

### Actuarial Science Requirements

#### Part A: Required Prerequisites

Math 1151, Math 1152	Calculus I, Calculus II	5,5
AcctMIS 2000	Foundations of Accounting	3
Econ 2001	Principles of Microeconomics	3
Econ 2002	Principles of Macroeconomics	3

Choose one of the following four:

CSE 1222	Introduction to Computer Programming in C++ for Engineers and Scientists	3
CSE 1223	Introduction to Computer Programming in Java	3
CSE 1224	Introduction to Computer Programming in Python	3
CSE 2111	Modeling and Problem Solving with Spreadsheets and Databases	3

Choose one of the following three:

Comm 2367	Persuasive Communication	3
Comm 2110	Principles of Effective Public Speaking	3
Comm 2131	Business and Professional Speaking	3

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

Math 2153	Calculus III	4
Math 2568	Linear Algebra	Prereq: Math 2153 3

Choose one of the following two:

Math 4530*	Probability <sup>1</sup>	Prereq: Math 2153 3
Stat 4201*	Introduction to Mathematical Statistics I <sup>1</sup>	Prereq: Math 2153 4

Complete the following five:

Stat 4202	Introduction to Mathematical Statistics II	Prereq: Stat 4201 or Math 4530 4
Math 3588	Practicum in Actuarial Science	Prereq: Junior Standing and two writing courses 3
Math 3618	Theory of Interest <sup>2</sup>	Prereq: Math 1152 3
BusFin 3120	Foundations of Finance	Prereq: AcctMIS 2000, Econ 2001, CSE 3
English 3304 or 3305	Business and Professional Writing or Technical Writing	3

Choose three of the following Actuarial Electives:

Math 5630	Life Contingencies I <sup>3-a</sup>	Prereq: Math 3618 and Stat 4201 or Math 4530 3
Math 5631	Life Contingencies II <sup>4</sup>	Prereq: Math 5630 3
Math 5632	Financial Economics for Actuaries	Prereq: Math 3618 and Stat 4201 or Math 4530 3
Math 5633	Loss Models I <sup>3-b</sup>	Prereq: Stat 4202 3
Math 5634	Loss Models II <sup>5</sup>	Prereq: Math 5633 3
Math 5637	Topics from Risk Modeling <sup>6</sup>	Prereq: Stat 4202 and Math 2568 3
<b>Total Hours</b>		<b>35-36</b>

Actuarial Exams: <sup>1</sup>SOA P/CAS 1   <sup>2</sup>SOA FM/CAS 2   <sup>3-a</sup>SOA FAM-L   <sup>3-b</sup>SOA FAM-S   <sup>4</sup>SOA ALTAM   <sup>5</sup>SOA ASTAM   <sup>6</sup>SOA SRM

\*Entry into the Actuarial Science Major requires a 3.0 GPA and a B- or better in Math 4530 or Stat 4201.

**Honors Degree:** Students completing an honors degree must complete at least 5 honors eligible courses selected in consultation with a faculty advisor. (e.g. 5630, 5631, 5633, 5634, 5637) Note: At most 2 courses can count from (2182H, 2568H, 3345H) and at least 3 courses must be at the 5000 level.

**Actuarial Science Sample Schedule**

	Autumn		Spring	
Year 1	Math 1151	5	Math 1152	5
	CSE 1222, 1223, 1224 or 2111	3	AcctMIS 2000	3
Year 2	Econ 2001 or 2002	3	Econ 2001 or 2002	3
	ARTSSCI 1100.01	1	English 1110	3
Year 3	GE	3	GE	3
		15		17
Year 4	Math 2153	4	Math 2568	3
	Math 3618 <sup>2</sup>	3	Stat 4201 <sup>1</sup> or Math 4530 <sup>1</sup>	3-4
Year 1		7	Comm 2367, 2110 or 2131	3
	Stat 4202	4	Math 3588	3
Year 2	BusFin 3120	3	Actuarial Elective	3
		7	English 3304 or 3305	3
Year 3	Actuarial Elective	3	Actuarial Elective	3
		3		3

 Actuarial Exams: <sup>1</sup>SOA P/CAS 1    <sup>2</sup>SOA FM/CAS 2    <sup>3-a</sup>SOA FAM-L    <sup>3-b</sup>SOA FAM-S    <sup>4</sup>SOA ALTAM    <sup>5</sup>SOA ASTAM    <sup>6</sup>SOA SRM

Additional hours may be necessary depending on course selection.