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NEWS LETTER

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

TECHNOZOLA
A CSE Students Association

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.

Department Program Specific Outcomes (PSOs)

PSO1: Illustrating a comprehensive understanding of fundamental computer system principles encompassing both hardwareand software components to cultivate strong conceptual skills in processing and assigning computation solutions.

PSO2: Demonstrate and design proficient and technical abilities in algorithms, networking, web design, cloud computing and data analytics enabling the development of innovative solutions to complex real-world problems while identifying and addressing emerging research gaps.

Vision of the Institute:

To emerge as a Centre of excellence in technical education by imparting quality teaching learning practices and research for the transformation of society.

Mission of the Institute:

M1: Provide an ideal and the best class infrastructure to foster exploration in engineering and research

M2: Build dedicated faculty with student centric teaching, incorporating experiential, innovative skills.

M3: Encourage life-long learning, entrepreneurial thinking, and ethical responsibility in students to address societal challenges.

Department Vision:

To emerge as skilled Technocrats on a global scale in Computer Science and Engineering through quality education, innovation, collaborative researchers and entrepreneurs with moral values.

Department Mission:

DM1: To impart quality education to the students.

DM2: To pursue creative research and new technologies in Computer Science and Engineering.

DM3: To encourage entrepreneurship skills among students and inculcating moral and ethical values to serve for the society.

GUIDING LIGHTS OF EXCELLENCE

Dr k. Rajashekhar Rao
DIRECTOR

Sunkara Rambramham
CHAIRMAN

Dr G.V.K.S.V. Prasad
PRINCIPAL

At Usha Rama College of Engineering and Technology, our foundation of excellence is built upon the visionary leadership of our esteemed Chairman, Director, and Principal. Their guidance shapes the institution's journey toward academic brilliance, innovation, and holistic development.

Chairman: Sri Sunkara Ramabrahmam
A Visionary Leader Driving Progress
Sri Sunkara Ramabrahmam provides the strong foundation that fuels Usha Rama's growth. His visionary leadership ensures state-of-the-art infrastructure, industry collaborations, and an education system that blends theoretical excellence with practical exposure. Under his guidance, Usha Rama continues to empower students with cutting-edge knowledge and real-world skills.

Director: Dr. K. Rajashekar Rao
A Catalyst for Innovation and Research
Dr. K. Rajashekar Rao fosters an environment of research, creativity, and technological advancements. His emphasis on entrepreneurship, startup incubation, and interdisciplinary learning ensures that students think beyond textbooks, preparing them for industry challenges. His leadership strengthens Usha Rama's reputation as a center of innovation and academic excellence.

Principal: Dr. G.V.K.S.V. Prasad
A Mentor Shaping Future Leaders
Dr. G.V.K.S.V. Prasad is committed to academic excellence, student development, and industry-aligned education. He ensures students receive practical training, leadership skills, and ethical values, making them well-rounded professionals. His focus on placements, faculty development, and student-centric learning has elevated Usha Rama's academic standards.
A Legacy of Excellence

EMPOWERING MINDS, SHAPING FUTURES

**Dr S M Roy Choudri
HOD OF CSE**

As the Head of the Department of Computer Science and Engineering at Usha Rama College of Engineering and Technology, Dr. S.M. Roy Choudri is a visionary leader committed to fostering academic excellence and innovation. With years of experience in academia and research, he has been instrumental in shaping the department's success and creating a vibrant environment for learning and growth.

Dr. Choudri's dedication to integrating modern technological advancements into the curriculum has empowered students to stay ahead in the ever-evolving tech landscape. Under his guidance, the department has achieved significant milestones, including successful student projects, research publications, and collaborations with industry leaders. His passion for nurturing talent and promoting a research-oriented mindset

Dr. K.P.N.V. Satya Sree is a distinguished professor in the Department of Computer Science and Engineering at Usha Rama College of Engineering and Technology. With a profound passion for teaching and research, she has consistently contributed to academic excellence and the holistic development of students.

