Applied Concentration

Required Basic and Intermediate Courses

course	prerequisites	offered	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.
1231 Calculus I (or 1221)		F, S, Smr								
1232 Calculus II	1231 or 1221	F, S, Smr								
2233 Multivariable Calculus	1232	F, S, Smr								
Computer Programming Course (CSCI) †										
2971 Intro. to Mathematical Reasoning	1232	F, S								
For BA: 2184 Linear Algebra I **or** ‡	1231 or 1221	F, S, Smr								
2185 Linear Algebra I for Majors	1231/21 & 2971 (co)	F, S								
For BS: 2185 Linear Algebra I for Majors **or** ‡	1231/21 & 2971 (co)	F, S								
(2184 Linear Algebra I ***along with***	1231 or 1221	F, S, Smr								
3125 Linear Algebra II [credit as an elective too])	2184/85 & 2971	S odd								

† Options: CSCI 1011, Java; 1041, FORTRAN; 1111, Software Development; 1121, C; 1131, C.
‡ Credit may not be earned for both Math 2184 and 2185.

Required Advanced Courses

course	prerequisites	offered	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.
3342 Ordinary Differential Equations	2184/85 & 2233	F (Smr)								
3343 Partial Differential Equations	3342	S								
3359 Mathematical Modeling	3342 & CSCI	S								
3553 Numerical Analysis	2184/5, 2233, CSCI	F								
4239 Real Analysis I	1232 & 2971	F (Smr)								

Electives (two for BA, four for BS)

course	prerequisites	offered	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.
3120 Elementary Number Theory	2971	S even								
3125 Linear Algebra II	2184/85 & 2971	S odd								
3257 Complex Variables	2184/85, 2233, 2971	F even								
3410 Mathematics of Finance	2233 & 2971	F								
3411 Stochastic Methods in Finance	2184/85 & 3410	S								
3613 Combinatorics	2971	F odd								
3632 Graph Theory	2971	S odd								
3710 Mathematical Logic	2971	F even								
3720 Axiomatic Set Theory	2971	F odd								
3730 Computability Theory	2971									
3740 Computational Complexity	2971									
3806 Topology	2971	F even								
3848 Differential Geometry	2184/85, 2233, & 2971	S even								
4121 Abstract Algebra I	2184/85 & 2971	F								
4122 Abstract Algebra II	4121	S even								
4240 Real Analysis II	2184/85, 2233, & 4239	S								
4981 Seminar: Topics in Mathematics	2184/85 and 2233	S								
4995 Reading and Research										