SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES (AUTONOMOUS)
NBA ACCREDITED-EEE &MCA

INSTITUTION'S INNOVATION COUNCIL (IIC)

Q1 ACTIVITIES

S.NO	ACTIVITY	TITLE	MODE	DATE
1	IIC	THE QUANTUM REVOLUTIO1	OFFLINE	29.09.2025
2	IIC	SEMINAR ON AUTOMATED MACHINE LEARNING	ONLINE	22.09.2025
3	SELF DRIVEN	MACHINING PROCESS ON ADVANCED CNC MACHINE	OFFLINE	22-10-2025
4	IIC	ECE IOT WORKSHOP	OFFLINE	10-10-2025
5	IIC	FIVE DAYS VALUE ADDED COURSE	OFFLINE	05-09-2025
6	IIC	NATIONAL EDUCATION DAY	OFFLINE	11.11.2025

Head of Institution

Dr.N. Venkatachalapathi

Sreenivasa Institute of Technology and Management Studies (Autonomous)-Chittoor - 517127

Department of Computer Science and Engineering (Data Science)

Date: 22-09-2025

THE QUANTUM REVOLUTION

Shaping Tomorrow's Computing,Communication& Sensing

Introduction: Quantum technology is emerging as a groundbreaking field, transforming the landscape of computing, communication, and sensing. Unlike classical systems, quantum systems leverage principles such as superposition, entanglement, and quantum parallelism to achieve levels of performance and security far beyond traditional technologies. With applications ranging from solving complex computational problems to secure communication and ultra-precise sensing, quantum advancements are poised to redefine the future.

The session began with an address by the **Principal**, who welcomed the participants and emphasized the importance of emerging technologies like quantum computing in shaping tomorrow's world. Following the Principal's words of encouragement, the session was handed over to the resource person, **Dr. Kolla Bhanu Prakash**, who conducted a **three-hour session** on the theme ***"The Quantum Revolution: Shaping Tomorrow's Computing, Communication & Sensing.***

Dr. Kolla Bhanu Prakash began with an introduction to Quantum Computing, explaining the role of qubits, quantum gates, and algorithms in solving problems that classical systems cannot efficiently handle. He highlighted how quantum parallelism enables exponential growth in computational capabilities. Moving forward, he discussed Quantum Communication, focusing on quantum key distribution (QKD) and its role in ensuring secure information transfer. The session also covered Quantum Sensing, where quantum principles enhance measurement accuracy, with applications in navigation, healthcare, and environmental monitoring.

Dr. Kolla Bhanu Prakash In the final part Dr. Kolla Bhanu Prakash conducted a Hands on session where participants explored introductory simulations of quantum circuits using quantum computing platforms. The hands-on exercise demonstrated how basic quantum gates operate, how qubits behave under superposition and entanglement, and how simple quantum algorithms can be executed. This interactive session enabled participants to bridge theory with practice and gain first-hand exposure to quantum programming concepts.

The session concluded with an engaging discussion on the future potential of quantum technologies and their transformative role in science, industry, and everyday life.

Speaker Details **:** DR.KOLLA BHANU PRAKASH

Co ordinator **:** DR M.DAMODHARA NAIDU , Associate professor

Date **:** 29-09-2025

Target Audience **:** III CSE-Data Science Students

Organized By **:** CSE-Data Science Department


GPS Map Camera
Chittoor, Andhra Pradesh, India
21-137/3, Revenue Ward No 21, Kodigunta, Chittoor, Andhra Pradesh 517127, India
Lat 13.247896° Long 79.095599°
29/09/2025 11:01 AM GMT +05:30
Google


GPS Map Camera
Chittoor, Andhra Pradesh, India
21-137/3, Revenue Ward No 21, Kodigunta, Chittoor, Andhra Pradesh 517127, India
Lat 13.24787° Long 79.095515°
29/09/2025 11:01 AM GMT +05:30
Google


GPS Map Camera
Chittoor, Andhra Pradesh, India
63ww+whp, Chittoor, Andhra Pradesh 517127, India
Lat 13.248103° Long 79.096382°
29/09/2025 11:09 AM GMT +05:30
Google


The Quantum Revolution
Shaping Tomorrow's Computing,
Communication & Sensing
GPS Map Camera
Chittoor, Andhra Pradesh, India
21-137/3, Revenue Ward No 21, Kodigunta, Chittoor, Andhra Pradesh 517127, India
Lat 13.248319° Long 79.09632°
29/09/2025 11:09 AM GMT +05:30
Google

