

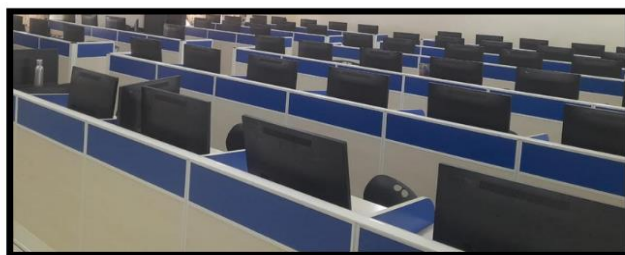


**KALLAM HARANADHAREDDY
INSTITUTE OF TECHNOLOGY**



I.T - EPITOME

YEAR : 2023-24 VOL : 1



**DEPARTMENT OF
INFORMATION TECHNOLOGY**



I.T - EPITOME



VOL. 1, 2023 - 2024

Volume: 1- July to Dec 2023

DEPARTMENT VISION

To emerge as a hub of excellence in Information Technology by producing technically proficient and ethically strong IT professionals to meet the evolving needs of industry and society.

DEPARTMENT MISSION

1. To deliver quality instruction in Information Technology through competent faculty and state-of-the-art laboratories and preparing graduates for successful careers in I.T enabled services.
2. To empower students with a socially relevant and industry-oriented curriculum, supported by innovative teaching methods and an outcome based evaluation process.
3. Equip students with the skills and knowledge to excel in professional careers, pursue higher education, and launch successful entrepreneurial ventures.
4. Instill in students strong ethical values, a sense of responsibility, and a commitment to using their IT skills for the betterment of society and the environment.
5. To collaborate with top institutes and industries to derive research and innovation, making the department as center for R&D.

PROGRAMME EDUCATIONAL OBJECTIVES

1. The graduates are able to possess strong foundation in core Information Technology principles enabling them to pursue successful careers in the IT industry and contribute effectively to the advancement of technology and society.
2. The graduates are able to apply analytical and computational techniques to design, implement, evaluate and maintain IT based solutions that are technically proficient, economically feasible and socially acceptable.

3. The graduates are able to Communicate effectively, demonstrate professionalism, collaboration, ethical attitude, team spirit and pursue lifelong learning to achieve career, organizational and societal goals.

PROGRAMME SPECIFIC OUTCOMES

PSO 1: Apply core principles and concepts of Information Technology to analyze and design solutions for complex engineering and societal problems.

POS 2: Integrate knowledge of emerging technologies, programming languages, web programming, and modern tools to design and develop IT-based solutions.

PO 3: Develop skills through experiential learning to foster innovation and entrepreneurship.

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1. TECH INSIGHTS

KUBERNETES SECURITY

Kubernetes has become the backbone of cloud-native infrastructure, orchestrating millions of containers across industries. Some of key applications of Kubernetes is listed below:

- Cloud Native Applications
- Microservices Management
- Devops
- Bigdata Analytics
- E-Commerce Platforms
- Financial Services
- Healthcare Applications

But its complexity introduces new risks: unsecured APIs, misconfigured role permissions, and unverified images can expose entire clusters. The task for organizations is to balance Kubernetes' agility with a robust security model that prevents threats without disrupting operations.

To address this, teams are implementing role-based access control (RBAC), enforcing network policies, scanning container images for vulnerabilities, and enabling runtime monitoring of workloads. Security is increasingly shifting left, with policies

embedded early in the CI/CD pipeline. The result is a hardened container ecosystem that protects sensitive applications at scale. Looking forward, Kubernetes security will lean heavily on automation and AI-driven anomaly detection, ensuring that large-scale, dynamic clusters remain secure while maintaining the agility DevOps demands.

To keep Kubernetes secure, it is also important to focus on compliance and visibility. Many organizations must follow rules and regulations (like in banking or healthcare), so they use Kubernetes tools to track activities, check policies, and generate reports. At the same time, monitoring tools collect logs, metrics, and traces to show what is happening inside the cluster in real time. This helps security teams quickly detect problems, fix them, and prevent future attacks. For students, the key takeaway is that security in Kubernetes is not only about setting rules but also about constantly watching and improving the system.

By: Sk.Sohail (208X1A1238)

2. STUDENT ACHIEVEMENTS

2.1.1 ACADEMIC EXCELLENCE

- **D.SWETHA (208X1A1204)** secured department highest SGPA of 8.44 in III B.Tech II Sem Regular Examinations May 2023 results.
- **SEKURI MANJU BHARGAVI (218X1A1232)** secured department highest SGPA of 8.65 in II B.Tech II Sem Regular Examinations May 2024 results.
- **A. CHANDRALEKHA (208X1A1203) & T. HARSHITHA (208X1A1213)**, secured **3rd Position** in **Reverse Coding** Event- **ADYANT** Annual Fest at Malla Reddy Engineering College, Telangana.
- **MANGALAGIRI MANVITHA (218X1A1222) & SEKURI MANJU BHARGAVI (218X1A1232)**, secured 3rd Position in **Tech Avadhani** organized by VVIT during 20-22nd Dec 2023.

