# **GEEK-PRESS**

——— Unveiling the World of Tech Wizards ——

### **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

Vol 3 , Issue 1 YEAR 2024-25



### **VISION OF THE DEPARTMENT**

To produce globally competent and socially responsible Computer Science Engineers.

### MISSION OF THE DEPARTMENT

#### M1: Professional Skills

Provide students with opportunities to become industry- ready professionals and entrepreneurs through analytical learning.

### **M2:** Lifelong Learning

Maintain a lifelong learning attitude and stay current in their profession to foster personal and organizational development.

#### M3: Engage with Society

Encourage students to focus on sustainable solutions, to improve quality of life and social welfare.

### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

#### **PEO1. Professional Practices**

Apply engineering practices required for Software development, Hardware development and Embedded systems.

#### PEO2. Intrapreneurial Skills

Exhibit innovation, Self – confidence and teamwork skills in the organization and society.

#### PEO3. Lifelong Learning

Offer continuing education programmes in the emerging areas for the knowledge upgradation of stakeholders.

### PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO1: Computer Science and Engineering students can analyse, design, develop, test and apply management principles, mathematical foundations in the development of computational solutions, making them experts in designing computer hardware and software.

**PSO2:** Develop their skills to solve problems in the broad area of programming concepts and appraise environmental and social issues with ethics and manage different projects in interdisciplinary fields.

### PROGRAM OUTCOMES (POS)

**Engineering Graduates will be able to:** 

**PO1 Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2 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.

**PO3 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.

**PO4** 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.

**PO5** 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.

**PO6** 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.

**PO7** 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.

**PO8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10 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.

**PO11 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.

**PO12 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.

### EVENTS

# SEMINAR ON CYBER SECURITY AND ETHICAL HACKING



The Department of **CSE** organized a Seminar on Cyber Security and Ethical Hacking on 22nd July, (Monday). The event was inaugurated by our distinguished Chief Guest, Shahansha IPS. At present, Sir is posted as Assistant Superintendent Police, at Thalassery.

During the inaugural all ceremony, the dignitaries dice, on including Mr. Sreenath Gopinath (CMO, Cofounder of Tech By Heart), Dr: Shinu Mathew John (Principal, STM) and Mr. Rijo Thomas Jose (CEO, STM), all had emphasized on the importance of being aware and alert while using various digital platforms.

Mr. Shazin Shahul, Cyber Security Analyst at Tech By Heart, had carried out the expert talk.

The expert also highlighted a few cases recorded in our country itself, where the Customer data has been compromised. For example, the data leak from Aadhar linked Arogya Sethu App or how deleted data can be retrieved from the mobile phones, etc.





### QUICK START GUIDE TO WEB DEVELOPMENT: ONE DAY HANDS ON WORKSHOP

A one-day hands-on workshop titled 'Quickstart Guide to Web Development' was conducted by VBLAZE in association with Geekzone (CSE association) and Datasphere (CD association) for the S3 students of the CSE and CD departments was conducted on August 30th . The resource persons for the event are Mr. Rajath P, Mr. Crisbin Joseph, Mr. Aswin Ratheesh D K.Mr. Jithin S, Mr. Muhammad Rasi K P were selected as the staff coordinators of the event.Fathima Diya Muhammed (S5 CSE), Niranj C N (S5 CSE) and Mohammed Riyad (S5 CSE) were selected as the student coordinators of the event.

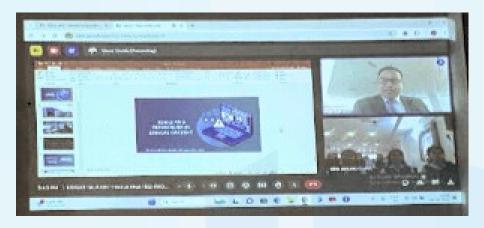






The participants gained insights into the practical aspects of web development, the tools and techniques used, and the hosting of website to different service providers. Web development is an essential component for the computer engineering students for their future career, and this workshop served as an excellent introduction in the field.

# EXPERT TALK ON TOOLS AND TECHNIQUES IN ETHICAL HACKING



A person from School of Engineering & Architecture Interior Design, Amity University Dubai, UAE was finalized as the Resource Person for the talk (Dr. Vinod Kumar Shukla). The Date of Event was fixed for 06 September, 2024, starting at 03:30 pm via Google Meet. The expert talk on the topic of Tools and Techniques in Ethical Hacking was conducted at our institution, by the Department of Computer Science and Engineering.

The expert talk focused mainly on educating the youth of Kerala, about various hidden aspects of Cyber World.

The entire session was highly interactive and our students were very excited to listen to the talk.

The seminar conducted by highlighting the growing need for skilled ethical hackers to protect against increasing cyber threats.

The participants gained insights into the practical aspects of ethical hacking , the tools and techniques used, and the legal considerations i involved .Ethical hacking is an essential component of modern cyber security strategies , and this seminar served as an excellent introduction in the field.





