

## Mathematics Transfer Pathway

## Saint Paul College

This document is designed for Saint Paul College students completing the Mathematics Transfer Pathway A.A. with the intent to transfer to Hamline University and complete the Applied Mathematics B.S. degree. Students who do not intend to complete the 60-credit degree should contact Kaia Sherburne at [ksherburne01@hamline.edu](mailto:ksherburne01@hamline.edu) to plan course selections.

Below is the list of approved coursework from the pathway that meets general education requirements or Applied Math major requirements. All courses must be completed with a C- or better to transfer. Completing the MnTC is strongly recommended prior to transfer to graduate on time.

| Saint Paul College Course   | Hamline Plan          | Credits          | Hamline University Course (current status)   |
|---|-----------------------|------------------|--|
| <b>Required Pathway Courses:</b>  |                       |                  |  |
| MATH 2749 Calculus 1  | M, R                  | 4                | MATH 1170 Calculus I   |
| MATH 2750 Calculus 2  | M, R                  | 4                | MATH 1180 Calculus II  |
| MATH 2753 Multivariable Calculus  | M, R                  | 4                | MATH 3320 Multivariable and Vector Calculus  |
| MATH 2760 Differential Equations and Linear Algebra   | M, R                  | 4                | MATH 3330 Linear Algebra<br><b>OR</b><br>MATH 3720 Differential Equations  |
| Choose one MATH elective<br><b>Examples:</b><br>MATH 2460 Discrete Mathematics*<br>MATH 1740 Introduction to Statistics   |                       | 4<br>4           | MATH 3440 Discrete Mathematics<br>MATH 1200 Statistics   |
| <b>Goal 1</b> - 9 credits to include:<br>ENGL 1711 Composition 1<br><b>AND</b><br>ENGL 1712 Composition 2*<br><b>AND</b><br>One COMM 17XX course<br><b>Examples:</b><br>COMM 1710 Fundamentals of Public Speaking<br>COMM 1720 Interpersonal Communication              | E<br><br>O, G<br>O, D | 4<br>2<br>3<br>3 | FYW 1110 Critical Reading and Composition<br>FYW 1120 Composition and Research<br>ENCM 1600 Public Speaking<br>ENCM 3410 Studies in Professional Communication |
| <b>Goal 2</b> – fulfilled by completing the MnTC  |                       |                  |  |
| <b>Goal 3</b> – 7 credits, two courses (one with lab) from two different disciplines<br><b>Examples:</b><br>BIOL 1740 General Biology 1: The Living Cell<br>BIOL 1760 Nutrition<br><br>CHEM 1711 Principles of Chemistry 1  | N1<br>N2<br><br>N1    | 5<br>3<br><br>4  | BIOL 1510 Integrated Concepts in Biology I<br>PBHL 3500 Nutrition for Health, Fitness, and Wellbeing<br>CHEM 1130 General Chemistry I                          |
| <b>Goal 4</b> – fulfilled by completing this pathway  |                       |                  |  |
| <b>Goal 5</b> – 9 credits, three courses from at least two different disciplines<br><b>Examples:</b><br>SOCI 1710 Introduction to Sociology<br>POLS 1720 Introduction to American Government<br>PSYC 1710 General Psychology<br>COMM 1740 Mass Media and Communications | S, D<br>S<br>S<br>S   | 4<br>3<br>4<br>3 | SJSC 1110 Society and Social Change<br>PSCI 1110 American Government and Politics<br>PSY 1330 General Psychology<br>ENCM 1300 Introduction to Media Studies    |