2.1.2 PLACEMENTS

S.NO	STUDENT NAME	ROLL NO	COMPANY DETAILS	OFFERED ROLE	PACKAGE	DATE OF SELECTION
1	DADE SWETHA	208X1A1204	ExcelR Solutions, Bangalore	QA Engineer & Software Developer	3LPA	09.12.2023
2	MANDAVA USHASREE	208X1A1222	Codegnan Destination, Hyderabad	Internship	3LPA	12.12.2023

3. UPSKILLING & CERTIFICATIONS

- **R20 IV B.Tech I Semester- 65** students completed SOC-V course “**Cloud Security**”, offered by Cisco Networking Academy in AUG-2024.
- **R20A III B.Tech I Semester- 66** Students completed SOC-III Course “**Java Script Essentials-1**”, offered by Cisco Networking Academy in Nov-2023.
- **R20A III B.Tech I Semester- 16** Students completed Software Testing Course offered through SWAYAM/NPTEL during Jul-Oct 2024.
- **R20A II B.Tech I Semester-66** Students completed SOC-I course “**Industry Certification Course on C Programming**”, offered by CodeTantra.
- **R20A II B.Tech I Semester-65** Students completed **Community Service Projects**.
- **R20 IV B.Tech I Semester- 65** Students completed **Summer Internship-II**.
- **R20A III B.TECH I Semester- 66** Students completed **Summer Internship-I**.

- **Dr.MD.Sirajuddin**, Professor & Head, attended “One Week Faculty Development Program on **“Amazon Web Services (AWS)”**, Organized by Department of CSE and Allied Branches in Association with CSI & ISTE at Narasaraopeta Engineering College, during 7th June to 13th June 2023.
- **Dr.MD.Sirajuddin**, Professor & Head, participated in Five Day online Faculty Development Program on **“Advanced Natural Language Processing”** organized by the Department of CSE, Bapatla Engineering College, during 3rd – 7th October 2023.
- **BVVH Chandrasekhar**, Assistant Professor, “One Week Faculty Development Program on **“Amazon Web Services (AWS)”**, Organized by Department of CSE and Allied Branches in Association with CSI & ISTE at Narasaraopeta Engineering College, during 7th June to 13th June 2023.
- **BVVH Chandrasekhar**, Assistant Professor, “One Week National Level Faculty Development Program on **“Cloud Infrastructure (AWS)”**, Organized by Department of CSE, JNTUK, during 21st to 25th August 2023.
- **Mr.KRMC Sekhar**, Assistant Professor, participated in Five Day online Faculty Development Program on **“Advanced Natural Language Processing”** organized by the Department of CSE, Bapatla Engineering College, during 3rd – 7th October 2023.

4. FACULTY ACHIEVEMENTS

- **Dr.MD.Sirajuddin**, Published a research article entitled “ **Deep Learning – Based Robust Hybrid Approaches for Brain Tumor Classification in Magnetic Resonance Images** ”, in **Journal of the Institution of Engineers (India): Series B**, Vol.106, pp.901-915, September 2023.
- **Dr.MD.Sirajuddin**, Published a patent entitled “ **An Enhancements to a Deep Learning Model for Intrusion Detection System in Internet of Things**”, on 01.09.2023.

5. INVITED TALKS

- Organized a Keynote address on “**Design Thinking**”, delivered by Dr.Syed Khasim, Associate Professor, Department of SCOPE, VIT-AP University on 22.09.2023.
- Organized a One Week Workshop on “**Crafting Solutions with Soft Computing & Deep Learning Techniques**” in collaboration with Sri Vensy Technologies Pvt. Ltd., Tirupati during 19.12.2024 to 23.12.2024.

- Organized Invited Talk On “**Artificial Intelligence**”, delivered by Dr.K.V.Ramana, Rector & Professor, Department of CSE, UCEK, JNTUK on 28.09.2024.
- Conducted a Guest Lecture on “**Trends in Storage & Cybersecurity**”, delivered by Dr.Rashmi Ranjan Rout, Professor, Department of CSE, NIT Warangal on 05.10.2023.



6. ITFT STUDENT CHAPTER ACTIVITIES

- Conducted **LOGICAL HUNT** on 27.07.2024, around 120 students participated in this Event.
- Organized **Tech Narration Wizard** on 05.08.2023, 110 students participated in this Event.