Sreenivasa Institute of Technology and Management Studies
(Autonomous)-Chittoor - 517127

Department of Computer Science and Engineering
(Data Science)

Date: 22-09-2025

ONE DAY SEMINAR ON

AUTOMATED MACHINE LEARNING

Introduction: Automated Machine Learning (AutoML)is emerging as a transformative field, revolutionizing the way machine learning models are built, optimized, and deployed. Unlike traditional approaches that require extensive manual intervention in feature engineering, model selection, and hyperparameter tuning, AutoML leverages automation to simplify and accelerate the machine learning workflow. With applications ranging from predictive analytics to natural language processing and healthcare, AutoML is reshaping industries by making advanced AI tools more accessible and efficient.

The session began with an address by the Principal, who welcomed the participants and emphasized the importance of emerging technologies like Artificial Intelligence and Machine Learning in shaping tomorrow's world. Following the Principal's words of encouragement, the session was handed over to the resource person, Mr. Arunjit Chowdhury, who conducted a three-hour online session on the theme "Automated Machine Learning"

Mr. Arunjit Chowdhury began with an introduction to Automated Machine Learning, explaining how AutoML platforms streamline the end-to-end ML pipeline—covering data preprocessing, model selection, hyperparameter tuning, and deployment. He highlighted the significance of democratizing AI, enabling even non-experts to build efficient predictive models with minimal coding effort. Moving forward, he discussed practical applications of AutoML in sectors such as finance, healthcare, marketing, and cybersecurity, where automation reduces development time and improves decision-making.

In the final part , Mr. Arunjit Chowdhury continued his discussion by elaborating on the practical aspects and real-world applications of Automated Machine Learning. He explained how AutoML platforms simplify the process of building and deploying models, highlighting their ability to automatically handle data preprocessing, feature selection, and algorithm optimization. The session also emphasized the growing importance of AutoML in industries such as healthcare, finance, and marketing, where it accelerates decision-making and enhances efficiency. Through clear examples and case studies, participants gained a deeper understanding of how AutoML is reshaping the future of artificial intelligence and making advanced technologies more accessible to a wider audience.

The session concluded with an engaging discussion on the future potential of Automated Machine Learning and its transformative role in research, industry, and everyday applications.

Speaker Details **:** MR. ARUNJIT CHOWDARY, CEO -Enterprise Building Training Solutions ,Mumbai

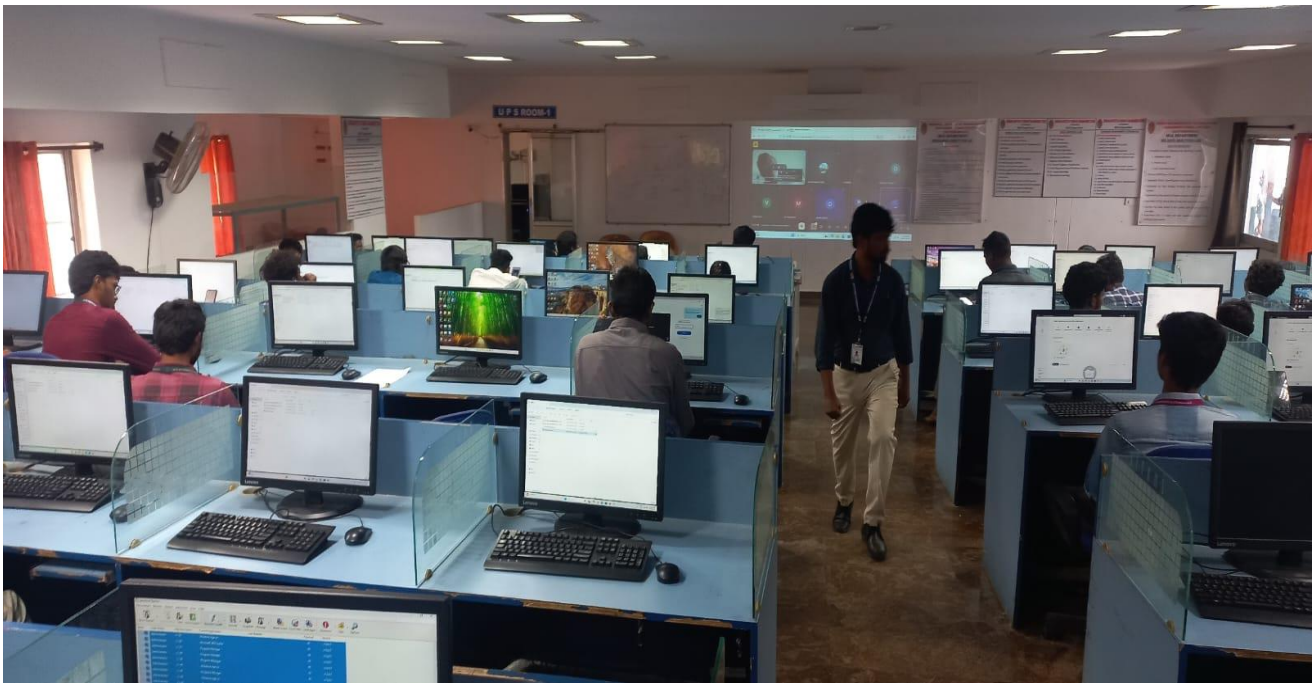
Co ordinator **:** Mr. G. Narasimhulu, Assistant professor