Dr. Satya Sree brings a wealth of expertise in her domain, having made significant contributions to research and innovation. Her dedication to fostering a student-centered learning environment has empowered numerous students to excel academically and professionally.

Renowned for her deep subject knowledge and effective teaching methodologies, Dr. Satya Sree has played a pivotal role in mentoring students and guiding them to achieve success in both academic and co-curricular pursuits.

**Dr K P V N Satya Sree
Professor**

CSE: MORE THAN A STREAM, IT'S A REVOLUTION

The Computer Science and Engineering (CSE) department at Usha Rama College of Engineering and Technology stands as a center of technological advancement, academic excellence, and innovative research. Committed to nurturing both creativity and technical acumen, the department offers a vibrant learning environment where theory is seamlessly blended with real-world application.

The comprehensive curriculum is aligned with current industry needs, encompassing areas such as programming, artificial intelligence, cybersecurity, cloud computing, data science, Internet of Things (IoT), blockchain, and full-stack development. Students are equipped with both core knowledge and practical skills to stay ahead in the rapidly evolving tech landscape.

Cutting-edge infrastructure—featuring modern computer labs, specialized AI and IoT facilities, and smart classrooms—enhances experiential learning. With access to virtual labs, cloud platforms, and high-performance computing clusters, students are empowered to undertake impactful research and complex projects.

The department actively fosters a culture of innovation and collaboration. Students regularly engage in hackathons, coding contests, and interdisciplinary research initiatives. Strong industry linkages and partnerships with IT companies, research bodies, and government agencies provide ample internship and project opportunities.

To enhance career readiness, the department offers focused training programs, certification courses, and job-oriented boot camps. Interaction with industry professionals and successful alumni offers students valuable exposure to emerging trends and career pathways. Robust placement support ensures that graduates secure positions in top MNCs, IT companies, and startups.

Outside the classroom, a thriving ecosystem of student-run clubs, technical festivals, and seminars encourages creativity and peer learning. The department also supports entrepreneurial aspirations through incubation centers, mentorship, and funding avenues. Embracing an interdisciplinary approach, the CSE department integrates concepts from electronics, business management, and applied sciences, preparing students for diverse career trajectories.

THREE DAY WORKSHOP ON DESIGN THINKING AND ANALYSIS

The Department of Computer Science and Engineering (CSE) at Usha Rama College of Engineering and Technology recently concluded a highly engaging and insightful **three-day workshop on Design Thinking and Analysis**. Held from **28th to 30th September**, the workshop aimed to equip students with a creative, user-centric approach to problem-solving, essential in today's fast-evolving technological landscape. With innovation being the cornerstone of modern engineering, the workshop bridged theoretical knowledge with real-world applications to foster critical thinking and innovation among participants. The event was coordinated by **B. V. Praveen Kumar**

Workshop Objectives
The primary objectives of the workshop were:
- To introduce students to the core principles and stages of design thinking.
- To develop analytical skills for identifying user needs and framing design problems effectively.
- To encourage collaborative and empathetic problem-solving through hands-on group activities.
- To provide practical exposure to prototyping and testing innovative solutions.

Day-Wise Highlights
Day 1 – Introduction to Design Thinking
  The workshop began with an overview of design thinking methodology, highlighting its five key stages: Empathize, Define, Ideate, Prototype, and Test. Participants were introduced to the mindset and tools required for human-centered innovation. Through interactive sessions, students learned how to identify user pain points and gather meaningful insights through empathy. Real-world case studies were discussed to demonstrate how design thinking is used to solve complex problems across industries.

Day 2 – Problem Analysis and Ideation

The second day focused on problem definition and ideation techniques. Students worked in teams to reframe problems and generate creative solutions. Facilitators guided them through tools like brainstorming, mind mapping, and affinity diagrams. Emphasis was placed on divergent thinking to encourage a wide range of ideas and on convergent thinking to evaluate and refine those ideas into viable concepts. The session encouraged collaborative innovation, helping students tackle problems with structured creativity.

