



Department of  
Computer Science



## E-NEWS LETTER

Volume-1, Issue-2

Academic Year 2017-2018 EVEN SEMESTER

### SPECIAL POINT OF INTEREST

*Message from HOD*

### DEPARTMENT VISION

*Engendering competent, excellent professionals by transforming the knowledge and computing skills to individuals through modern innovative tools and techniques"*

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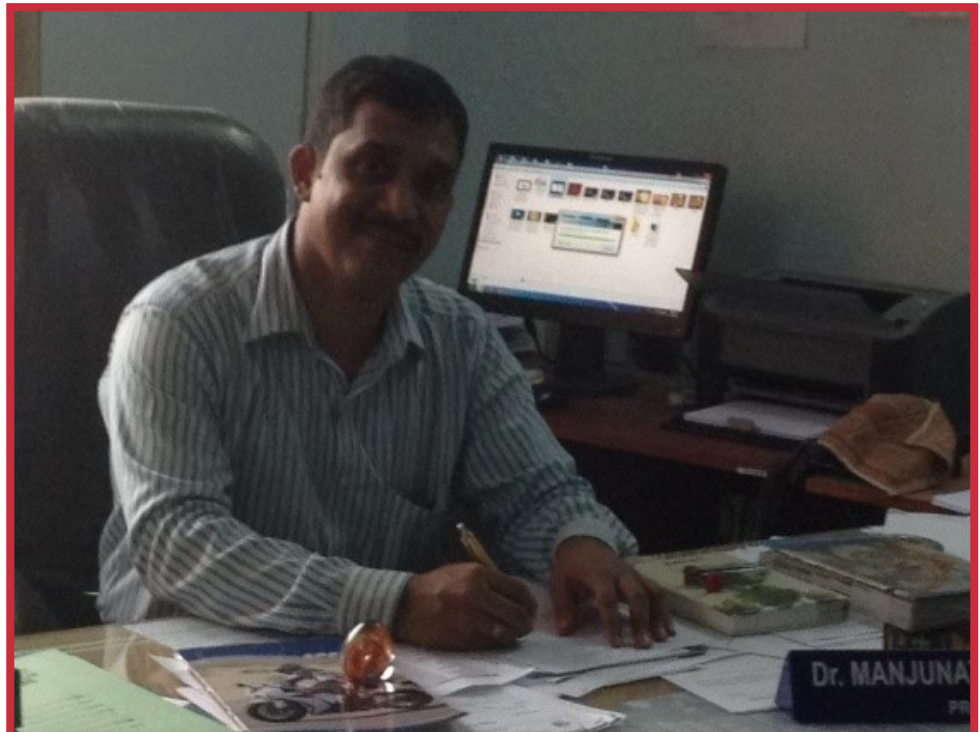
### DEPARTMENT MISSION

- *To produce skilled, creative software developers through rigorous training.*
- *To conduct specific technical courses to keep abreast to the latest technological developments and transformations in the domain.*
- *To establish Industry-Institute Interaction programs to enhance the skills of employability and entrepreneurship.*
- *To implement the ideas of research and innovations in interdisciplinary domains.*

### **Editorial Board**

**Chairman** : Dr. Manjunath Kotari  
**Editor – in -Chief** : Dr. Sumith N  
**Co-Editors** : Mr. Parikshith Nayaka S K  
**Members** : Mrs. Harshitha G M  
Ms. Ankitha Shetty

*I welcome our Editorial team for bringing this e-News Letter once again in this Academic Year 2017-18. We seek to be renowned for our distinctive curriculum emphasizing work- integrated learning, learning-based work, problem solving and cross-cultural skills. As a Head of the Department, I provide academic leadership to maintain academic standards. With our distinct student centered teaching-learning methodology, our students will be able to face challenges of life with our holistic approach in teaching and learning encouraging students to indulge in extracurricular activities to shape them as leaders of tomorrow. All these efforts are followed ambitiously to develop the overall personality of the students so as to equip themselves with modern and sensitive outlook to face the challenges of the competitive world.*



