

Four Year Graduation Planner

Program: Data Science Bachelor of Science

Total Credits: 120

Catalog: Fall 2024 to Summer 2026

- This guide is intended to show a recommended four-year pathway to a degree if student is college ready and full-time.
- 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 |
|--|-----------------|----------------------|---------|-------------------|
| METR 101 Your Academic Journey | GELS elective | Fall, Spring | 3 | |
| MATH 115 College Algebra | Pre/GELS Goal 4 | Fall, Spring, Summer | 4 | |
| STAT 201 Statistics I | Premajor | Fall, Spring, Summer | 4 | |
| General Education Writing | GELS Goal 1 | Fall, Spring, Summer | 3 | 14 |
| General Education Communication | GELS Goal 1 | Fall, Spring, Summer | 3 | |
| ICS 140 Computational Thinking & Programming | Premajor | Fall, Spring, Summer | 4 | |
| General Education Writing II | GELS Goal 1 | Fall, Spring, Summer | 3 | |
| MATH 215 Discrete Mathematics | Premajor | Fall, Spring, Summer | 4 | 14 |
| First Year Total | | | | 28 |

Continued

Second Year

| Course | Requirement Met | Semester Offered | Credits | Credit Hour Total |
|---|------------------------|-------------------------|----------------|--------------------------|
| ICS 141 Programming with Objects | Core | Fall, Spring, Summer | 4 | |
| DATA 211 Data Science & Visualization | Core | Fall, Spring | 4 | |
| MATH 315 Linear Algebra | Core | Fall, Spring | 4 | |
| General Education | Goal 3 | | 3-4 | 15-16 |
| ICS 240 Introduction to Data Structures | Core | Fall, Spring, Summer | 4 | |
| STAT 311 Regression Analysis | Core | Fall, Spring | 4 | |
| General Education | GELS Goal 10 | Fall, Spring, Summer | 3-4 | |
| General Education | GELS Goal 3 | Fall, Spring, Summer | 3-4 | 15-16 |
| Second Year Total | | | | 30-32 |

Third Year

| Course | Requirement Met | Semester Offered | Credits | Credit Hour Total |
|---|------------------------|-------------------------|----------------|--------------------------|
| ICS 311 Database Management Systems | Core | Fall, Spring, Summer | 4 | |
| ICS 352 Machine Learning | Core | Fall, Spring | 4 | |
| General Education | GELS Goal 5 and RIGR | Fall, Spring, Summer | 3-4 | |
| General Education | GELS Goal 6 and 7 | Fall, Spring, Summer | 3-4 | 14-16 |
| MIS 380 Business Intelligence and Analytics | Core | Fall, Spring | 4 | |
| DATA 401 Applied Machine Learning | Core | Spring | 4 | |
| STAT 301 Analysis of Variance and Multivariate Analysis | Core | Spring | 4 | |
| General Education | GELS Goal 9 and LS | Fall, Spring, Summer | 3-4 | 15-16 |
| Third Year Total | | | | 29-32 |

Fourth Year

| Course | Requirement Met | Semester Offered | Credits | Credit Hour Total |
|--|------------------------|-------------------------|----------------|--------------------------|
| DATA 499 Data Science Capstone (or Non-Major Elective if you are taking STAT 480) | Core | Fall | 4 | |

| Course | Requirement Met | Semester Offered | Credits | Credit Hour Total |
|--|-------------------|----------------------|---------|-------------------|
| Select Major Elective | Elective | varies | 3-4 | |
| Non-Major Elective | Elective | varies | 4 | |
| General Education | GELS Goal 6 and 8 | Fall, Spring, Summer | 3-4 | 14-16 |
| STAT 480 Statistical Consulting (or Non-Major Elective if you are taking DATA 499) | Core | Spring | 4 | |
| MIS 480 Predictive Analytics | Core | Spring | 4 | |
| Select Major Elective | Elective | varies | 4 | |
| Non-Major Elective | Elective | varies | 3-4 | 15-16 |
| Fourth Year Total | | | | 30-32 |

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)

Continued

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
 - 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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