|  |                        |                  |   |
|--|------------------------|------------------|---|
| <b>Goal 6</b> - 9 credits, three courses from at least two different disciplines<br><b>Examples:</b><br>ARTS 1720 Art Appreciation<br>PHIL 1720 Ethics<br>MUSC 1770 Music in World Cultures<br>MUSC 1720 Fundamentals of Music | H, G<br>H<br>H, G<br>F | 3<br>3<br>3<br>3 | PHIL 1140 Ethics                                |
| <b>Goal 7</b> – one course<br><b>Example:</b><br>ENGL 1790 Contemporary Writers of Color   | D, H                   | 3                | ENCM 3100 Studies in and Across Culture         |
| <b>Goal 8</b> – one course<br><b>Example:</b><br>COMM 1710 Fundamentals of Public Speaking   | G, O                   | 3                | ENCM 1600 Public Speaking                       |
| <b>Goal 9</b> – one course<br><b>Example:</b><br>COMM 1750 Small Group Communication   | O                      | 3                | ENCM 3410 Studies in Professional Communication |
| <b>Goal 10</b> - one course<br><b>Examples:</b><br>ANTH 1720 Introduction to Physical Anthropology<br>PHIL 1724 Environmental Ethics   | S<br>H                 | 4<br>3           |   |
| <b>Additional Electives</b> - any course numbered 1000 or above  |                        |                  |   |
| <b>Total pathway credits</b>   |                        | 60               |   |

\*Recommended for transfer to Hamline, for additional course options, contact [admission@hamline.edu](mailto:admission@hamline.edu)

| Remaining major courses for Applied Mathematics B.S. degree   | Credits      |
|---|--------------|
| BIOL 1700 Inclusive STEM (Hamline Plan D)   | 4            |
| CDS 1010 Introduction to Programming (Hamline Plan C)   | 4            |
| MATH 1200 Statistics (if not met by MnTC; Hamline Plan M, R)  | 0-4          |
| MATH 3330 Linear Algebra (if not met by MnTC)   | 0-4          |
| MATH 3440 Discrete Mathematics (if not met by MnTC)   | 0-4          |
| MATH 3720 Differential Equations (if not met by MnTC)   | 0-4          |
| MATH 5950 Topics in Advanced Mathematics  | 4            |
| <b>Choose one:</b><br>CDS 3200 Elements of Statistical Learning<br>MATH 3410 Mathematical Modeling<br>PHYS 3600 Mathematical and Computational Methods in Physics and Engineering w/lab | 4            |
| Choose two electives from extensive list  | 8            |
| MATH 5920 Seminar in Mathematics/Computational Data Science (three terms at 1 credit each)  | 3            |
| MATH 5930 Mathematics/Computational Data Science Seminar Presentation   | 1            |
| <b>Total credits required for the major</b>   | <b>28-40</b> |

| Remaining graduation requirements for B.S. degree | Credits |
|---|---------|
|---|---------|

|   |        |
|---|--------|
| General Education Requirements  |        |
| - Hamline Plan W - Writing Intensive (1 course if not met by remaining major courses)     | 0-4    |
| - Hamline Plan O - Speaking Intensive (1-2 courses if not met by remaining major courses) | 0-8    |
| - Hamline Plan F - Fine Arts (8 credits total if not met by MnTC)                         | 0-8    |
| - Hamline Plan H - Humanities (2 courses if not met by MnTC)                              | 0-8    |
| - Hamline Plan P - LEAP (1 course; consult with department for possible major courses)    | 2 or 4 |
| Electives credits to reach minimum 128  | varies |
| Total credits completed at university   | 68     |
| Total credits for B.S. degree   | 128    |

**Advising Notes:**

- Consult with Hamline Transfer Admissions when choosing courses for goal areas 5-10 to maximize meeting Hamline's graduation requirements.

**Hamline Plan**

E - Expository Writing  
 O - Speaking Intensive  
 R - Formal Reasoning  
 M - Quantitative Reasoning  
 F - Fine Arts  
 H - Humanities  
 N - Natural Science (N1 lab, N2 non-lab)  
 S - Social Science  
 G - Global Citizenship  
 D - Diversity  
 C - Collaboration  
 W - Writing Intensive  
 Q - Independent Critical Inquiry and Information Literacy  
 P – LEAP: Liberal education As Practice

Graduation Requirements: The Hamline Plan <http://bulletin.hamline.edu/content.php?catoid=32&navoid=1551>