

COMPUTER SCIENCE (BS) MAJOR

COMPUTER SCIENCE AND CYBERSECURITY DEPARTMENT

COMPUTER SCIENCE BACHELOR OF SCIENCE MAJOR CHECKLIST 2018-2019

This checklist aids in placement of students into their major coursework and documents the department evaluation of transferred credit and course waivers, based on coursework listed on the Degree Audit Report (DARs). A student must complete General Education and Liberal Studies (GELS) along with other graduation requirements for graduation – refer to your DARs.

Official admission to this major program and review of prior course credentials is done directly through the Computer Science and Cybersecurity (CSC) Department. Contact information is noted at the bottom of this checklist.

Student Name	Metro State ID #	Date

PRE-MAJOR FOUNDATION COURSES

In order to declare a Computer Science major, students are required to complete the following foundation courses listed with a grade of C- or better:

- *Minimum cumulative GPA of 2.5 for ICS 141, ICS 240 and MATH 215 or transfer equivalents*
- *Demonstrated competency in the Java programming language either through completion of coursework (e.g. ICS 141) or passing a Java competency exam*
- *Successful completion of General Education Goal I Writing requirement*

Students who do not meet the pre-major foundation requirements noted in this section or are on academic probation will not be accepted to the major. Students not accepted to the major will not be allowed to take advanced courses in the discipline.

Course #	Title	Transfer Equivalent Details	Grade	Credits	✓
MATH 120	Precalculus				
MATH 208 or MATH 210	Applied Calculus, OR, Calculus I				
MATH 215	Discrete Math				
ICS 140	Computational Thinking with Programming				
ICS 141	Programming with Objects				

Course #	Title	Transfer Equivalent Details	Grade	Credits	✓
ICS 232	Computer Organization and Architecture				
ICS 240	Introduction to Data Structures				

JAVA COMPETENCY REQUIREMENT

☐ *Check box if demonstrated competency in Java either through course work or passing exam.*

WRITING COURSE REQUIREMENT

☐ *Check box if General Education Goal I Writing requirement has been successfully completed. Reference DARs to determine which courses fulfill this requirement.*

☐ *Pending completion of _____.*

GPA Calculation: A = 4.00, A- = 3.67, B+ = 3.33, B = 3.00, B- = 2.67, C+ = 2.33, C = 2.00, C- = 1.67, D = 1.00, F = 0

CORE REQUIREMENTS: 32 CREDITS

Once admitted into major the following courses are required.

Course #	Title	Transfer Equivalent Details	Upper Division	Grade	Credits	✓
ICS 311	Database Management Systems					
ICS 340	Algorithms and Data Structures					
ICS 365	Organization of Programming Languages					
ICS 372	Object-Oriented Design and Implementation					
ICS 440	Parallel and Distributed Algorithms					
ICS 460	Networks and Security					
ICS 462	Operating Systems					
ICS 499	Software Engineering and Capstone Project					

ELECTIVE (8-CREDITS) COURSE REQUIREMENT OR MINOR

Students are required to complete either (1) at least 8 credits of major electives, including at least one upper-division ICS course other than ICS 350I or ICS 370, and the rest either ICS (not ICS 370) or MATH courses; or (2) an approved minor (an approved "minor" can be a second major).

☐ APPROVED MINOR/MAJOR: _____

OR

☐ ELECTIVE REQUIREMENT: 8 CREDITS

Course #	Title	Transfer Equivalent Details	Upper Division	Grade	Credits	✓

ADDITIONAL NOTES, CREDIT TOTALS OR COMMENTS:

Academic advisor notes:

GRADUATION REQUIREMENTS

Below is a summary of residency and graduation requirements for this major and used as an advising tool as you work towards completion. Students are advised to reference their DARs for official graduation requirements.

Major Requirements Checklist	In Progress	Completed
<input type="checkbox"/> 60 Major credits with minor option <input type="checkbox"/> 68 Major credits with elective option		
20 Metro State Major Credits		
32 Upper Division Major (300 or higher)		

University Requirements Checklist	In Progress	Completed
120 Total Credits (minimum), and GPA of 2.0 or better		
30 Metro State Credits		
40 Upper Division (300 or higher)		
48 credits GELS +RIGR	See DARs for details	

CONTACT US

For specific questions about this major program or equivalencies of prior coursework at other institutions, contact the Computer Science and Cybersecurity Department at:

Email: CSC@metrostate.edu Tel: 651.793.1471 Web: www.metrostate.edu/csc-department



College of Sciences

METROPOLITAN STATE UNIVERSITY

College of Sciences

700 East Seventh Street

Saint Paul, MN 55106-5000

Tel: 651-793-1606

Email: COS@metrostate.edu

Web: www.metrostate.edu/COS



MINNESOTA STATE

A MEMBER OF MINNESOTA STATE

This information is available in alternative formats upon request by contacting the Center for Accessibility Resources, accessibility.resources@metrostate.edu or 651-793-1549. Information is subject to change without notice.

An equal opportunity educator and employer.