Day 3 – Prototyping and Testing

On the final day, the spotlight was on rapid prototyping and solution testing. Students learned the importance of building quick, low-cost prototypes to visualize and communicate their ideas. They engaged in hands-on activities to create mock-ups using paper, digital tools, and everyday materials. Teams then tested their solutions, gathered feedback, and iterated on their designs. The day concluded with group presentations and discussions, allowing students to reflect on their learning journey.

Key Takeaways

- Human-Centered Approach: Students developed empathy-driven problem-solving skills by focusing on real user needs.

- Analytical and Creative Thinking: The workshop emphasized a balance of structured analysis and out-of-the-box creativity.

- Team Collaboration: Group-based tasks nurtured effective communication, teamwork, and peer learning.

- Practical Exposure: Through prototyping and testing, students gained firsthand experience in the iterative design process.

The workshop proved to be a stepping stone for students aspiring to become innovative thinkers and problem solvers in their engineering careers. By embracing the design thinking mindset, participants are now better equipped to tackle complex challenges with confidence and creativity.

REVERSE CODING CHALLENGE

A Reverse Coding Challenge is an intellectually stimulating competition that flips the conventional approach to problem-solving. Instead of writing code to solve a defined problem, participants are given outputs and must determine the logic or code that could produce those results. This unique format tests not only coding skills but also logical reasoning, analytical thinking, and a deep understanding of algorithms and patterns. The event was coordinated by **M.Sambasiva Rao** and was held on **13th October 2022**.

Challenge Overview
In a Reverse Coding Challenge, participants—either individually or in teams—are presented with a series of input-output pairs. Their task is to deduce the underlying logic or write code that replicates the observed behaviour. Unlike standard coding contests, the problem is not explicitly defined; instead, inferring the rules becomes the core challenge.

The competition typically involves multiple rounds, with increasing complexity. Participants may face numeric patterns, string manipulations, data structure transformations, or hidden algorithms. Time constraints add to the pressure, making fast thinking and clear logic essential for success.

Team Dynamics and Strategy

For team-based versions, 3–5 members collaborate to decode problems, assign roles strategically, and test hypotheses. Each member may specialize in different domains—such as mathematics, data structures, or pattern recognition—helping the team tackle a broader range of logic puzzles.

Unlike relay-style coding, where tasks are passed sequentially, reverse coding teams may work collaboratively in real time, sharing insights and proposing different interpretations of the observed outputs. Coordination, communication, and hypothesis testing become critical components of success.

Benefits of a Reverse Coding Challenge

- Sharpens Logical Thinking
- Encourages decoding outputs to uncover the underlying logic behind them.
- Enhances Analytical Skills
- Develops the ability to recognize patterns and create innovative solutions.
- Simulates Real-World Debugging
- Mimics real scenarios where unexpected outputs must be analyzed and resolved.
- Promotes Team Collaboration
- Fosters brainstorming, strategy sharing, and task delegation within teams.
- Builds Adaptability
- Trains participants to quickly shift approaches and explore multiple solutions under pressure.

Conclusion

A Reverse Coding Challenge is more than a test of coding—it's a journey through logic, collaboration, and creativity. Whether you're a beginner or an experienced coder, it offers a unique and exciting way to enhance problem-solving skills, teamwork, and adaptability in real-world scenarios.

BUG HUNT

The Department of Computer Science and Engineering (CSE) at Usha Rama College of Engineering and Technology is proud to present the **Bug Hunt**, an exciting and hands-on event aimed at enhancing practical cybersecurity skills among students and tech enthusiasts. The event was coordinated by **S.Gogul Priya** and was held on **26th October 2022.**

About the Event

In today's digital age, vulnerabilities in systems, websites, and applications pose serious security threats. The Bug Hunt is designed to simulate real-world scenarios where participants must identify and analyze potential security flaws. This interactive event encourages critical thinking, ethical hacking skills, and security awareness, fostering a proactive approach to cybersecurity.

