



Miami University
Mathematics
 Associate of Science to Bachelor of
 Science

Effective beginning Academic Year 2019-20 (Last revised June 18, 2021)

The following table outlines how transfer credits will be applied to the Bachelor of Science in Mathematics degree at Miami University for students who completed an Associate of Science degree via the Ohio Guaranteed Mathematics (AS to BS) Transfer Pathway. The OGTP designation guarantees the transfer and applicability of credits, but does not guarantee admission to a program. Some bachelor-degree granting programs may be competitive, and students should check with individual institutions for their program admission requirements.

COURSE EQUIVALENCIES FROM THE ASSOCIATE DEGREE	Course Number	Credit Hours
GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		
Any Ohio Transfer 36 approved First Writing (TME001) course	ENG 111	3
Calculus I (TMM005)	MTH 151	5
Any Ohio Transfer 36 approved Arts and Humanities course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Arts and Humanities course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course	Ohio Transfer 36 Elective*	3
Calculus-based Physics I with lab (OSC016)	PHY 191	5
Calculus-based Physics II with lab (OSC017) or any Ohio Transfer 36 approved Natural Sciences course	PHY 192	5
Any Ohio Transfer 36 approved Second Writing (TME002) course	ENG 112	3
Calculus II (TMM006)	MTH 249 or MTH 251	4-5
Up to 3 additional hours of Ohio Transfer 36 approved courses	Ohio Transfer 36 Elective*	0-4
PRE-MAJOR/BEGINNING MAJOR		
Calculus III (OMT018)	MTH 252	4
Elementary Linear Algebra (OMT019)	MTH 222	3
Elementary Differential Equations (OMT020)	MTH 245	3
OTHER RECOMMENDATIONS		
General Electives as needed (May include FYE or Orientation course) ¹	Varies*	9-17
TOTAL HOURS FROM ASSOCIATE DEGREE:		60-65
Advising Notes: (*) Indicates that coursework will be evaluated for applicable equivalency upon transfer at the university. If a Transfer Assurance Guide (TAG) course is taken, the approved course equivalency will be awarded. ¹ Miami University recommends two semesters of foreign language be taken during the associate degree if possible, or that credit has been earned via an approved Advanced Placement or International Baccalaureate exam through the end of the beginning level (or higher). The College of Arts & Sciences (CAS) requires that students earn credit in a foreign language at or beyond the 202-level. If not taken during the associate degree, up to four semesters of foreign language may need to be taken upon transfer.		

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.

The following additional coursework will be required to complete the Bachelor of Science in Mathematics degree at Miami University after a student has completed their Associate of Science Ohio Guaranteed Mathematics (AS to BS) Transfer Pathway degree. 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.

REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE		Course Number	Credit Hours
Major Core Course/ Advanced Writing Requirement:	Proof: Introduction to Higher Mathematics	MTH 331	3
Major Core Course:	Introduction to Abstract Algebra	MTH 421	4
Major Core Course:	Real Analysis	MTH 441	3
Major Core Course:	Choose two Theory Courses at 400-level	MTH 411, 422, 425, 438, 451, 483, 486, or 491	6-8
Major Core Course:	Choose two Application Courses at 400-level	MTH 347, 432, 435, 436, 437, 439, 447, 453, or 495	6
Major Elective Course/ Capstone:	MTH Electives; should include a capstone ¹	Theory course, Application course, or MTH 410, 420, 440, 482; STA 401, 462	4-6
Major Core Course:	Related Area - Part I: Computer Programming	Varies	3
Major Core Course/ Thematic Sequence:	Related Area - Part II: cluster of courses in one of ACC, CHM, CSE, ECO, ECE, PHY, or STA ²	Varies	12
Divisional Requirement:	First (if needed) and Second year of selected foreign language sequence	101, 102, 201, and 202	6-14
General Education:	Experiential Learning Requirement	Varies	3
General Education:	Intercultural Perspectives Course	Varies	3
General Education:	Global Perspectives Courses	Varies	6
General Electives:	General Electives ³	Varies	3
REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE TOTAL:⁴			62-70
<p>Advising Notes:</p> <p>¹This program requires at least 28 semester hours in MTH or STA at the 300+ level, with at least 22 hours at the 400+ level. At least 12 of the hours at the 400-level must be earned at Miami. The capstone course requirement will be met if MTH 425, MTH 435, or MTH 482 are taken among these credit hours. Please work closely with your advisor.</p> <p>²At least six hours must be advanced level. In CHM, CSE, and PHY this is any course at the 200+ level. In ACC, ECO, ECE, and STA this is any course at the 300+ level.</p> <p>³Students are required to attend an orientation session and will meet with an advisor to review the coursework coming in, as well as what they should register for the following semester. At this time, the divisional requirements for CAS will be addressed so that students are able to be efficient in their course selection.</p> <p>⁴Miami University requires a total of 124 credit hours for degree completion. The total number of hours to complete the bachelor's degree represents a range of hours that may be needed depending on the individual course selections made during the associate degree program.</p>			

COMPLETE BACHELOR'S DEGREE	Total Credit Hours
BACHELOR'S DEGREE TOTAL:	124

SPECIAL NOTES

For more information, please contact:
College of Arts & Sciences Advising Office
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(513) 529-3031
<http://miamioh.edu/cas/academics/advising/>

SAMPLE DEGREE MAP

THIRD YEAR

SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
MTH 331 Proof: Introduction to Higher Mathematics	3	MTH 421 Introduction to Abstract Algebra	4
MTH Application Course 400+ Level	3	MTH Application Course 400+ Level	3
Foreign Language 201	3	Foreign Language 202	3
Related Area - Part II	3	Related Area - Part II	3
Related Area - Part I: Computer Programming	3	Global Perspectives Course	3
Total Semester 5 Credit Hours	15	Total Semester 6 Credit Hours	16

FOURTH YEAR

SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
MTH 441 Real Analysis	3	MTH Theory Course 400+ Level	3-4
MTH Theory Course 400+ Level	3-4	MTH 400+ Level	3
MTH Elective/Capstone	3-4	MTH Elective	0-2
Related Area - Part II	3	Related Area - Part II	3
Global Perspectives Course	3	Experiential Learning Requirement	3
		Intercultural Perspectives Course	3
Total Semester 7 Credit Hours	15-17	Total Semester 8 Credit Hours	15-18