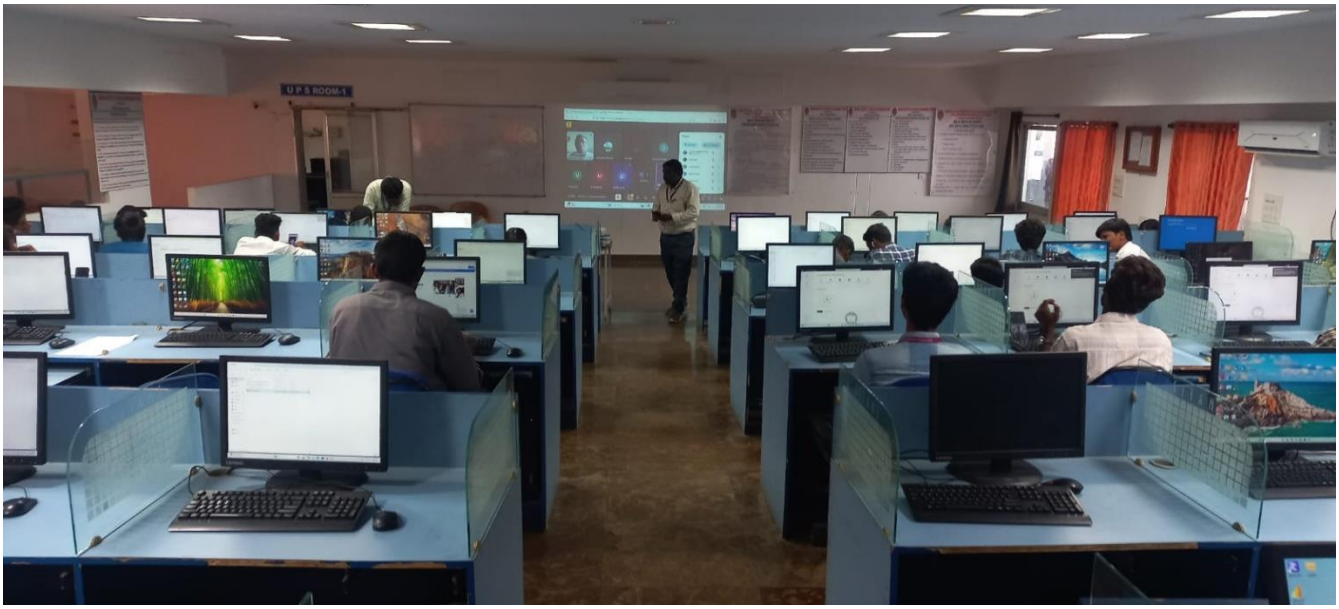
Mr.A.S.Praveen, Assistant professor

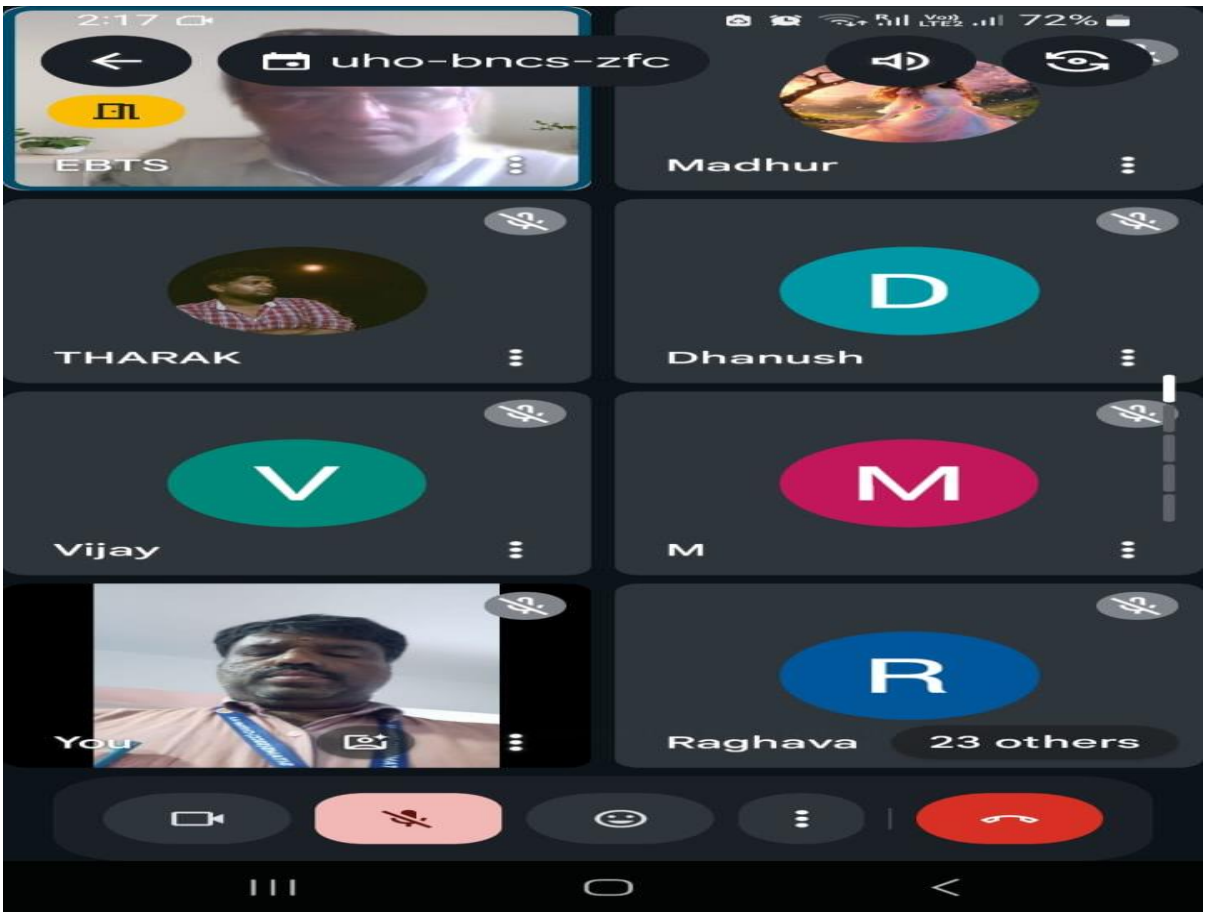
Date **:** 26-09-2025

Target Audience **:** CSE-Data Science Students

Organized By **:** CSE-Data Science Department AND Mechanical Department


U P S ROOM-1


U P S ROOM-1


2:17
uho-bncs-zfc
EBTS
72%
Madhur
THARAK
D
Dhanush
V
Vijay
M
M
You
R
Raghava
23 others

SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES

DEPARTMENT OF MECHANICAL ENGINEERING

ONE DAY WORKSHOP ON

MACHINING PROCESS ON ADVANCED CNC MACHINE

Date : 22-10-2025

TIME : 9.30A.M TO 4.00P.M

VENUE : CNC LAB
MECHANICAL BLOCK

Coordinators
Mr.D.Raju
Mr.B.Surya Prakash

RESOURCE PERSON
Mr.V.Chinnaswamy
Production Engineer
Indra Prasta Engine Parts
Hosur

Dr.N.Venkatachalapathi
PRINCIPAL

Dr.N.Satish Kumar
HOD

SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(SITAMS)
(AUTONOMOUS)
Department of Mechanical Engineering
(Mechanical Engineering Department Association- MEDA)

INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

Institution's Innovation Council (IIC)
A Workshop
On
"Machining Process on Advanced CNC Machine"

Introduction: On 22nd October 2025, a Workshop on **"Machining Process on Advanced CNC Machine"** was organized by **Department of Mechanical Engineering** and association with **Institution's Innovation Council (IIC),** SITAMS. **Mr.V. Chinna Swamy**, Production Engineer, Indra Prasta Engine Parts (Ltd), Hosur acted as a resource person for this event.

