### Computer Science Pathway Fall Term Start (4 Year Sample Path)

Updated July 2022 to support recommended CS 322 & Ethics, Concentrations, CS Early Start M.S., CS Accelerated Master’s Program, OR Major Transfer Map

#### Year 1 (1)
- **Fall Term**
  - CS 210 Computer Science I
  - MATH 251 or 261 or 246 Calculus I
  - WR 121 College Composition I
  - Core Ed (Social Science)
- **Winter Term**
  - CS 211 Computer Science II
  - MATH 252 or 262 or 247 Calculus II
  - WR 122 College Composition II
  - Core Ed (Arts & Letters)
- **Spring Term**
  - CS 212 Computer Science III
  - MATH 231 Discrete Math I
  - Core Ed (Arts & Letters)

#### Year 2 (2)
- **Fall Term**
  - CS 314 Computer Organization
  - MATH 232 Discrete Math II
  - Science/Minor (4)
  - Core Ed (Arts & Letters)
- **Winter Term**
  - CS 322 (3) Intro to Software Eng
  - Math Choice Group
  - Science/Minor (4)
  - Core Ed (Social Science AND Multicultural)
- **Spring Term**
  - CS 330 C/C++ and Unix
  - Math Choice Group
  - Science/Minor (4)
  - Core Ed (Arts & Letters AND Multicultural)

#### Year 3 (3)
- **Fall Term**
  - CS 313 Int. Data Structures
  - CS 415 Operating Systems
  - Math Upper Division Elective
  - Minor/UO Elective
- **Winter Term**
  - CS 315 Intermediate Algorithms
  - CS 422 (7) Software Methodology I
  - WR 320 or 321 Sci & Tech or Bus Comm
  - Minor/UO Elective
- **Spring Term**
  - CS 425 Principles of Prog Langs
  - CS Upper Division Elective (7) (8)
  - PHIL 223 Data Ethics (9) or Core Ed (Social Science)
  - Minor/UO Elective

#### Year 4 (4)
- **Fall Term**
  - CS Upper Division Elective (10) (11)
  - CS Upper Division Elective (10) (11)
  - CS Upper Division Elective (10) (11)
- **Winter Term**
  - CS Upper Division Elective (11) (12)
  - CS Upper Division Elective (11) (12)
  - CS Upper Division Elective (11) (12)
- **Spring Term**
  - CS Upper Division Elective (13)
  - CS Upper Division Elective (13)
  - CS Upper Division Elective (13)

#### Summer Internship or Research Opportunity (5)

#### Math Choice Group
- MATH 251 or 261 or 246 Calculus I
- MATH 252 or 262 or 247 Calculus II
- MATH 231 Discrete Math I
- MATH 232 Discrete Math II
- Math Upper Division Elective
- CS Upper Division Elective
- CS Upper Division Elective

#### Core Ed (Arts & Letters)
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#### Core Ed (Social Science)
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#### Core Ed (Arts & Letters AND Multicultural)
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Math Core Requirements

Students must take Discrete Mathematics 231 and 232, and two terms of Calculus (I and II). In addition, students must take two of the following:

- Choose 1: [MATH 253 Calculus III OR MATH 263 Calculus with Theory III]
- MATH 341 Linear Algebra I
- Choose 1: [MATH 343 Statistical Models/Methods OR MATH 345M Probability and Statistics for Data Science OR MATH 425 Statistical Methods I]

Laboratory Science Requirement

Students must complete one three-term sequence chosen from the following:

- General Physics: PHYS 201, 202, 203
- Foundations of Physics: PHYS 251, 252, 253
- General Chemistry: CH 221, 222, 223
- Honors General Chemistry: CH 224H, 225H, 226H
- Geological Sciences: GEOL 201, 202, 203 (ERTH 201, 202, 203)
- Geography: GEOG 141, choose 2: [GEOG 321, GEOG 322, GEOG 323]
- Biology: choose 1: [CH 111, CH 113, CH 114, CH 221, CH 224H], BI 211, choose 1: [BI 212, BI 213]
- Psychology: PSY 201, PSY 202, choose 1: [PSY 304, PSY 330, PSY 348]

Notes

(1) Check out CS and UO student organizations (see https://cs.uoregon.edu/activities/student-groups).
(2) Schedule a major progress review advising appointment for upper-division majors (see https://cs.uoregon.edu/undergraduate/computer-science-advising).
Attend CS 407 Career/Internship seminar (Mondays during the academic year 3:30-4:50 p.m.; all are welcome).
Begin to explore summer internship or Research Experience for Undergrads (search on “NSF REU Computer Science”) plans.
(3) CS 322 recommended, else UO elective
(4) A computing-related minor may substitute for science sequence with approved petition.
(5) 401/404 cr. is possible – 404 cr. may be combined with CS 407 Career/Internship seminar credit.
(6) Check out CS student organizations; attend CS Career/Internship seminar; plan for summer internship or REU.
(7) possible Computer Science Early Start M.S. Course
(8) possible capstone (CS 423) or individual study course (e.g., CS 401, 403)
(9) PHIL 223 Data Ethics recommended, else other Social Science Core Ed course
(10) possible concentration (formerly track) course; must be numbered 410 or higher
(11) possible CS Accelerated Master’s Program (AMP) course
(12) possible individual study course (e.g., CS 401, 403)
(13) upper-division if needed to meet UO graduation requirements
(14) may choose an additional Computer Science elective