Event Format

The Bug Hunt will be structured into four escalating rounds, each focusing on different layers of cybersecurity. Participants will explore systems, applications, and simulated environments to uncover security flaws, report vulnerabilities, and suggest possible mitigations. The complexity will increase with each round, testing both technical expertise and problem-solving ability

◆ Round 1: Basic Vulnerability Identification (Easy Level)
- Identifying weak passwords and login flaws
- Spotting insecure form fields and basic misconfigurations
- Recognizing phishing elements and basic email spoofing

Round 2: Web and Network Vulnerabilities (Moderate Level)

- Exploiting common web vulnerabilities (e.g., XSS, SQL injection)
- Analyzing insecure cookies and session management
- Detecting open ports and misconfigured firewalls
◆ Round 3: Cryptographic & OS Exploits (Advanced Level)
- dentifying weak encryption schemes and insecure data storage
- Testing OS-level privilege escalation vulnerabilities
- Exploiting misconfigured services in Linux and Windows environment

Round 4: Live Threat Simulation & Incident Response (Expert Level)

- Detecting advanced threats like malware or ransomware behavior
- Conducting mini penetration tests on test servers
- Investigating logs and tracing digital footprints
- Drafting a basic incident response report and mitigation plan

Event Goals

In an era where cyber threats are constantly evolving, understanding how to identify and report bugs is essential for maintaining digital safety. The Bug Hunt is more than a competition—it's a real-world simulation that builds a security-first mindset. Participants will not only strengthen their technical skills but also develop a deeper appreciation for ethical hacking, vulnerability disclosure, and digital responsibility.

Conclusion

The Bug Hunt is an engaging and educational experience that challenges participants to think like attackers and act like defenders. Whether you're a budding ethical hacker or simply curious about security flaws, this event will help you develop the skills and awareness needed to safeguard the digital world.

By the end of the event, you'll be more confident in spotting vulnerabilities, understanding real attack vectors, and contributing to a more secure cyberspace—for yourself and others.

Exploring the Future with IOT

The Department of Computer Science and Engineering at Usha Rama College of Engineering and Technology successfully conducted a 3-day workshop titled **"Exploring the Future of IoT"**, aimed at introducing students to the fast-evolving world of the Internet of Things (IoT). The workshop provided an immersive experience into the core concepts, real-time applications, and future prospects of IoT, blending theory with hands-on sessions to enhance student understanding and engagement. The event was coordinated by **P. Bhagya Sri** and was held from **14th to 16th November 2022.**

◆ Day 1 – Introduction to IoT & Smart Systems

The workshop commenced with a detailed introduction to the Internet of Things, covering its architecture, components, and significance in today's connected world. Experts explained how IoT integrates hardware, software, sensors, and networks to create intelligent systems.

Topics covered:

- What is IoT? Evolution and scope
- Key components: sensors, actuators, microcontrollers, and cloud
- IoT architecture and communication models
- Overview of smart systems (smart homes, cities, healthcare, agriculture)

Students also got hands-on experience in setting up basic IoT circuits using sensors and microcontrollers like Arduino and NodeMCU.

◆ Day 2 – IoT Programming & Cloud Integration

The second day focused on programming for IoT devices and integrating them with cloud platforms for data management and remote access.

Topics covered:

- Programming microcontrollers using Arduino IDE and MicroPython
- Collecting and sending sensor data to the cloud
- Introduction to platforms like ThingSpeak, Blynk, and Firebase
- Real-time data visualization and dashboard creation

Students developed simple IoT applications such as temperature monitoring, motion detection, and real-time alerts using cloud-based triggers.

◆ Day 3 – Future Trends, Security & Project Development

The final day was dedicated to exploring advanced IoT applications, industry trends, and cybersecurity in IoT systems. Students were also guided in developing mini-projects.

Topics covered:

- Emerging trends: AI + IoT (AIoT), Industrial IoT, and Edge Computing
- IoT security challenges and best practices
- Ethical and privacy considerations in connected systems
- Group project development and presentations
- Students showcased their innovative IoT mini-projects, such as smart irrigation systems, home automation models, and health monitoring devices, receiving constructive feedback from mentors.

The workshop concluded with an interactive Q&A session, where students discussed potential career paths, certifications, and project ideas in the IoT domain.

