

Mathematics

Associate of Science to Bachelor of Science

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

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		Course Number	Credit Hours
ENGLISH COMPOSITION AND ORAL COMMUNICATION:			3
Course 1:	Any Ohio Transfer 36 approved First Writing (TME001) course	ENG124	3
MATHEMATICS, STATISTICS, AND LOGIC:			4
Course 1:	Calculus I (TMM005) ¹	MTH223	4
ARTS AND HUMANITIES:			6
+ Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	AH Elective (see last page for list)	3
+ Course 2:	Any Ohio Transfer 36 approved Arts and Humanities course	AH Elective (see last page for list)	3
SOCIAL AND BEHAVIORAL SCIENCES:			6
+ Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	SOC225	3
+ Course 2:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	SBS Elective (see last page for list)	3
NATURAL SCIENCES:			8-10
Course 1:	Calculus-based Physics I with lab (OSC016)	PHY221	5
Course 2:	Calculus-based Physics II with lab (OSC017) or any Ohio Transfer 36 approved Natural Sciences course	PHY222 or NS Elective (see last page for list)	3-5
ADDITIONAL CREDITS: ²			10
Course 1:	Any Ohio Transfer 36 approved Second Writing (TME002) course	ENG221, ENG230, or ENG231	3
Course 2:	Calculus II (TMM006)	MTH224	4
Course 3:	Up to 3 additional hours of Ohio Transfer 36 approved courses	Ohio Transfer 36 Elective (see last page for lists)	3
GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:			37-39
<p>Advising Notes: Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors. (+) indicates that the courses chosen should be from two different areas within that category. ¹ A prerequisite, such as College Algebra (TMM001), may be needed for a student to reach Calculus I (TMM005). ² 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 Ohio Transfer 36.</p>			

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PRE-MAJOR/BEGINNING MAJOR		Course Number	Credit Hours
Course 1:	Calculus III (OMT018)	MTH 225	4
Course 2:	Elementary Linear Algebra (OMT019)	MTH 226	3
Course 3:	Elementary Differential Equations (OMT020)	MTH 227	3
PRE-MAJOR/BEGINNING MAJOR TOTAL:			10

OTHER REQUIREMENTS		Course Number	Credit Hours
Electives:	General Electives as needed (May include FYE or Orientation course) ¹	SSC101	1
		MTH135	5
		MTH214	3
		Ohio Transfer 36 Electives (see last page for lists)	4-6
OTHER REQUIREMENTS TOTAL:			13-15

Advising Notes:

¹ 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
ASSOCIATE DEGREE TOTAL:	60-64

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.

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 36 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 more information, please contact:

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SAMPLE DEGREE MAP

FIRST YEAR

SEMESTER 1		SEMESTER 2	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
SSC101 Student Success Seminar	1	MTH223 Analytic Geometry & Calculus I	4
MTH135 Precalculus	5	SOC225 Cultural Diversity	3
ENG124 College Composition	3	MTH214 Discrete Mathematics	3
Ohio Transfer 36 Social and Behavioral Sciences Elective	3	Ohio Transfer 36 Arts and Humanities Elective	3
Ohio Transfer 36 Arts and Humanities Elective	3	ENG221 Technical Report Writing, ENG230 Business Communication, or ENG231 College Composition II	3
Total Semester 1 Credit Hours	15	Total Semester 2 Credit Hours	16

SECOND YEAR

SEMESTER 3		SEMESTER 4	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
MTH 224 Analytic Geometry & Calculus II (taken over the summer before semester 3)	4	MTH 227 Ordinary Differential Equations	3
MTH 225 Analytic Geometry & Calculus III	4	PHY222 General Physics II with Calculus or Ohio Transfer 36 Natural Sciences Elective	3-5
MTH 226 Linear Algebra	3	Ohio Transfer 36 Elective	3
PHY221 General Physics I with Calculus	5	Ohio Transfer 36 Elective	3
		Ohio Transfer 36 Elective	3
Total Semester 3 Credit Hours	16	Total Semester 4 Credit Hours	15-17

OHIO TRANSFER 36 ELECTIVES

Please work closely with your advisor when selecting courses.

ARTS AND HUMANITIES	Course Number	Credit Hours
British Literature: Medieval to 1785	ENG233	3
British Literature: 1785 to Present	ENG234	3
American Literature: Colonial to 1865	ENG236	3
American Literature: 1865 to Present	ENG237	3
U.S. History I to 1877	HIS121	3
U.S. History II from 1877	HIS122	3
World Civilization to 17th Century	HIS221	3
World Civilization from 17th Century	HIS222	3

SOCIAL AND BEHAVIORAL SCIENCES	Course Number	Credit Hours
General Psychology	PSY121	3
Political Science	PSC121	3
Basic Economics	BUS122	3
Microeconomics	BUS221	3
Macroeconomics	BUS222	3
Sociology	SOC121	3

NATURAL SCIENCES	Course Number	Credit Hours
Anatomy and Physiology I (Lab)	BIO121	4
Anatomy and Physiology II (Lab)	BIO122	4
Science, Energy and the Environment (Lab)	BIO126	4
Human Biology (Lab)	BIO127	4
Meteorology (Lab)	BIO129	3
General Biology I (Lab)	BIO141	4
General Biology II (Lab)	BIO142	4
Principles of Microbiology (lab)	BIO221	4
Introduction to Chemistry (No Lab)	CHM101	4
General, Organic & Biological Chem I (Lab)	CHM121	4
General, Organic & Biological Chem II (Lab)	CHM122	4
General Chemistry I (Lab)	CHM141	5
General Chemistry II (Lab)	CHM142	5
Principles of Physics (Lab)	PHY101	4
College Physics I with Algebra (Lab)	PHY121	4
College Physics II with Algebra (Lab)	PHY122	4
Astronomy (Lab)	PHY105	4
General Physics II with Calculus (Lab)	PHY222	5