

# Mathematics Transfer Guide McHenry County College

This transfer program for the prospective Mathematics major is recommended by the Illinois Articulation Initiative (IAI) and can be incorporated into MCC's Associate in Arts (A.A.) or Associate in Science (A.S.) degree. It is designed to help students who have decided on the major but who are **undecided about a baccalaureate transfer school. If you know where you will transfer, do not use this guide. Instead, use course information specific to the major at that school.** The decision to accept courses is always up to the transfer school, and responsibility for complying with requirements ultimately rests with the student.

Baccalaureate Mathematics programs prepare students for diverse careers by developing rigorous, logical thinking; an appreciation and familiarity with complex structures and algorithms; and the ability to learn technical material and abstract concepts. Four-year schools have specific requirements for admission to the major (e.g., minimum grade point average).

The following are course suggestions to follow while you are deciding on a specific transfer institution. **It is highly advised that students complete the entire Calculus sequence at a single institution.** Course content may vary widely among institutions, and completing the sequence at a single institution is the best way to assure that neither credit nor content is lost in transfer. **(Please remember that all of these courses may not be required at the transfer school you choose.)**

## PLEASE SEE AN ADVISOR FOR GUIDANCE IN SELECTING A TRANSFER SCHOOL AND APPROPRIATE COURSEWORK.

### IAI General Education Core Curriculum

#### **Communications: 3 courses (9 semester credits)**

ENG151 (3 cr.) – Composition I  
ENG152 (3 cr.) – Composition II  
SPE151 (3 cr.) – Introduction to Speech

#### **Mathematics: 1 or 2 courses (3 to 6 semester credits)**

(The A.A. degree requires 3 credits and the A.S. degree requires 6 credits.\*)

MAT175 (5 cr.) – Calculus w/Analytic Geometry I  
**and/or**  
MAT245 (5 cr.) – Calculus w/Analytic Geometry II

#### **Physical and Life Sciences: 2 courses (8 semester credits)**

Select 1 course from IAI Physical Sciences\*  
(PHY291 is highly recommended)  
Select 1 course from IAI Life Sciences\*

#### **Social and Behavioral Sciences: 3 courses (9 semester credits)**

Select 3 courses from IAI Social and Behavioral Sciences\* (must be from at least 2 different disciplines)

#### **Humanities and Fine Arts: 3 courses (9 semester credits)**

Select 1 course from IAI Humanities\*.  
Select 1 course from IAI Fine Arts\*.  
Select 1 course from either IAI Humanities or IAI Fine Arts\*.

\*For complete listings of approved courses, see MCC's catalog or the A.A. and A.S. degree planning sheet.

### Mathematics Major Core Courses

The following courses are suggested Mathematics courses for the student who is undecided about the transfer school. Please keep in mind that all of these courses may not substitute for major coursework required at the transfer school. *If coursework is accepted, the transfer school may require a grade of "C" or better.*

MAT175 (5 cr.) – Calculus w/Analytic Geometry I  
MAT245 (5 cr.) – Calculus w/Analytic Geometry II

MAT255 (3 cr.) – Calculus w/Analytic Geometry III  
MAT260 (3 cr.) – Differential Equations

### Additional Recommended Courses

PHY291 (4 cr.) – Principles of Physics I  
(PHY291 will also satisfy a gen. ed. Physical Science requirement.)

\*\*CSC121 (4 cr.) – Computer Science I

\*\* Students are encouraged to take a structured, higher-level language, computer programming course

### Don't Forget!

- **Do not take too long to decide on your transfer school. There is no guarantee that all of the courses listed on this guide will be required at your transfer school. Also, there may be other MCC courses that your transfer school will accept or require.**
- **Foreign language is a graduation requirement at some schools.**  
MCC's A.A. degree foreign language requirement: Completion of the same foreign language through the 4<sup>th</sup> semester college-level class.
- **To ease credit transfer, students should complete course sequences at the same school.**
- **The completion of the coursework on this guide does not satisfy a degree at MCC.**

The Illinois Articulation Initiative website was used to create this guide. Transfer guides are produced as a service to MCC students. Every effort is made to maintain up-to-date and accurate information; however, this information is subject to change. Students should check with an MCC advisor and with the IAI website ([www.itransfer.org](http://www.itransfer.org)) for the most current course recommendations.