

COLLEGE: Montgomery College

HIGH SCHOOLS: Bethesda-Chevy Chase, Blair, Damascus, Gaithersburg,

CLUSTER: Information Technology

Northwest, Quince Orchard, Seneca Valley, Springbrook, Wheaton,

MCPS PROGRAM: Cisco Networking Academy Program

Wootton

MC PROGRAM: Network and Wireless Technologies A.A.S.

Students learn basic technical and problem-solving skills needed to diagnose and repair computers and local area network (LAN's). Basic computer and LAN design and architecture, board-level programming and repair, hardware and software problem diagnosis and repair, and LAN installation and troubleshooting are study topics. Students completing CISCO IT Essentials will be qualified to take the A+ industry certification exam. Upon completion of Networking Engineering and Management, students will be qualified to take the CCNA certification exam.

STUDENT ENTRY POINTS

GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
					RECOMMENDED ELECTIVE COURSES		OTHER ELECTIVE COURSES		
CAREER AND TECHNICAL EDUCATION COURSES									
SECONDARY	9	English	Mathematics	Science	Social Studies	Foreign Language	Physical Education	Select one: -Discovering Programming Concepts A/B** -Computer Programming 1A/B**	
	Software Applications by Design A/B and Entrepreneurship & Business Management are highly recommended courses.								
	10	English	Mathematics	Science	Social Studies	Foreign Language	Health (.5) Personal Finance (.5)	Select one from the following courses: -Discovering Programming Concepts A/B** -Computer Programming 1A/B** -♦Microcomputer Technologies A/B**	
	11	English	Mathematics	Science	Social Studies	Technology Education Credit	Fine Arts	Select one from the following courses: -Computer Programming 1A/B** -Microcomputer Technologies A/B** -♦Network Engineering & Management A/B***	
12	English	Mathematics	Science Elective		♦Advanced Network Engineering & Management A/B	College Information Technology Course A/B	Information Technology Internship		
Articulate up to 24 credits with a grade of B or better for a tuition savings of \$3,274 at Montgomery College.									
POSTSECONDARY	Year 1 1st Semester	EN 101 Techniques of Reading & Writing	Mathematics Foundation			♦NW 127 Microcomputer Control Programs	NW 130 Network Cabling Technology	NW 101 Introduction to Wireless Technologies	
	Year 1 2nd Semester	English Foundation			Behavioral and Social Sciences Distribution	♦NW 140 Microcomputer Configuration & Installation	NW 170 Networking Operating Systems	NW 173 Network Security	NW 199 Microsoft Windows Client Operating Systems
	Year 2 1st Semester	Arts or Humanities Foundation		Health Foundation		♦NW 252 Cisco Routers and Routing Basics	♦NW 253 Cisco Router Configuration & Management II	♦NW 151 Introduction to Networking	
	Year 2 2nd Semester	Speech Foundation		Natural Sciences Lab Distribution		♦NW 254 Cisco Router Configuration & Management III		Technical Electives (3)	

Note: Four information technology credits are required to complete this career pathway program.

Students who complete the MCPS program (courses in red) in high school do not have to repeat the courses in red at MC.

Technology Education Credit for class of 2010 and 2011 only *Advanced Technology Education Credit for class of 2010 and 2011 (4000 level courses only)



This MCPS CTE program is approved by the Maryland State Department of Education for graduates in 2012.

Required Courses
Recommended Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
(♦=High School to Com. College)(●=Com. College to 4-Yr Institution)



Information Technology

2009–2010

CISCO Networking Academy Program (OASIS Code = CI) CIP 11.0950.0			
Requirements for Program Completion (1 credits A) + (2 credits B) + (1 credit C)			
Code	Course #	Course Title	Credit
A	2964/2967	Discovering Programming Concepts A/B (Tech Ed Credit)	1.0
	2989/2990	Computer Programming 1A/1B (Advanced Level) (Tech Ed Credit)	1.0
B	5611/5612 4214/4215	Microcomputer Technologies A/B (4000 courses = Adv Tech Ed Credit)	1.0
	5613/5614 4216/4217	Microcomputer Technologies A/B (Double Period) (4000 courses = Adv Tech Ed Credit)	2.0
	5615/5616 4218/4219	Network Engineering and Management A/B (4000 courses = Adv Tech Ed Credit)	1.0
	5617/5618 4220/4221	Network Engineering and Management A/B (Double Period) (4000 courses = Adv Tech Ed Credit)	2.0
C	4230/4231	Advanced Network Engineering and Management A/B	1.0
	TBD	College-Information Technology (Advanced Level; Unlimited Repeats)	.5
	2907	Internship-Information Technology (Unlimited Repeats)	.5
	2800/2801	Guided Research-Information Technology A/B	1.0

Articulation Agreements with Montgomery College (MC)

Students can articulate up to **24** credits at Montgomery College for a savings of **\$3,274** (including fees).

For more information, go to:

<http://www.montgomeryschoolsmd.org/departments/cte/toolkit/ClusterInfo/IT/index.shtm>