## Computer Science Pathway Year 2 Fall Term Start (4 Year Sample Path) Updated July 2022 to support recommended CS322 & Ethics, Concentrations, CS Early Start M.S., CS Accelerated Master's Program, OR Major Transfer Map

Year 1	Fall Term	Winter Term	Spring Term	
	CS 110 Fluency w/Info Tech	CS 111 Intro to Web Programming	CS 122 (1) Intro to Prog & Prob Solv	
	MATH 111 College Algebra	MATH 112 Elementary Functions	MATH 251 or 261 or 246 Calculus I	
	WR 121 College Composition I	WR 122 College Composition II	Core Ed (Arts & Letters)	
	Core Ed (Social Science)	Core Ed (Art & Letters)	Core Ed (Social Science)	
Year 2 (2)	CS 210 Computer Science I	CS 211 Computer Science II	CS 212 Computer Science III	
	MATH 252 or 262 or 247 Calculus II	MATH 231 Discrete Math I	MATH 232 Discrete Math II	
	Science/Minor (3)	Science/Minor (3)	Science/Minor (3)	
	Core Ed (Arts & Letters)	Core Ed (Social Science)	Core Ed (Arts & Letters)	
Year 3 (4)	CS 322 (5) Intro to Software Eng	CS 313 Intermediate Data Structures	CS 315 Intermediate Algorithms	Internship or REU (6)
	CS 314 Computer Organization	CS 330 C/C++ and Unix	CS 415 Operating Systems	
	Math Choice Group	Math Choice Group	Math Upper Division Elective	
	Minor/UO Elective	Minor/UO Elective	Minor/UO Elective	
	CS 425	CS 422		
	CS 423	Software Methodology I (7)	CS Upper Division Elective (9) (10)	
	Principles of Prog Lang	Software Methodology I (7)		
Year 4	Principles of Prog Lang  CS Upper Division Elective (7) (8)	CS Upper Division Elective (8) (9)	CS Upper Division Elective (8) (9)	

## 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:

- MATH 233 Discrete Mathematics III
- 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 343M Probability and Statistics for Data Science OR MATH 425 Statistical Methods I]

## Laboratory Science Requirements

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, CH114, CH 221, CH 224H], BI 211, choose 1:[BI 212, BI 213]
- Psychology: PSY 201, choose 2: [PSY 301, PSY 304, PSY 305, PSY 348]

## Notes

- (1) CIT 281 for CIT minor.
- (2) Check out CS and UO student organizations (see https://cs.uoregon.edu/activities/student-groups).
- (3) A computing-related minor may substitute for CS additional science sequence with approved petition.
- (4) Schedule a major progress review advising appointment for upper-division majors (see <a href="https://cs.uoregon.edu/undergraduate/computer-science-advising">https://cs.uoregon.edu/undergraduate/computer-science-advising</a>).
  - . Attend CS 407 Career/Internship seminar (Mondays during the academic year 3:30-4:50 p.m.; all are welcome).
  - . Begin to make summer internship or Research Experience for Undergrads (search on "NSF REU Computer Science") plans.
- (5) CS 322 recommended, else UO elective
- (6) 404 Internship (2 cr.) may be combined with CS 407 Career/Internship Seminar (2 cr.) taken in any regular AY term in the last two years of the major.
- (7) possible CS Early Start M.S. Course
- (8) possible concentration (formerly track) course; must be numbered 410 or higher
- (9) possible CS Accelerated Master's Program (AMP) course
- (10) possible capstone (CS 423) or individual study course (e.g., CS 401, 403).
- (11) PHIL 223 Data Ethics recommended, else other Social Science Core Ed course