This event proved to be a stepping stone for many aspiring engineers, equipping them with the essential skills and confidence to explore future opportunities in IoT.

The Department of CSE remains committed to organizing such knowledge-driven workshops to encourage innovation, enhance practical learning, and prepare students for the challenges of tomorrow's tech landscape.

Cloud Security: Are We Safe in the Cloud?

In recent years, cloud computing has revolutionized the way we store, access, and manage data. From startups to large enterprises, organizations are rapidly moving their operations to the cloud to take advantage of scalability, flexibility, and cost-efficiency. But as businesses migrate their critical infrastructure to cloud platforms, one pressing question arises—Are we truly safe in the cloud?

Understanding Cloud Security

Cloud security refers to the set of policies, technologies, and controls deployed to protect data, applications, and infrastructure associated with cloud computing. Major cloud service providers (like AWS, Microsoft Azure, and Google Cloud) offer strong security frameworks, including data encryption, access control, network security, and monitoring tools. However, security is a shared responsibility between the provider and the user.

Key Cloud Security Threats

1. Data Breaches
Unauthorized access to sensitive data stored in the cloud remains the most significant concern. Weak credentials, misconfigured settings, or lack of encryption can lead to devastating leaks.

2. Misconfiguration
A single misstep in setting up cloud resources can leave systems exposed. In fact, a large percentage of cloud data leaks occur due to misconfigured storage buckets or firewalls.

3. Insider Threats
Employees or contractors with malicious intent—or even unintentional mistakes—can compromise cloud security from within.

4. Insecure APIs
Application Programming Interfaces (APIs) are essential in cloud services but can become gateways for attackers if not properly secured.

5. Denial of Service (DoS) Attacks
Attackers may flood cloud resources with traffic, causing service interruptions or high usage costs.

op-tier cloud service providers implement a wide range of security measures to protect their platforms:
- End-to-end encryption to protect data in transit and at rest
- Multi-factor authentication (MFA) to add a layer of access security
- Regular compliance audits for standards like ISO 27001, GDPR, HIPAA, etc.
- Security Information and Event Management (SIEM) systems for real-time monitoring
- Disaster recovery and backup solutions to ensure business continuity

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User Responsibility in Cloud Security
The "Shared Responsibility Model" places part of the security burden on cloud users. While providers secure the infrastructure, customers are responsible for:

- Correct configuration of services
- Managing user roles and permissions
- Encrypting sensitive data
- Regularly auditing logs and access points
- Keeping software and operating systems up to date

Neglecting these responsibilities can lead to vulnerabilities regardless of how secure the provider is.

Best Practices for Cloud Security
To enhance cloud security, organizations and individuals should:

- Use strong identity and access management (IAM) practices
- Encrypt sensitive data using secure algorithms
- Enable automated alerts for suspicious activity
- Train employees in basic cybersecurity hygiene
- Perform regular security audits and penetration testing

Conclusion

So, are we safe in the cloud? Yes—and no. While cloud providers offer robust security systems, ultimate safety depends on how well users manage and protect their own environments. The cloud can be incredibly secure, but only when both parties—provider and user—take proactive measures.

In a digital world driven by cloud technology, awareness, responsibility, and vigilance are the real keys to staying safe.

RAYAPUREDDY SHARON ROJA
20NG1A0549
CSE

How to Build a Career in Cybersecurity

In an era where digital threats are growing more sophisticated by the day, cybersecurity has become one of the most in-demand and rewarding career paths in the tech industry. Organizations across the globe are seeking skilled professionals who can protect their data, systems, and networks from cyberattacks. But how does one start a career in cybersecurity, especially with so many roles and specializations? The journey begins with understanding the fundamentals of computer science and networking. A solid foundation in topics like operating systems, computer networks, databases, and basic programming (especially Python or Java) is essential. Knowledge of how data moves through systems and how networks communicate lays the groundwork for understanding how vulnerabilities can be exploited—and how they can be defended.

