Mathematics Transfer Pathway   Normandale Community College

This document is designed for Normandale 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 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.

Normandale Community College Course	Hamline Plan	Credits	Hamline University Course (current status)
Required Pathway Courses:			
MATH 1510 Calculus 1	M, R	5	MATH 1170 Calculus I
MATH 1520 Calculus 2	M, R	5	MATH 1180 Calculus II
MATH 2510 Calculus 3: Multivariable Calculus	M, R	5	MATH 3320 Multivariable and Vector Calculus
MATH 2520 Calculus 4: Differential Equations with Linear Algebra		5	MATH 3330 Linear Algebra **OR** MATH 3720 Differential Equations
Goal 1 - two courses to include: ENGC 1101 College Writing	E	4	FYW 1120 Composition and Research
AND one of the following: COMM 1100 Introduction to Communication	O	3	ENCM 1100 Introduction to Communication Studies
COMM 1101 Fundamentals of Public Speaking	O	3	ENCM 1600 Public Speaking
COMM 1111 Interpersonal Communication	O	3	ENCM 3460 Studies in Communication & Cultural Rhetorics
COMM 1121 Small Group Communication			ENCM 3410 Studies in Professional Communication
Goal 2 - fulfilled with completion of MnTC			
Goal 3 - two courses from two different departments (one must have a lab) **Examples:**			
BIOL 1501 Principles of Biology I	N1	5	BIOL 1510 Integrated Concepts in Biology I
GEOL 1110 Environmental Geology	N2	3	
CHEM 1061 Principles of Chemistry I	N1	5	CHEM 1130 General Chemistry I
Goal 4 - fulfilled with pathway requirements			
Goal 5 – two courses from two different departments **Examples:**			
HIST 1111 United States History 1	D, S	4	HIST 1300 Introduction to American History: Civil War and Reconstruction
POLS 1130 Introduction to U.S. Politics	S	3	
PSYC 1110 Introduction to Psychology	S	4	PSY 1330 General Psychology

Goal 6 - two courses from two different departments **Examples:** ART 1101 The Visual Arts PHIL 1103 Ethics MUSC 1124 Rock and Roll History MUSC 1120 Fundamentals of Music	 F, G H H, D F	 3 3 3 3	 PHIL 1140 Ethics
Goal 7 - one course **Example:** MUSC 1124 Rock and Roll History	 H, D	 3	
Goal 8 - one course **Example:** ART 1101 The Visual Arts	 G, F	 3	
Goal 9 - one course **Examples:** PHIL 1103 Ethics POLS 1130 Introduction to U.S. Politics	 H S	 3 3	 PHIL 1140 Ethics
Goal 10 - one course **Example:** HIST 1133 Minnesota History	 S	 3	
Additional Electives - any course numbered 1000 or above **Example:** MATH 1080 Introduction to Statistics*	 M, R	 4	 MATH 1200 Statistics
Health - one HLTH course **Exercise Science** - one EXSC course		Varies	
Total pathway credits		60	

*Recommended for transfer to Hamline, for additional course options contact 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 (Hamline Plan W)	4
MATH 3720 Differential Equations (if not met by MnTC)	0-4
MATH 5950 Topics in Advanced Mathematics	4
Choose one: CDS 3200 Elements of Statistical Learning MATH 3410 Mathematical Modeling PHYS 3600 Mathematical and Computational Methods in Physics and Engineering (with 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 (Hamline Plan Q)	1
Total credits required for the major	32 - 44

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