



City Colleges of Chicago Transfer Guide Bachelor of Arts in Mathematics

Available at:
NEIU Main Campus (Chicago, IL)

Mathematics Program Description

The Bachelor of Arts degree in Mathematics provides preparation for mathematics-related careers and for graduate study. Specializations are offered in the areas of applied mathematics and secondary teaching.

Contact Information

Northeastern Illinois University Transfer Center: Students who have questions about the program prior to admission may contact the Northeastern Illinois University Transfer Center at (773) 442-4076 or email TransferSteps@neiu.edu.

Student Center for Science Engagement (SCSE): The SCSE supports students enrolled in majors in the biology, chemistry, computer science, earth science, math, physics, and psychology fields. For more information, please contact Laura West, Student Academic Services Specialist in STEM at 773-442-5664 or L-West2@neiu.edu.

Admission Requirements

- Students must have earned a minimum cumulative grade point average of 2.0 or higher for all college or university course work attempted. Students must be in good academic standing at the last college or university attended.
- Required documents are: application for admission, \$30 nonrefundable application fee, and official transcripts from all colleges and universities.
- Additional Admission and application materials, including the option to apply online can be found at www.neiu.edu/Transfer.
- Application deadlines are as follows:

		<i>International Applicants</i>
Fall	July 1	June 1
Spring	November 1	October 1
Summer I	April 1	March 1
Summer II	May 1	April 1

Transfer Policies

- Students with an AA degree from an Illinois Community College and/or completion of the IAI will have fulfilled Northeastern Illinois University's general education requirements.
- A maximum of 64 semester hours may be transferred to Northeastern from a community college. In cases where both a community college and university were attended, a maximum of 90 semester hours are accepted, with a maximum of 64 semester hours allowed at the community college level.
- Additional information about transferring and transfer policies are available at www.neiu.edu/Transfer.

Northeastern Illinois University Degree Requirements

- 1.) **General Education:** 36 credit hours (see requirements below).
- 2.) **English 101 or equivalent (grade of “C” or higher):** At CCC, take ENGLISH 101 – Composition.
- 3.) **Total Credits and Credit Levels:** A minimum of 120 semester hours must be earned by every undergraduate student to be eligible to graduate from Northeastern. **Students must complete a minimum of 40 semester hours at the 300 level to meet the Upper Division requirement.**
- 4.) **Major Program:** Undergraduate students must declare and complete a major. Students must earn a grade of “C” or higher in all courses counted toward the major. No “P” grades will count toward a major.
- 5.) **Residency:** Must complete a minimum of 30 credit hours at Northeastern.
- 6.) **GPA:** Students must have a minimum cumulative 2.0 GPA (overall “C” average). Some academic programs and departments have other specific grade requirements.
- 7.) **Improving Human Relations:** The Improving Human Relations requirement may be met through the General Education program. Courses are available in both the Humanities and Social / Behavioral Sciences categories. You may choose a course that meets the Improving Human Relations requirement **and** Humanities or Social / Behavioral Sciences.
- 8.) **WIP (Writing Intensive Program):** Students must successfully complete a writing intensive course within their discipline. **This course must be completed at Northeastern.** Students completing the Bachelors of Arts in Mathematics fulfill this requirement by taking MATH 251 – WIP: Intro to Advanced Mathematics.
- 9.) **University Core Curriculum (UCC):** Students must complete three Engaged Learning Experience (ELE) courses. ELE courses are either Boundary Crossing (ELE-X) or Discipline Specific (ELE-DS) and are chosen in consultation with the student’s advisor. At least one course must be at the 300 level and one course must be an ELE-X course as part of meeting the requirement.

General Education Requirements

Four options are available to students who plan to complete their General Education requirements at CCC.

