

CYBERSECURITY (BS) 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: 24 CREDITS

In order to declare a Cybersecurity 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*
- *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 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				
CFS 262	Computer and Operating Systems Fundamentals I				

Course #	Title	Transfer Equivalent Details	Credits	Grade	✓
CFS 264	Computer and Operating Systems Fundamentals II				

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: 26 CREDITS

Once admitted into major the following courses are required. ICS 251 may be waived with a demonstrated industry experience of 3 years AND with Program Coordinator's permission. If waived, an additional two credits needed in the elective category to total 62 credits.

Course #	Title	Transfer Equivalent Details	Upper Division	Credits	Grade	✓
ICS 251	IT Work Skills					
STAT 201	Statistics I					
ICS 311	Database Management Systems					
ICS 382	Computer Security					
ICS 383	Networking Protocols and Analysis					
ICS 482	Vulnerability Assessment and Penetrating Testing					
ICS 483	Cryptography for Cybersecurity Practitioners					

ELECTIVE REQUIREMENT: 8 CREDITS

A minimum of eight credits of elective coursework are required from the list below. The contents of ICS 490 Special Topics in Information and Computer Sciences vary from semester to semester, and may be taken more than once so long as its related to Cybersecurity topic for elective credit.

Course #	Title	Transfer Equivalent Details	Upper Division	Credits	Grade	✓
ICS 325	Internet Application Development					
ICS 484	Cyber Operations					
ICS 486	Malware Analysis					
ICS 487 (pending)	Cyber Incident Response and Handling					
ICS 488 (pending)	Offensive and Defensive Security					
ICS 490	Special Topics in Information and Computer Science					
CFS 380	Digital Evidence Analysis					
CFS 484	Computer Laws					
CFS 485	Mobile Device Security and Forensics					
MIS 450	MIS Auditing and Security Controls					

CAPSTONE PROJECT OR CYBER RESIDENCY: 4 CREDITS

In the last semester, students will need to complete the 4 credits an integrative cybersecurity capstone project or internship residency. Discuss options with your advisor.

Select one.

Course #	Title	Credits	Grade	✓
ICS 495	Cybersecurity Capstone			
ICS 350I	Information and Computer Sciences Individualized Internship			

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
62 Major credits			
20 Metro State Major Credits			
32 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			
40 Upper Division (300 or higher)			
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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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.

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