

Planning Guide: Computer Sciences & Data Science Certificate

Below are sample course plans that show how a student might navigate both the Computer Sciences major and Data Science certificate. This plan is provided as a tool for students to understand the potential course load between two programs and areas of overlap and non-overlap. Please note that this is a flexible plan and students are not required to follow this plan exactly. Students are strongly encouraged to review the full curriculum for both programs on the Guide and contact relevant advisors for information on course selection.

[Guide link to the Computer Sciences major](#) (select BA or BS).

[Guide link to the Data Science certificate](#).

4 YEAR PLAN

	Fall Semester		Spring Semester	
	<i>CS Maj Courses</i>	<i>DS Cert Courses</i>	<i>CS Maj Courses</i>	<i>DS Cert Courses</i>
Year 1	MATH 221 (5), COMP SCI 200 (3)		MATH 222 (4), COMP SCI 300 (3)	STAT 240 (4)
Shared/Gen-Ed's	Electives and gen-ed courses		Electives and gen-ed courses	
Year 2	COMP SCI 252 (3), 400 (3), 240 (3)		COMP SCI 354 (3), Linear Algebra (3)	
Shared/Gen-Ed's	Electives and gen-ed courses		Electives and gen-ed courses	
Year 3	COMP SCI 577 (3), Probability or Statistics (3) ^	COMP SCI 320 (4)	Software & Hardware (3), Applications (3)	
Shared/Gen-Ed's	Electives and gen-ed courses		Electives and gen-ed courses	
Year 4	Software & Hardware (3)	Data Ethics (3-4)		
Shared/Gen-Ed's	CS/DS Elective * (3) , Electives and gen-ed courses		CS/DS Elective * (3) , Electives and gen-ed courses	

Below is a 5-semester and 3-semester plan for students who may have less than two years to complete the Data Science certificate.

5 SEMESTER PLAN

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
COMP SCI 320 (4)	STAT 240 (4)	CS/DS Elective (3)	CS/DS Elective (3)	Data Ethics (3-4)

3 SEMESTER PLAN

Semester 1	Semester 2	Semester 3
COMP SCI 320 (4)	STAT 240 (4), CS/DS Elective (3)	Data Ethics (3-4), CS/DS Elective (3)

^ STAT 340 overlaps as a DS cert fundamental elective and CS Probability/Statistics requirement.

* Overlapping DS/CS Electives include CS 471, 524, 532, 541, 544, 565, and 576.

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