



Information Technology – Software Development Bachelor of Applied Science (BAS) 180 Credits

The Bachelor of Applied Science in Information Technology-Software Development is designed to prepare students for employment in a variety of software development positions, such as software developer, software tester, systems analyst, quality assurance analyst, mobile application developer, and web developer. Successful graduates of the program should be able to:

- Develop stable, robust, secure, and efficient code following best practices in database design and software construction.
- Communicate with technical and non-technical project stakeholders, and within project teams.
- Apply Agile practices such as maintaining a product backlog, planning sprints, participating in sprint reviews and retrospectives.
- Perform software quality assurance activities throughout the entire software lifecycle.
- Write technical documentation to support software lifecycle activities.

Students typically begin their studies in this program at third-year (junior) standing, with credits earned during their first and second year applying towards the total 180 credits.

Entry Requirements

To enter this program, students must have an associate degree or higher from a regionally accredited institution. Students must have a minimum cumulative GPA of 2.5 or a waiver from the Program Director for entry into the program. Students who have completed some college coursework but do not have an associate degree or higher are encouraged to meet with academic advisor in the Information Technology department to develop an educational plan to prepare for entry into the program.

The following courses, or equivalents, are strongly recommended before entering this program because they contain foundational knowledge upon which the upper-division courses build:

- IT 201 Database Fundamentals
- IT 206 Front-End Web Development
- IT 207 Web Programming with JavaScript
- IT 219 Programming I **or** CS& 141 Computer Science I Java
- IT 220 Programming II **or** CS 145 Java 2-Data Structures

Laptop Requirement

The BAS Software Development curriculum engages students in a hands-on learning environment to reflect modern software development practices, requiring students to collaborate in team-based workspaces with access to wireless technology. As a result, all incoming students are required to have a wireless laptop computer.

This document is available in alternative formats to individuals with disabilities by contacting Disability Support Services at 253-833-9111, ext. 2631; TTY 253-288-3359; or by email at dss@greenriver.edu. Green River College is an equal opportunity educator and employer. Learn more at www.greenriver.edu/accessibility. The above referenced program of study information was current at the time of printing. The program may have been updated or changed to remain industry current. For program updates, please visit greenriver.edu or contact the program's listed faculty adviser.

**Graduation Requirements**

Students must attain a cumulative GPA of 2.5.

For more information about this degree please visit www.greenriver.edu/software or contact an Information Technology program advisor at itdegrees@greenriver.edu.

Dept./No.	Course Title	Credits
Core Requirements (55 credits)		
IT 301	Systems Programming	5
IT 305	Web Development Frameworks	5
IT 328	Full Stack Web Development	5
IT 333	Data Structures and Algorithms	5
IT 355	Agile Development Methods	5
IT 372	Software Maintenance and Evolution	5
IT 378 or	Software Development Internship or	
BUS 400	Personal and Professional Branding	5
IT 405	Mobile Development Frameworks	5
IT 426	Design Patterns and Practices	5
IT 485	Software Development Capstone 1	5
IT 486	Software Development Capstone 2	5
Communication Skills (15 credits)		
ENGL& 101	English Composition I	5
ENGL 128 or	Research Writing: Science/Engineering/Business or	
ENGL 126 or	Writing: Humanities or	
ENGL 127 or	Writing: Social Sciences or	
CMST& 210 or	Interpersonal Communication or	
CMST& 220 or	Public Speaking or	
CMST& 230	Small Group Communication	5
ENGL 335	Advanced Technical Writing	5
Quantitative/Symbolic Reasoning Skills (5 credits)		
QSR course	Five credits of Quantitative Skills/Symbolic Reasoning courses from AA-DTA degree (Math& 141 PreCalculus I, Math 147 Finite Mathematics, or higher recommended)	5
Humanities (10 credits)		
CMST 338 or	Diversity in the Workplace or	
CMST 238	Intercultural Communication or	
	Any Humanities course from AA-DTA degree	5
Humanities	Any Humanities course from AA-DTA degree	5
Social Sciences (10 Credits)		
Social Science courses	Ten credits of Social Science courses from AA-DTA degree	10

This document is available in alternative formats to individuals with disabilities by contacting Disability Support Services at 253-833-9111, ext. 2631; TTY 253-288-3359; or by email at dss@greenriver.edu. Green River College is an equal opportunity educator and employer. Learn more at www.greenriver.edu/accessibility. The above referenced program of study information was current at the time of printing. The program may have been updated or changed to remain industry current. For program updates, please visit greenriver.edu or contact the program's listed faculty adviser.



Natural Sciences (10 credits)

Lab Science course	Five credits of Natural Science lab-List A course from AA-DTA degree	5
Natural Science course	Five credits from Natural Science List A or List B courses from AA-DTA degree	5

General Education Electives (10 credits)

Distribution courses	Ten credits from Humanities, Social Science, or Natural Science courses from AA-DTA degree	10
----------------------	--	----

Technical Electives (20 credits)

20 credits of any Computer Science (CS) courses, any Information Technology (IT) courses, or any of the following Mathematics courses:
MATH& 146 Introduction to Statistics
MATH 210 Discrete Math
MATH 256 Statistics for Business and Social Science

Electives (45 credits)

45 credits from any courses at the 100-level or higher	45
--	----

This document is available in alternative formats to individuals with disabilities by contacting Disability Support Services at 253-833-9111, ext. 2631; TTY 253-288-3359; or by email at dss@greenriver.edu. Green River College is an equal opportunity educator and employer. Learn more at www.greenriver.edu/accessibility. The above referenced program of study information was current at the time of printing. The program may have been updated or changed to remain industry current. For program updates, please visit greenriver.edu or contact the program's listed faculty adviser.