

## Biology Major & Data Science Certificate Planning Guide

Below is a sample 4-year plan that shows how a student might navigate both the Biology 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 Biology major in L&S \(select BA or BS\).](#)

[Guide link to Biology major in CALS](#)

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

### 4 Year Plan

	Fall		Spring	
	BIO	DS	BIO	DS
<b>Year 1</b>	CHEM 103 (4), MATH 221 (5)		CHEM 104 (5)	
Shared/Gen-Ed	electives and gen-ed courses		<b>STAT 240 (4)</b> , electives and gen-ed courses	
<b>Year 2</b>	BIO/BOT/ZOO 151 (5), CHEM 343 (3)		BIO/BOT/ZOO 152 (5), CHEM 344 (2), CHEM 345 (3)	
Shared/Gen-Ed	electives and gen-ed courses		electives and gen-ed courses	
<b>Year 3</b>	Major Foundation Course (3), PHYSICS 103 (4)	COMP SCI 220 (4)	Major Upper-Level Breadth (4), PHYSICS 104 (4)	DS Elective (3)
Shared/Gen-Ed	electives and gen-ed courses		electives and gen-ed courses	
<b>Year 4</b>	Major Upper-Level Breadth (6)	L I S 461 (3-4)	Major Upper-Level Breadth (3), Additional Lab or Capstone (2)	DS Elective (3)
Shared/Gen-Ed	electives and gen-ed courses		electives and gen-ed courses	

**STAT 240 is an overlapping course between the DS certificate and Biology major. There may be additional courses that count such as BIOCHEM 570 or Biocore. Please consult your advisor for more information.**

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 220 (4)	<b>STAT 240 (4)</b>	L I S 461 (3-4)	DS Elective (3)	DS Elective (3)

### 3 Semester Plan

Semester 1	Semester 2	Semester 3
COMP SCI 220 (4), L I S 461 (3-4)	<b>STAT 240 (4)</b> , DS Elective (3)	DS Elective (3)