APPLIED MATHEMATICS - MINOR

College of Arts and Sciences
Department of Mathematical Sciences
233 Mathematics and Computer Science Building
Kent Campus
330-672-2430
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www.kent.edu/math

Description
The Applied Mathematics minor offers courses in several areas of mathematics that are applicable to sciences and can be combined with science majors.

FULLY OFFERED AT:
• Kent Campus
• Stark Campus

Admission Requirements
Admission to a minor is open to students enrolled in a bachelor's degree, the A.A.B. or A.A.S. degree or the A.T.S. degree (not Individualized Program major). Students enrolled only in the A.A. or A.S. degree or the A.T.S. degree in Individualized Program may not declare a minor. Students may not pursue a minor and a major in the same discipline.

Minor Requirements
[AMTH]

Minor Prerequisites
MATH 10774 ALGEBRA FOR CALCULUS STRETCH II (KMCR)
or MATH 10775 ALGEBRA FOR CALCULUS PLUS (KMCR)
or MATH 11010 ALGEBRA FOR CALCULUS (KMCR)
MATH 11022 TRIGONOMETRY (KMCR)
Prerequisite Electives, choose from the following:
CS 10061 INTRODUCTION TO COMPUTER PROGRAMMING
CS 13001 COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING
CS 13011 & CS 13012 COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING and COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING
DSCI 15310 COMPUTATIONAL THINKING AND PROGRAMMING

Minor Requirements
MATH 12002 ANALYTIC GEOMETRY AND CALCULUS I (KMCR) 5
MATH 12003 ANALYTIC GEOMETRY AND CALCULUS II 5
Choose from the following: 8-10
Selection A
MATH 21001 LINEAR ALGEBRA WITH APPLICATIONS
MATH 22005 ANALYTIC GEOMETRY AND CALCULUS III
MATH 32044 INTRODUCTION TO ORDINARY DIFFERENTIAL EQUATIONS

Selection B
MATH 32051 MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES I
MATH 32052 MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES II
Minor Electives, choose from the following: 6
MATH 23022 DISCRETE STRUCTURES FOR COMPUTER SCIENCE
or MATH 31011 DISCRETE MATHEMATICS
MATH 40011 INTRODUCTION TO PROBABILITY THEORY AND APPLICATIONS
MATH 40012 INTRODUCTION TO STATISTICAL CONCEPTS
MATH 40051 TOPICS IN PROBABILITY THEORY AND STOCHASTIC PROCESSES
MATH 41021 THEORY OF MATRICES
MATH 42011 MATHEMATICAL OPTIMIZATION
MATH 42031 MATHEMATICAL MODELS AND DYNAMICAL SYSTEMS
MATH 42039 MODELING PROJECTS (ELR) (WIC)
MATH 42041 ADVANCED CALCULUS
MATH 42045 INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS
MATH 42048 INTRODUCTION TO COMPLEX VARIABLES
MATH 42201 INTRODUCTION TO NUMERICAL COMPUTING I
MATH 42202 INTRODUCTION TO NUMERICAL COMPUTING II

Minimum Total Credit Hours: 24

1 A minimum C grade must be earned in CS 13011 and CS 13012.
2 Students should select electives in consultation with the student’s minor advisor.
3 Credit for both MATH 23022 and MATH 31011 is not permitted. Students planning to take Computer Science upper-division courses (CS 30000 or 40000 level) must take MATH 23022.

Graduation Requirements
Minimum Minor GPA 2.000

• Students must complete at least two upper-division (30000 or 40000 level) courses in the minor at Kent State on a graded basis (A-F).