***Dr. Manjunath Kotari***  
***Professor & Head***



# TECHNICAL TALKS



## **Technical Talk on the topic "Software Testing Tools"**

**Resource Person: Mrs. Rajashree, Senior Quality Manager, Thomson Reuters, Mangalore**

Software testing is a process of executing a program or application with the intent of finding the software bugs. It can also be stated as the process of validating and verifying that a software program or application or product: she explained the important concepts like decision to automate testing, Test tool application,

## **Technical Talk on the topic "Security issues in wired and wireless networks"**

**Resource Person Dr. N Jayashankar, Professor, School of Computer Science and Engineering, VIT, Vellore, Tamilnadu**

Dr. N Jayashankar gave a brief introduction on security issues in wired and wireless networks. He gave brief description of benefits of security issues like safe and stable data exchange environment, joint information protection system, He discussed about Adhoc On Demand Routing Protocol.



## **Technical Talk on the topic**

### **"Oracle Fusion Cloud Technologies"**

**Resource Person: Mr. Krishna Raja H, Senior Program Manager, Oracle, Bengaluru**

Krishna Raja gave detailed explanation on Oracle fusion. He started with the brief explanation on Oracle fusion. Oracle Fusion Middleware is the digital business platform for the enterprise and the cloud He explained about oracle cloud fusion. Oracle Fusion services.



### **Technical Talk on the topic**

#### **"Empowering Next Generation Professionals Salesforce"**

**Resource Person: Mr. Rajesh R Nambiar,**  
**Software developer, Salesforce, Bengaluru.**

Rajesh gave detailed explanation on how the next generation professionals has to be Salesforce is the primary enterprise offering within the Salesforce platform. It provides companies with an interface for case management and task management, and a system for automatically routing and escalating important events. He explained about AppExchange and Webservices. web interface, Salesforce offers a SOAP/REST Web service API that enables integration with other systems .



### **Technical Talk-11 on the topic**

#### **"Application of Novel Algorithm Pattern"**

**Resource Person: Mr. Vipin Kumar, Project Manager,**  
**Infosys, Mangalore**

Vipin Kumar gave detailed explanation on Novel algorithm for pattern matching. Modern network security applications. He explained the basic idea of novel pattern approach is to transform a back reference problem to a conditional sub match problem, and represent it with a Non-deterministic Finite Automata (NFA) .He briefly explained about novel approach for image compression Analysis (DCA) .He finally neatly suggested a novel algorithm



### **Technical Talk on the topic**

#### **"Big Data Applications and Processing Tools"**

**Resource Person: Mr. Rathinaraja Jeyaraj, Research Scholar, Dept of IT, NITK.**

Rathinaraja briefly explain about the big data applications in industries. IG DATA is a term used for a collection of data sets so large and complex that it is difficult to process using traditional applications/tools. It is the data exceeding Terabytes in size. Because of the variety of data that it encompasses, big data always brings a number of challenges relating to its volume and complexity. He explains how Industry influencers, academicians, and other prominent stakeholders certainly agree that big data has become a big game changer in most, if not all, types of modern industries over the last few years. As big data continues to permeate our day-to-day lives, there has been a significant shift of focus from the hype surrounding it to finding real value in its use. He gave importance on that generally, most organizations have several goals for adopting big data projects While the primary goal for most organizations is to enhance customer experience, other goals include cost reduction, better targeted marketing and making existing processes more efficient. In recent times, data breaches have also made enhanced security an important goal that big data projects seek to incorporate. Finally he explained about the tools used in big data. Here are the top tools used to store and analyze Big Data.

