

**Program: Cybersecurity Bachelor of Science**

**Total Credits: 120**

**Catalog: FY 2023 Fall 2022 to Summer 2023**



## 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
<b>Second Year Total</b>				<b>28-32</b>

**Third Year**

<b>Course</b>	<b>Requirement Met</b>	<b>Semester Offered</b>	<b>Credits</b>	<b>Credit Hour Total</b>
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
<b>Third Year Total</b>				<b>29-32</b>

**Fourth Year**

<b>Course</b>	<b>Requirement Met</b>	<b>Semester Offered</b>	<b>Credits</b>	<b>Credit Hour Total</b>
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	

**Program: Cybersecurity Bachelor of Science**

**Total Credits: 120**

**Catalog: FY 2023 Fall 2022 to Summer 2023**



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**

*Metropolitan State University,*  
a member of Minnesota State



Metro State is a Yellow Ribbon University, serving the most veterans and active-duty military members in Minnesota.

To request accommodations for a disability, contact Accessibility Resources at 651.793.1549 or [accessibility.resources@metrostate.edu](mailto:accessibility.resources@metrostate.edu)