

# Mathematics

## Associate of Science to Bachelor of Science

Effective beginning Academic Year 2019-20 (Last revised October 1, 2019)

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER MODULE		Course Number	Credit Hours
<b>ENGLISH COMPOSITION AND ORAL COMMUNICATION:</b>			<b>3</b>
Course 1:	Any OTM approved First Writing (TME001) course	ENG 1111	3
<b>MATHEMATICS, STATISTICS, AND LOGIC:</b>			<b>5</b>
Course 1:	Calculus I (TMM005) <sup>1</sup>	MTH 2200	5
<b>ARTS AND HUMANITIES:</b>			<b>6</b>
+ Course 1:	Any OTM approved Arts and Humanities course	PHL 2000	3
+ Course 2:	Any OTM approved Arts and Humanities course	ENG 1600	3
<b>SOCIAL AND BEHAVIORAL SCIENCES:</b>			<b>6</b>
+ Course 1:	Any OTM approved Social and Behavioral Sciences course	ECO 1100	3
+ Course 2:	Any OTM approved Social and Behavioral Sciences course	PSY 1111	3
<b>NATURAL SCIENCES:</b>			<b>10</b>
Course 1:	Calculus-based Physics I with lab (OSC016)	PHY 2501	5
Course 2:	Calculus-based Physics II with lab (OSC017) or any OTM approved Natural Sciences course	PHY 2502	5
<b>ADDITIONAL CREDITS:<sup>2</sup></b>			<b>8</b>
Course 1:	Any OTM approved Second Writing (TME002) course	ENG 1112	3
Course 2:	Calculus II (TMM006)	MTH 2220	5
<b>GENERAL EDUCATION/OHIO TRANSFER MODULE TOTAL:</b>			<b>38</b>
<p>Advising Notes:            Where it indicates "Any OTM approved," students should work closely with their advisors.            (+) indicates that the courses chosen should be from two different areas within that category.  <sup>1</sup> A prerequisite, such as College Algebra (TMM001), may be needed for a student to reach Calculus I (TMM005).  <sup>2</sup> Due to the variability across institutions, students should work with their academic advisor to determine an appropriate program of study and appropriate amount of additional credits to satisfy the OTM.</p>			

### SPECIAL NOTES

Students with plans of pursuing a pre-professional or graduate studies track in the future should work closely with their academic advisor and receiving institution starting in the first year of their program in order to adequately prepare themselves for those types of tracks. Some pre-professional degrees include pre-medicine, pre-veterinary, pre-law, and pre-dentistry.

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PRE-MAJOR/BEGINNING MAJOR		Course Number	Credit Hours
Course 1:	Calculus III (OMT018)	MTH 2242	5
Course 2:	Elementary Linear Algebra (OMT019)	MTH 2530 <sup>1</sup>	4
Course 3:	Elementary Differential Equations (OMT020)	MTH 2430	4
<b>PRE-MAJOR/BEGINNING MAJOR TOTAL:</b>			<b>13</b>
Advising Notes: <sup>1</sup> MTH 2530 is only offered during summer semester and would need to be taken during that term.			

OTHER REQUIREMENTS		Course Number	Credit Hours
Electives:	General Electives as needed (May include FYE or Orientation course) <sup>1</sup>	FYE 1100	1
		COM 1120	3
		PHL 2100	3
		PLS 2300	3
		PHY 1100	4
<b>OTHER REQUIREMENTS TOTAL:</b>			<b>14</b>
Advising Notes: <sup>1</sup> Certain institutions may require two semesters or more of foreign language for Bachelor of Arts and Bachelor of Science degrees. If so, foreign language should be taken – check with your receiving institution. Additional recommended pre-major/major coursework may include a course in programming or proofs. Consult with your academic advisor and your receiving institution to determine an appropriate program of study.			

ASSOCIATE DEGREE	Total Credit Hours
<b>ASSOCIATE DEGREE TOTAL:</b>	<b>65</b>

SPECIAL NOTES
Some bachelor-degree granting programs may be competitive and admission into the program is not guaranteed. Students should check with individual institutions for their program admission requirements.
Some bachelor-degree granting institutions require additional general education courses outside of the Ohio Transfer Module and students may be required to take these courses in their junior or senior year. Students will still be able to follow this pathway and complete their bachelor's degree in approximately 60 additional credit hours.
For additional information, please contact: Student Success Center - Advising advisors@clarkstate.edu (937) 328-6084 www.clarkstate.edu

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### SAMPLE DEGREE MAP

#### FIRST YEAR

SEMESTER 1		SEMESTER 2	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
ENG 1111 English I	3	ENG 1112 English II	3
MTH 2200 Calculus I	5	MTH 2220 Calculus II	5
PHL 2000 Critical Thinking	3	ECO 1100 General Economics	3
PSY 1111 Introduction to Psychology	3	PHL 2100 Ethics	3
FYE 1100 College Success	1	PHY 1100 Fundamentals of Physics	4
<b>Total Semester 1 Credit Hours</b>	<b>15</b>	<b>Total Semester 2 Credit Hours</b>	<b>18</b>

#### SECOND YEAR

SEMESTER 3		SEMESTER 4	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
ENG 1600 Introduction to Literature	3	MTH 2430 Differential Equations	4
MTH 2242 Multivariable Calculus	5	PHY 2502 College Physics II with Calculus	5
PHY 2501 College Physics I with Calculus	5	PLS 2300 Introduction to International Relations	3
COM 1120 Public Speaking	3	MTH 2530 Matrix Algebra (only offered during summer semester)	4
<b>Total Semester 3 Credit Hours</b>	<b>16</b>	<b>Total Semester 4 Credit Hours</b>	<b>16</b>