# INDUSTRIAL VISITS

## **Industrial Visit to Indian Space Research Organization (ISRO) Satellite Centre (ISAC), Bangalore & HAL Heritage Centre, Bangalore**

*The department of Computer Science and Engineering had organized an industrial visit for 36 students of the Sixth semester B.E on the 20th March 2018, who were accompanied by three of the faculties of the department.*

*ISRO Satellite Centre (ISAC) is the lead center of the Indian Space Research Organization (ISRO) responsible for design, development, assembly & integration of communication, navigation, remote sensing, scientific and small satellite missions. For the benefit of students there is a space exhibition center at ISAC. Our students were able to see the exhibition. Scientist Mr. H L Srinivasa explained each and every display unit kept for the exhibition. It includes the models of the first Indian satellite Aryabhata, APPLE, INSAT series etc.*



*The visit to HAL Heritage Centre, Bangalore was organized on 20th March 2018 with the prior permission and guidance of beloved HOD Dr. Manjunath Kotari. Students had practical insights about LCA (Light combat Aircraft division). They also had audio video presentation on the development of propulsion system and gas turbine followed by visit to Heritage center 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 pre-final year students with the knowledge of Aviation*

## **Industrial Visit To UPCL**

*The department of Computer Science and Engineering had organized an industrial visit for 65 students of the Fourth semester B.E on the 13th March, 2018, who were accompanied by Two of the faculties of the department.*

*Udupi Power Co-operation Limited (UPCL) is a subsidiary of Adani Power limited (APL). It has established a 2x600 MW coal based power plant which is located in notified industrial area at villages Yelluru and Santhuru, Taluk Udupi, District Udupi, Karnataka State. It is also the largest private power producer in India. Udupi, Karnataka State. It is also the largest private power producer in India.*



# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## TECHNOFIA 18

*The Department of Computer Science & Engineering, Alva's Institute of Engineering & Technology, Moodbidri organized a Intercollegiate Technical Fest TECHNOFIA'18 for the all surrounding engineering college students on 22nd March,2018. The event was inaugurated by Mr. Deepak Rai, CEO, Code Craft Pvt. Ltd, Mangalore. In his inaugural address, Mr Deepak said, "Nowadays Engineering students are facing a biggest challenge that lack of technical skills after the engineering. Engineering students must develop their Technical skills during students life along with regular study by participating this kind of Technical Fest, otherwise it is very difficult to survive in the industry. Also he added that, students who exhibits extraordinary talents will be having more job opportunity today.*

*Around 150 external students from various other engineering colleges took part in the event along with 250 internal students. The competitions like Students Technical Paper Presentation, Technical Quiz, Tech Charads, Tech Wizards, Web designing, IT Manager, InQuest, Architect, Engineered were organized in this Technical fest .*

*Dr. Peter Fernades, Principal, AIET, Moodbidri, Dr.Manjunath Kotari, HOD CSE, Faculty coordinator Mr. Hemanth Kumar N.P. and all faculty members and students of the department were present during the program. The Valedictory program was held on 22nd March evening to distribute the prizes for winners. The first and second cash prizes for winners of all nine events were distributed by Mr. Vivek Alva, Dr. Peter Fernandes and Dr. Manjunath Kotari.*



*Department of Computer Science & Engineering and Science Society of India(SSI), Bengaluru organized a Alva's Hackathon-2018 on March 17th & 18th, 2018 at Alva's Institute of Engg. & Technology, Moodbidri, The Alva's Hackathon-2018 was inaugurated by Mr. Narayan Iyer, President , Science Society of India(SSI), Bengaluru and said that "Nowadays people are involved in most the financial transactions over the Internet. However, this Internet is not secure due to Hackers. So, nowadays students need to learn how to make the coding in web based transactions securely. For this study purpose we have arranged the event like Day and Night Hackathon-2018(36 Hours).*

*Dr. Manjunath Kotari, HOD CSE, Faculty coordinator Mr. Hemanth Kumar N P, All the faculties of the department and students were present during this program. About 20 teams of 80 members were participated in this Alva's Hackathon-2018. Along with Mr. Narayan Iyer, Mr. Rakesh Choudary, Software Engineer, Synopsis, Bengaluru and Mr. Sannith Shetty, Software Engineer, Tech Jini Soft, Bengaluru were acted as a Mentors for this Alva's Hackathon 2018. Mr. Vivek alva and Dr.Manjunath Kotari also joined the mentors group to decide the best projects of the Hackathon on 28th Afternoon and announced the winners list and Mr. Narayana Iyer handover the prizes to winners.*



