

Mathematics Transfer Pathway

Inver Hills Community College

This document is designed for Inver Hills Community 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 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.

Inver Hills Community College Course	Hamline Plan	Credits	Hamline University Course (current status)
Required pathway courses:			
MATH 1133 Calculus I	M, R	5	MATH 1170 Calculus I
MATH 1134 Calculus II	M, R	5	MATH 1180 Calculus II
MATH 2219 Multivariable Calculus	M, R	5	MATH 3320 Multivariable and Vector Calculus
Choose one: MATH 2221 Introduction to Linear Algebra* OR MATH 2222 Introduction to Differential Equations*		3 3	MATH 3330 Linear Algebra MATH 3720 Differential Equations
Goal 1 - three courses ENG 1108 Writing and Research Skills* AND ENG 1111 Researching Writing OR ENG 1114 The Research Paper OR ENG 1130 Writing & Research for the Professions AND COMM 1100 Interpersonal Communication OR COMM 1110 Public Speaking OR COMM 2230 Small Group Communication	E E O, D O O	4 2 3 3 3 3 3	FYW 1120 Composition and Research FYW 1120 Composition and Research** ENCM 1500 Introduction to Professional Communication & Cultural Rhetorics ENCM 3460 Studies in Communication & Cultural Rhetorics ENCM 1600 Public Speaking ENCM 3410 Studies in Professional Communication
Goal 2 - completed by MnTC requirements			
Goal 3 - two courses: one in life sciences, one in physical sciences; at least one with lab Examples: BIOL 1117 Environmental Science ENGR 1701 Climate Crisis: Implementing Solutions CHEM 1061 Principles of Chemistry I	N1 N2 N1	4 3 5	CHEM 1130 General Chemistry I
Goal 4 - completed by pathway requirements			
Goal 5 - Three courses from at least two different disciplines Examples: SOC 1100 Introduction to Sociology POLS 1111 Introduction to U.S. Politics PSYC 1140 Psychology of Women	S S S, D	4 3 3	SOC 1110 Introduction to Sociology PSCI 1110 American Government and Politics

Goal 6 - three courses: at least one from Fine Arts and one from Humanities Examples: ART 1131 Introduction to Digital Photography HUM 1115 Holocaust & Genocide Studies in Film PHIL 1112 Ethics MUSC 1104 Class Piano I	F H, G H F	3 3 3 3	
Goal 7 – one course Example: PHIL 2110 American Mind	D, H	3	
Goal 8 – one course Example: ECON 1105 Principles of Macroeconomics	G, S	3	
Goal 9 – one course Example: ENGR 1701 Climate Crisis: Implementing Solutions	N2	3	
Goal 10 - one course, minimum 3 credits Examples: BIOL 1117 Environmental Science	N1	4	
Additional Electives - any course numbered 1000 or above MATH 1103 Introduction to Statistics*	M, R		MATH 1200 Statistics
Health & Physical Education - two credits: one in health, one in physical education		2	
Total pathway credits		60	

*Recommended for transfer to Hamline, for additional course options, contact admission@hamline.edu

**ENG 1108 and ENG 1114 may both be transferred into Hamline with the second instance counting toward general credit.

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 3330 Linear Algebra (if not met by MnTC)	0-4
MATH 1200 Statistics (if not met by MnTC; Hamline Plan M, R)	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 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	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 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>