- Conducted **Code Quest** during 19.08.2023 to 01.09.2023, 120 students participated in this Event.
- Organized a **Group Discussion** session on 02.09.2023 to enhance student's communication, critical thinking, and collaborative learning skills.
- Organized an outreach activity titled **Awareness Program on Cybersecurity** at Veda School to educate students on online safety and digital security.



గుంటూరు , జనవరి 30(ఆంధ్రపత్రిక): గుంటూరు శివారులోని వళ్ళం హరనాథరెడ్డి ఇన్స్టిట్యూట్ ఆఫ్ టెక్నాలజీ కళాశాలలో ఇన్స్పెక్టివ్ టెక్నాలజీ విభాగంలో ఇంజనీరింగ్ అభ్యసిస్తున్న విద్యార్థులు గుంటూరు జిల్లాలో గ్రామీణ ప్రాంతాలలో పాఠశాలలో విద్యనభ్యసిస్తున్న 5వ తరగతి నుండి 10వ తరగతి విద్యార్థులకు నేటి సమాజంలో జరుగుతున్న సైబర్ క్రైమ్ మరియు డిజిటల్ టెక్నాలజీ ఉపయోగాలు అనే అంశంపై అవగాహన సదస్సులు జరుపుతున్నారు. ఈ సందర్భంగా చిలకలూరిపేట ప్రాంతంలో నెలకొన్న విద్యా సంస్థలలో ఇటీవల సైబర్ క్రైమ్ అంశంపై మరియు అవైస్ గేమ్స్ వినియోగంలో జరిగే పలు ప్రమాదాలను వివరంగా స్కూలు విద్యార్థులకు తెలియజేశారు. ఈ విధంగా కళ్ళం ఇంజనీరింగ్ కళాశాలలో విద్యనభ్యసిస్తున్న ప్రతి ఇంజనీరింగ్ విద్యార్థి సామాజిక స్పృహతో పాఠశాల విద్యార్థులకు డిజిటల్ టెక్నాలజీ ఉపయోగాలు మరియు అసర్థాలను వివరంగా తెలియజేస్తున్నారని కళాశాల డైరెక్టర్ డా. యం. ఉమాశంకరరెడ్డి, కళాశాల ప్రిన్సిపాల్ డా. బి.యస్.బి. రెడ్డి, ఐ.టి. విభాగాధిపతి డా. మహ్మద్ సిరాజుద్దీన్, మరియు ఉపాధి కల్పనాధికారి డా. పి.యల్. మాధవరావు అభినందించారు.

సేవా కార్యక్రమాలపై దృష్టి సారించాలి



గుంటూరు హరల్, పేజర్ స్కూల్స్, ఇంజనీరింగ్ విద్యార్థులు చురువుతో పాటగా సామాజిక సేవ కార్యక్రమంలో పాల్గొనాలి కల్లం ఇంజనీరింగ్ కళాశాల డైరెక్టర్ ఎం. ఉమా శంకర్ చెప్పి కోరారు. కళాశాలకు చెందిన ఐ.టి విభాగం విద్యార్థులు కొన్ని రోజులుగా వివిధ పాఠశాలం విద్యార్థులకు పలు అంశాలపై అవగాహన కార్యక్రమాలను నిర్వహిస్తున్నారు. అవైస్ గేమ్స్, సైబర్ క్రైమ్ పట్ల కట్గే జ్ఞానం, డిజిటల్ టెక్నాలజీ కదితడ అంశంపై అవగాహన కల్పించారు. వారి వల్ల కలిగే దుష్ప్రభావాలను విద్యార్థులకు చక్కగా వివరించారు. ఈ సందర్భంగా ఐ.టి విభాగం విద్యార్థులను కళాశాల డైరెక్టర్ తో పాటు ప్రిన్సిపాల్ బి.ఎస్.బి. రెడ్డి, ఇతర విభాగం అధిపతి మహ్మద్ సిరాజుద్దీన్, ఉపాధి కల్పన అధికారి మాధవరావు, అధ్యాపకులు అభినందించారు.



Glimpses of Awareness Program at Veda School

7. HIGHER EDUCATION

- The following graduates have secured admissions in reputed international universities.

S.NO	ROLL NO.	STUDENT NAME	PROGRAMME	NAME OF UNIVERSITY
1	198X1A1218	UMA NAGA VENKATA BHARATH AKASH DIVVELA	Master of Computer Science	CLEVELAND STATE UNIVERSITY
2	198X1A1253	VETALADEVUNI SAI PRAVEENA	Master in Data Science and Analytics	FLORIDA ATLANTIC UNIVERSITY
3	198X1A1245	OMKANTH TALLAM	MSc Data Science	Conventry University

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 - Sk.Asmatulla (208X1A1236)
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 - Sk.Sohel (218X1A1237)