The next step is gaining cybersecurity-specific knowledge. This includes learning about topics such as firewalls, encryption, ethical hacking, malware analysis, and incident response. Many aspiring professionals start by earning certifications such as CompTIA Security+, Certified Ethical Hacker (CEH), or Cisco's CCNA Security, which validate essential security skills and improve job prospects. For more advanced roles, certifications like CISSP (Certified Information Systems Security Professional) or CISM (Certified Information Security Manager) are highly respected. Hands-on experience is equally important. Beginners can practice through labs, online platforms like TryHackMe, Hack The Box, or by setting up their own home labs. Internships and entry-level roles like security analyst or IT support technician can offer real-world exposure and pave the way for more advanced positions.

Cybersecurity is a broad field with several career paths. Some professionals specialize in network security, protecting data in transit; others focus on application security, ensuring software is free from vulnerabilities. Roles like penetration tester, security analyst, incident responder, and forensics expert all fall under the cybersecurity umbrella. With the rise of cloud computing, cloud security is another fast-growing specialization. Continuous learning is vital, as cyber threats constantly evolve. Following industry blogs, attending cybersecurity conferences, and joining communities like OWASP or local security meetups can help stay up to date. Many universities and online platforms also offer free or paid courses to deepen your expertise.

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CSE

NATIONAL SERVICE SCHEME

The Computer Science and Engineering (CSE) students of Usha Rama College of Engineering and Technology (URCE) have consistently demonstrated their dedication to social service by actively participating in various NSS (National Service Scheme) events. Their involvement in activities such as cleanliness drives, blood donation camps, plantation programs, and awareness campaigns showcases their commitment to making a positive impact on society alongside their academic pursuits. These initiatives have not only enhanced their sense of social responsibility but also encouraged them to actively contribute to the welfare of society, proving that technical education goes hand in hand with humanitarian values.

One of the most impactful initiatives was the "Clean Campus, Green Campus" drive, where CSE students took the lead in promoting environmental sustainability within the college premises. Their collective efforts in spreading awareness about cleanliness and greenery transformed the campus environment and inspired others to join hands in maintaining a clean and green campus. The students showed exceptional dedication by planting saplings, ensuring proper waste management, and emphasizing the importance of eco-friendly practices. This initiative not only contributed to the beautification of the campus but also instilled a sense of responsibility toward nature among the students.

Another significant contribution was witnessed during the Blood Donation Camp organized under the NSS wing, where the response from the CSE department was commendable. A large number of students voluntarily came forward to donate blood, demonstrating their compassion and readiness to serve humanity. Their willingness to contribute to this noble cause reflected their understanding of social responsibility, as they knew their act of kindness could save many lives. This participation helped the students realize that true service goes beyond the boundaries of academics, emphasizing the importance of empathy and care towards society.

In addition to these major events, CSE students have also been actively involved in various social awareness campaigns such as health and hygiene drives, educational programs, and community engagement initiatives. Their participation in these activities highlighted their commitment to uplifting society and promoting a better standard of living. By stepping into real-world social challenges, the students have learned the importance of teamwork, communication, and problem-solving, which are essential qualities not only for an engineer but also for a responsible citizen. These campaigns have enabled them to understand the ground realities of society and strengthened their will to contribute meaningfully toward social causes.

The continuous involvement of CSE students in NSS activities has also greatly contributed to their personal growth, allowing them to develop leadership skills, organizational abilities, and a strong sense of empathy. Being a part of such initiatives has given them an opportunity to connect with different communities, understand their challenges, and work towards solutions. Their efforts in conducting community outreach programs and addressing social issues reflect their dedication to creating a positive social impact. This practical exposure has complemented their technical knowledge, making them not just skilled engineers but also socially responsible individuals.

The department takes immense pride in witnessing its students embrace the spirit of social service and humanitarian values. Their active participation in NSS events has not only strengthened their character but also inspired their peers to engage in community service. As the students continue to take part in such noble initiatives, they set a remarkable example of leadership, compassion, and teamwork. The CSE department hopes to see this spirit of selfless service grow stronger among students, reinforcing the belief that education is truly meaningful when it contributes to the betterment of society. With such dedicated and socially responsible students, the future of technology and humanity appears promising and bright.

