

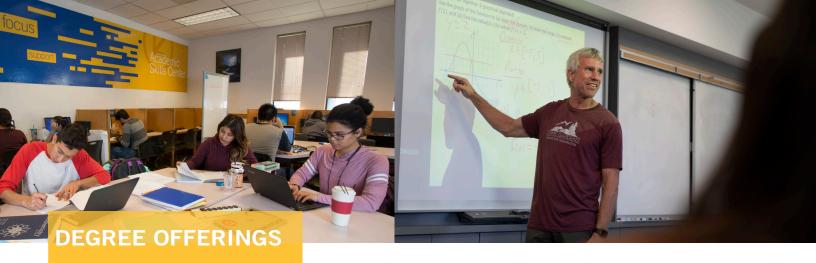
**BACHELOR OF SCIENCE** 

# **MATHEMATICS**

## Prepare to become a leader through Heritage University's Mathematics program.

If you enjoy math, your career opportunities are numerous. You thrive on solving problems and are eager to make sense of the most advanced equations. There is virtually no career that wouldn't suit a math major who can think independently, creatively and critically.





BACHELOR OF ARTS, B.A.

Mathematics Education

(5-12 Credential)

**Mathematics** 

#### WHAT COULD YOU DO?

Mathematics instructor

Actuarial

Web developer

Statistician

Financial analyst

Cryptography

Finance

Data science

Graduate studies

#### **ABOUT THE PROGRAM**

Our Mathematics program at Heritage offers a personalized environment and focuses on techniques for exploring and communicating quantitative and spatial relationships. Blending traditional and technology-based skills, you'll gain a broad understanding of mathematical concepts numerically, symbolically, algorithmically and graphically. You will benefit from faculty interaction and guidance, with plenty of one-on-one attention, to help you progress smoothly and form a clear path to your future. In addition, there are opportunities to conduct original research outside of your regular curriculum.

Heritage has two mathematics paths for you to choose from, the B.A. in mathematics education, which prepares students to teach mathematics at the middle school through high school levels; or the B.A. in mathematics, which can lead to careers in business, law, medicine or other professional fields. Businesses will recruit mathematics majors because of their analytical and problem-solving skills. Additionally, many mathematics majors pursue advanced degrees in such fields as mathematics, mathematics education, statistics, operations research, computer science and the sciences.

#### **ALUMNI EMPLOYERS**

Yakima Valley Community
College

**Grandview School District** 

Wells Fargo

AKQA

Sunnyside School District

Mabton School District

Washington University - Ph.D.

studies

Entrepreneur

### "Majoring in Mathematics was one of the best decisions I made in my life.

Mathematics taught me more than just math, it gave me a strong foundation in logic and problem solving, which has helped me in every aspect of my life. For those who enjoy the rigorous nature of mathematics and the strict application



of logic, I encourage you to pursue that enjoyment to create a solid foundation that will be with you every step of your life."

- Tyler Allen, B.A., Mathematics (2010), Web Developer, AKQA



SAMPLE COURSE GUIDE FOR B.A. MATHEMATICS (even-year start)
Courses in bold are part of the GENERAL UNIVERSITY COURSE REQUIREMENTS. This is a suggested course guide and may change as needed.

FRESHMAN YEAR FIRST SEMESTER		Credits	SECOND SEMESTER		Credits
<b>UNIV 101</b>	Foundations for Success I	2	ENG 102	English Composition II	3
ENG 101	English Composition I	3	MATH 221	Intro to Stats	4
MATH 212	Calculus I	5	MATH 213	Calculus II	5
CPSC 202	JAVA I	3	HIS 102W	World Civilization II	3
FINE ARTS		3			
		16			15

SOPHOMORE YEAR FIRST SEMESTER Cred		SECOND SEMESTER	Credits
MATH 312 Calculus III	3	UD Elective MATH	3
PHIL 210 Logic & Critical Reasoning	3	CPSC 202 Discrete Math	3
LAB SCIENCE	4	LAB SCIENCE	4
WORLD LANGUAGE	4	HUMANITIES	3
	14		13

JUNIOR YEAR FIRST SEMESTER	Credits	SECOND SEMESTER	Credits
MATH 335 Linear Algebra & Differential Equations I	4	MATH 336 Linear Algebra & Differential Equations II	4
MATH 462 Intro to Real Analysis	3	Upper Division Elective	6
SOCIAL SCIENCE	3	FREE ELECTIVE	6
Upper Division Elective	3		16
FREE ELECTIVE	3		
	16		

SENIOR YEAR FIRST SEMESTER	Credits	SECOND SEMESTER	Credits
MATH 410W Abstract Algebra I	3	MATH 415W Abstract Algebra II	3
Upper Division MATH	3	MATH 495W Senior Project	3
Upper Division Elective	6	Upper Division MATH	3
FREE ELECTIVE	3	Upper Division Elective	3
		FREE ELECTIVE	3
	15		15

**TOTAL: 120 CREDITS** 

### SAMPLE COURSE GUIDE FOR B.A. MATHEMATICS EDUCATION (even-year start)

Courses in bold are part of the *GENERAL UNIVERSITY COURSE REQUIREMENTS*. This is a suggested course guide and may change as needed.

FRESHMAN YEAR FIRST SEMESTER		Credits	SECOND SEMESTER	Credits
<b>UNIV 101</b>	Foundations for Success I	2	ENG 102 English Composition II	3
ENG 101	English Composition I	3	CPSC 221 Intro to Stats	4
MATH 212	Calculus I	5	MATH 213 Calculus II	5
CPSC 202	JAVA I	3	HIS 102W World Civilization II	3
PSY 101	Intro to Psychology	3		15
		16		

SOPHOMORE YEAR FIRST SEMESTER		Credits	SECOND SEMESTER		Credits
MATH 335	Linear Algebra & Differential Equations I	4	MATH 336	Linear Algebra & Differential Equations II	4
PHIL 210	Logic & Critical Reasoning	3	CPSC 202	Discrete Math	3
LAB SCIENC	CE	4	FINE ARTS		3
WORLD LAN	IGUAGE	4	HUMANITIES	S	3
		15	FREE ELECT	IVE	3
					16

JUNIOR YEAR FIRST SEMESTER		Credits	SECOND SI	SECOND SEMESTER	
MATH 462	Intro to Real Analysis	3	MATH 413	History of Math	3
MATH 354W	Methods Tch Math	3	BLE 413W	ELL Methodology & Assessment	3
ED 304	Tch Pre Orientation	0	ED 410B	Issues of Abuse	1
ED 305CW	Foundations of Ed & Lm	2	ED 343	Innovation by Design	3
ED 315B	Intro to Curr, Mng, Meth	3	FREE ELECT	TVE	6
BLE 311	Struct of Lng	2			16
		13			

SENIOR YEAR FIRST SEMESTER C		Credits	SECOND SEMESTER		Credits
MATH 410W	Abstract Alg I	3	MATH 436	Adv Euclidean Geo	3
MATH 322	Probability & Stats	2	ED 410D	Clinical Practice Seminar	1
MATH 454	Transformational Geo	2	ED 481S	Secondary Clinical Practice	10
ED 347D	Exceptional Learners	2	ED 496BW	Senior Capstone Project	2
ED 395AW	Advanced Literacy	3			16
FREE ELECT	IVE	3			
		15			



To get started on your career today, visit us online at *heritage.edu/Mathematics* or call (509) 865-0440.

**TOTAL: 120 CREDITS**