- **Associate of Arts:** Students who transfer with an approved Illinois Community College Board (ICCB) Model Associate of Arts degree will have met Northeastern Illinois University’s General Education Requirements. For information regarding completing an Associate of Arts at CCC, including assistance with course selection, please visit Advising Services at CCC. More information is available at their website (<http://www.ccc.edu/departments/Pages/Advising.aspx>) or by calling (773) 265-5343.
- **Associate of Science:** Students who transfer with an approved Illinois Community College Board (ICCB) Model Associate of Science degree granted August 2016 or earlier will have met Northeastern Illinois University’s General Education requirements. Students who transfer with an approved ICCB Model Associate’s degree granted December 2016 or later may need to take one additional Humanities course and one additional Social and Behavioral Sciences course to meet Northeastern’s General Education requirements. For information regarding completing an Associate of Arts at CCC, including assistance with course selection, please visit Advising Services at CCC. More information is available at their website (<http://www.ccc.edu/departments/Pages/Advising.aspx>) or by calling (773) 265-5343.

- **Complete the *Illinois Articulation Initiative (IAI)*:** Students who transfer after completing the Illinois Articulation Initiative (IAI) will have met their General Education requirements. For information regarding the Illinois Articulation Initiative, including courses at CCC that fulfill General Education requirements, please visit the iTransfer web site at www.itransfer.org.
- **Transfer Course Lists for CCC:** Students may choose to meet their General Education requirements by selecting courses from Northeastern's Transfer Course Equivalency Guides, available at: www.neiu.edu/Transfer. **When choosing this option, please use the following Northeastern General Education guide:**

Northeastern Illinois University General Education Program		
The General Education Program requires a minimum of 36 credit hours of courses distributed among 5 areas.		
Northeastern Illinois University Requirement	Credits	City Colleges of Chicago Equivalent (if any)
Math / Quantitative Reasoning – one course (3 hours)	3	<ul style="list-style-type: none"> Students will fulfill the Math/ Quantitative Reasoning requirement by completing the major in Mathematics.
Social / Behavioral Sciences 3 courses (9 hours)	9	<ul style="list-style-type: none"> No more than two courses from the same department may be used.
Natural Sciences 3 courses (9 hours)	9	<ul style="list-style-type: none"> No more than two courses from the same department may be used. One course must have a lab component.
Fine Arts 2 courses (6 hours)	6	<ul style="list-style-type: none"> No more than one course from the same department may be used.
Humanities 3 courses (9 hours)	9	<ul style="list-style-type: none"> No more than two courses from the same department may be used. No more than two foreign language courses may be used to fulfill this requirement.

Mathematics Major Requirements

Northeastern Illinois University Mathematics Major: 45 Credits		
Northeastern Illinois University Course	Credits	City Colleges of Chicago Equivalent (if any)
Pre-Requisite Courses for MATH 187 Calculus I:		Pre-Requisite Courses for MATH 207 Calculus & Analytical Geometry I:
MATH 185 Pre-Calculus	4	MATH 143 Pre-Calculus
Or		Or
MATH 173 College Algebra	3	MATH 140 College Algebra
<u>and</u>		<u>and</u>
MATH 175 Trigonometry	3	MATH 141 Plane Trigonometry
MATH 187 Calculus I	4	MATH 207 Calculus & Analytic Geometry I
MATH 202 Calculus II	4	MATH 208 Calculus & Analytic Geometry II
MATH 203 Calculus III	4	MATH 209 Calculus & Analytic Geometry III
MATH 251 WIP: Intro to Advanced Mathematics <i>(This course must be completed at Northeastern)</i>	5	<i>No Equivalencies at City Colleges of Chicago.</i>
MATH 253 Linear Algebra I	3	MATH 212 Linear Algebra
MATH 340 Computing for Mathematicians	4	<i>No Equivalencies at City Colleges of Chicago.</i>

