

B.S. Computer Science

Applied Option: Web and Mobile Software Development

Curriculum Checklist 2017-2018

Student Name: _____

OSU ID: _____ COCC ID: _____

Students are required to meet the University Graduation requirements as well as complete course work required for their major to graduate with a Bachelor of Science in Computer Science.

- 180 total college credits (124 max transferred from a community college)
- 60 upper division credits
- 45 out of last 75 credits must be OSU credits

Specific GPA requirements for College of Engineering:

- Students must apply to the College of Engineering for admission to the Computer Science professional program
- To apply, grades of "C" or better and a minimum of 2.90 cumulative GPA must be earned in pre-CS courses (Admission may require a higher GPA if the number of students applying exceeds a program's capacity)

Important Notes:

- It is the student's responsibility to double check that all requirements are met. The advisor can suggest courses and assist the student in constructing a plan of study, but the student in the end is responsible for assuring all requirements for graduation are met.
- MECOP Internship information: <https://www.mecopinc.org/>
- Professional School information: <http://engineering.oregonstate.edu/applying-engineering-professional-program>

****ALL SUBJECT TO CHANGES and CATALOG YEAR**

Students will work with their Academic Advisor and use the Bacc Core approved list for OSU-Cascades to choose courses for the Bacc Core requirements. To find information about Bacc Core or for the approved list, visit:

<http://osucascades.edu/advising/baccalaureate-core>

Baccalaureate Core:

| x | Skills Requirements | COURSE | TERM | GRADE |
|----------|--|---------------------------|------|-------|
| | Health/Fitness | | | |
| | Mathematics | MTH 251 in major | | |
| | Writing I^ | WR 121 in major | | |
| | Writing II^ | WR 222 or WR 214 in major | | |
| | Speech^ | COMM 111 or 114 in major | | |
| x | Perspectve Requirements: <i>no more than 2 from 1 department</i> | | | |
| | Cultural Diversity | | | |
| | Literature & the Arts | | | |
| | Social Processes & Institutions - <i>(ECON 201 recommended)</i> | | | |
| | Western Culture | | | |
| | Physical Science | | | |
| | Biological Science | | | |
| | Additional Science (Physical or Biological) | | | |
| | Difference, Power & Discrimination | | | |
| x | Synthesis Requirements: <i>cannot be from the same department</i> | | | |
| | Contemporary Global Issues | | | |
| | Science, Technology & Society | CS 391 in major | | |
| | | | | |

A student who has completed (or plans on completing) an ASOT-Business or an AAOT has completed all Skills & Perspectives requirements in the Bacc Core. Students still need to complete synthesis courses.

Computer Science Fundamentals:

| x | Course | Title | Pre-requisites | Credits | Term Offered* | Term/Grade |
|---|-----------------------------|---|-------------------------------|---------|---------------|------------|
| | CS 160^ | Computer Science Orientation | Wireless Laptop | 3 | F | |
| | CS 161^ | Introduction to Computer Science I Accelerated | MTH 112 | 4 | W | |
| | CS 162^ | | CS 161 | 4 | SP | |
| | CS 261^ | Data Structures | CS 162/CS 165, MTH 231/CS 225 | 4 | F | |
| | CS 290^ | Web Development | CS 162/CS 165 | 4 | W | |
| | MTH 231 or CS 225 (online)^ | Discrete Mathematics or Discrete Structures in Computer Science (online only) | MTH 112 | 4 | SP | |
| | MTH 251^ | Differential Calculus | MTH 112 | 4 | F | |
| | MTH 252^ | Integral Calculus | MTH 251 | 4 | W | |
| | WR 121^ | English Composition | | 3 | F | |
| | COMM 111 or COMM 114^ | Public Speaking or Argument & Critical Discourse | | 3 | W, SP | |
| | CS 271^ | Computer Architecture & Assembly Language | CS 161/CS 165 | 4 | SP | |
| | WR 222 or WR 214^ | English Composition or Writing in Business | WR 121^ | 3 | W | |
| | ST 314 | Introduction to Statistics for Engineers | MTH 252 | 3 | SP | |
| | WR 327 | Technical Writing | WR 121^ | 3 | SP | |

Professional Computer Science:

| x | Course | Title | Pre-requisites | Credits | Term Offered* | Term/Grade |
|---|---------------------|---------------------------------------|---|---------|---------------|------------|
| | CS 344 | Operating Systems I | CS 261, CS 271, C programming | 4 | W | |
| | CS 325 | Analysis of Algorithms | CS 261, MTH 231/CS 225 | 4 | W | |
| | CS 340 | Introduction to Databases | CS 290 | 4 | W | |
| | CS 361 (WIC) | Software Engineering I | CS 261 | 4 | W | |
| | CS 362 | Software Engineering II | CS 261 (CS 361 recommended, not required) | 4 | SP | |
| | CS 372 | Introduction to Computer Networks | CS 261, CS 271, C programming, Unix | 4 | F | |
| | CS 381 | Programming Language Fundamentals | CS 261, MTH 231/CS 225 | 4 | SP | |
| | CS 391 | Social and Ethical Issues in CS | CS 101 or computer literacy | 3 | SP | |
| | CS 444 | Operating Systems II | CS 344, CS 271 | 4 | SP | |
| | CS 461 | Senior Software Engineering Project | CS 361, Senior Standing | 3 | F | |
| | CS 462 | Senior Software Engineering Project | CS 362, CS 461, Senior Standing | 3 | W | |
| | CS 463 | Senior Software Engineering Project | CS 462 | 2 | SP | |
| | CS 352 | Introduction to Usability Engineering | CS 161/CS 165 | 4 | F | |
| | Restricted Elective | Choose (1) course in applied option | | 3-4 | | |
| | Restricted Elective | Choose (1) course in applied option | | 3-4 | | |

Applied Option: Web and Mobile Software Development (32 credits):

| x | Course | Title | Pre-requisites | Credits | Term Offered* | Term/Grade |
|--|------------------|---|--------------------------------------|---------|---------------|------------|
| Required courses (16 credits) | | | | | | |
| | BA 260 | Introduction to Entrepreneurship | Sophomore standing | 4 | SP | |
| | CS 466 | Web-based Start-up Project | Co-requisite: CS 461 | 4 | F | |
| | CS 496 | Mobile & Cloud Software Development | CS 344, knowledge 1 operating system | 4 | F | |
| | ECE 478 | Network Security | CS 372 | 4 | W | |
| Choose (16 credits) from the following: | | | | | | |
| | BA 352 or BA 351 | Individual & Team Performance or Managing Organizations (online only) | COMM 111, Junior standing | 4 | W, SP | |
| | BA 360 | Introduction to Financial Management | BA 215, ECON 201 | 4 | F, SP | |
| | MGMT 364 | Project Management | BA 351/BA 352 | 4 | W | |
| | BA 215 | Fundamentals of Accounting | | 4 | SP | |
| | CS 434 | Machine Learning and Data Mining | CS 325 | 4 | SP | |
| | CS 447 | Wireless Embedded Systems | CS 344 | 4 | W | |

NOTES

^=Courses used for pre-CS GPA calculation
 See Academic Advisor for Restricted Elective (RE) information:
 RE cannot be used to meet both Applied Option & Restricted Elective
 * All info is subject to change