Hall of Excellence

The Computer Science and Engineering (CSE) Department at Usha Rama College of Engineering and Technology (URCE) is proud to have a highly skilled and experienced faculty that plays a crucial role in shaping the academic and professional growth of students. The faculty members are not only experts in their respective fields but also committed to continuous learning and development to keep pace with the rapidly evolving world of technology.

Professional Certifications and Specializations

To ensure that students receive the best education aligned with industry trends, many faculty members have obtained professional certifications in various cutting-edge domains. These certifications include:

- Artificial Intelligence & Machine Learning – Enabling faculty to integrate AI-driven problem-solving techniques into the curriculum.
- Cybersecurity – Strengthening knowledge in data protection, network security, and ethical hacking.
- Cloud Computing – Focusing on cloud-based technologies such as AWS, Microsoft Azure, and Google Cloud.
- Data Science & Big Data Analytics – Enhancing expertise in data-driven decision-making, predictive modeling, and business intelligence.
- Internet of Things (IoT) – Exploring smart devices and connectivity solutions for real-world applications.
- Universal Human Values (UHV) Certification – Encouraging holistic education by incorporating ethics, empathy, and human-centric learning into technical education.

These certifications enable faculty members to stay updated with the latest technological trends and incorporate industry-relevant skills into the teaching-learning process.

Active Participation in Faculty Development Programs (FDPs)

To further enhance their teaching methodologies and technical expertise, faculty members actively participate in Faculty Development Programs (FDPs), workshops, and short-term training programs organized by premier institutions such as IITs, NITs, and AICTE-approved organizations. These FDPs help educators gain advanced knowledge in emerging technologies, refine their pedagogical approaches, and explore innovative teaching strategies to make learning more interactive and engaging.

Regular participation in hands-on training sessions, coding boot camps, and online certification programs ensures that faculty members stay ahead in the academic and technological domains. Their continuous learning efforts directly benefit students by providing them with exposure to the latest tools, software, and programming paradigms used in the tech industry.

Research Contributions and Industry Collaborations

Many faculty members of the CSE department are actively involved in research and innovation, publishing their findings in renowned national and international journals and conferences. Their research covers diverse fields such as Artificial Intelligence, Blockchain Technology, Network Security, and Automation. Faculty members also guide students in research projects, hackathons, and coding competitions, fostering a culture of innovation and problem-solving.

Additionally, the department collaborates with leading tech companies and industry experts to provide faculty and students with real-world exposure. These collaborations include:

Guest lectures and expert talks from industry professionals.

Internship and training opportunities for students under the mentorship of faculty.

Industry-academia tie-ups to design and update the curriculum as per industry standards.

Through these initiatives, the faculty ensures that students are well-prepared to face the challenges of the modern tech-driven world.

Creating an Industry-Oriented Learning Environment

The faculty members at URCE's CSE department go beyond traditional teaching methods to create an industry-oriented learning environment. By incorporating real-world case studies, project-based learning, coding challenges, and open discussions, they encourage students to think critically and develop problem-solving abilities.

Additionally, the UHV-certified faculty members focus on imparting ethical values, teamwork, leadership skills, and professional responsibility. This ensures that students not only excel in technical knowledge but also develop a strong moral foundation to contribute positively to society.

Conclusion

The CSE Department at URCE takes immense pride in its highly qualified, certified, and research-oriented faculty, who continuously strive to enhance their knowledge and teaching methodologies. Their commitment to lifelong learning, active research, and professional development ensures that students receive top-quality education, industry exposure, and ethical guidance.

Through certifications, FDPs, research, and industry collaborations, the faculty empowers students to excel in the competitive world of technology, making them job-ready and future innovators.

Hall of Fame - Beyond the Grades

At Usha Rama College of Engineering and Technology, The students of CSE have actively participated in numerous national competitions, showcasing their skills and innovative ideas. They have competed in renowned events such as hackathons, coding challenges, robotics competitions, and technical fests, consistently securing top positions. Our students excel in fields like artificial intelligence, machine learning, robotics, software development, and cybersecurity, earning accolades for their creativity and problem-solving abilities. Their participation in these competitions not only enhances their technical expertise but also helps them build teamwork, leadership, and communication skills. These experiences have also opened doors for internships and collaborations with industry leaders, further strengthening their career prospects.

