# **Minor in Applied Mathematics**

### **University Core Curriculum Requirements**

### General Education Distribution Area Cr. Hrs.

#### Fine Arts (FA)\*

6

9

2 courses, from at least two of the following areas of study: Art, CMT (Mass Media or Theatre), Music (includes Dance).

#### Humanities (HU)\*

3 courses, from at least two of the following areas of study: CMT (Communication), English, Linguistics. Philosophy, Women's and Gender Studies, World Languages and Cultures, (Note: No more than two foreign language courses may be used to fulfill this requirement.)

#### Behavioral/Social Sciences (SB)\*

9

3 courses, from at least two of the following areas of study: African & African American Studies, Anthropology, Computer Science, Economics, Geography & Environmental Studies, History, Justice Studies, Latino & Latin American Studies, Political Science, Psychology, Sociology, Social Work

#### Natural Sciences (NS and NSL)\*\*

9

3 courses, from at least two of the following areas of study; one course must have a laboratory component (NSL): Biology, Chemistry, Earth Science, Environmental Science, Physics (Note: If an FYE ANTH that counts as Natural Science is taken, only one Biology course may be used for Natural Science).

#### **Engaged Learning Experiences**

Students must complete, at Northeastern, three courses designated as Engaged Learning Experiences courses. One of the Engaged Learning Experiences courses must be at the 300-level, and one Engaged Learning Experiences course must be designated as "Boundary Crossing".

#### Discipline Specific (ELE-DS)

These courses have pre-requisites that are specific courses within a program of study. Discipline Specific courses give students a deeper understanding of how knowledge is created and applied in their field.

#### **Boundary Crossing (ELE-X)**

These are courses that cross disciplinary boundaries and/or cross boundaries through engagements outside the classroom or University allowing students to see how knowledge gained in one field might inform other fields or other aspects of society.

#### Math/Quantitative Reasoning (MA)

1 Math course, that has intermediate Algebra as prerequisite OR is a course listed on the General Education Distributive Learning List of Approved Courses. Any 3 hour college level math course, beyond Intermediate Algebra, meets this requirement.

- \* Majors in Fine Arts, Humanities or Social/Behavioral Sciences, may waive up to 6 credit hours of General Education requirements in the corresponding distribution area.
- \*\* Majors in Natural Sciences may waive up to 9 credit hours of General Education requirements in the Natural Sciences distribution area.

Students should also be aware of all other university requirements to obtain a degree - NEIU requirements (http://catalog.neiu.edu/graduation-requirements/bachelors-degree/)

## Minor in Applied Mathematics (26 cr. hrs.)

Code	Title	Hours
Required Courses		
MATH-187	Calculus I	4
MATH-202	Calculus II	4
MATH-203	Calculus III	4
MATH-253	Linear Algebra I	3
MATH-311	Writing Intensive Program: Introduction To Advanced Mathematics	5
Select two Elective courses from the	approved list of courses/check with advisor	6
Total Hours		26
Code	Title	Hours
Elective courses:		
MATH-301	Ordinary Differential Equations I	4
MATH-302	Ordinary Differential Equations II	3
MATH-303	Partial Differential Equations	3
MATH-304	Introduction To Numerical Analysis	3
MATH-305	Probability And Statistics	4
MATH-306	Linear Programming And Extensions	3
MATH-307	Introduction To Stochastic Processes	3
MATH-334	Mathematical Statistics I	3
MATH-336	Statistical Inference	4
MATH-338	Introduction To Real Analysis	3
MATH-339	Vector Calculus	4
MATH-340	Computing For Mathematicians	4
MATH-343	Linear Algebra II	3
MATH-365	Statistical Computer And Data Analysis Packages	3

At least three classes in the minor must be taken at NEIU. Handbooks on all math minor programs are available from the Department of Mathematics.