

A Report on
6 Weeks Online Hands-On Internship
Fundamentals of Switching & Routing
Organized by
IEEE Communications Society, IEEE Hyderabad Section
In association with
IEEE MITS Student Branch & MITS Cisco Networking Academy
25th May to 3rd July 2026 (7PM to 8.30 PM)

Event Details

Title of the Event: Fundamentals of Switching and Routing - A 6-Weeks Online Hands-on Internship

Duration: 25th May 2026 to 3rd July 2026 (6 Weeks - 30 Sessions)

Mode: Online

Timing: 6:00 PM / 7:00 PM to 7:30 PM / 8:30 PM (session-wise, as per schedule)

Total Participants Registered: 532

Total Participants Completed: 503

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Objective of the Event

The six-week online hands-on internship was designed to bridge the gap between theoretical networking concepts and industry practice by providing participants with a strong foundation in switching and routing fundamentals. The program aimed to help students understand how networks operate, explore addressing and protocol concepts, gain real-time practical exposure through Cisco Packet Tracer simulations, and build the networking competency required for careers in emerging technology domains such as IoT, cloud computing, cybersecurity, and AI data-center infrastructure.

Resource Persons

The sessions were delivered by experienced Cisco-trained instructors and industry experts from India, Canada, and the USA.

Participation Summary

Total Participants Registered	495 participants + 37 Volunteers = 532
Total Participants Completed	503
Completion Rate	94.5%

Registered Participants – State wise count

State	Count	State	Count
ANDHRA PRADESH	224	MAHARASHTRA	2
TELANGANA	146	KERALA	1
KARNATAKA	46	PUDUCHERRY	1
TAMIL NADU	34	JAMMU & KASHMIR	1
WEST BENGAL	18	HARYANA	1
MADHYA PRADESH	4	TRIPURA	1
GUJARAT	3	ODISHA	1
RAJASTHAN	3	Ghana (International)	1
JHARKHAND	2	Others (Faculties)	6
Total Registered Participants			495

Certification and Assessment

On successful completion of the sessions, qualified students attempted the assessment hosted on the Cisco Networking Academy website and completed the CCNA ITN (Introduction to Networks) and CCNA SRWE (Switching, Routing, and Wireless Essentials) courses, which form part of the official Cisco Certified Network Associate (CCNA) curriculum. This industry-recognized certification validates participants' conceptual understanding and hands-on proficiency in switching, routing, and wireless networking fundamentals.

Outcome of the Program

- Participants gained a comprehensive, hands-on understanding of switching and routing fundamentals, including OSI/TCP-IP models, IPv4/IPv6 addressing, and subnetting.
- Participants developed practical configuration skills for VLANs, inter-VLAN routing, and static and dynamic routing protocols, including OSPF.
- Participants gained proficiency in transport and application layer protocols, WLAN configuration, layer-2 network security, and NAT using Cisco Packet Tracer for simulation-based practice.
- Participants developed systematic network troubleshooting skills applicable to real-world enterprise networking scenarios.
- Qualified students attempted the assessment on the Cisco Networking Academy website and completed the CCNA ITN and CCNA SRWE courses, gaining industry-recognized certification.
- The program strengthened participants' readiness for professional networking certifications and careers in networking, cybersecurity, and cloud computing.
- The internship fostered direct interaction between students and senior industry professionals from organizations such as Cisco Systems, Bank of America, Movate, and Gamestop Corp.
- The program achieved a high completion rate of 94.5% (503 out of 532 registered participants), reflecting strong engagement and the effectiveness of the training delivery.

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IEEE Hyderabad Section



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MITS
MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
(Deemed to be University under Section 3 of UGC Act, 1956)

Internship Structure & Guidelines

Code of Conduct

- Participants should maintain professional ethics and discipline during all sessions.
- Any form of misconduct, impersonation, or misuse of online platforms will be viewed seriously.

❖ **We encourage all participants to actively engage, interact with speakers, and make the best use of this learning opportunity to strengthen their technical knowledge and career readiness in networking technologies.**

Fig. Session screenshot — Day 1 (25th May 2026).

