

## Mathematics Transfer Pathway

## North Hennepin Community College

This document is designed for North Hennepin 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.

North Hennepin Community College Course	Hamline Plan	Credits	Hamline University Course (current status)
<b>Required Pathway Courses:</b>			
MATH 1221 Calculus I	M, R	5	MATH 1170 Calculus I
MATH 1222 Calculus II	M, R	5	MATH 1180 Calculus II
MATH 2220 Calculus III	M, R	5	MATH 3320 Multivariable and Vector Calculus
Choose one: MATH 2300 Linear Algebra* <b>OR</b> MATH 2400 Differential Equations*		4 4	MATH 3330 Linear Algebra MATH 3720 Differential Equations
<b>Goal 1</b> ENGL 1201 College Writing I <b>AND</b> ENGL 1202 College Writing II* <b>AND</b> - one selected communication course <b>Examples:</b> COMM 1010 Fundamentals of Public Speaking COMM 1110 Principles of Interpersonal Communication	  E  O O, D	 4 2 3 3	 FYW 1110 Critical Reading and Composition FYW 1120 Composition and Research ENCM 1600 Public Speaking ENCM 3410 Studies in Professional Communication
<b>Goal 2</b> - fulfilled with completion of MnTC			
<b>Goal 3</b> - Two courses from different disciplines (one must include lab) <b>Examples:</b> BIOL 1101 Principles of Biology I BIOL 1120 Human Biology CHEM 1061 Principles of Chemistry I	  N1 N2 N1	  4 3 4	  BIOL 1510 Integrated Concepts in Biology I CHEM 1130 General Chemistry I
<b>Goal 4</b> - fulfilled with pathway requirements			
<b>Goal 5</b> - three courses, minimum 9 credits <b>Examples:</b> SOC 1110 Introduction to Sociology POLS 1100 American Government and Politics PSYC 1150 General Psychology	  S, D S S	  3 3 3	  SJSC 1110 Society and Social Change PSCI 1110 American Government and Politics PSY 1330 General Psychology
<b>Goal 6</b> - three courses from at least two different disciplines, minimum 9 credits <b>Examples:</b> ART 1401 Drawing I ART 1040 Art Appreciation PHIL 1020 Ethics ENGL 2320 Writing: From Structure to Style	  F H, G H F, D	  3 3 3 3	   PHIL 1140 Ethics

<b>Goal 7</b> - one course <b>Examples:</b> GCST 1040 American Indian Culture COMM 1110 Principles of Interpersonal Communication	D D, O	3 3	ENCM 3410 Studies in Professional Communication
<b>Goal 8</b> – one course <b>Example:</b> ART 1040 Art Appreciation	G, H	3	
<b>Goal 9</b> – one course <b>Example:</b> PHIL 1120 Ethics in Organizations	H	3	
<b>Goal 10</b> - One course, minimum 3 credits <b>Examples:</b> ANTH 1020 Introduction to Anthropology GCST 1040 American Indian Culture	N2 D	3 3	
<b>General Electives</b> to reach 60 credits - any courses numbered 1000 or above <b>Examples:</b> MATH 3330 Linear Algebra** MATH 3720 Differential Equations** MATH 1210 Applied Statistics*	M, R	4 4 4	MATH 3440 Linear Algebra MATH 3720 Differential Equations MATH 1200 Statistics
<b>Physical Education/Health</b> - two courses, 4 credits; one Health course and one Exercise Science course		4	
Total pathway credits		60	

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

\*\*If taken beyond required pathway courses

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 (Hamline Plan W)	4
MATH 3720 Differential Equations (if not met by MnTC)	0-4
MATH 5950 Topics in Advanced Mathematics	4
<b>Choose one:</b> CDS 3200 Elements of Statistical Learning MATH 3410 Mathematical Modeling 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 one credit each)	3
MATH 5930 Mathematics/Computational Data Science Seminar Presentation (Hamline Plan Q)	1
Total remaining credits required for the major	32-44

Remaining graduation requirements for B.S. degree	Credits
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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 course if not met by remaining major courses)	0-4
- 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>