

Mathematics

Mathematics evolved from counting, measurement, and the study of shapes and the motion of physical bodies into a harmonious collaboration of beauty and utility, abstraction and application. The study of mathematics trains the student to search for unity and a desire to treat phenomena comprehensively. Mathematics makes the invisible visible through the use of language and the study of abstractions, patterns and relationships, computation and calculation.

DEGREES OFFERED

- Bachelor of Science in Mathematics
- Bachelor of Arts in Mathematics
- Minor in Mathematics

PROGRAM INFORMATION

Mathematics at Newman University involves numerical, algebraic and graphical analysis of patterns and problems. The patterns can involve simple counting numbers or real or complex numbers. Problems solved with mathematics can range from statistical questions to questions about 3-dimensional surfaces. The program has connections to a variety of fields of study such as music, computer graphics, probability and many more.

Core Mathematics

Students should demonstrate a broad understanding of mathematics, demonstrated by competency in the following areas: statistics, calculus, geometry, and algebra.

Critical Thinking

Students should develop clear analytical thinking skills, as demonstrated by the following.

- **Proof:**

Students should demonstrate the ability to employ rigorous reasoning to construct logically correct arguments.

- **Problem Solving:**

Students should demonstrate the ability to formulate problems quantitatively, and interpret the solutions.

Communication

Students should demonstrate the ability to effectively communicate mathematics.

Technology

Students should be able to employ technology as one of a variety of problem solving strategies.

Ethics

Students can distinguish between ethical and unethical uses of data.

High School Preparation

It is recommended that students complete four years of English, four years of mathematics and four years of science in high school.

PROMINENT CAREERS

Mathematicians make important contributions to society by helping to solve problems in such diverse fields as:

Medicine
Management
Economics
Government
Computer science
Physics
Psychology
Engineering
Social science
Research
Education/Teaching

Students who prepare as high school mathematics teachers have always found employment in Kansas. The bachelor of science degree prepares a person for employment in math related fields or for graduate study.

Mathematics graduates find jobs in fields such as:

Statistical modeling
Operations research
System engineering
Actuarial science

EXPERT, ACCESSIBLE FACULTY

The Mathematics program consists of a group of carefully selected scholarly and professional practitioners who creatively introduce students to emerging theory and current best practices.

Newman Graduates regularly cite close collaboration with talented, dedicated faculty as one of their most meaningful experiences at Newman.

Newman faculty members are more than just leaders in their field. They take an active and personal role in students' studies and progress, forming strong relationships with students through coursework, special projects and informal out of class discussions.

ACCREDITATION

Newman University is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools, www.ncahigherlearningcommission.org.

FINANCIAL AID

With many scholarships, grants, work-study and company tuition assistance programs available, the cost of a degree from Newman University is comparable to that of state universities.

PROGRAM CONTACT

For more information or if you have questions about this program contact Associate Professor John Vogt at vogtj@newmanu.edu.

To contact Newman University

Admissions, office hours are 8 a.m. to 6 p.m., Monday-Thursday and 8 a.m. to 5 p.m. on Friday. For a personal appointment call 316-942-4291, ext. 2144 or e-mail admissions@newmanu.edu. Call us Toll-Free at 877-NEWMAN (639-6268) or visit our website at www.newmanu.edu.