

Computer Science Transfer Guide McHenry County College

This transfer program for the prospective Computer Science 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 a Computer Science 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 Computer Science programs encompass 2 distinct emphases: an Information Systems emphasis and a Technical emphasis.

- The Information Systems emphasis focuses on the use of computer technology and information management methods to solve business problems. This requires an understanding of both the organizational context of the problem and the technologies, methodologies, and tools available in a variety of business applications. An Information Systems major may be located in Computer Science or Computer Information Systems departments, or in a variety of departments within a College of Business.
- The Technical emphasis focuses on algorithms, theoretical foundations of computer science, and development of software. A strong foundation in mathematics and science is needed for this emphasis. Graduates will be prepared to work for a variety of companies including those that have a software, engineering, scientific, or mathematical focus. A Technical emphasis major is typically found in a Computer Science or Mathematics department or within a College of Engineering.

Consult with Computer Science faculty to select the appropriate emphasis for you. Four-year schools have specific requirements for admission to the major (e.g. minimum grade point average and prerequisite coursework).

Suggested coursework is on the backside of this sheet.

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

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.**
- Students are **advised to complete sequence courses at one school before transferring.** Students who complete only one course may have to repeat that course, since material may be arranged differently by another institution.
- **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 4th semester college-level class.
- **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) for the most current course recommendations.

The following are course suggestions to follow while you are deciding on a specific transfer institution. Please remember that all of these courses may not be required at the transfer school you choose.

Information Systems Emphasis

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.*)

MAT171 (4 cr.) – Calculus for Business/Social Science

or

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

and/or

MAT170 (3 cr.) – Finite Mathematics

Consult the 4-year schools you are considering, since different schools have different requirements.

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

Select 1 course from IAI Physical Sciences
(PHY291 recommended – selecting PHY291 gives you the option of changing to the technical emphasis)
 Select 1 course from IAI Life Sciences

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

ECO251 (3 cr.) – Microeconomics
 ECO252 (3 cr.) – Macroeconomics
 Select 1 more course from the IAI Social and Behavioral Sciences that is outside of the Economic discipline*.

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 sheets.

Information Systems Emphasis Core Courses

The following courses are suggested Information Systems emphasis 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 generally requires a grade of "C" or better.*

CSC121 (4 cr.) – Computer Science I

CSC122 (4 cr.) – Computer Science II

Technical Emphasis

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

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

(IAI recommends Discrete Math, which is not offered at MCC.)

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

ECO251 (3 cr.) – Microeconomics
 ECO252 (3 cr.) – Macroeconomics
 PSY151 (3 cr.) – Intro. to Psychology
ECO251 & 252 are recommended because selecting them gives you the option of changing to the Information Systems emphasis.

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*.

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

PHY291 (4 cr.) – Principles of Physics I
 Select 1 course from IAI Life Sciences

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

**MAT245 will satisfy the additional general education math core required for the AS degree.

Technical Emphasis Core Courses

The following courses are suggested Technical emphasis 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 generally requires a grade of "C" or better.*

CSC121 (4 cr.) – Computer Science I

CSC122 (4 cr.) – Computer Science II