# STAFF ACHIEVEMENTS

- Dr. Manjunath Kotari "Framework of Security Mechanisms for Monitoring Adaptive Distributed System" *IOSR Journal of Computer Engineering (IOSR-JCE)* e-ISSN: 2278-0661,p-ISSN: 2278-8727, Volume 18, Issue 4, Ver. I , pp 25-36 .
- Dr. Manjunath Kotari " A Comparative Study on Reversible Data Hiding in Encrypted Images Using Various Frameworks " *International Journal of Computer Organization Trends(IJCOT)* ISSN: 2249-2593, Special Issue May 2017, pp 54-58
- Dr. Manjunath Kotari Novel Authorized Accessible Privacy Model in Distributed m-Healthcare Cloud Computing System *International Journal of Advanced Research in IT and Engineering(IJARIE)* ISSN: 2278-6244
- Dr. Mohideen Badhusha S Secure Low-Bandwidth Video Streaming through Reliable Multipath Propagation in MANETs' *International Journal of Computer, Electrical, Automation, Control and Information Engineering (WASET).* ISSN 0950-4125 vol.9, no.6, pp.1339-1350
- Dr. Sumith N. Data reduction by removal of lurkers in OSN *IEEE TENCON 2013, Conference, Xi'an, China* pp. 1-4. DOI: 10.1109/TENCON.2013.6718499
- Dr. Mohideen Badhusha S 'Energy Efficient Improved Bandwidth Video Streaming through reliable Multipath propagation in MANETs' *International Journal of Applied Engineering Research (IJAER)* ISSN 0973-4562,vol.10, no.13, pp.32888-32900
- Dr. Sumith N. Data reduction by removal of lurkers in OSN *IEEE TENCON 2013, Conference, Xi'an, China* pp. 1-4. DOI: 10.1109/TENCON.2013.6718499
- Mr. Sayeesh A Review on Reversible Data Hiding in Encrypted Images using Reversible Image Transformation *Proceedings of Emerging & Innovative Trends in Computer Science (at VCE, Hyderabad. March 30 - 31, 2017. pp.22-28.*
- Mr. Harish Kunder A Comparative Study on Reversible Data Hiding in Encrypted Images Using Various Frameworks *International Journal of Computer Organization Trends,2017* ISSN: 2249-2593, Special Issue May 2017, pp 54-58
- Mr. Venkatesh An efficient mining of frequent Item set purchase on retail outlet using frequent Item set Ultra metric tree on Hadoop. *International Research Journal of Engineering and Technology[IRJET]* e-ISSN:2395-0056 p-ISSN:2395-0072 volume 4,issue 4,April 2017



