

# Metropolitan State University

## Computer Science

### Requirements for the Bachelor of Arts and Bachelor of Science degrees:

To earn a Bachelor of Arts (B.A.) degree or a Bachelor of Science (B.S.) degree in the College of Arts and Sciences at Metropolitan State University, students must complete a total of 120 semester credits. Of these 120 credits, 40 must be in courses numbered 300 or higher and 30 must be in courses completed at Metropolitan State. Students must also complete Metropolitan State's General Education and Liberal Studies requirements, as well as the requirements for their major.

### General Education:

- 40 semester credits of general education meeting Minnesota Transfer Curriculum goal areas are required. See the [Metropolitan State University General Education](#) Transfer Information sheet.
- Century College's [Associate of Arts \(AA\) degree or completed Minnesota Transfer Curriculum \(MnTC\)](#) fulfills Metropolitan State University's 40-semester credit general education requirement. (Students will still need to complete eight credits of upper-division liberal arts courses.)

### Admission to the Major:

Students interested in pursuing a major in either computer information systems or computer science must apply to the program. To be eligible for admission to either major, students must be admitted to the university and meet minimum application requirements. The following prerequisite courses or equivalents must be completed with a C- or better, or competency in previous work experience must be demonstrated: Math 120, Math 210, Math 215, ICS 140, ICS 141, ICS 240 (or transfer equivalents), and two writing courses, as defined to meet general education requirements (**ENGL 1021 and ENGL 1022** at Century College). Metropolitan State University's ICS 141, ICS 240 and Math 215 (or transfer equivalents) must be completed with a minimum cumulative GPA of 2.5 on a 4.0 scale.

Century College Course	Metropolitan State University Equivalent
<b>Prerequisites:</b>	
MATH 1061 College Algebra I <b>And</b> MATH 1062 college Algebra II with Trigonometry	MATH 115 College Algebra + Math 116 Trigonometry <b>Or</b> MATH 120 Pre-Calculus
<b>Required CSCI and MATH Courses</b>	
CSCI 1081 Programming Fundamentals <b>And</b> CSCI 1082 Object Oriented Programming	ICS 140 Programming Fundamentals <b>And</b> ICS 141 Programming with Objects
CSCI 2082 Data Structures	ICS 240 Programming with Elementary Data Structures
CSCI 2016 computer Organization and Architecture	ICS 362 Computer Organization and Architecture
CSCI 2014 Discrete Structures of Computer Science	MATH 215 Discrete Math
MATH 1081 Single Variable Calculus I	MATH 210 Calculus
<b>Other MATH Requirements and Elective Courses</b>	
MATH 1082 Calculus II	MATH 211 Calculus II; satisfies the second Math course requirement or serves as lower division elective
MATH 2082 Linear Algebra and Differential Equation	Serves as lower division elective