RAPARLA VENKATA VARUN TEJA	CADD Modelling	NATIONAL	Participated
GOTTAPU SAI GEETHANJALI	C2 HACK	NATIONAL	Participated
VAJJA PREM CHANDU	HACKATHON	NATIONAL	Participated
VARSHITHA LAVU	PAPER PRESENTATION	NATIONAL	Participated
IMMADISETTY SAI SRIKAR	CADD Modelling	NATIONAL	Participated
JALLA LAKSHMI PRASANNA	C2 HACK	NATIONAL	Participated

Attendance Legend

HEMA CHATTU
19NG1A0522
CSE

KODURI MANASA
20NG1A0528
CSE

NALLURI VIVEK
21NG1A0540
CSE

Maintaining 100% attendance throughout an academic year is a remarkable achievement that reflects a student's dedication, discipline, and unwavering commitment to learning. At Usha Rama College of Engineering and Technology, the students of the Computer Science and Engineering (CSE) Department have demonstrated such admirable consistency by attending every class without fail.

These students serve as role models for their peers, showcasing the importance of punctuality and responsibility in academic life. Their regular presence in the classroom not only contributes to their own personal and academic growth but also sets a positive example and enriches the overall learning environment of the department.

We wholeheartedly appreciate and congratulate the CSE students who have achieved 100% attendance. Their commitment and perseverance reflect the true spirit of excellence that our institution stands for. They remind us that success is built not only on intelligence but also on discipline and consistent effort.

Volunteer Appreciatios

– Event Organizers & Helpers

The Department of Computer Science and Engineering (CSE) at Usha Rama College of Engineering and Technology extends its heartfelt appreciation to the dedicated team of student volunteers who played a pivotal role in organizing and supporting various events throughout the academic year. These enthusiastic and responsible students went above and beyond to ensure the smooth execution of seminars, workshops, technical fests, and cultural programs conducted by the department.

Their commitment to teamwork, time management, and problem-solving reflects the true spirit of leadership and service. From managing registrations and coordinating with guests, to handling logistics and providing on-ground support, each volunteer contributed significantly to the overall success of the events.

The efforts of these young organizers and helpers have not only enhanced the reputation of the CSE department but also showcased the values of professionalism, collaboration, and a strong sense of community upheld by Usha Rama College of Engineering and Technology. Their dedication serves as an inspiration to their peers and is a testament to the vibrant student culture nurtured within the campus.

We thank and applaud each one of them for their incredible contribution!

Certified Achievers of AWS Programs

The Department of Computer Science and Engineering at Usha Rama College of Engineering and Technology proudly acknowledges the remarkable achievements of its students who have successfully completed prestigious Amazon Web Services (AWS) certifications and virtual internship programs. Demonstrating a commitment to excellence and a passion for cutting-edge technologies, these students have equipped themselves with globally recognized skills that are vital in today's tech-driven world.

Our students have earned certifications in highly sought-after domains such as:
- AWS Cloud Engineering
- AWS Data Engineering
- Zero Trust Cloud Security Virtual Internship
- AWS Networking Virtual Internship
- Cybersecurity Virtual Internship

These certifications and internships provided students with hands-on exposure to real-world cloud infrastructure, data management, secure networking practices, and modern cybersecurity techniques. Through these programs, they have not only strengthened their technical foundations but also enhanced their employability and readiness for industry challenges.

The department applauds these certified achievers for their dedication, persistence, and continuous learning spirit. Their accomplishments stand as a testament to the quality of education and the encouragement provided by the CSE department in fostering a culture of innovation and professional growth.

"The best way to predict the future is to invent it."

-ALAN KAY

TECHNOZOLA
A CSE Students Association

COMPUTER SOCIETY OF INDIA
ESTD. 1965