Speaker Details	: **Mr.V.Chinna Swamy**, Production Engineer, Indra Prasta Engine Parts (Ltd), Hosur.
Covenor	: Dr.N.Sathish Kumar, HOD, Dept.of Mech.Engg. SITAMS.
Co ordinator	: Mr.D.Raju, Assistant Professor, Dept.of Mech.Engg. SITAMS.
President IIC	: Dr. M. Saravanan, Professor, Academic Dean, SITAMS
Date	: 22nd October 2025
Venue	: CNC Lab, Mechanical Block
Target Audience	: 2nd, 3rd and final year Mechanical Engineering students and other college students.

About Program

Recent trends in CNC programming aim to achieve several objectives, reflecting advancements in technology, industry demands and manufacturing efficiency. Here are some common objectives:

Automation and Efficiency: CNC programming trends focus on enhancing automation levels to reduce manual intervention, minimize errors, and improve overall efficiency in manufacturing process.

Optimization for complex Geometries: with the rise of additive manufacturing and demand for intricate designs, CNC programming trends emphasize the ability to handle complex geometries effectively. This includes developing algorithms and software tools that can efficiently program CNC machines to produce complex shapes and surfaces.

Integration with CAD/CAM systems: There’s a grooving emphasis on seamless integration between CAD and CAM systems. This integration streamlines the programming process by allowing engineers to directly translate designs into machine instructions, reducing manual programming efforts and potential errors.

Multi-Axis Machining: Recent trends in CNC programming focus on multi-axis machining capabilities to enable the production of more complex parts with greater precision. This includes developments in 5-axis and even 9-axis machining, allowing for more flexibility and efficiency in manufacturing processes.

Adaptive Machining and Real-time Adjustments: CNC programming trends increasingly involve adaptive machining techniques that enable real-time adjustments based on focus like tool wear, material variations or environmental conditions. This helps optimize machining processes, improve quality control and reduce waste.

Simulation and Verification: There’s a growing emphasis on simulation and verification tools in CNC programming to ensure the accuracy of machining process before actual production. Advanced simulation software allows programmers to visualize tool paths, detect potential collisions and optimize machining strategies before running jobs on the shop floor.

Activities Performed

Activities are performed to translate a design into machine instructions for manufacturing.

Typically involved in CNC programming:

Tool selection:

Toolpath Generation:

Speeds and Feeds calculation:

Machining Strategy Selection:

Post-Processing:

Simulation and Verification:

Documentation:

Setup Instructions:

Outcome:

The outcome of CNC programming is the successful execution of machining operations on a CNC machine to produce parts according to specified design requirements.


CNC TECHNOLOGY LABORATORY


CNC LATHE MACHINE


UNIVERSAL STRENGTH MACHIN
Electronic Tensometer

Sreenivasa Institute of Technology and Management Studies (Autonomous)-Chittoor - 517127

Department of Electronics & Communication Engineering

Date: 10-10-2025

Demo On IOT: Hands-On Workshop ForFuture Innovators

Introduction: The IoT Handson training program is emerging as a ground breaking field, transforming the landscape of computing, communication, and sensing. The Internet of Things ('IoT'), all-embracing heterogeneous networks of smart devices hyper-connected with each other via the Internet. Notably, the IoT is transforming and disrupting our daily lives faster than any other technology before. The aim of workshop to discuss real life use cases on IoT application and make the session really interactive by providing an opportunity to suggest a solution to real life scenario also has been include to discuss some bonus: IoT demo applications with Arduino and NodeMCU. Day ended with the demonstration of live project such as Weather monitoring, etc.

The session began with an address by the HOD-ECE, who welcomed the participants and emphasized the importance of emerging technologies like IOT in shaping tomorrow's world. Following the HOD-ECE words of encouragement, the session was handed over to the resource person, **Prof S.Premkumar**, who conducted a Two days on the theme ***"IOT: Hands-on Workshop For Future Innovators".***

