

Eight Semester Plan BS Data Science

12 credits in the major and 9 credits in the minor must be completed at Alvernia University

When pursuing a double major, you must have 12 distinct credits between the two majors.

Semester 1	Credits	Semester 2	Credits
Diversity graduation requirement <i>cannot</i> be fulfilled through major courses; students should fulfill this with a Gen Ed SEARCH class			
Writing Enhanced graduation requirement <i>cannot</i> be fulfilled through major courses; students should fulfill this with a Gen Ed SEARCH class			
SRH 101: Search Sem-Enduring Questions or HNR 160: Honor Search-Enduring Questions THE 105 or PHI 105	3	CS 155: Object-Oriented Programming MAT 209: Probability & Statistics MAT 230: Calculus I	3 3 4
CS 115: Intro to Programming	3	THE 105 or PHI 105	3
CS 120: Intro to IT	3	Gen Ed	<u>3</u>
MAT 131 Pre-calculus or Gen Ed if MAT 131 is not needed.	<u>3</u>		
TOTAL	15	TOTAL	16
Semester 3	Credits	Semester 4	Credits
CS 210: Computer Organization & Assembly Language	3	CS 220: Data Structures and Algorithms DS 210: Data Visualization & Methods of Data Science	3 3
DS 110: Introduction to Data Science	3	MAT 231: Calculus II	4
MAT 250: Discrete Mathematics	3	Gen Ed	3
Gen Ed	3	Gen Ed	<u>3</u>
Gen Ed	<u>3</u>		
TOTAL	15	TOTAL	16
Semester 5	Credits	Semester 6	Credits
CS 310: Operating Systems	3	DS 410: Advanced Methods of Data Science	3
CS 320: Algorithm Design and Analysis	3	MAT 240: Linear Algebra	3
DS 310: Data Mining & Machine Learning	3	Gen Ed (MAT if MAT 131 was not needed)	3
Gen Ed (Lab Course Recommended)	4	Gen Ed	3
Gen Ed	<u>3</u>	Gen Ed	<u>3</u>
TOTAL	16	TOTAL	15
Semester 7	Credits	Semester 8	Credits
CS 400: Database Systems	3	CS 425: Software Development	3
DS Elective	3	CS 420: Computer Science Seminar	3
SCI 406: Research I Or SCI 480: Internship	3	SCI 407: Research II Or SCI 480: Internship	3
Gen Ed	3	Gen Ed	3
Elective	<u>3</u>	Elective	<u>3</u>
TOTAL	15	TOTAL	15

Academic Policy on Eligibility for Participation of May Commencement Ceremony

The academic policy, which the Registrar follows, is: A student who has 6 or less credits remaining to complete the degree may participate in the May Commencement Ceremony. The Graduation Application is available online in myAlvernia on the 'Academics' tab. Seniors must submit the Graduation Application to the Registrar's Office as follows:

October 1 for May Graduation; December 1 for August graduation; and March 1 for December graduation.

If you have any questions, please call the Registrar's Office (610.796.8201)