MATHEMATICS EDUCATION, ASSOCIATE OF SCIENCE (450)

About Our Program

This program is intended to provide the first two years of a four-year baccalaureate program. This program studies the mathematical principles, relationships, and methods of analysis as well as approaches and materials used in educating students in mathematics. Mathematics Education majors intend to teach, usually at the secondary level.

Nature of Work and Employment

After completion of a Bachelor's degree with a major in this field, students are prepared to become a high school or middle school teacher, or pursue an advanced degree.

Special Considerations

The listed coursework is a recommendation only. Students should check with a student advisor for HCC graduation requirements, and specific university requirements in this major. Students must meet with an advisor to ensure that the special requirements of the department and institution to which they plan to transfer are met.

Requirements

Associate of Science Requirements

Students must meet all requirements for the Associate of Science degree (https://catalog.highland.edu/programs-available/as-requirements/) in order to graduate from Highland Community College. For more information, please see your advisor.

Recommended Courses

The following are recommended courses for this major only.

Mathematics

Code	Title	Hours
MATH 250	Analytic Geometry/Calculus I [1]	5
MATH 255	Analytic Geometry/Calculus II [1]	5
MATH 269	Analytic Geometry/Calculus III [1]	4

Computer Science

Code	Title	Hours
INFT 190	Prin of Computer Science I [1]	3
INFT 290	Prin of Computer Science II [1]	3

Education

Code	Title	Hours
EDUC 224	The Exceptional Individual	3
EDUC 221	American Public School	3
or EDUC 222	Education As An Agent Change	

Psychology

Code	Title	Hours
PSY 161	Introduction to Psychology [1]	3
PSY 261	Educational Psychology [1]	3

[1] Course has a prerequisite. See course description.

Program Outcomes

- Students should be able to analyze relationships among quantities in order to determine inferences and conclusions.
- Students should apply problem solving techniques in a variety of situations.
- Students should apply basic arithmetic operations (add, subtract, multiply, divide) to fractions, decimals, and percentages in real applications.
- Students should be able to draw inferences from mathematical models such as formulas, tables, and graphs.
- Students should be able to arrange numerical information into appropriate tables and/or graphs.
- Students should use the fundamental concepts of Algebra/ Trigonometry to calculate solutions to problems/equations both with and without a calculator.
- Students should be able to employ a conceptual understanding of limit, continuity, differentiation, and integration as well as a thorough background in techniques and application of Calculus.

Program Contacts

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Brendan Dutmer, Dean, Natural Science and Mathematics
- Marty Hilberg, Mathematics Faculty
- Steve Mihina, Mathematics Faculty
- Jenna Rancingay, Mathematics Faculty
- Mark Rasmussen, Mathematics Faculty
- Beth Groshans, Student Advisor