

# CIS 152C : CISCO ROUTER CONFIGURATION

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## Transcript title

Cisco Routing and Switching

## Credits

4

## Grading mode

Standard letter grades

## Total contact hours

50

## Lecture hours

30

## Other hours

20

## Prerequisites

CIS 151C.

## Course Description

Second of a three-course sequence to prepare the student to take the Cisco Certified Network Associate (CCNA) certification exam. Cisco Routing and Switching implements the Cisco Academy online curriculum, CCNA 5.0, Routing and Switching Essentials, developed by Cisco Systems experts. Explores switch VLANs, trunks and Inter-VLAN routing, 1Pv4 and 1Pv6 static and dynamic routing, OSPFv2 and OSPFv3, DHCP and DNS for 1Pv4 and 1Pv6, NAT, and access-lists for 1Pv4 and 1Pv6. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term.

## Course learning outcomes

1. Describe the overall purpose and identify the major components of a router.
2. List the key internetworking functions of the OSI network layer and how they pertain to a router.
3. List problems that each routing type encounters dealing with topology changes and describe techniques to reduce the number of problems.
4. Demonstrate procedures used to examine router elements, how to remotely access a router and testing network connectivity, having access to a multiple router configuration.
5. Perform the initial configuration of a router and enable IP.
6. Perform the necessary steps to implement routing information protocol (RIP), interior gateway routing protocol (IGRP), enhanced interior gateway routing protocol (EIGRP) and open shortest path first (OSPF) routing protocols.