

Basic Course Information

Semester:	SP25	Instructor Name:	Bijan Houshiar
Course Title & #:	CIS 163 - Routing and Switching Essentials	Email:	Bijan.houshiar@imperial.edu
CRN #:	20419	Webpage (optional):	Cisco.netacad.com
Classroom:	Online	Office #:	Zoom
Class Dates:	2/10/2025-06/06/2025	Office Hours:	by appointment
Class Days:		Office Phone #:	
Class Times:		Emergency Contact:	
Units:	3	Class Format:	Online asynchronous

Course Description

This course presents the architecture, components, and operations of routers and switches in a small network. Students will configure routers and switches for basic functionality. Students will configure and troubleshoot routers and switches and resolve common issues with wireless LANs static routing, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course is one of the courses required to prepare for Cisco Certified Network Associate (CCNA) certification exam. (C-ID: ITIS 151) (CSU)

Course Prerequisite(s) and/or Corequisite(s)

None

Student Learning Outcomes

Students will be able to:

Describe basic switching concepts, VLANs, and inter-VLAN routing.

Configure and troubleshoot basic operations of a switched network, VLANs, and inter-VLAN routing.

Describe the purpose, nature, and operations of a router, routing tables, and the route lookup process.

Describe and configure Dynamic Host Configuration Protocol (DHCP)

Configure and verify static routing and default routing.

Configure and troubleshoot basic operations of routers.

Course Objectives

This course objective is to become familiar with basic routing and switching essentials.



Textbooks & Other Resources or Links

Students will be enrolled in <https://www.netacad.com/> which has the textbook online. This online book will be available for the entire term. Students are not required to purchase textbooks.

Course Requirements and Instructional Methods

To use course materials, Internet access and a computer that you can install Packet Tracer on are required. Windows systems are preferred.

Course Grading Based on Course Objectives

Homework	up to	100 points
Chapter Exams		50 points
Hands-On Skills- Final Exam		100 Points
Final Exam		100 Points
Hands-on Quiz/Lab Activities	up to	100 Points
Discussion	up to	50 Points

Grades:

A = 90 - 100 %

B = 80 - 89 %

C = 70 - 79 %

D = 60 - 69 %

F = below 60%

Course Policies

There is no late policy. If instructor accepts a late assignment, there will be a 25% deduction for one week late if the instructor allows it. Assignments passed due by more than one week will not be accepted. Instructor may revise if there is proper documentation.

No late work will be accepted after the term ends.

Discussion has no makeup and will not be graded if submitted after the due date.



IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

Weekly agenda and due dates are listed on college course Canvas.