

COMPLETER: [Cisco Networking Academy](#)

CREDITS: 6

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Exact scheduling depends on student's plan and school's master schedule.	English 9 (1)	English 10 (1)	✦ AP Language and Composition	English 12 (1)
	US Government (1)	US History (1)	World History (1)	
	Conceptual Physics (1)	Chemistry (1)	Biology (1)	
	Algebra I (1)	Geometry (1)	Algebra II (1)	Higher Level Math (1)
	PE (.5) / Health (.5)		PE (.5) / Financial Literacy (.5)	
	Fine Arts (1)	Foundations of Technology or Exploring Computer Science (1)		
	World Language (1)	World Language (1)		
Completer Program Requirements 6 credits			CCNA: Routing and Switching I (3)	CCNA: Routing and Switching II (3)

Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	✦ Recommended AP Connections: AP Statistics (1), AP Physics (1) Advanced Design Applications (1), Technological Design (1), Managing Personal Finances Using Excel (1), Honors Accounting I (1), Business Law (1), Internship (.5-1)		
8 credits possible per year			
Value Added:	Up to 16 Articulated Credits	Credits determined on an individual bases	
From:	CC of Baltimore County, Catonsville, Essex, or Dundalk	Frederick Community College	
Program:	Information Technology	Computer Science	
End of Program Test:	Cisco CCENT CCNA / CompTIA A+ certification		
Industry:	CISCO / CompTIA		
Taken:	At the end of CCNA Routing and Switching / PC Hardware and Software		



[CISCO NETWORKING ACADEMY](#) – Five to Six Credit Completer

CCNA: **ROUTING AND SWITCHING I**

Course: 557137(Articulated) 3 credits

This class introduces and describes the architecture, structures, functions, components, models and operations of computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media and operations are introduced. Students learn how to build simple LANs, perform basic configurations and troubleshoot problems of routers and switches, implement IP addressing schemes, and resolve common network issues. This career-oriented approach to learning networking empowers students to enter a career and further their education in the computer networking field

Prerequisites and other notes: This course is the first course in a 5 or 6 credit completer program.

CCNA: **ROUTING AND SWITCHING II**

Course: 557237 (Articulated) 3 credits

This class continues the work of configuring routers and switches for advanced functionality. Students develop the knowledge and skills needed to implement operations in a network. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Knowledge and skills are developed that are needed to implement virtual private network operations in a complex network.

Prerequisites and other notes: Completion of CCNA: Routing and Switching I. This course is the final class in a 6 credit completer program. All students in this class are required to take an industry-standard end of program assessment.