# STUDENTS ACHIEVEMENTS

- Ms. Jolyn Tellis (4AL15CS046) and Ms. Megha (4AL15CS055) of 3rd year attended a workshop "Hackathon" in Hacks Earth, Bengaluru.
- Following students paper has been accepted in IEEE-EECCMC conference , organized by PEC College, Vellore, Tamil Nadu, India during Jan. 28th & 29th of 2018, Title: Review on IoT health monitoring system. Authors: Archana Achar, Deepa Shetty, Deepthi shetty, Neetha tellis.
- Students of 2nd year, Mr. Anix Jugal (4AL16CS013), Mr. Marsh Vishal (4AL16CS052), Ms. Katira Krishna (4AL16CS045) attended UR workshop in Sahyadri College of Engineering & Management.
- Mr. Sudharshan G has participated in Solo singing in the event "SAMBHRAM '17" on 22nd and 23rd February held in Shree Devi Institute of Technlogy, and secured prize, He also participated in 17th VTU Youth Festival "YUVA KALANJALI" held at Sri. M. Visveshvaraya Institute of Technology, Bengaluru and secured FIRST place in Folk Orchestra.
- Ms. Apeeksh Rai, Ms. Apoorva Bhat, Ms. Divya B, Ms. Fathima A, Ms. Karishma, Ms. Kaveri Ms. Kavitha C, Ms. Kavyashree Rai, Ms. Safnaz K, Mr. Sandeep N, Mr. S Prajwal, Mr. Shravan, Ms. Sonal D, Mr. Khaleed Ahamed, Mr. Vikram, are the students of final year has participated in "ENVISION 2K17", National Level Festival, held on 27th and 28th February at S.I.J, Mangalore.
- Ms. Algeena Carol D'Souza, Ms. Nidhi Chakravarthy, Mr. Poojary Prajwal, Mr. Tushar Poojari, Ms. Prathiksha P Rai, Mr. Shetty Mayur K, Mr. Shreyas Rao, Mr. Sumith Kumar, Ms. Thripthi A. H, Ms. Varsha S, Mr.Vilasraj S, Mr. Vishnu P. S, Mr. Adithya M N, Ms. Aishwarya Shetty, Mr. Yogesh students of 3rd year has participated in "ENVISION 2K17", National Level Festival, held on 27th and 28th February at S.I.J, Mangalore.
- Mr. Lalith Kumar Mishra J and Mr. Karan P has participated in western dance event conducted during two days National Level Techno-Cultural Fest "INSIGNIA' 17", held in SDM, Dharwad on 17th and 18th March 2017, they also participated in "VARNOTHSAVA" an Inter-Collegiate Techno-Cultural Fest, held in Shri Madwa Vadiraja Institute of Technology And Management
- Mr. P Karan has secured **2nd** place in Solo Dance in two days National Level Techno-Cultural Fest "INSIGNIA' 17", held in held in SDM, Dharwad on 17th and 18th March 2017.
- Mr. Marsh Vishal (4AL16CS052), Mr. Vishal Nayak (4AL16CS057), Mr. Nayan (4AL16CS058), Mr. Mallikarjun (4AL16CS048), Mr. Mohammed Ashfan (4AL16Cs054), Mr. Ameen Ahmed (4AL16CS009), Mr. Jayanth (4AL16CS041), Mr. Kiran A. S.(4AL16CS050), Mr. Albin Francis (4AL16CS008), the above students attended a 3 days' workshop, "Ethical Hacking" in P. A. College.

### Apple iOS App Development using Swift C and XCode

Department of CSE organized 45 days Certification Program on “**Apple iOS App Development using Swift C Language and XCode**”. The internship Program was conducted from 01-08-2017 to 03-02-2018 with intervals. The Certification Program was inaugurated by Mr. Divyang and Mr. Sudheep Jha, Monkfox, Bangalore. Dr. Manjunath Kotari, HOD CSE, AIET and Mr. Venkatesh Bhat Senior Associate Professor were present during the inauguration. The resource person Mr. Sudheep Jha and Mr. Divyang trained around 50 students of 6th SEM BE CSE, AIET. Mr. Venkatesh Senior Associate Professor, Dept of CSE was the coordinator of this internship program.

The students learned various features of Apple iOS App development like image display, and some animations with images, Databases using SQLite, Multi tab Communication, Drawing tables, Multi window communications Network Communications etc

### Web Programming and Product Development

Department of CSE organized a 10 days Certification Programme on “**Web Programming and Product Development**” from 22nd January 2018 to 03 February 2018. For the students of II Year CSE Students. Mr Chandrashekhar Rao Kuthyaru, CEO, SangamOne Services pvt ltd, Mangalore was the chief resource person of this course. Dr. Manjunath Kotari, HOD, CSE, Mr. Venkatesh Bhat, Sr. Associate Professor, CSE Dept. were present during the course.

### Web Development Programming

Department of CSE organized a 45 days internship course on “**Web development Programming**” from 16th January to 5th March 2018. The workshop was inaugurated by Mrs. Seema Nair, CEO Calibre Code, Pvt Ltd on 16th Jan, 2018. Dr. Manjunath Kotari and Prof. Venkatesh were present during the inauguration. Thirteen Students were got the benefits from this internship.



