

# Actuarial Science Honours Plan

## 2011-2012 Calendar

	Course	Year	Term	Math Core	Topic	Pre-reqs	Offering	SoA/CAS exams	Comments
1	CS 125 or 133 or 135 or 134 or 115 or 230 or 234 or 241	1	A	y	CS Core I		FWS		
2	MATH 135/145	1	A	y	Algebra		FWS		
3	MATH 137/147	1	A	y	Calculus I		FWS		
4	ECON 101	1	A/B	n	Intro microeconomics		FWS	VEE-E	
5	CS 134 or 136 or 230 or 234 or 241 or 116 or 145	1	B	y	CS Core II	CS Core I	FWS		
6	MATH 136/146	1	B	y	Linear Algebra 1	M135	FWS		
7	MATH 138/148	1	B	y	Calculus II	M137	FWS		
8	ECON 102	1	B	n	Intro macroeconomics		FWS	VEE-E	
9	ENGL 119	1	A/B	n	Intro academic writing		FWS		
10	MATH 235	2	A	y	Linear Algebra 2	M136	FWS		
11	MATH 237	2	A	y	Calculus 3	M136,138	FWS		
12	ACTSC 231	2	A	n	Maths of finance	M137, level 2A	FWS	FM	
13	STAT 230	2	A	y	Probability	M137	FWS	P	
14	ONE OF:								
	a) MATH 239	2	B	n	Intro combinatorics	M136,138	FWS		
	b) AMATH 231	2	B	n	Calculus 4	M237	FW		
	c) AMATH 250	2	B	n	Intro to diff equations	M138	FWS		
15	STAT 231	2	B	y	Statistics	M138,S230	FWS		
16	ACTSC 232	2	B	n	Intro actuarial math	AS231,S230	FWS	MLC	
17	ACTSC 371	2/3	B/A	n	Corporate finance 1	Coreq S231	FWS	FM	
18	ACTSC 331	3	A	n	Life Contingencies 1	AS232 **	0	MLC	** ≥60% as of F11
19	STAT 330	3	A/B	n	Stat theory and methods	M237,S231	FWS		
20	STAT 333	3	A/B	n	Applied probability	S230, level 3A	FWS		
21	STAT 331	3	A/B	n	Applied linear models	M235,S231	FWS	VEE-AS	
22	STAT 340	3/4	A/B	n	Simulation	S231, CS Core II	WS	C	
23	ACTSC 431	4	A	n	Loss models 1	S330,S333	FS	* C	* most exam C material from these courses
24	ACTSC 432	4	A	n	Loss models 2	S330,S333	FS	* C	* most exam C material from these courses
+									
	4 Additional 300-400 level (ACTSC courses or AFM 472 or STAT 431 or STAT 443); currently available courses include:								
	ACTSC 372	3	A/B	n	Corporate finance 2	AS371	WS	VEE-CF	
	ACTSC 433	4	B	n	Survival analysis	AS331,S330	W	C	
	ACTSC 445	4	A	n	Asset liability management	(AS231,371), (S330 and 333 or 334)	FS	C, FSA(E,F)	
	ACTSC 446	4	A/B	n	Math models in finance	(AS231,371), (S333 or 334)	FW	MFE	
	ACTSC 453	4	B	n	Pensions	AS331	W	FAP/FSA(R)	
	ACTSC 455	4	A/B	n	Advanced Life Insurance Practice	AS331 **	varies	MLC (as of spring 2012)	** ≥60% as of F11
	ACTSC 462	4	A/B	n	Intro to Property & Casualty Pricing	(AFM 272 or AS 231)	varies	CAS - Exam 5	Antireq: 363
	ACTSC 463	4	A/B	n	Intro to Property & Casualty Loss Reserving	(AFM 272 or AS 231), (S331 or 371 or 373)	varies	CAS - Exam 6	Antireq: 363
	ACTSC 471/AFM 476	4	A/B	n	Advanced corporate finance	AS372	F		
	AFM 472	3/4	B/A	n	Investments	AS372	FW	FSA(F,V)	
	STAT 443	3/4	B/A	n	Forecasting	S331	FWS	VEE-AS	
	STAT 433 or STAT 431	4	A/B	n	Stochastic processes/Generalized linear models	S333/S330,S331	F		
+	2 Additional 300-400 level mathematics half-unit courses; common choices are								
	CO 350, 480, STAT 332, STAT 450 ACTSC courses not used to satisfy "+4additional" above								
+	10 Additional courses, of which at least 7 must be outside the math faculty (6 if AFM 472 is taken)								
	Recommended non-math electives: ECON 201, 202								
	Other popular non-math electives : SPC 223, PSYCH 101, BUS 111W, AFM 101, AFM 102, MTHEL 131, JAPAN 101R								
	<b>Please Note: Students who take ACTSC 446 CAN NOT get credit for ECON 372</b>								
Total 40 courses									