

# MSCS Course Planning Guide

## For Students and Advisors

Mathematics Courses		Tentatively Scheduled For: <u>Subject to Change—Be sure to Check</u>									Typical Prerequisite(s): Check for Exceptions
		2008-2009			2009-2010			2010-2011			
		F	I	S	F	I	S	F	I	S	
M117	Gateways	X	X	X	X	X	X	X	X	X	None
M118	Geometric Patterns/Islam			X				X		X	None
M210	Principles of Mathematics	X							X		None
M120	Calculus I	X		X	X		X	X		X	Placement
M126/120	Calculus II	X		X	X		X	X		X	Placement
M220	Linear Algebra	X	X	X	X	X	X	X	X	X	M120
M224	Investigative Mathematics										M126(128)
M226	Multivariable Calc.	X		X	X		X	X		X	M126(128)
M230	Elem. Diff. Equations	X		X	X		X	X		X	M126(128), M220
M232	Discrete Mathematics			X						X	M120
M234	Structure of Math		X			X			X		M220
M236	Mathematics of Biology						X			X	M220
M238	Number Theory					X			X		M220
M242	Modern Computational Math.	X			X			X			M220
M244	Elem. Real Analysis	X		X	X		X	X		X	M126(128)
M252	Abstract Algebra	X		X	X		X	X		X	M220
M262	Probability	X		X	X		X	X		X	M126(128)
M266	Operations Research			X				X		X	M126(128), 220
M282	Analytic Topics (occasional)										Varies
M284	Applied Topics (occasional)										Varies
M330	Differential Equations II			X						X	M230
M340	Complex Analysis	X					X	X			M244
M344	Real Analysis (odd years)				X						M244
M348	Topology (even years)	X						X			M244 or M252
M352	Abstract Alg. II (even years)			X						X	M252
M356	Geometry		X			X			X		M220 and (M244 or M252)
M364	Combinatorics (odd years)						X				M252
M370	Math. Logic (occasional)										M244 or M252
M382	Analytic Topics	X			X			X			Varies by offering
M384	Applied Topics			X			X			X	Varies by offerings
M390	Practicum		X			X			X		Permission

See reverse for Statistics and Computer Science Courses

# MSCS Course Planning Guide - Tentative

## For Students and Advisors

Computer Science Courses		Tentatively Scheduled For:									Typical Prerequisite(s): Check for Exceptions
		<u>Subject to Change—Be sure to Check</u>									
		2008-2009			2009-2010			2010-2011			
		F	I	S	F	I	S	F	I	S	
C121	Principles of Computer Science	X	X	X	X	?	X	X	X	X	
C225	Accelerated Principles of CS	X			X			X			Placement (by arrangement)
C231	Math Foundations of Computing			X			X			X	C121
C333	Theory of Computation			X						X	C231
C241	Hardware Design	X			X			X			C121
C251	Software Design and Implementation			X			X			X	C121
C252	Software Design/Implementation Lab			X			X			X	Co-required for C 251
C253	Algorithms and Data Structures	X			X			X			C251,C231
C263	Ethical Issues in Software Design			X			X			X	C251
C273	Operating Systems				X						C251, pre- or co-req C241
C276	Programming Languages						X				C241,C251
C284	Client-Server Applications	X						X			C251
C300	Topics in Computer Science		X						X		Varies
C315	Bioinformatics						X				C121 and (C251 or Bio125 or math bio)
C336	Logic Programming			X						X	C253 or C276
C350	Advanced Team Project					X					C251
C390	Senior Capstone Seminar	X			X			X			Senior, CS core courses

Statistics Courses		Tentatively Scheduled For:									Typical Prerequisite(s): Check for Exceptions
		<u>Subject to Change—Be sure to Check</u>									
		2008-2009			2009-2010			2010-2011			
		F	I	S	F	I	S	F	I	S	
S110	Principles of Statistics	X		X	X		X	X		X	None
S212	Statistics for Science	X		X	X		X	X		X	M120(122)
S263	Statistics for Economics						X				
S272	Statistical Modeling	X		X	X		X	X		X	Intro Statistics
S276	Experimental Design										S272
S282	Topics: Biostatistics		X				X		X		Intro Statistics
S316	Advanced Statistical Modeling			X			X			X	S272
S322	Statistical Theory	X			X			X			M262 and S272

See reverse for Mathematics Courses