

Individualized Mathematics Proposal (IMaP) for Math Major

Name: _____ E-mail: _____

Graduation year: _____ Advisor: _____

Major(s) _____ Concentration(s) _____

Do you plan to get a mathematics (grades 5-12) teaching license? Yes ____ No ____

Write a brief statement about your reasons for majoring in mathematics and ideas about your post-graduate plans.

List the mathematical activities in which you are participating or planning to participate (for example: MAA, grading, tutoring, attending colloquia, problem solving)

List mathematics, statistics, and computer science courses taken through AP or IB programs or at another college before coming to St. Olaf for which you received St. Olaf credit:

Directions: In the sections below, check the courses you plan to take or have taken (since coming to St. Olaf) to complete your math major.

Basic (all required unless completed before coming to St. Olaf)

	Course	Term, Year
120	Calculus I	
126/8	Calculus II	
220	Linear Algebra	

Seven courses in addition to the basic courses are required. These must include:

- two transition courses
- two Level III courses, at least one of which must be a Mathematics course
- one course from each of three of the following perspectives: Axiomatic/Algebraic (A), Continuous/Analytic (C), Discrete/Combinatorial (D), and Modeling/Computation (M)
- a Level II – Level III sequence of two courses

A total of two approved courses from statistics or computer science can be counted toward the mathematics major. You may be able to count one mathematics-related course from another department. If you wish to do so, list the course in the appropriate “other” blank and attach a paragraph explaining why you believe the course should be included as part of your major.

For more information on the requirements, see www.stolaf.edu/depts/math. **NOTE:** Some upper level courses are not offered every semester or even every year. Consult the department chair or the department website for confirmation of an offering during a particular term or year.

Perspectives - Circle the perspective letters for the three courses you will use to satisfy the perspectives requirement. A course can only count for one perspective.

Transition courses (at least two required)

	Course	Perspectives	Term, Year
242	Modern Computational Mathematics	M	
244	Elementary Real Analysis	C	
252	Abstract Algebra I	A	

Other Level II courses

	Course	Perspectives	Term, Year
224	Investigative Mathematics	D	
226	Multivariable Calculus	C	
230	Introduction to Differential Equations	C, M	
232	Discrete Mathematics	D	
234	Structure of Higher Mathematics	A	
236	Mathematics of Biology	M	
238	Number Theory	D	
248	Knot Theory	D	
262	Probability Theory	C, D, M	
266	Operations Research	M	
S 272	Statistical Modeling	M	
CS 231	Mathematical Foundations of Computing	A	
CS 233	Theory of Computation	A, D	
	Other:		

Level III courses (at least two required) – Draw a line in the left margin connecting the two courses that will meet your sequence requirement.

	Course	Sequence with	Term, Year
330	Differential Equations	230	
340	Complex Analysis	226	
344	Real Analysis	244	
348	Topology	244	
352	Abstract Algebra II	252	
356	Geometry	220	
364	Combinatorics	232	
370	Mathematical Logic	252	
382	Topic: Graph Theory	232	
390	Mathematics Practicum		
S 322	Statistical Theory	262	
CS 300	Topic: Computer Graphics	220	
	Other:		

Discuss your IMAp with an MSCS faculty member, get his/her signature, and then submit this form to Donna Brakke in OMH 202.

Student Signature _____ Date _____

Faculty Signature _____ Date _____

Approved by: _____, MSCS chair Date: _____