



**ISTITUTO DI ISTRUZIONE SUPERIORE
"MICHELE GIUA"**



Ind. CHIMICO-MATERIALI E BIOTECNOLOGIE AMBIENTALI – INFORMATICO –
LICEO SCIENTIFICO opzione SCIENZE APPLICATE

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Programma del Corso CISCO CCNA R&S "Routing and Switching Essentials"

CCNA R&S "Routing and Switching Essentials" covers the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality.

By the end of the course, students will be able to:

- Determine how a router will forward traffic based on the contents of a routing table.
- Explain how switching operates in a small to medium-sized business network.
- Use monitoring tools and network management protocols to troubleshoot data networks.
- Configure monitoring tools available for small to medium-sized business networks.
- Configure initial settings on a network device.
- Configure Ethernet switch ports.
- Implement VLANs.
- Implement static routing.
- Implement DHCP on a router.
- Implement network address translation (NAT).
- Implement access control lists (ACLs) to filter traffic.

The 70-hour, instructor-led course is the second of 4 courses in the Cisco CCNA Routing & Switching curriculum. The course includes activities using Packet Tracer, hands-on lab work, and a wide array of assessment types and tools.

Requirements

The curriculum is appropriate for students at many education levels and types of institutions, including high schools, secondary schools, universities, colleges, career and technical schools, and community centers.

For Students

CCNA 1 or equivalent experience