# ANDERSON UNIVERSITY

### Actuarial Science (66 credit hours)

The Actuarial Science major prepares students for careers in areas such as actuarial science, banking, corporate finance, financial planning, and financial analysis. The major satisfies all three VEE (Verified Educational Experiences) of the SOA (Society of Actuaries). In addition, it would prepare students for graduate study in Mathematical Finance, Applied Mathematics, and Actuarial Science.

#### **Major Requirements:**

- MATH 2010, Calculus I, 4 credit hours
- MATH 2020, Calculus II, 4 credit hours
- MATH 2120, Introductory Statistics with Applications, 4 credit hours
- MATH 3010, Linear Algebra, 4 credit hours
- MATH 3020, Calculus III, 4 credit hours
- MATH 3200, Mathematical Models, 3 credit hours
- MATH 3400, Mathematics of Finance, 3 credit hours
- MATH 4000, Problem Seminar, 2 credit hours
- MATH 4010, Probability, 3 credit hours
- MATH 4020, Advanced Statistics, 3 credit hours
- ACCT 2010, Principles of Accounting I, 3 credit hours
- ACCT 2020, Principles of Accounting II, 3 credit hours
- BSNS 2510, Principles of Finance, 3 credit hours
- BSNS 3390, Advanced Descriptive Analytics, 3 credit hours
- BSNS 4150, Investments, 3 credit hours
- BSNS 4390, Advanced Predictive Analytics, 3 credit hours
- CPSC 2020, Fundamentals of Computational Thinking, 4 credit hours
- ECON 2010, Principles of Macroeconomics, 3 credit hours
- ECON 2020, Principles of Microeconomics, 3 credit hours
- ECON 3410, Money, Banking, and Financial Markets, 3 credit hours
- POSC 2420, Applied Statistics Lab, 1 credit hour
- ECON 2010, Principles of Macroeconomics, is a Social & Behavioral Ways of Knowing course in the Liberal Arts Program.
- MATH 2010, Calculus I, is a Quantitative Reasoning course in the Liberal Arts Program.
- MATH 2120, Introductory Statistics with Applications, is a Quantitative Reasoning course in the Liberal Arts Program.
- MATH 4000, Problem Seminar, is a Speaking Intensive course in the Liberal Arts Program.

NOTE: All students must complete 120 total credit hours to graduate from Anderson University.



Proposed course sequence:

Freshman:	MATH 2010, CPSC 2020; MATH 2020, 2120, POSC 2420
Sophomore:	ACCT 2010, MATH 3010, 3400; ACCT 2020, MATH 3020, 3200
Junior:	BSNS 2510, 3390, ECON 2010, MATH 4010; BSNS 3350, 4390, ECON 2020, MATH 4020
Senior:	BSNS 4150, MATH 4000; ECON 3410

## Actuarial Science 4-Year Suggested Course Sequence

SEMESTER 1		SEMESTER 2	
MATH 2010	4 Hours	MATH 2020	4 Hours
CPSC 2020	4 Hour	MATH 2120	4 Hours
ENGL 1110	3 Hours	POSC 2420	1 Hours
LART 1050	1 Hour	ENGL 1120	3 Hours
Personal Wellness	2 Hours	COMM 1000	3 Hours

SEMESTER 3		SEMESTER 4	
ACCT 2010	3 Hours	ACCT 2020	3 Hours
MATH 3010	4 Hours	MATH 3020	4 Hours
MATH 3400	3 Hours	MATH 3200	3 Hours
BIBL 2000	3 Hours	Aesthetic Ways of Knowing	3 Hours
Civic Ways of Knowing	3 Hours	Civil Discourse & Critical Reasoning	2 Hours

SEMESTER 5		SEMESTER 6	
BSNS 2510	3 Hours	BSNS 3350	3 Hours
BSNS 3390	3 Hours	BSNS 4390	3 Hours
ECON 2010	3 Hours	ECON 2020	3 Hours
MATH 4010	3 Hours	MATH 4020	3 Hours
Language (Modern/Ancient)	4 Hours	Global/Intercultural Ways of Knowing	3 Hours

SEMESTER 7		SEMESTER 8	
BSNS 4150	3 Hours	ECON 3410	3 Hours
MATH 4000	2 Hours	Writing Intensive	3 Hours
Scientific Ways of Knowing	4 Hours	Additional Class	3 Hours
Christian Way of Knowing	3 Hours	Additional Class	3 Hours
Writing Intensive	3 Hours	Additional Class	2 Hours



Proposed Course Sequence:

 Freshman:
 MATH 2010, CPSC 2020; MATH 2020, 2120, POSC 2420, ACCT 2010

 Sophomore:
 MATH 3010, 3400, ACCT 2020, ECON 2010; MATH 3020, 3200, BSNS 2150, ECON 2020

 Junior:
 MATH 4010, 4000, BSNS 3390, 4510; MATH 4020, ECON 3410, BSNS 4390

#### Actuarial Science 3-Year Suggested Course Sequence

SEMESTER 1		SEMESTER 2	
MATH 2010	4 Hours	MATH 2020	4 Hours
CPSC 2020	4 Hour	MATH 2120	4 Hours
COMM 1000	3 Hours	POSC 2420	1 Hours
ENGL 1110	3 Hours	ACCT 2010	3 Hours
LART 1050	1 Hour	ENGL 1120	3 Hours
Personal Wellness	2 Hours	Civil Discourse & Critical Reasoning	2 Hours

SUMMER 1	
Civic Ways of Knowing	3 Hours
BIBL 2000	3 Hours
Aesthetic Ways of Knowing	3 Hours

SEMESTER 3		SEMESTER 4	
MATH 3010	4 Hours	MATH 3020	4 Hours
MATH 3400	3 Hours	MATH 3200	3 Hours
ACCT 2020	3 Hours	BSNS 2510	3 Hours
ECON 2010	3 Hours	ECON 2020	3 Hours
Language (Modern/Ancient)	4 Hours	Scientific Ways of Knowing	4 Hours

SUMMER 2	
Christian Way of Knowing	3 Hours
Global/Intercultural Ways of Knowing	3 Hours
Additional Class	3 Hours

SEMESTER 5		SEMESTER 6	
MATH 4010	3 Hours	MATH 4020	3 Hours
MATH 4000	2 Hours	ECON 3410	3 Hours
BSNS 3390	3 Hours	BSNS 4390	3 Hours
BSNS 4150	3 Hours	Writing Intensive	3 Hours
Writing Intensive	3 Hours	Additional Class	3 Hours
Additional Class	3 Hours	Additional Class	2 Hours