

What Can I Do With a Major in...

Mathematics Teachers guide middle and/or high school students in the exploration of mathematical concepts, problems, equations and sometimes technology. A general description of teacher work activities includes: planning courses, instructing students, interacting with parents and administration, and keeping up with developments in the field.

Mathematics Education majors at Pitt-Bradford take courses in Education and Mathematics to prepare students to lead their own classroom after graduation. Courses for majors include Discrete Mathematics, Calculus, Linear Algebra, Geometry, Statistics, Computer Science, Child Development, Introduction to Education, Educational Law, Educational Psychology, and Secondary Methods. Mathematics Education majors receive hands-on training by observing classrooms, hosting elementary school children at events on campus, and student teaching.

REQUIRED SKILLS

- Teaching
- Knowledge of Mathematics
- Writing and Presenting
- Decision Making
- Organization
- Flexibility
- Problem Solving
- Creativity

POSSIBLE EMPLOYERS

- School System
- Insurance Company
- Consulting Firm
- Research Corporation
- Computer Software Company
- Library
- College or University
- Government Agency

EMPLOYMENT OPPORTUNITIES

Accountant
 Actuary
 College/University Professor
 Computer Programmer
 Cryptographer
 Engineer
 Financial Analyst
 Grant Writer
 High Inventory Control Specialist
 Investment Analysis

Librarian
 Operations Research Analyst
 Research Analyst
 Revenue Agent
 School Administrator
 Software Specialist
 Statistician
 Teacher
 Tutor
 Underwriter

**Some careers will require advanced training, certification and/or education*

MATHEMATICS EDUCATION

University of Pittsburgh at Bradford Mathematics Education Major Curriculum

Degree: Bachelor of Science

Division: Management & Education

Program Contact: Dr. Donna Dombek, 151 Swarts Hall, dma18@pitt.edu , 814.362.7617

The Mathematics Education major consists of a 133-135-credit curriculum leading to a Bachelor of Science degree. Consistent with the overall mission of the University of Pittsburgh at Bradford, the Mathematics Education major includes a liberal arts general education, much of which is taken during the first two years of study.

Course Requirements in the Major

MATH 0135 Discrete Math

MATH 0140 Calculus I

MATH 0150 Calculus II

MATH 0201 Calculus III

MATH 0202 Ordinary Differential Equations

MATH 0206 Linear Algebra

MATH 0207 Geometry or

MATH 1303 Math Modeling

MATH 1309 Probability & Statistics

MATH 1312 Abstract Algebra & Number Theory

MATH 1315 Advanced Differential Equations

MATH 1318 Introduction to Analysis

MATH 1452 Capstone

CS 0101 Introduction to Computer Science

EDUC 0204 Introduction to Education

EDUC 0215 English Language Learners

EDUC 0220 Special Education Law

EDUC 1307 Secondary Methods

EDUC 1325 Development of Exceptional Children

EDUC 1330 Educating Exceptional Children

EDUC 1350 Educational Psychology and Measurement

EDUC 1378 Reading & Writing in Content Curriculum

EDUC 1481 Student Teaching

EDUC 0210 Education Practicum 1

EDUC 1310 Education Practicum 2

EDUC 1410 Education Practicum 3

All courses in the major must be completed with a C- or higher and a 3.0 grade point average must be maintained.

Students accepted to Pitt-Bradford may declare education as a major but are not fully an education student until being officially admitted into the teacher education program. Students need to meet certain criteria before applications can be accepted: successful completion of 60 credits, successful completion of the PRAXIS I (PPST) Exams, and achieve a cumulative GPA of 3.0

PROFESSIONAL ORGANIZATIONS

National Council of Teachers of Mathematics

www.nctm.org

The National Association of Mathematicians

www.nam-math.org

American Mathematical Society

www.ams.org

Pennsylvania Association of Mathematics Teacher Educators

www.pamte.org

FIND OUT MORE ABOUT CAREERS IN MATHEMATICS EDUCATION AT:

ProTeacher

www.ProTeacher.com

UPB Teacher Education

websites.pdesas.org/jar1/default.aspx

Occupational Outlook

www.bls.gov/oco/ocos318.htm

Career Services

www.upb.pitt.edu/career.aspx