New Electives

Online Post-Baccalaureate Computer Science Degree

School of Electrical Engineering

& Computer Science

Oregon State University

CS Post-Baccalaureate Degree Curriculum

Programming Fundamentals	•Programming I, II (CS 161 & CS 162 OR CS 165) •Discrete structures (CS 225) •Data structures (CS 261) Analysis of algorithms (CS 325)
Mobile & Web Development	• Web Development (CS 290)
Databases	• Introduction to databases (CS 340)
Software Engineering	• Software Engineering I and II (CS 361 & CS 362)
Computer Systems and Networking	• Computer Architecture and Assembly Language (CS 271) • Operating Systems (CS 344) • Introduction to Computer Networks (CS 372)
Capstone Course	• Software Projects (CS 419). The number will change to CS 466 in Winter 2017.
Electives	• Please find the list in the next slide. You can now pick 2 out of 5 electives.

Elective Choice – Pick 2 out of 5

Course	Prerequisites	Term
CS 352* Introduction to Usability Engineering	CS 161 or CS 165	Offered every term until further notification
CS 373 Defense Against the Dark Arts	CS 340, CS 344 & CS 372, Knowledge of C	Winter**
CS 464 Open Source Software Development	CS 261	Winter**
CS 475 Parallel Programming	CS 261	Spring
CS 496 Mobile and Cloud Software Development	CS 344	Offered every term until further notification

*If you wish to take CS 352 along with CS 162, please talk to your advisor.
** CS 373 and CS 464 are most likely to be offered in Winter 2017. Please be ready!

New Elective Course Descriptions

- CS 373 – Defense Against the Dark Arts: Introduction to the current state of the art in anti-malware, computer forensics, and networking, messaging, and web security. Broad introduction to the field of computer security.

  Prerequisites: CS 340, CS 344 & CS 372, Knowledge of C

  Course is math intense, requiring strong math foundation. Also requires sound knowledge of Operating Systems (CS 344) and ability for independent learning.

- CS 464 – Open Source SW Development: This course provide a theoretical foundation of the history, key concepts, technologies, and practices associated with modern Free and Open Source Software (FOSS) projects, and give students an opportunity to explore and make contributions to FOSS projects with some mentoring and guidance.

  Prerequisites: CS 261

- CS 475 – Theoretical and practical survey of parallel programming, including a discussion of parallel architectures, parallel programming paradigms, and parallel algorithms. Programming one or more parallel computers in a higher-level parallel language.

  Prerequisites: CS 261

  http://web.engr.oregonstate.edu/~mjb/cs575