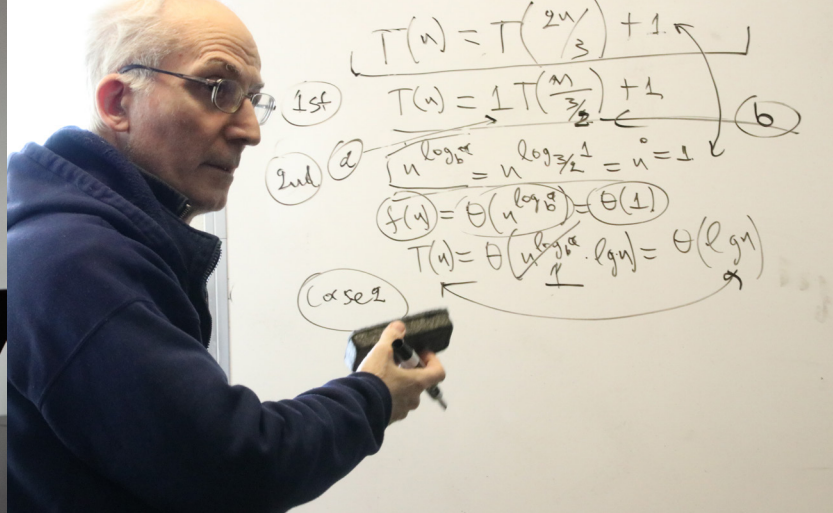


BACHELOR OF SCIENCE COMPUTER SCIENCE

Prepare to become a leader through Heritage University's Computer Science program.

The Computer Science program at Heritage focuses on the theory and techniques by which information is encoded, stored, communicated, transformed and analyzed. The program concentrates on the theory of algorithms (effective procedures), the structure of languages for expression of algorithms and the design of efficient algorithms for the solution of practical problems. Extra emphasis is placed on the study of everyday computer systems (hardware and programs) for the automatic execution of these algorithms.



**BACHELOR OF ARTS, B.A.
Information Technology**

**BACHELOR OF SCIENCE, B.S.
Computer Science**

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

COMPUTER SCIENCE

ABOUT THE PROGRAM

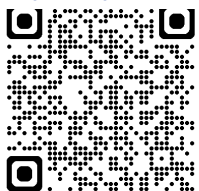
The computer science program is based in engineering and mathematics but draws upon concepts from a wide variety of other disciplines such as linguistics, psychology, biology, philosophy, economics and business. With our series of advanced-topic courses, you'll gain the valuable knowledge and skills needed for rewarding internship placements and opportunities to participate in research. These experiences offer a chance to apply what you've learned in class, explore new interests, refine your career goals and develop new strengths and understanding of real-world environments.

CAREER OUTLOOK FOR COMPUTER SCIENCE MAJORS

Information technology is a career field with nearly unlimited possibilities. Skilled workers are needed in every aspect of IT, such as database administration, security, application development, programming, web development, video game design, and so much more. Right now, the industry demand for workers far exceeds the supply. And, this high demand shows no signs of slowing down.



SCAN FOR MORE
INFORMATION



WHAT COULD YOU DO?

Computer programmer
System analyst
Web administrator
Network administrator

Security specialist
Database administrator
Database programmer
Software engineer



EXPERIENCES BEYOND THE NORM

Experiential learning is an essential part of the Computer Science program. Internships, research projects and opportunities for specialized study allow you to use what you are learning in the classroom in real-world situations. This means you will graduate with a degree and experience.

What kinds of hands-on learning might you do at Heritage? Computer science students have worked with OSHU Center for Coastal Margin Observation to help preserve salmon habitat through computerized mapping of predictive models. They have utilized IGERT Ecosystem Informatics to influence ecosystem science with projects that blended biological science, computer science, and math. In addition, they have worked with tech giant Amazon to program a robotic tour guide to lead guests through the Yakama Nation Cultural Center.

ALUMNI EMPLOYERS

- Amazon
- Centralia College
- Wholesail Networks
- Costco Wholesale
- Daon Software
- NetApp
- Evensoft, LLC
- Yakima Valley Farmworkers Clinic

“Heritage facilitated my development as a student to get into grad school: I was educated and mentored by an incredibly caring and research-oriented professor, supported by such wonderful staff and instructors, and learned alongside many other hard-working and intelligent students. Eventually, I got into the tech industry and can’t thank Heritage enough for everything.

So, a B.S. in Computer Science can open up tremendous opportunities towards grad school or employment. I attribute my success – in my present and future – to Heritage University.”

- Ermenejildo (Meadow) Rodriguez, Jr. (B.S., Computer Science)
Information Security Analyst, Costco Wholesale



SAMPLE COURSE GUIDE FOR B.S. COMPUTER SCIENCE

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
UNIV 101	Foundations for Success I		2	ENG 102	English Composition II		3
CPSC 150	Digital Logic		3	CPSC 202	Discrete Math		3
MATH 140	College Algebra		3	MATH 150	Trigonometry		4
CPSC 207	Intro to C++		3	FINE ARTS			3
CPSC 230	Databases I		3	CPSC 330	Databases II		3
			14				16

SOPHOMORE YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
MATH 212	Calculus I		5	MATH 213	Calculus II		5
CPSC 202	JAVA I		3	CPSC 302	JAVA II		3
CPSC 112	Internet Programming I		3	CPSC 312	Internet Programming II		3
CPSC 344	Database Management		3	ENG 102	English Composition II		4
			14				14

JUNIOR YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
MATH 335	Linear Algebra & Differential Equations		4	MATH 221	Intro to Stats		4
PHYS 211	Physics I		4	CPSC 306	Computer Organization & Architecture		3
PHIL 210	Logic & Critical Reasoning		3	Humanities			3
CPSC 345W	Software Engineering		3	Social Science			3
			14	HIS 102W	World Civilization II		3
							16

SENIOR YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
CPSC 321	Operating Systems		3	ENG 351W	Technical Writing		3
CPSC 352	Data Structures		3	CPSC 331	Theories of Programming Languages		3
World Language			4	CPSC 400	Design & Analysis of Algorithms		3
FREE ELECTIVE			3	CPSC 497	Senior Thesis		3
FREE ELECTIVE			3	FREE ELECTIVE			3
			16				15

TOTAL: 120 CREDITS