with a set of guidelines on examination and test schedules, following which, the rules and regulation of the college were laid out for the students. Thanking our Principal Dr. T V Govindaraju for this joyful day, our batch of cheerful first years were now ready for a first day at Kammavari Sangham Institute of Technology.



Alumní Meet - 2016

A trip down memory lane is always a joyous occasion. An Alumni meet establishes itself as one such occurrence. After a euphonious invocation song, our 2nd Alumni meet began at 10 am on a pleasant Sunday morning. Our Principal Dr.T V Govindaraju along with the President of the association Mr.Y Ramachandra Naidu, welcomed our honourable chief guests, **Mr. Abhiroop Matilal, Mr. Shreyas Jothish and Mr. Karthik Shekar C**, who were soon joint by the Treasurer Dr. Rukmangada, all the department HODs and the members of our faculty.

The ceremonious lamp was lit by our Chief guests to mark the beginning of a felicitous day. Following this, our Honorary Secretary K. Venkatesh Vaidu, introduced the office bearers and all the executive committee members of the Association. The Principal addressed the gathering of Alumni's and a summary of events conducted with Alumni participation for the past year was given. After a successful suggestion session, a new set of activities and events were decided for the coming year for the benefit and gaiety of the students.

A number of workshops, technical talks, stress management courses and a lot of other such projects were set up to help the present student batches with their 4-year college journey. Bringing an end to the 2nd Alumni meet, the Principal thanked everybody for coming and promised an equally grandiose and triumphant event next year.



Industrial Visit

MECHANICAL ENGINEERING

On 22nd October 2016 an industrial visit was organised for faculties and students to TUV Rhineland Company. It is a solar module testing company which has sophisticated testing machines which are best in Asia. It is a third party authorising institute of ISO standard which authorizes the solar panels. A complete test environment is present which takes a total of 45 days to completely teat a solar module including its ability to withstand stresses due to impact, high thermal radiation, weather changes etc. The students got the practical knowledge about the working of solar modules and indirectly got the idea about various testing techniques.

COMPUTER SCIENCE ENGINEERING

The Department of Computer Science & Engineering, KSIT organized a one day Industrial Visit to Indian Space Research Organization (ISRO). The Objective of the visit was to provide an insight to the quality of research happening in area of space Technology & the scope of Computer Science Engineering field. The outcome of program is to know about the pillars of ISRO and understand the explanation of Indian satellite launches. The two types of satellites and rockets: Polar Satellite Launch Vehicle (PSLV) launches communication satellites like INSAT used in fields like TV, Radio, Internet etc.

TELECOMMUNICATION ENGINEERING

The Department of Telecommunication Engineering organized a one day Industrial Visit to HAL Heritage centre and Aerospace museum, Bangalore on 20th August 2016 for students of 3rd semester. They had audio video presentation on the development of propulsion system and gas turbine followed by visit to Heritage centre and Aerospace museum where a number of aircrafts and aero engines are on display. It was a good experience, which has provided exposure to the students with the knowledge of Aviation. The students are benefitted in terms of technical details provided by the company.



ELECTRONICS & COMMUNICATION ENGINEERING

On Sunday, the 11th of September, 'India International Innovation Fair' held at Bangalore International Exhibition Centre (BIEC). The industrial visit was conducted in collaboration with IETE and was guided by Dr. Surekha, Mr. Vikram, and Mrs. Rajeshwari Devi. 'Makerdemy - learn explore make' was one of those stalls which provided students several online courses at reasonable price. The courses include embedded system courses, IOT courses etc. These exhibitions improve our technical skills and provide us good exposure to industrial side and it provides us a better vision of what the electronic world is.

EDITORIAL TEAM





Congratulations to Toppers

MECHANICAL

COMPUTER SCIENCE

ELECTRONICS & COMMUNICATION

TELECOMMUNICATION



LIKHITH M R 1KS15ME039 9.08(CGPA)



NARASIMHA PRAS-ANNA H N 1KS15CS062 9.17(CGPA)



SWATHI K S 1KS15EC101 9.25 CGPA



JYOTHIKA 1KS15TE017 8.67 (CGPA)



ADARSH J 1KS15ME003 9.00(CGPA)



VAISHNAVI K N 1KS15CS117 9.00 (CGPA)



RAKSHITHA S 1KS15EC074 9 CGPA



SUSHMA KARANTH N 1KS15TE045 8.5 (CGPA)



NAVEEN KASHYAP B N 1KS14ME056 80.11%



CHAITRA R 1KS14CS029 86.78%



PRAGATHI R 1KS14EC074 82.56%



MEGHANA M A 1KS14TE023 74.44%



ANKUSH A TELKAR 1KS14ME013 79.88%



MANASA NARYAN 1KS14CS051 84.67%



YUKESH R 1KS14EC118 79.22%



DEEPASHREE R 1KS14TE010 72.56%



ARJUN B 1KS14ME402 77%



SHRI RAKSHA N 1KS13C106 83.6%



MANASA M 1KS13EC044 79.11%



SHRUTHI B 1KS13TE042 79.11%



SHASHIKUMAR B P 1KS13ME102 76.22%



M ARCHANA 1KS13CS047 83.33%



PALARLAPALLI ROHITH BABU 1KS13EC055 78.00%



NAYANA M 1KS13TE028 78.56%



TEJASWINI NAGESH 1KS12ME108 84.80%



POORNIMABHA-RADVAJ 1KS12CS068 76.89%



NAVYA SRI 1KS12EC072 85.33%



SAHANA H B 1KS12TE040 86.60%



VINAYAK SHARMA 1KS12ME116 84.67%



POOJITHA HEBBAR 1KS12CS067 75.22%



SUMITHRA B 1KS12EC087 83.73%



SEEMA K S 1KS12TE036 82.80%



NATIONAL CONFERENCES FACULTY DEVELOPMENT PROGRAM

NSS CLUB INAUGURATION

ARDUINO

BLOOD DONATION CAMP

ANANYA 2K17

PERSONALITY DEVELOPMENT

INNOVACEEEA 2K17

GRADUATION DAY

AND MANY MORE...

The function of education is to teach one to think intensively and to think critically. Intelligence plus character, that is the goal of true education.



- Martin Luther King Jr

