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 outside-the-classroom 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.

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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
	S 212	Statistics for Science	M	
	224	Investigative Mathematics	D	
	226	Multivariable Calculus	C	
	230	Introduction to Differential Equations	C, M	
	232	Discrete Mathematics	D	
	234/235	Structure of Higher Mathematics	A	
	236	Mathematics of Biology	M	
	238/239	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	
		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	Topics in Math	Varies	
	384	Topics in Applied Math	Varies	
	390	Mathematics Practicum		
	396	Directed Undergraduate Research	Varies	
	S 322	Statistical Theory	262	
	CS 300	Topic: Computer Graphics	220	
	CS 315	Bioinformatics		
	CS 333	Theory of Computation		
		Other:		

Discuss your IMaP with an MSCS faculty member, get his/her signature, and then submit this form to Donna Brakke in RMS 307.

Student Signature _____ Date _____

Faculty Signature _____ Date _____

Approved by: _____ , MSCS chair Date: _____