

# AS Science, Mathematics Concentration

## Supporting Course Sequence: Economics

### MONTGOMERY COLLEGE

Semester 1		Total Credits	16
MATH 181	Calculus I <sup>1</sup>	4	
ENGL 102	Critical Reading, Writing & Research <sup>1</sup>	3	
CMSC 140	Intro. to Programming <sup>2</sup>	3	
	Gen. Ed. Distribution Course - ARTD <sup>3</sup>	3	
	Gen. Ed. Distribution Course - BSSD <sup>3 4</sup>	3	

Semester 2		Total Credits	16
MATH 182	Calculus II	4	
ECON 201	Principles of Economics I	3	
COMM 108 OR COMM 112	Foundations of Human Communication/Business & Professional Speech Communication	3	
	Gen. Ed. Distribution Course - HUMD <sup>3</sup>	3	
	Program Elective	3	

Semester 3		Total Credits	15
MATH 280	Multivariable Calculus	4	
MATH 284	Linear Algebra	4	
ECON 202	Principles of Economics II	3	
	Gen. Ed. Distribution Course - NSLD <sup>3 5</sup>	4	

Semester 4		Total Credits	14
MATH 282	Differential Equations	3	
CMSC 207	Intro to Discrete Structures <sup>6</sup>	4	
	Gen. Ed. Distribution Course - NSLD <sup>3 5</sup>	4	
	Program Elective	3	

### UNIVERSITY of MARYLAND

Semester 1		Total Credits	16-17
MATH 140	Calculus I	4	
ENGL 101	Intro. to Writing	3	
	Programming Requirement <sup>2</sup>	3-4	
	Gen. Ed. Requirements <sup>3</sup>	3	
	Gen. Ed. Requirements <sup>3</sup>	3	

Semester 2		Total Credits	16
MATH 141	Calculus II	4	
ECON 201	Principles of Macroeconomics	3	
COMM 107	Oral Communication: Principles and Practices	3	
	Gen. Ed. Requirements <sup>3</sup>	3	
	Elective	3	

Semester 3		Total Credits	15
MATH 241	Calculus III	4	
MATH 240	Intro. to Linear Algebra	4	
ECON 200	Principles of Microeconomics	3	
	Gen. Ed. Requirements <sup>3</sup>	4	

Semester 4		Total Credits	14
MATH 246	Differential Equations	3	
CMSC 250	Discrete Structures <sup>6</sup>	4	
	Gen. Ed. Requirements <sup>3</sup>	4	
	Program Requirement	3	

### [MC AS Mathematics Requirements](#)

### [UMCP BS Mathematics Requirements](#)

<sup>1</sup>Many students start at MC missing one or more pre-requisites for MATH 181 and ENGL 102. The pre-requisite for MATH 181 is MATH 165. The pre-requisite for ENGL 102 is ENGL 101 or ENGL 101A. For placement information visit the [Assessment Center link](#).

<sup>2</sup>CMSC 140 does not have an equivalent course at UMCP, but will transfer as a lower level elective and will satisfy the math major programming requirement at UMCP.

<sup>3</sup>Earning an AS degree at MC guarantees that the General Education requirements at UMCP are considered complete. Students who do not transfer with a degree or do not at least complete the General Education requirements at MC can find information about the General Education requirements at UMCP, using the [UMCP Gen Ed link](#).

<sup>4</sup>This cannot be an ECON course. ECON 201 is a BSSD course & the two required BSSD courses must come from different disciplines.

<sup>5</sup>Students are strongly encouraged to take two consecutive lab science courses.

<sup>6</sup>CMSC 207 is not required, but is highly recommended.

Other notes: Students are required to select at least one course with a global and cultural perspectives designation in order to satisfy the Gen. Ed. Global Perspectives requirement. See an advisor to submit an application for graduation the semester BEFORE you intend to graduate.

# AS Science, Mathematics Concentration

## Supporting Course Sequence: Economics

### MONTGOMERY COLLEGE

Semester 1		Total Credits	10
MATH 181	Calculus I <sup>1</sup>	4	
ENGL 102	Critical Reading, Writing & Research <sup>1</sup>	3	
	Gen. Ed. Distribution Course - ARTD <sup>3</sup>	3	

Semester 2		Total Credits	10
MATH 182	Calculus II	4	
CMSC 140	Intro. to Programming <sup>2</sup>	3	
	Gen. Ed. Distribution Course - BSSD <sup>3 4</sup>	3	

Semester 3		Total Credits	11
MATH 280	Multivariable Calculus	4	
	Gen. Ed. Distribution Course - NSLD <sup>3 5</sup>	4	
COMM 108 OR COMM 112	Foundations of Human Communication/Business & Professional Speech Communication	3	

Semester 4		Total Credits	11
MATH 284	Linear Algebra	4	
	Gen. Ed. Distribution Course - NSLD <sup>3 5</sup>	4	
	Gen. Ed. Distribution Course - HUMD <sup>3</sup>	3	

Semester 5		Total Credits	9
MATH 282	Differential Equations	3	
ECON 201	Principles of Economics I	3	
	Program Elective	3	

Semester 6		Total Credits	10
CMSC 207	Intro to Discrete Structures <sup>6</sup>	4	
ECON 202	Principles of Economics II	3	
	Program Elective	3	

### UNIVERSITY of MARYLAND

Semester 1		Total Credits	10
MATH 140	Calculus I	4	
ENGL 101	Intro. to Writing	3	
	Gen. Ed. Requirements <sup>3</sup>	3	

Semester 2		Total Credits	10-11
MATH 141	Calculus II	4	
	Programming Requirement <sup>2</sup>	3-4	
	Gen. Ed. Requirements <sup>3</sup>	3	

Semester 3		Total Credits	11
MATH 241	Calculus III	4	
	Gen. Ed. Requirements <sup>3</sup>	4	
COMM 107	Oral Communication: Principles and Practices	3	

Semester 4		Total Credits	11
MATH 240	Intro. to Linear Algebra	4	
	Gen. Ed. Requirements <sup>3</sup>	4	
	Gen. Ed. Requirements <sup>3</sup>	3	

Semester 5		Total Credits	9
MATH 246	Differential Equations	3	
ECON 201	Principles of Macroeconomics	3	
	Program Requirement	3	

Semester 6		Total Credits	10
CMSC 250	Discrete Structures <sup>6</sup>	4	
ECON 200	Principles of Microeconomics	3	
	Program Requirement	3	

### [MC AS Mathematics Requirements](#)

### [UMCP BS Mathematics Requirements](#)

<sup>1</sup>Many students start at MC missing one or more pre-requisites for MATH 181 and ENGL 102. The pre-requisite for MATH 181 is MATH 165. The pre-requisite for ENGL 102 is ENGL 101 or ENGL 101A. For placement information visit the [Assessment Center link](#).

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