

Emerging Technologies

CCIE Routing & Switching Certification Program

Curriculum

Program Outline :

Module 1: Fundamentals of Routing & Switching

- 1. Introduction to Routing & Switching**
 - Core principles, tools, and industry applications.
- 2. Layer 2 Technologies**
 - Understanding and managing Layer 2 networks.
- 3. Layer 3 Technologies**
 - Understanding and managing Layer 3 networks.
- 4. Basic Network Configuration**
 - Setting up basic network environments.

Module 2: Advanced Routing & Switching Techniques

- 5. Advanced Network Services**
 - Configuring and managing network services.
- 6. Network Security Fundamentals**
 - Implementing advanced network security measures.
- 7. Quality of Service (QoS)**
 - Ensuring high-quality network performance.
- 8. Multicast and IPv6**

- Managing multicast and IPv6 networks.

Module 3: Practical Applications

9. Practical Networking Projects

- Developing and implementing networking projects.

10. Network Troubleshooting

- Identifying and resolving network issues.

11. Data Analysis and Visualization

- Analyzing network data and visualizing results.

12. Business Intelligence Applications

- Using data for networking decision making.

Module 4: Capstone Project

13. Integration of Learned Skills

- Apply tools and techniques to real-world networking problems.

14. Advanced Networking Systems

- Developing complex networking systems.

15. Cloud Networking Management

- Securing and managing cloud-based networks.

16. AI for Networking

- Implementing AI solutions in networking.

Elective Modules

17. Data Ethics and Privacy

- Ethical considerations, privacy laws, compliance strategies.

18. Predictive Analytics with Networking Management

- Building and validating predictive models.

19. AI for Networking Management

- Implementing AI solutions in networking.

20. Advanced Data Warehousing Techniques

- Optimizing data warehousing solutions.

21. Data-Driven Networking Decision Making

- Using data to inform and drive networking strategies.

22. Cloud Networking Solutions

- Deploying networking management systems on cloud platforms.

23. Networking Project Management

- Leading networking projects, ensuring successful delivery.

24. Big Data Security

- Securing data in big data environments.

25. IoT Networking

- Securing and managing IoT devices and networks.

Websites:

- <https://chools.in/>
- <https://ramaqchools.com/>
- <https://www.choolsgroup.com/>