

## Math Theoretical Track Requirements

### Part A: Required Prerequisites

Math 1151	Calculus I	5
Math 1152	Calculus II	5
Math 1295	Introductory Seminar	1

### Part B: Major Program (Minimum grade of C- and GPA of 2.0)

#### Core Requirements

Math 2153 or 2182H	Calculus III or Honors Calculus II	4-5
Math 2568 or 2568H	Linear Algebra	3
Math 3345 or 3345H	Foundations of Higher Mathematics	3
Math 4530 or Stat 4201	Probability or Introduction to Mathematical Statistics I	3-4
Stat 4202	Introduction to Mathematical Statistics II	4

#### Required Courses

Math 2255	Differential Equations and Their Applications	3
Math 4547	Introductory Analysis I	3
Math 4548	Introductory Analysis II	3
Math 4580	Abstract Algebra I	3
Math 4581	Abstract Algebra II	3

#### Math Major Electives (choose at least 6 hours):

Math 3589	Introduction to Financial Mathematics	3
Math 3607	Beginning Scientific Computing	3
Math 3618	Theory of Interest	3
Math 4350	Quantitative Neuroscience	3
Math 4504	History of Mathematics	3
Math 4507	Geometry	3
Math 4556	Dynamical Systems	3
Math 4557	Partial Differential Equations	3
Math 4551	Vector Analysis	3
Math 4552	Complex Analysis	3
Math 4573	Elementary Number Theory	3
Math 4575	Combinatorial Mathematics	3
Math 4578	Discrete Mathematical Models	4
Math 5632	Financial Economics for Actuaries	3
<b>Total Hours</b>		<b>38-40</b>

**Honors Degree:** Students completing an honors degree must complete at least 5 honors eligible courses selected in consultation with a faculty advisor. At most 2 courses can count from (2182H, 2568H, 3345H) and at least 3 must be from a list of approved 5000 level courses.



**Math Theoretical Track Sample Schedule**

	Autumn		Spring		Major Hours
Year 1	Math 1151	5	Math 1152	5	0
	ARTSSCI 1100.01	1	English 1110	3	
	GE	3	GE	3	
	GE	3	GE	3	
	GE	3			
		15		14	
Year 2	Math 2153	4	Math 3345	3	10
	GE	3	Math 2568	3	
	GE	3	Math 1295	1	
	GE	3	GE	3	
	GE	3	GE	3	
		16		13	
Year 3	Math 4530 or Stat 4201	3-4	Stat 4202	4	16-17
	Math 4547 or 4580	3	Math 4548 or 4581	3	
	Math 2255	3	GE	3	
	GE	3	GE	3	
		12-13		13	
Year 4	Math 4547 or 4580	3	Math 4548 or 4581	3	12
	Math Major Elective	3	Math Major Elective	3	
	GE	3			
		9		6	

Additional hours may be necessary depending on course selection.