

# Computer Science-Data Science Double Major Pathway\*

Updated July 2022 to support recommended CS322 & Ethics, Concentrations, CS Early Start M.S., CS Accelerated Master's Program, OR Major Transfer Map

	Fall Term	Winter Term	Spring Term	
Year 1	CS 122 Intro to Prog & Prob Solv	DSCI 101 Found of Data Science I	DSCI 102 Found of Data Science II	
	MATH 112 Elementary Functions	MATH 251 or 261 or 246 Calculus I	MATH 252 or 262 or 247 Calculus II	
	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	CS 210 Computer Science I	CS 211 Computer Science II	CS 212 Computer Science III	
	MATH 341 (1) Elementary Linear Algebra	MATH 342 (1) Elementary Linear Algebra	MATH 345M (1) Prob & Stats Data Science	
	DSCI Domain 1	DSCI Domain 2	DSCI Domain 3	
	Core Ed (Arts & Letters)	Core Ed (SSci/Multicultural)	Core Ed (A&L/Multicultural)	
Year 3	CS 314 (2) Computer Organization	CS 313 (2) Intermediate Data Structures	CS 330 (2) C/C++ and Unix	Internship or REU CS 404/CS 399
	MATH 231 Discrete Math I	MATH 232 Discrete Math II/override	CS 315 Intermediate Algorithms	
	DSCI 311 (3) Princ & Tech Data Science	DSCI 372 (3) Machine Learning for DSC	PHIL 223 (4) Data Ethics	
	UO Elective	WR 320 or 321 Sci & Tech or Bus Comm	DSCI Domain 4	
Year 4	CS 415 Operating Systems	CS 422 Software Methodology I	CS 425 Principles of Prog Lang	
	CS Upper Division Elective (410 or higher) (5) (6)	CS Upper Division Elective (410 or higher) (5) (6)	CS Upper Division Elective (410 or higher) (5) (6)	
	DSCI Domain 5 (7)	DSCI Domain 6 (7)	DSCI Domain 7/Capstone (7)	

## Notes

\*A Computer Science (CS) and Data Science (DSCI) double major completes all of the courses required by both majors, and choosing electives carefully to take advantage of courses that count toward both majors:

- (1) CS majors satisfy Math requirement with 341, 342, and 345M
- (2) DSCI majors satisfy Computational and Inferential Depth requirement with required upper-division CS courses
- (3) CS majors satisfy 2 (8 cr.) of CS upper-division elective requirements with DSCI 311 and 372

Also:

- (4) PHIL 223 is required by DSCI and is also a Core Ed Social Science Core course
- (5) possible concentration (formerly track) course
- (6) possible CS Accelerated M.S. Program (AMP) course
- (7) upper-division if needed to meet UO graduation requirements

And:

CS Science sequence is satisfied with DSCI major (petition must be filed)