



MSU COLLEGE OF AEROSPACE, COMPUTING, ENGINEERING, AND DESIGN

25-26 Data Science and Machine Learning Major (w/ Calc I prerequisites already completed)

First Year			Third Year		
Fall: 14 Credits	CS 1050: Computer Science I	4	Fall: 14-16 Credits	CS 3120: Machine Learning	4
	MTH 1410: Calculus I	4		MTH 3220: Statistical Methods	4
	ENG1010: Composing Arguments	3		Nat'l. Phy. Sci, See Accepted Science Courses in Major Req.	3-5
	COMM 1010: Presentational Speaking or COMM 1100: Fundamentals of Oral Communication	3		Free Elective	3-4
					14-17
		14			
Spring: 14 Credits	CS 2050: Computer Science II	4	Spring: 15 Credits	DSML 4220: Deep Learning	4
	MTH 3210: Probability and Statistics	4		DSML 3850: Cloud Computing	4
	JMP 2610: Intro to Technical Writing	3		Free Elective (ideally a discipline where DSML can be applied)	3-4
	ENG 1020: Written Communication	3		Free Elective	3-4
		14			14-16
Second Year			Fourth Year		
Fall: 14 Credits	CS 3250: Introduction to Software Development and Tools	4	Fall: 15 Credits	DS/ML Upper Division Elective	4
	MTH 3130: Applied Methods in Linear Algebra	4		DS/ML Upper Division Elective	4
	Social and Behavioral Science + Global Diversity	3		Art and Humanities General Studies Requirement	3
	PHI 3370: Computers, Ethics, and Society	3		Free Elective (ideally a discipline where DSML can be applied)	3-4
	Free Elective	3-4			14-15
		17-18			
Spring: 14-16 Credits	CS 3810: Principles of Database Systems	4	Spring: 14-16 Credits	DSML 4360: Senior Experience	4
	MTH 3270: Data Science	4		Social and Behavioral Science General Studies Requirement	3
	Nat'l. Phy. Sci, See Accepted Science Courses in Major Req.	3-5		Free Elective	3-4
	Historical + ESSJ	3		Free Elective	3-4
		14-16			13-15

1. This is not the only ordering of classes, but classes must be taken in an order that satisfies the prerequisites for subsequent classes.

2. All Prerequisite and Major/Minor/ Ancillary courses require a C- or greater.

3. A minimum of 6 credits are needed to meet the Science Requirement.

4. Take Free Electives as needed to meet the total 120 credit requirement.

5. Because of the interdisciplinary nature of DS, it is recommended that some electives are chosen in a field where DS can be applied