PORTLAND • GORHAM • LEWISTON • ONLINE
B. A. Mathematics

Name:
ID: $\qquad$ Math Ready $\qquad$ Yes
$\square$ No
Professional Advisor:

| Semester 1 Fall 2022 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG 100 (WRI 1) | (waived for transfer students with 60+ credits) | 3 | $\checkmark$ | All semesters |  |
| MAT 152 | MAT 140 or appropriate placement score | 4 | $\checkmark$ | All semesters |  |
| Core SCA |  | 3 |  | All semesters |  |
| Core CE |  | 3 |  | All semesters |  |
| Elective |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Semester Credits: 16 |  |  |  |  |  |


| Semester 2 Spring 2023 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :---: | :---: | :---: | :---: |
| MAT 153 | MAT 152 | 4 | $\boldsymbol{V}$ | All semesters |  |
| COS 160 | MAT 108 (C or higher) or appropriate placement score | 3 |  | Fall and Spring |  |
| COS 170 | Co-requisiste COS 160 | 1 |  | Fall and Spring |  |
| ENG 102 (WRI 2) | ENG 100 (waived for transter students with 90+ credits) | 3 | $\boldsymbol{\nu}$ | All semesters |  |
| Core Cl |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
| Total Semester Credits: 14 |  |  |  |  |  |
|  |  |  |  |  |  |


| Semester 3 Fall 2023 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :---: | :---: | :---: | :---: |
| MAT 252 | MAT 153 | 4 | $\boldsymbol{\nu}$ | All semesters |  |
| MAT 281* (see notes) | MAT 153 | 3 | $\boldsymbol{v}$ | Fall Only |  |
| MAT 290* (see notes) | MAT 153 | 4 | $\boldsymbol{v}$ | Fall and Spring |  |
| Core SE | See catalog (course dependent) | 4 |  | All semesters |  |
| WRI 3 |  | 3 |  |  |  |
|  |  |  |  |  |  |
| Total Semester Credits: 18 |  |  |  |  |  |


| Semester 4 Spring 2024 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :---: | :---: | :---: | :---: |
| MAT 282* (see notes) | MAT 281 | 3 | $\boldsymbol{v}$ | Spring Only |  |
| MAT 295 | MAT 153 | 3 |  | Fall and Spring |  |
| MAT 350 | MAT 252 | 4 |  | Spring Only |  |
| Core Ethical Inquiry |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
| Total Semester Credits: 16 |  |  |  |  |  |


| Semester 5 Fall 2024 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MAT Concentration Elective \#1 |  | 3 |  |  | Varies |
|  |  |  |  |  |  |
| MAT Elective (>260) |  | 3 |  |  | Varies |
|  |  |  |  |  |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Core INT |  | 3 |  | All semesters |  |
| Core EL |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
| Total Semester Credits: 15 |  |  |  |  |  |


| Semester 6 Spring 2025 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :--- | :--- | :---: | :---: |
| MAT Concentration Elective \#2 |  | 3 |  |  | Varies |
|  | MAT Elective (>260) |  | 3 |  | Varies |
|  | Elective or Minor |  | 3 |  | All semesters |
| Elective or Minor |  | 3 |  | All semesters |  |
| Core DIV |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
| Total Semester Credits: 15 |  |  |  |  |  |


| Semester 7 Fall 2025 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :---: | :---: | :---: | :---: |
| MAT Concentration Elective \#3/CAP |  | 3 | $\boldsymbol{V}$ | Varies |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Semester Credits:15 |  |  |  |  |  |


| Semester 8 Spring 2026 | Prerequisite(s) | Credits | Critical | Offered | Grade |
| :--- | :--- | :--- | :--- | :---: | :---: |
| MAT Capstone (if not in FallPrev. Semesters) or Elective/Minor |  | 3 |  | Varies |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
| Elective or Minor |  | 3 |  | All semesters |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Semester Credits:15 |  |  |  |  |  |

## Total Degree Credits: 124

It is strongly recommended you review your graduation plan with your advisor each semester and check to see if courses in your planner will be offered when you plan for them. Every best effort has been made to ensure the accuracy of this tool. The Academic Catalog documents the official requirements.

## Key to USM CORE Abbreviations \& Overlapping Courses Between this Major and the CORE

EYE Entry Year Course............
CW College Writing.
QR Quantitative Reasoning... MAT 152
CI Cultural Interpretation....
CE Creative Expression.........
SCA Sociocultural Analysis......
SE Science Exploration.........
DIV Diversity.. $\qquad$
INT International. $\qquad$
EISRC Ethical Inquiry, Social Responsibility \& Citizenship
EL Engaged Learning ............ MAT 497 Independent Study/internship (see below in plans/activites)
CAP Capstone. $\qquad$ (Pure Math: MAT 352, 371, 395, or 490) (Applied: MAT 364, 366, 383, or 460) (Stats: MAT 264, 387, 488, or 496)

Core Electives: Students complete 9 credits of advanced Core Electives at the 200 -level or above and from subject areas outside the primary subject area of the student's major. Overlaps are not allowed between advanced electives and courses that satisfy lower division Core requirements in CE, CI, SCA, SE or QR. Students may complete a second major, minor, academic certificate, or thematic cluster to satisfy their Core Electives.

Click here to see a list of Core courses by Requirement Ared

## Notes About Major

* Choose one from three concentrations: Pure Math, Applied Math/Operations Research, or Statistics:
$>$ Those pursuring the Pure Math concentration should complete MAT 290 as soon as possible. MAT 290 is a prerequisite for the courses offered in the Pure Math concentration. $>$ Those pursuing the Statistics concentration should complete MAT 281 and MAT 282 as soon as possible. MAT 282 is a pre-requisite for the courses offered in the Statistics concentration

Notes about concentrations:
> Mathematics majors intending to pursue graduate work in mathematics should consider the Pure Math concentration and are urged to take Real Analysis, Abstract Algebra, Topology, and one year of French or German. Those intending to teach at the secondary level should choose this concentration.
$>$ Those majors intending to enter industry or other applied fields should consider the Applied Math/Operations Research concentration. Majors who plan to prepare for the actuarial profession should be certain to include in their programs Numerical Analysis and the appropriate courses in the School of Business. Majors intending to pursue graduate work in applied mathematics are urged to take Real Analysis and Abstract Algebra.
$>$ The Secondary Mathematics Education track is aimed at preparing qualified teachers in the area of mathematics.
$>$ The Statistics concentration is aimed at preparing undergratudates to pursue a carreer as a statistician in government or industrial jobs, or to pursue a higher degree in statistics or allied fields. Majors intending to pursue graduate work in statistics are urged to take Real Analysis and Abstract Algebra.

| Other Plans/Activities to Include |
| :--- |
| $>$ Engaged Learning component |
| through independent |
| study/internship |

Minimum Requirements for Graduation from this Major 2.0 GPA minimum in all coursework, D- or higher with the exception that some courses have a prerequisite that must be successfully completed with a $\mathrm{C} / \mathrm{C}$ - or higher.

Examples of Related Minors https://usm.maine.edu/majors-minors-programs

- Computer Science - Actuarial Science - Risk Management and Insurance

Strengths: Quality of education at the undergraduate and graduate leve

Critical Courses must be completed in order before moving forward in the major. Note that they may not be offered each semester. Plan Ahead!

Note: This is a suggested Academic Map. Course sequencing in your personal plan may vary depending upon course availability, full or part time status, transfer credits, or other details. It is recommended you review your Academic Map with your advisor(s) each semester.