Applied Mathematics Track		
MATH 334 Mathematical Statistics I	3	<i>No Equivalencies at City Colleges of Chicago.</i>
MATH 336 Mathematical Statistics II	3	
MATH 339 Vector Calculus	3	
Four Mathematics 300-level courses selected from the list of electives below.	12	
Teaching of Secondary Mathematics Track		
MATH 305 Probability and Statistics	3	<i>No Equivalencies at City Colleges of Chicago.</i>
MATH 312 Foundations of Geometry	3	
MATH 321 History of Mathematics	3	
MATH 331 Abstract Algebra I	3	
MATH 338 Introduction to Real Analysis	3	
Two Mathematics 300-level courses selected from the list of electives below	6	
List of Elective Courses (for both tracks)		
MATH 301 Ordinary Differential Equations I	3	<i>No Equivalencies at City Colleges of Chicago.</i>
MATH 302 Ordinary Differential Equations II	3	
MATH 303 Partial Differential Equations	3	
MATH 304 Introduction to Numerical Analysis	3	
MATH 306 Linear Programming and Extensions	3	
MATH 307 Probability Models for Operations Research	3	
MATH 309 Numerical Analysis II	3	
MATH 312 Foundations of Geometry	3	
MATH 322 Number Theory	3	
MATH 326 Real Analysis	3	
MATH 328 Complex Variables	3	
MATH 331 Abstract Algebra I	3	
MATH 332 Abstract Algebra II	3	
MATH 334 Mathematical Statistics I	3	
MATH 336 Mathematical Statistics II	3	
MATH 337 Theory of Equations	3	
MATH 338 Introduction to Real Analysis	3	
MATH 339 Vector Calculus	3	
MATH 343 Linear Algebra II	3	
MATH 365 Statistical Computer and Data Analysis Packages	3	
MATH 370 Mathematical Modeling in the Natural Sciences	3	
MATH 374 Modeling and Simulations of Complex Systems Networks	3	
Mathematics Major Policies		
<ul style="list-style-type: none"> • Students must earn a grade of "C" or higher in all courses counted toward the major. No "P" grades will count toward a major. Mathematics courses with "D" grades may be used as university electives. • Transfer courses must be approved by the department before being applied to the major or minors during the first term of enrollment. • Transfer Students must complete half of the courses applied to the major at Northeastern. 		

Tuition, Financial Aid and Scholarships

Northeastern Illinois University is committed to providing an affordable education. That's why our tuition and fees are among the most affordable of the Illinois Public Universities. We offer a **tuition guarantee program** that guarantees incoming students the same tuition rate for four years.

For information about financing your education at Northeastern, including Financial Aid and Scholarship opportunities, please see our website: <http://www.neiu.edu/financial-aid/>. You may also contact our Financial Aid Office directly at (773) 442-5016 or email Financial-Aid@neiu.edu. If you are completing the Free Application for Federal Student Aid (FAFSA), Northeastern's federal School code is **001693**.

Provost and Deans Merit Scholarships for TRANSFER students:

Provost Merit Scholarship

Scholarships in the amount of **\$2,000** will be awarded to new transfers who meet the following criteria and who apply early for admission. Scholarships will be awarded on a first-come first-serve basis:

- Admitted entering transfer students with an Associate of Arts or Associate of Science (or at least 60 earned credits).
- Must have at least a cumulative transfer GPA of 3.50.
- Must be an Illinois resident.
- Must be enrolled full time at Northeastern.

Deans Merit Scholarship

Scholarships in the amount of **\$1,000** will be awarded to new transfers who meet the following criteria and who apply early for admission. Scholarships will be awarded on a first-come first-serve basis:

- Admitted entering transfer students with an Associate of Arts or Associate of Science (or at least 60 earned credit hours).
- Must have at least a cumulative transfer GPA of 3.00.
- Must be an Illinois resident.
- Must be enrolled full time at Northeastern.

Until all of the scholarships are awarded, students who meet these qualifications will automatically be considered for the Provost and Deans Merit Scholarships at the time of applying for admission to Northeastern. Completing an additional application is not necessary. The Office of Scholarships may be reached at (773) 442-4606 or scholarships@neiu.edu.