

Subject	DRAFT Virtual Middle College Computer Science and Technologies, Information Sciences and Systems Area of Concentration Pathway A.A. 109						
	Grade 9 MCPS/MC Credits	Grade 10 (on HS Campus)	Summer (on MC Campus)	Grade 11 (on MC Campus)	Winter 1 Winter 2 (on MC Campus)	Summer (on MC Campus)	Grade 12 (on MC Campus)
English	Honors English 9, 1/0	Honors English 10, 1/0		Sem 1: ENGL 101 , 1/3 (MCPS English Credit) Sem 2: ENGL 102/103 , 1/3 (MCPS English Credit)			
Math	Geometry, 1/0	Algebra 2, 1/0		Sem 1: MATH 115 , 1/4 (MATF); Sem 2: MATH 117 , 1/3 (2 MCPS Math Credits)			
Science, or Natural Science	9 th Grade Science, 1/0 **	10th Grade Science, 1/0**					Sem 1: Natural Science with Lab Distribution (NSLD) , 1/4; (MCPS NGSS Science Credit) Sem 2: Natural Science without Lab Distribution (NSND) , 1/3
Social Studies, or Humanities/ Electives	Honors or AP U.S. History*, 1/0	Honors or AP NSL, 1/0		Sem 1: Behavioral & Social Science Distribution , 1/3; Sem 2: HIST 117 , 1/3 (MCPS World History Credit)			Sem 1: Humanities Distribution , 1/3; Sem2: Behavioral & Social Science Distribution , 1/3
Arts, Fine Arts		Sem 2: Arts Distribution , 1/3					Sem 2: Unmet MC requirement or Elective, 1/3
Behavioral and Social Sciences							
Physical Education, Health	General P.E., 1/0;						
Program Completer/Track Electives	For. Language, 1/0	For. Language, 1/0		Sem 1: CMSC 110 , 1/3 Sem 2: CMSC 140 , 1/3		HLTH 105 (If MCPS Health credit needed) 1/3	Sem 1: CMSC 243 , Program Elective, 2/6; Sem 2: CMSC 207 , Program Elective, 3/9
Technology Education	MCPS Tech Course, 1/0						
Elective/MC classes		College Test Prep, .5/0			Winter 2: COMM 108 (GEEL), 1/3		

* Additional math course may be taken during the summer, if needed for high school graduation **High School Biology must be completed by the end of 10th grade. ** Plan for NCSS Science requirements based on science course available in pathway from MC. Students will not be able to adjust the MC science course.

MC courses approved for dual credit (high school graduation credit) can be found [here](#). MC courses will be awarded credit based on that list.

INFORMATION SCIENCES AND SYSTEMS AREA OF CONCENTRATION, COMPUTER SCIENCE AND TECHNOLOGIES AA: 109

Total Credits: 60
Catalog Edition: 2020-2021

Program Description

This transfer degree area of concentration is for students who plan to transfer to a four-year program such as information systems or information management. The curriculum is designed to present a broad coverage of concepts applying to the theory and management of information, analytical techniques in the development of computer-based information systems, and practical experience with business programming.

Because of the variation in such programs at four-year institutions, students are urged to consult an advisor about specific course selections.

Program Outcomes

Upon completion of this program a student will be able to:

- Analyze components of the computer information systems.
- Analyze, design, and implement computer programs using a high level programming language.
- Demonstrate proficiency in analysis and design techniques