

ACTUARIAL SCIENCE B.S.

Requirements

Code	Title	Units
	Core Curriculum Requirements (https://catalog.vanguard.edu/college/core-curriculum/)	47-45
	Mathematics Major Core Requirements	41
	Actuarial Science Major Requirements	33-31
Total Units		121-117

Mathematics Major Core Requirements

Code	Title	Units
Lower Division:		
MATH-180C	Calculus I	4
MATH-181C	Calculus II	4
CSCI-100C & 100CL	Introduction to Computer Science and Introduction to Computer Science Lab	4
MATH-265C	Intro to Statistical Methods	3
MATH-207	Computer Programming	3
MATH-281	Multivariable Calculus	4
MATH-285	Intro to Adv Mathematics	3
Upper Division		
MATH-300	Linear Algebra	3
MATH-310	Differential Equations	3
MATH-365	Probability and Statistics	3
MATH-390	Numerical Analysis	3
MATH-485	Undergraduate Research	2
or MATH-450	UG Research and Internship Program	
or MATH-488	Senior Project	
MATH-499C	Mathematics Capstone	2
Total Units		41

Actuarial Science Major Requirements

Code	Title	Units
ACCT-225	Principles of Financial Accounting	3
ACCT-321	Accounting and Finance for Decision Making	3
BUSN-215	Principles/Economics I-Macro	3
BUSN-216	Principles/Economics II-Micro	3
DSCI-100C & 100CL	Introduction to Data Science and Introduction to Data Science Laboratory	4
FINC-335	Corporate Finance	3
MATH-375	Discrete Mathematics	3
MATH-400	Casualty & Actuarial Mathematics	3
Electives		
	Select two (2) lecture/lab courses from MATH, DSCI, CSCI, or BUSN	6-8
Total Units		31-33

Four Year Plan

Disclaimer: This sample Four Year Plan is provided as a guide for the recommended sequencing of courses. Vanguard University requires that students complete a minimum of 120 units of required course work as outlined on the Requirements tab in order to receive a Bachelor of Arts, Bachelor of Music, Bachelor of Science, or Bachelor of Science in Nursing degree. It is the student's responsibility to confirm with the department the course rotation before enrolling in courses. If applicable, please note the footnotes at the bottom of the page for additional information related to courses listed in a particular year and term. Questions, contact the Department of Physical Science and Mathematics.

Study Abroad Participation: Students interested in participating in the university's Study Abroad programs are encouraged to reach out to the Global Education and Outreach Office (studyabroad@vanguard.edu) for more information and collaboration in their academic course planning. Students using Education and Training Benefits through the U.S. Department of Veteran Affairs are encouraged to also reach out to the School Certifying Official (veteranscertifyingofficial@vanguard.edu) for more information regarding how benefits can be applied.

Course	Title	Units
Year 1 Term 1		
KINE-146C	Lifetime Fitness/Well Activity	1
MATH-285	Intro to Adv Mathematics	3
NT-101C	New Testament Survey	3
ENGL-120C	Persuasive Writing	3
CORE-100C	Cornerstone	1
MATH-180C	Calculus I	4
	Units	15
Year 1 Term 2		
KINE-145C	Lifetime Fitness/Wellness Lect	1
CSCI-100C	Introduction to Computer Science	3
CSCI-100CL	Introduction to Computer Science Lab	1
SOC-PLCR	Social Science Core Curriculum Reqmt	3
	Units	8
Year 2 Term 1		
BUSN-215	Principles/Economics I-Macro	3
MATH-281	Multivariable Calculus	4
MATH-300	Linear Algebra	3
THEO-PLHD	Theology Core Requirement	3
DSCI-100C	Introduction to Data Science	3
DSCI-100CL	Introduction to Data Science Laboratory	1
	Units	17
Year 2 Term 2		
BUSN-216	Principles/Economics II-Micro	3
MATH-265C	Intro to Statistical Methods	3
MATH-310	Differential Equations	3
OT-201C	Old Testament Survey	3
MATH-207	Computer Programming	3
	Units	15



Year 3 Term 1

MATH-390	Numerical Analysis	3
MATH-375	Discrete Mathematics	3
ACCT-225	Principles of Financial Accounting	3
SOC-PLCR	Social Science Core Curriculum Req'm't	3
FINA-PLCR	Fine Arts Core Curriculum Requirement	3

Units **15**

Year 3 Term 2

MATH-3XX	Mathematics Elective - 300 Level	1-9
MATH-485	Undergraduate Research	2
ACCT-321	Accounting and Finance for Decision Making	3
COMM-201C	Speech Composition and Presentation	3
HSPS-PLCR	History/Political Sci Core Requirement	3

Units **12-20**

Year 4 Term 1

THEO-300C	Developing a Christian World View	3
FINC-335	Corporate Finance	3
ENGL-220C	Researched Writing	3
HIST-203C	World Civilizations I	3
MATH-4XX	Mathematics Elective - 400 Level	1-9

Units **13-21**

Year 4 Term 2

MATH-365	Probability and Statistics	3
MATH-499C	Mathematics Capstone	2
CHIS-400C	Christian Heritage	3
MATH-400	Casualty & Actuarial Mathematics	3
ENGL-230C	Literature and the Human Experience	3

Units **14**

Total Units **109-125**

