## **Mathematics Minor**

For information, contact the Department of Mathematics, mathematics@miamioh.edu, 513-529-5818.

This minor provides students with an increased understanding of, and competence in, mathematics. Building on a base of calculus and linear algebra, already required for many majors, students further develop their understanding by taking three upper-level courses in theoretical and/or applied mathematics.

To complete the minor in Mathematics, you must have at least a 2.00 grade point average (GPA) over the courses in the minor. All courses taken for the minor must be for a grade, not for credit/no-credit. This minor is not available to majors in Mathematics, Mathematics and Statistics, or Integrated Mathematics.

## **Program Requirements**

(19-24 semester hours)

Code	Title	Credit Hours
Select one of the	following courses:	4-5
MTH 249	Calculus II	
MTH 251	Calculus II	
The following cou	rse is required:	4
MTH 252	Calculus III	
Select one of the	following courses:	2-4
MTH 222	Introduction to Linear Algebra	
MTH 222T	Introduction to Linear Algebra (Honors) <sup>1</sup>	
MTH 246	Linear Algebra and Differential Equations for Engineers	
Select three cours	ses from the list below.	9-11
At least two of the level.	ese selected courses must be at the 400	
At least one of the taken at Miami.	ese selected 400-level courses must be	
MTH 331	Proof: Introduction to Higher Mathematics	
or MTH 331	T Proof: Introduction to Higher Mathematics	(H)
MTH 347	Differential Equations	
MTH 411	Foundations of Geometry	
MTH 421	Introduction to Abstract Algebra	
MTH 425	Number Theory	
MTH 432	Optimization	
MTH 433	Applied Linear Algebra	
MTH 435	Mathematical Modeling Seminar	
MTH 438	Theory and Applications of Graphs	
MTH 439	Combinatorics	
MTH 441	Real Analysis	
MTH 447	Topics in Mathematical Finance	
MTH 451	Introduction to Complex Variables	
MTH 453	Numerical Analysis	
MTH 455	Introduction to Partial Differential Equations	

Total Credit Hours			19-24
_	or MME 495	Introduction to Applied Nonlinear Dynamics	
	MTH 495	Introduction to Applied Nonlinear Dynamics	
	MTH 491	Introduction to Topology	
	MTH 486	Introduction to Set Theory	
	MTH 483	Introduction to Mathematical Logic	

<sup>&</sup>lt;sup>1</sup> MTH 222T must be taken concurrently with MTH 331T.