

Proposed 2014 Catalog Copy for Computer Science Major Applied Baccalaureate

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Mission

Founded in 1980, the Western Oregon Computer Science program blends instruction of theoretical and practical aspects of computing, with an emphasis on the practical.

Our graduates demonstrate a solid foundation in core concepts, problem solving and decision-making skills, preparing graduates who will be productive employees as software engineers and lifelong learners.

Learning Outcomes

Upon completion of the Computer Science program at Western Oregon University, students should be able to:

1. Demonstrate expertise in software engineering practices.
2. Master software development and project management tools consistent with current industry standards.
3. Exhibit autodidactic qualities through individual studies, group projects and research opportunities.

Computer Science Major (75 Credits)

Required Courses (66)

Computer Science (46)

- CS 160 Survey of Computer Science (3)
- CS 161 Computer Science I (5)
- CS 162 Computer Science II (5)
- CS 260 Data Structures I (3)
- CS 262 Programming Language (2)
- CS 271 Computer Organization (4)
- CS 311 Data Structures II (3)
- CS 314 Survey of Programming Languages (3)
- CS 345 Theory of Computation I (3)
- CS 372 Operating Systems (3)
- CS 420 Database Management Systems (3)
- CS 425 Systems Analysis and Design (3)
- CS 430 Software Implementation (3)
- CS 470 Human Machine Interface (3)

Other Required Courses (20)

- MTH 231 Elements of Discrete Mathematics (3)
- MTH 354 Discrete Structures for Computer Science (3)
- PSY 443 Group Processes (4)
- WR 322 Technical Writing (4)

Select at least two courses from:

- BA 310 Principles of Marketing (3)
- BA 315 Financial Management (3)
- BA 361 Organizational Behavior (3)

Electives (9)

Select at least 9 hours of upper division Computer Science electives (9)

Computer Science majors must have a grade of C or better in courses that are used to satisfy the major requirements. Students must also have a C or better in all listed prerequisite courses unless waived by the course instructor and the computer science division chair.