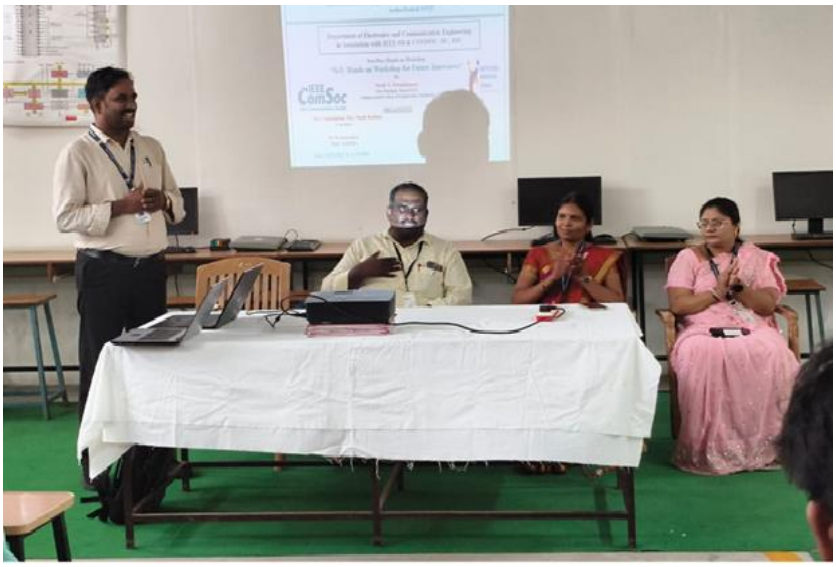
The Internet of Things ('IoT'), all-embracing heterogeneous networks of smart devices hyper-connected with each other via the Internet. Notably, the IoT is transforming and disrupting our daily lives faster than any other technology before. The aim of workshop to discuss real life use cases on IoT application and make the session really interactive by providing an opportunity to suggest a solution to real life scenario also has been include to discuss some bonus: IoT demo applications with Arduino and NodeMCU. Day ended with the demonstration of live project such as Weather monitoring, etc.

Objectives :

- Different types of Arduino board such as Arduino Uno, Arduino Uno R3 SMD, Ardino Pro 3.348 MHz , Arduino mini , Aurdino Ethernet, NodeMCU and there characteristics (Power supply, clock speed, Digital I/O, Analog Input, PWM modulation and different kinds of interfacing.
- Wi-Fi module Programming with Arduino.
- Interfacing of sensors and uploading data on cloud.

- For Interfacing different types of sensors with Arduino and Arduino with data base ,different programming steps have been discussed (function , statement ,control statement levels variables, math, pin mode, serial mode, digital mode variable, delay and for loop)
- Interfacing and controlling various devices like LED, motors, sensors etc with Arduino and NodeMCU.
- Four examples have been taken as a hands-on such as LED glow, Switch sensing,Temperature display, small motor controlling.

Speaker's Details : Prof. S. Premkumar, Vice-Pricipal, Department of ECE, Adhipaaraskathi College of Engineering, Tamilnadu.
Convener : Dr. S. Sugumaran, Mrs.V.G.Hamsaveni & Mr.P. Bharath Kumar
Date :10.10.2025 & 11.10.2025
Target Audience : **III year** Students
Organized by : Department of ECE, IIC & IIIC cell, SITAMS.



Sreenivasa Institute of Technology and Management Studies
(SITAMS)

Murukambattu, Chittoor, Andhra Pradesh-517127.

Department of CSE-Artificial Intelligence and Machine Learning

&

Department of CSE- Data Science

FIVE DAYS VALUE ADDED COURSE

On

"AI Integrated Routing Concepts, 5G Communication, Cybersecurity for Next Gen.Computing"

09.10.2025 to 13.10.2025

Introduction:

In the dynamic landscape of telecommunications, the advent of 5G technology heralds a new era of connectivity, promising unparalleled speeds and capabilities. As we delve into the intricacies of high-speed switching and routing, we embark on a journey to understand the fundamental mechanisms driving this revolution. Over the course of five days, our program aims to dissect the nuances of 5G communication and explore the latest trends shaping its trajectory. Through a blend of theory and practical applications, participants will unravel the complexities of high-speed data transfer and delve into the forefront of technological innovation. Welcome to an immersive exploration of the future of connectivity.

Objectives:

Participants will gain practical skills in configuring high-speed switches, designing 5G routing protocols and mastering Networking. This five days Value Added Course (VAC) generally addresses several key points:

- Gain hands-on experience in configuring high-speed switches and routers, as well as designing routing protocols for 5G networks.
- Apply theoretical knowledge to real-world scenarios, reinforcing understanding and retention of concepts related to high-speed switching, routing, and 5G communication. Enhance problem-solving abilities and collaboration through lab sessions and group projects.