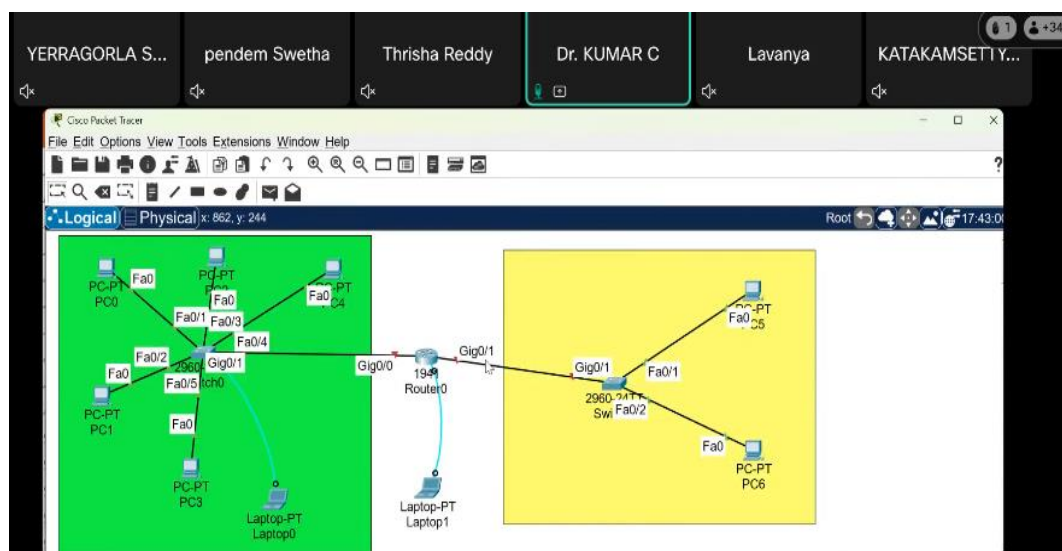


Fig. Session screenshot — Day 5 (29th May 2026).

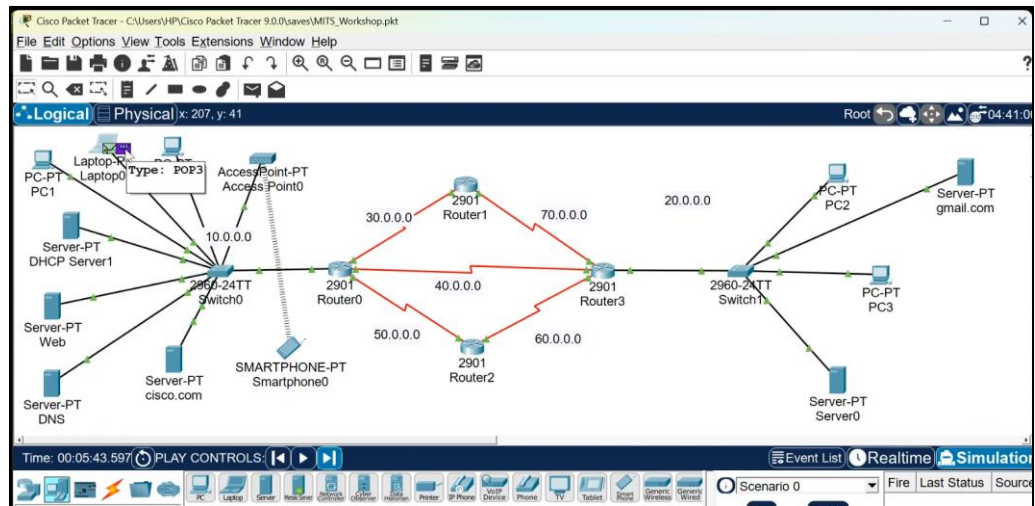


Fig. Session screenshot — Day 15 (12th June 2026).

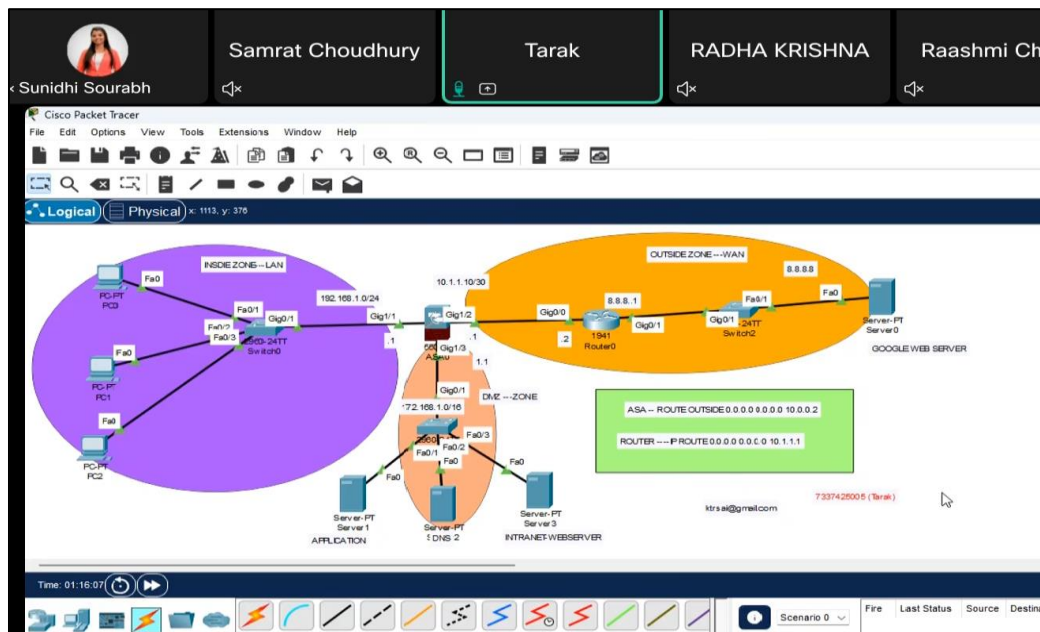


Fig. Session screenshot — Day 30 (3rd July 2026).