COMPUTER APPLICATION DEVELOPMENT (BAS) MAJOR

COMPUTER SCIENCE AND CYBERSECURITY DEPARTMENT

MAJOR CHECKLIST FALL 2019–SUMMER 2020

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: 20 CREDITS

In order to declare a Computer Application Development 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 and MATH 215 or transfer equivalents*
- *Successful completion of General Education Goal I Writing requirement*
- *Demonstrated competency in the Java programming language either through completion of coursework (e.g. ICS 141) or passing a Java competency exam.*

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 400-level courses in the discipline.

Course #	Title	Transfer Equivalent Details	Credits	Grade	✓
MATH 115, OR, MATH 120	College Algebra, OR, Precalculus				
MATH 215	Discrete Math				
ICS 140	Computational Thinking with Programming				
ICS 141	Programming with Objects				
ICS 225	Web Design and Implementation				

JAVA COMPENTENCY 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: 20 CREDITS

Once admitted into major the following courses are required for the major:

Course #	Title	Transfer Equivalent Details	Upper Division	Credits	Grade	✓
ICS 251	IT Work Skills					
ICS 311	Database Management Systems					
ICS 325, OR, ICS 425	Internet Application Development, OR, Client/Server Architectures					
ICS 370	Software Design Models					

RESIDENCY INTERNSHIP REQUIREMENT: 6 CREDITS

Students are required to do a residency internship consisting of six credits of ICS 350I Computer Sciences Individualized Internship which span either two or three semesters.

Course #	Title	Semesters	Credits	Grade	✓
ICS 350I	Computer Sciences Individualized Internship				

ELECTIVE COURSE REQUIREMENT: 20 CREDITS

A student must take a minimum of 20 credits of major electives as part of the major, of which at least 12 must be at the upper-division (300-level or above). Consult with academic advisor on acceptable electives.

All 200, 300, and 400-level ICS courses that are not required for the major may be taken as electives (assuming the student has completed the necessary prerequisites), with the following exceptions: ICS 372, ICS 381, ICS 390, ICS 495, CFS 499, ICS 499.

Repeatable exceptions: ICS 490 Special Topics in Information and Computer Sciences and ICS 492 Seminar on Emerging Technologies may be taken more than once for elective credit, so long as the topics differ.

Course #	Title	Transfer Equivalent Details	Upper Division	Credits	Grade	✓

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	Remaining	In Progress	Completed
60 Major credits			
20 Metro State Major Credits			
24 Upper Division Major (300 or higher)			

University Requirements Checklist	Remaining	In Progress	Completed
120 Total Credits (minimum), and GPA of 2.0 or better			
30 Metro State Credits			
48 credits GELS +RIGR (see DARs)			

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

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