### **“Development of Python Applications using MySQL, SQLite and XML”**

A 5 days workshop on **“Development of Python Applications using MySQL, SQLite and XML”** has been organized by Department of Computer Science and Engineering, AIET, Mijar from 27th FEB to 03rd MAR 2018. The workshop was inaugurated by Dr. Manjunath Kothari H.O.D, Dept. CSE and all staff members and student volunteers were also present during the inauguration function along with the resource person Dr. S. Mohideen Badhusa. 34 internal participants from Computer Science and Engineering department, Alva's Institute of Engineering and Technology have participated in this workshop.

### **Workshop on Web Oriented approach using PHP/MySQL**

Department of CSE organized 4 days Workshop on **“Web Oriented approach using PHP/MySQL”** from 17th to 20th January, 2018 for BCA students of Alva's Degree College. The Workshop was inaugurated by Resource Person Dr. M.S. Badhusa, Professor CSE dept, Prof. Sunil, HOD CS, Alva's Degree College and Mr. Sushant M, Workshop Coordinator on 17th Jan, 2018.

### **Core Java and Advanced Java**

Department of CSE organized a 5 days Certification Programme on **“Core Java & Advanced Java”** from 16th to 20th January, 2018. The inauguration of certification course was held on 16th January, 2018. Resource person Mr. Chandra Shekar Rao, Sangam One Connected Services, Bangalore, Dr. Manjunath Kotari, HOD CSE, Prof. Venkatesh, Dept of CSE were present during the inauguration. The Certification course was started with sample Java Program and students were made to make small projects every day. The resource person explained all the concepts by using hands-on session. About 127 CSE 2nd year students were participated and certified during this course.

# PLACEMENT NEWS

## INFOSYS BPM

- **APEKSHA RAI**
- **Hemashree J**
- **Preema Jovita Serrao**
- **Reeba Thankam Chandy**
- **Sony G Kotian**
- **Tejaswini Gowda H**

## ROBOSOFT

- **Bhat Apoorva Anandha**
- **Aishwarya Saraswathi H M**

## EY

- **Karishma R Vernekar**
- **Kartik Ganiga**
- **Kavya Padman**
- **Manjula K C**
- **Nikhitha Kale M**
- **Poojari Karan Satish**
- **Prarthana M J**
- **Safnaz K**

## JARO

- **Manasa R**
- **Shetty Diksha Dinesh**

## PATH FRONT TECH

- **Divya Vinod Bandekar**
- **Kavyashree Rai K**
- **Nagaveni V**
- **Sahana M**
- **Sony G Kotian**
- **Tejaswini Gowda H**
- **Varsha A**
- **Varsha P M**
- **Anvitha Bhat H G**



## INSTITUTE VISION

*"Transformative education by pursuing excellence in engineering and management through enhancing skills to meet the evolving needs of the community"*

## INSTITUTE MISSION

- *To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.*
- *To inculcate the best engineering practices through transformative education.*
- *To develop a knowledgeable individual for a dynamic industrial scenario*
- *To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.*

## PROGRAM OUTCOMES(POs)

**Engineering Graduates will be able to:**

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** 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/development of solutions:** 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. **Conduct investigations of complex problems:** 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. **Modern tool usage:** 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. **The engineer and society:** 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. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** 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. **Project management and finance:** 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. **Life-long learning:** 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

**A graduate of the Computer Science and Engineering Program will exhibit:**

**PSO1: Professional Skills:** The ability to understand & implement the computer programs in the areas of Computer Architecture, System Software, Database Management Systems, Web Design, Multimedia and Computer Networking.

**PSO2: Problem-Solving Skills:** The ability to solve real-world problems by suitable mathematical model with strong technological concepts in rapidly growing arena of computer technology.

**PSO3: Successful Career and Entrepreneurship:** Knowledge in diverse areas of Software Engineering and Management & Entrepreneurship for IT Industry, conducive in cultivating skills for successful career development.

## PROGRAM EDUCATION OUTCOMES

**PEO1:** To provide students with fundamental strength in core disciplines of computer engineering to solve the problems of computing world

**PEO2:** To ensure that graduates conquer the difficulties of emerging adaptive technological changes.

**PEO3:** To prepare students for successful career in the industry of international standard.