

# Mathematical Finance Honours Plan

## 2015/2016 Calendar

	Course	Year	Math Core?	Topic	Pre-reqs	Offering	Comments
1	CS 125 or 133 or 135 or 134 or 115 or 230 or 234 or 241	1A	y	CS Core I		FWS	
2	MATH 135/145	1A	y	Algebra		FWS	
3	MATH 147/137	1A	y	Calculus I		FWS	Highly recommend 147
4	ECON 101	1A/B	n	Intro microeconomics		FWS	
5	AFM 101	1A	n	Core Concepts of accounting information		FWS	
6	CS 134 or 136 or 230 or 234 or 241 or 116 or 145	1B	y	CS Core II	CS Core I	FWS	
7	MATH 136/146	1B	y	Linear Algebra 1	M135	FWS	
8	MATH 148/138	1B	y	Calculus II	M137	FWS	Highly recommend 148
9	ECON 102	1B	n	Intro macroeconomics		FWS	
10	AFM 102	1B/2	n	Introduction to managerial accounting	AFM101	WS	
11	AFM 131	2A	n	Intro to Business in North America		FW	
12	MATH 235	2A	y	Linear Algebra 2	M136	FWS	
13	MATH 247	2A	y	Calculus 3	M136,138	FWS	
14	ACTSC 231	2A	n	Introductory Financial Mathematics	M137, level 2A	FWS	
15	STAT 230	2A	y	Probability	M137	FWS	
16	ECON 201	2A/B	n	Microeconomic theory	ECON 101	FWS	
17	AMATH 250	2B	n	Intro to diff equations	M138	FWS	
18	STAT 231	2B	y	Statistics	M138,STAT230	FWS	
19	ACTSC 371	2/3	n	Introduction to Investments	Coreq S231	FWS	
20	PMATH 351	2/3	n	Real analysis	M247 or PM333	FS	
21	STAT 330	3	n	Stat theory and methods	S230,S231	FWS	
22	STAT 331	3	n	Applied linear models	M235, ≥60% in S231	FWS	
23	STAT 333	3	n	Applied probability	≥60% in S230, level 3A	FWS	
24	ACTSC 372	3	n	Corporate finance	ACTSC371	WS	
25	PMATH 450	3	n	Lebesgue Integration and Fourier Analysis	≥60% in PMATH351	WS	
26	ONE OF:						
	CS 371 / AMATH 242	3/4	n	Intro to computational math	CS134 or136, M235,237 (CS 116,136,138,or146), (M136/146, 237/247), (S.231/241)	FW	
	CS 335	3/4	n	Computational Methods in Business and Finance		F	
27	STAT 443	3/4	n	Forecasting	STAT331	FWS	
28	ACTSC 445	4	n	Quantitative Enterprise Risk Management	(AS231,371), (S330 and 333 or 334)	FS	
29	ACTSC 446	4	n	Mathematics of Financial Markets	(AS231,371), (S333 or 334)	FW	
30	PMATH 451	4	n	Measure and integration	≥60% in PMATH450	F	
31	ONE OF:						
	(a) PMATH 352	2	n	Complex analysis	M247 or PMATH 333	F	
	(b) AMATH 351	3	n	Ordinary differential equations 2	AMATH250, M247	FS	
	(c) CO 250	4	n	Linear optimization	M136	FWS	
32	ONE OF:						
	(a) AMATH 353	3	n	Partial differential equations 1	AMATH231,250	WS	
	(b) PMATH 453	4	n	Functional analysis	PMATH354/450	F	
	(c) CS 476	4	n	Numeric comp for finan mode	(AM341 orCS370), S231	F	
	(d) CO 372	4	n	Portfolio optimization models	AS371, (CM350 orCO352)	W	
+	8 additional courses of which 4 must be outside the math faculty						

May-16

Total 40 courses