Advisory Committee : **Sri K Ranganatham** Garu, Chairman,
Smt. D A Kalpaja Garu, Managing Trustee,
Sri D K Badri Narayana Garu, Secretary,
Dr K L Narayana Garu Academic Advisor,
Dr. N. Venkatachalapathi Garu, Principal,
Dr. M Saravanan Garu, Academic Dean.

Convenor : **Dr.S.Vijayakumar**, Professor & Head, CSM Dept., SITAMS.
: **Mr.A.Srinivasan,** Associate Professor & Head, DS Dept., SITAMS

Coordinator : **Dr.V.Rajanikanth**, Associate Professor in CSM, SITAMS.
Mr.D.Gowtham, Assistang Professor in CSM, SITAMS
Mr.G.Yuvaraj, Assistang Professor in DS, SITAMS

Dates : 09.10.2025 to 13.10.2025
Venue : **Seminar hall (Mechanical block)** & Computer Labs 1 & 09.
Target Audience : CSM & DS Students
Organised by : Department of CSE-AIML & CSE-DS

DAY-1 (09/10/2025): Sessions 1 & 2

On our inaugural day, we embark on a journey into the realm of networking, laying the foundation for understanding communication protocols and network architectures. Through interactive sessions, we delve into the basics of data transmission, exploring concepts such as IP addressing, subnetting, and network topologies. Participants will gain insights into the OSI model and TCP/IP stack, unraveling the intricacies of packet-switching networks. Our exploration will not only demystify the technical aspects but also highlight the significance of networking in enabling seamless connectivity in our digital age. Welcome to an immersive initiation into the world of networking.

Speaker: Mr .A.Manoj Kumar HR Manager, Strydo Techologies

ATM (Asynchronous Transfer Mode) networking revolutionized data transfer by introducing fixed-length cells, enhancing speed and efficiency. Its deterministic nature ensures reliable transmission, ideal for time-sensitive applications like voice and video. However, its complexity and high cost limited widespread adoption. With the rise of packet-switched technologies like Ethernet, ATM's dominance waned, but its legacy persists in critical infrastructures. Today, as networks evolve towards higher speeds and lower latencies, ATM's principles influence modern protocols, emphasizing quality of service and prioritization. Reflecting on ATM's journey underscores the dynamic nature of networking technologies, where innovation and adaptation drive progress towards ever more efficient data transfer solutions.

Speaker: Mr .S.Praveenraj Data Scientist, Strydo Techologies

DAY-2 (10/10/2025): Sessions 3 & 4

Day two deals with router configuration, administrators set up routing protocols, IP addressing, and access control lists to control traffic flow between networks. They optimize performance through route summarization and implement security measures such as firewall rules and VPN tunnels. Conversely, switch configuration focuses on VLAN setup, trunking, and spanning tree protocols to segment and manage network traffic efficiently. Administrators configure port security and quality of service parameters to prioritize critical traffic. Both router and switch configurations play pivotal roles in network management, ensuring seamless connectivity and security while adapting to evolving technological demands and organizational needs.

Resource Persons: 1. Dr.V.Jayaprakasan, Professorin ECE, SNIST, Hyderabad Treasurer, IEEE-Hyderabad Section.

2. Dr.C.Kumar, Associate Professor/ECE MITS, Madanapalle.

Day two explores server configuration, focusing on establishing robust connections and understanding connector types. Participants will learn to configure servers for optimal performance and reliability, mastering tasks such as setting up user accounts, managing file systems, and implementing security measures. Additionally, the session delves into connecting links, covering Ethernet, fiber optic, and wireless connections. Understanding connector types, including RJ45 for Ethernet and LC/SC connectors for fiber optics, is essential for ensuring seamless data transmission. Through practical demonstrations and hands-on activities, attendees gain the expertise needed to configure servers effectively and deploy various connection types in network environments.

Resource Persons: 1. Dr.V.Jayaprakasan, Professorin ECE, SNIST, Hyderabad Treasurer, IEEE-Hyderabad Section.

2. Dr.C.Kumar, Associate Professor/ECE MITS, Madanapalle.

DAY -3 (11-10-2025): Sessions 5 & 6

Day three focuses on constructing and configuring a simple wired network using two switches and a router. Participants will delve into the fundamentals of network construction, understanding the roles of switches in connecting devices within local area networks (LANs) and the router's function in facilitating communication between multiple LANs. Using two switches, attendees will learn to create a basic LAN infrastructure, connecting devices such as computers, printers, and servers. They will configure switch settings, including VLANs and port assignments, to optimize network performance and ensure seamless communication.

