

Program: Cybersecurity Bachelor of Science

Total Credits: 120

Catalog: Fall 2023 to Summer 2024



Four Year Graduation Planner

- This guide is intended to show a recommended fulltime four-year pathway to earning a bachelor degree.
- It is only a sample; there may be other pathways that lead to completion of the degree in four years.
- It is NOT intended to take the place of meetings with advisors or intended to take the place of the Degree Audit System (DARs).

Key to tables below. More details on final page.

Core: fulfills required course for major	Elective: student selected course credits for major	GELS: General Education Liberal Studies Goal Area
LS: Liberal Studies	Pre/Premajor: Premajor foundation course	RIGR: Racial Issues Graduation Requirement

First Year

Course	Requirement Met	Semester Offered	Credits	Credit Hour Total
MATH 115 College Algebra, or, MATH 120 Precalculus	Premajor/GELS Goal 4	Fall, Spring, Summer	4	
General Education Writing I	GELS Goal 1	Fall, Spring, Summer	3-4	
General Education	GELS Goal 5, 10	Fall, Spring, Summer	3-4	
METR 101 Your Academic Journey	GELS elective	Fall, Spring	3	13-15
MATH 215 Discrete Math	Premajor	Fall, Spring, Summer	4	
ICS 140 Computational Thinking	Premajor	Fall, Spring, Summer	4	
General Education	GELS Goal 3, 10	Fall, Spring, Summer	4	
General Education Communication	GELS Goal 1	Fall, Spring, Summer	3-4	15-16
First Year Total				28-31

Second Year

Course	Requirement Met	Semester Offered	Credits	Credit Hour Total
ICS 265 C Programming	Premajor	Fall, Spring, Summer	4	
CFS 262 Computer and Operating Systems Fundamentals I	Premajor	Fall, Spring, Summer	4	
General Education Writing II	GELS Goal 1	Fall, Spring, Summer	3-4	

Continued

General Education	GELS Goal 3	Fall, Spring, Summer	3-4	14-16
CFS 264 Computer and Operating Systems Fundamentals II	Premajor	Fall, Spring, Summer	4	
ICS 232 Computer Organization	Premajor	Fall, Spring, Summer	4	
STAT 201 Statistics I	Premajor	Fall, Spring, Summer	3-4	
General Education	GELS Goal 6, 7, RIGR	Fall, Spring, Summer	3-4	14-16
Second Year Total				28-32

Third Year

Course	Requirement Met	Semester Offered	Credits	Credit Hour Total
CFS 280 Introduction to Computer Forensics	Core	Fall, Spring	4	
ICS 311 Database Management Systems	Core	Fall, Spring, Summer	4	
CYBR 362 Networking Protocols and Analysis	Core	Fall, Spring	4	
General Education	GELS Goal 6, 9, UD	Fall, Spring, Summer	3-4	15-16
CYBR 332 Computer Security	Core	Fall, Spring, Summer	4	
CYBR 442 Cyber Operations	Core	Fall, Spring	4	
Select Major Elective	Elective	Fall, Spring, Summer	4	
General Education	GELS Goal 6, UD	Fall, Spring, Summer	3-4	15-16
Third Year Total				29-32

Fourth Year

Course	Requirement Met	Semester Offered	Credits	Credit Hour Total
CYBR 432 Cryptography for Cybersecurity Practitioners	Core	Fall, Spring		
CYBR 498 Cybersecurity Capstone I Concepts, Research and Planning	Core	Fall, Spring	2	
Select Major Elective or GELS	Elective or GELS	Fall, Spring, Summer	2-4	
General Education	GELS Goal 5, 8, UD	Fall, Spring, Summer	4	12-14
CYBR 412 Vulnerability Assessment and Penetration Testing	Core	Fall, Spring	4	

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CYBR 499 Capstone, or, CYBR 350I Internship	Core	Fall, Spring, Summer-CYBR 350I option	4	
Select Major Elective	Core Elective	Fall, Spring, Summer	4	
General Education	GELS Goal 5, 7, UD	Fall, Spring, Summer	4	16
Fourth Year Total				28-30

Academic and graduation requirements

Course requirements

Credit requirements: 120 total credits

- 40 upper-division credits (courses at community colleges are all lower-division courses, so they do not count toward this requirement)
- 30 credits completed at Metropolitan State University
- 40 general education credits
- 8 upper-division liberal studies credits
- 3 [racial issues graduation requirement \(RIGR\)](#) credits
- All credit requirements for the major
- Elective credits (if you are short of the 120 total credits required for graduation)

GELS: General education/liberal studies requirements (48 credits)

- [Minnesota Transfer Curriculum](#): 40 credits. Goal areas 1–10 are met by Minnesota community college A.A. degree. They are *not* met by A.S. or A.A.S degrees or community colleges outside of Minnesota.
- [Liberal studies](#): 8 credits.
 - These credits must be:
 - Upper-division general education courses (300 to 500 level)
 - Designated as a liberal studies (LS) course
 - These credits are not:
 - completed by AA, AAS or AS degrees or the Minnesota Transfer Curriculum

Continued

- met by any community college course (all community college courses are lower division, including courses that meet major requirements)

Racial Issues Graduation Requirement (RIGR) and transfer coursework

All new or readmitted undergraduate students admitted fall 2016 or later must complete an approved learning experience (at least 3 credits) with a significant focus on race and racism to graduate with a bachelor's degree from the university. Upon review, an approved prior learning, independent study, theory seminar or transfer course from other accredited institutions may also be used to meet this graduation requirement.

DARS: Your degree audit report

The Degree Audit report is a degree planning tool for students that includes both transfer and Metropolitan State coursework. You can access your Degree Audit report in [eServices](#) under “Academic Records.” The report includes:

- How your transfer credits have been accepted and applied to General Education and Liberal Studies, including the Minnesota Transfer Curriculum.
- All the requirements needed to complete a specific program.
- Courses that have already been completed, grades received and hours earned, both at Metropolitan State and in transfer.
- Transfer courses that have been made equivalent to Metropolitan State University courses.
- Exceptions to degree and program requirements that have been processed.
- What is still needed to complete a program, with a list of courses that will satisfy each requirement.



MINNESOTA STATE

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