# UNLOCKING CAREER SUCCESS: STRATEGIES FOR GROWTH AND DEVELOPMENT



The primary objective of this expert talk was to equip students with the knowledge and tools to effectively plan their careers, understand industry demands, and foster personal and professional growth. The session emphasized the importance of skill development, adaptability, and proactive decision-making in the dynamic technology sector, while also encouragin g the students to take ownership of their trajectories, and to seize opportunities for professional advancement.

The topic for the interactive session was decided as Unlocking Career Success: Strategies for Growth and Development.

Mr. Ashok Rajan, Senior Vice President and Global Head of Cargo & Logistics Solutions at IBS Software, was finalized as the Resource Person for the session.

The Date of Event was fixed for 09 September, 2024, starting at 01:30 pm.

The session was very interactive, and students were excited to take part and learn from the speaker. It highlighted the importance of planning careers carefully and focusing on personal growth in the fast-changing tech industry, leaving students motivated and excited about the information shared.

Students gained knowledge on navigating the professional landscape, understanding industry expectations, and leveraging key strategies for long-term career advancement. The session served as an excellent guide for students, providing valuable perspectives on how to build successful careers in the competitive world of technology.







### INTRODUCTION TO NUMBER THEORY CONCEPTS

Seminar on Introduction to number theory concepts was organized by the Department of Computer Science and Engineering for the B. Tech 4th year students of CSE department for one hour.

The seminar was Conducted on 25th October 2024 at 11:35-12:25 pm.

Ms. Subina K has been selected as resource person. Jithika M has been selected as the staff coordinator.





The primary objective of these seminar is to familiarize students with number theory concept. Through interactive sessions, students will acquire the necessary skills to apply this information to cryptographic area. This seminar aims to address the gap related to Course Outcome, CO2 ,CO3,C04,CO5 of the course, CST 433 Security in Computing.

By conducting this session, a moderate level of attainment in all the above for Program Outcomes 1,2, 3, and 5 will be attained.

### **INNOVATIVE TEACHING**













# **EXPLORING THE INDUSTRY:**A JOURNEY INTO KELTRON

An Industrial Visit, "Exploring the industry: A journey into KELTRON" was organized by the Department of Computer Science and Engineering and Data Science in association with GEEKZONE and Datasphere for the B.Tech 2nd year students of the department of CSE and CD At Keltron Component Complex Ltd, Kannur on 26th October. The Student Coordinators were Ms. Yashika Prashanth (S3 CSE) and Ms. Adithya Sujayan (3 CD).

In conclusion, the industrial visit to Keltron, Kannur, provided the students with invaluable insights into the complex manufacturing processes behind a wide range of electronic components, including capacitors, supercapacitors, and quartz crystals. It was an enriching experience that bridged the gap between theory and real-world industry practices.







### **STAFF ACHIEVEMENTS:**

### Academic Excellence Award for the academic year 2023-2024



Dr . AMITHA I C



Ms. JITHIKA M



Mr. JITHIN S



Ms . VAISHAKHI V K



Ms. JITHIKA M

Ms. Jithika M has successfully completed the NPTEL certification course Python for Data Science with a consolidated score of 73%.



Ms . ANJU G

Congratulations for qualifying UGC-NET exam 2024

### STUDENT ACHIEVEMENTS

### **DEPARTMENT TOPPERS (2023-24 EVEN)**

### **S2 TOPPERS**



**SOUMMYAKEERTHI KS** 



**SHYAMJITH M** 



**JIBIN PV** 



**S4 TOPPERS** 

**RHUTHOSHIKA K** 



**ANJITHA V** 

**SHEETAL MADHU** 



**FATHIMATHU SUHADHA K V** 



**RIFA SALEEM** 



**SAMANTHA SHINE JYOTHIRMAYI** 

**S6 TOPPERS** 





SANDRA C M



**AYSHA SHAMA MUSAMIL** 

**S8 TOPPER** 



**DEEPIKA MOHAN** 

### **NPTEL ACHIEVERS**



**AKASH M** 



**AKRITHUL** 



**SANJAY M** 



**AYUSH SUNIL KUMAR E K** 



SIVANTH P K



SANDRA C M



**SHEETAL MADHU** 



**SOUMYASREE** 



DRISHYAP K 7

## **ONAM 2K24**















### **EDITORIAL TEAM**

### **STAFF EDITORS**

Dr. Amitha I C (Associate Professor)

Ms. Anju G (Assistant Professor)

Mr. Jithin S (Assistant Professor)

Ms. Anu C (Assistant Professor)

### STUDENT EDITORS

Ms. Yashika Prasanth (S3 CSE)

Mr. K Sandeep (S3 CSE)

Mr. Athul Raj (S3 CSE)

COMPUTER SCIENCE AND ENGINEERING ASSOCIATION