Additionally, participants explore the static router configuration between two routers, establishing connectivity between three LANs. By configuring static routes and addressing schemes, attendees will enable data exchange between different network segments.

Through practical demonstrations and hands-on exercises, participants will gain valuable insights into network construction and configuration principles, empowering them to build and manage basic wired networks effectively.

Resource Persons: 1. Dr.V.Jayaprakasan, Professorin ECE, SNIST, Hyderabad Treasurer, IEEE-Hyderabad Section.

2. Dr.C.Kumar, Associate Professor/ECE MITS, Madanapalle.

DAY-4 (12-10-2025): Sessions 7 & 8

Day four delves into dynamic network configuration essentials, covering DHCP (Dynamic Host Configuration Protocol) and DNS (Domain Name System), alongside modern wireless network configurations. Participants will explore the role of DHCP in dynamically assigning IP addresses to devices, streamlining network management and connectivity. They will also delve into DNS, understanding its significance in translating domain names into IP addresses, facilitating seamless internet browsing and service accessibility.

In the session 7, focus shifts to contemporary wireless network configurations, addressing security measures, SSID settings, and encryption protocols to ensure robust network protection and performance optimization. Additionally, participants will delve into HTML basics and email service configurations, facilitating efficient communication between clients and servers.

The culmination of the day involves a comprehensive course assignment, wherein participants apply acquired knowledge to design and configure a network environment. This practical exercise enables attendees to demonstrate proficiency in network configuration, troubleshooting, and security implementation. Through hands-on practice and real-world scenarios, participants solidify their understanding of network fundamentals and emerge equipped with practical skills to navigate dynamic network environments effectively.

Resource Persons: 1. Dr.V.Jayaprakasan, Professorin ECE, SNIST, Hyderabad Treasurer, IEEE-Hyderabad Section.

2. Dr.C.Kumar, Associate Professor/ECE MITS, Madanapalle.

In the afternoon, the course assignment exercise has been given to the participants. The following are the VAC assignment Questions, which are assigned to participants:

1. Construct and configure simple network with 2 routers, 4-switch and 10 -end devices (use packet tracer)
2. With continuation of first question, configure between router and end device by below given condition:
   A. RIP routing protocol
   B. Static routing protocol
   C. DHCP
   D. Wireless home router configuration.
   E. Use wireless Access Point

DAY-5 (13-10-2025): Session 9 & 10

Day five explores recent trends in cybersecurity and their implications, as well as a reevaluation of 5G technology in light of emerging threats. Participants will delve into the evolving landscape of cyber threats, including ransomware, phishing, and insider threats, and examine strategies for mitigating risks and enhancing resilience.

In particular, the session will highlight the critical importance of proactive security measures such as endpoint protection, threat intelligence, and security awareness training to safeguard against sophisticated cyber attacks. Additionally, participants will explore emerging technologies like AI and machine learning for threat detection and response, as well as the growing significance of compliance frameworks such as GDPR and CCPA in ensuring data privacy and regulatory compliance.

Moreover, the re-evaluation of 5G technology will entail a comprehensive analysis of its security posture and vulnerabilities. Participants will assess the potential impact of 5G on cybersecurity, considering factors such as increased attack surface, network slicing vulnerabilities, and the proliferation of IoT devices. Through case studies and discussions, attendees will gain insights into the evolving threat landscape and the importance of integrating security measures into the design and deployment of 5G networks. This holistic approach aims to equip participants with the knowledge and skills needed to address cybersecurity challenges in the context of evolving technologies like 5G.

Resource Persons: 1. Dr.V.Jayaprakasan, Professorin ECE, SNIST, Hyderabad Treasurer, IEEE-Hyderabad Section.

2. Dr.C.Kumar, Associate Professor/ECE MITS, Madanapalle

Course Outcome:

The outcomes for a value-added course on high-speed switching and routing and trends in 5G communication:

- Familiarity with different switching techniques such as cut-through, store-and-forward, and fragment-free.
- Ability to design high-speed networks considering factors like bandwidth requirements, latency, and scalability.
- Practical experience in configuring and managing high-speed switches and routers in simulated or real-world environments.
- Understanding the architecture and key components of 5G networks.

PO'S Attained: PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO9,P010,PO12