

# Data Science - Requirements 2024-25

Questions? Contact a KSoC Academic Advisor or email [ugrad-help@cs.utah.edu](mailto:ugrad-help@cs.utah.edu)

Course	Title	Credits	Designation	Notes	Planned Semester	DV choose	IR choose
<b>GENERAL EDUCATION</b>							
WRTG 2010	Intermediate Writing	3	WR2	Ⓒ	_____	1	1
WRTG 3014 or 3015		3	CW	Ⓒ	_____		
_____	_____	3	AI	Ⓒ	_____		
_____	_____	3	FF	Ⓒ *	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	3	HF	Ⓒ *	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	3	BF	Ⓒ *	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	3	LS	Ⓒ *	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	3	PS	Ⓒ *	_____	<input type="checkbox"/>	<input type="checkbox"/>
<b>PRE-MAJOR</b>	CS 1400	Intro to Comp Prog	4		_____		
	CS 1410	Intro to OOP	4		_____		
	OR						
	CS 1420	Accel OOP	4		_____		
	CS 2420	Intro to Algs & DS	4		_____		
MATH 1210	Calculus 1	4	QL	Ⓒ ■	_____		
<b>ANALYTICAL FOUNDATIONS</b>							
MATH 1220	Calculus 2	4	QL	Ⓒ ■	_____		
CS 2100	Discrete Structures	3		‡	_____		
Math 2270	Linear Algebra	4	QL		_____		
Math 3070	Applied Statistics 1	4	QL/QI	⊙	_____		
Math 3080	Applied Statistics 2	4	QI		_____		
DS 3190	Fndn of Data Analysis	3			_____		
<b>COMPUTING FOUNDATIONS</b>							
DS 2500	Data Wrangling	3			_____		
CS 3500	Software Practice 1	4			_____		
CS 4150	Algorithms	3			_____		
<b>CORE DATA SCIENCE</b> <small>2.5 GPA required to graduate</small>							
DS 3390	Ethics in Data Science	3			_____		
DS 3941	Data Science Seminar	1			_____		
DS 4140	Data Mining	3			_____		
DS 4350	Machine Learning	3			_____		
DS 4530	Database Systems	3			_____		
DS 4630	Visualization for DS	3			_____		
<b>DATA ANALYSIS BREADTH ELECTIVE</b> Choose 3 from <a href="https://handbook.cs.utah.edu/2023-2024/DS/">https://handbook.cs.utah.edu/2023-2024/DS/</a>							
_____	_____	3			_____		
_____	_____	3			_____		
_____	_____	3			_____		
<b>DATA DOMAIN ELECTIVE</b> Choose 3 from <a href="https://handbook.cs.utah.edu/2023-2024/DS/">https://handbook.cs.utah.edu/2023-2024/DS/</a>							
_____	_____	3			_____		
_____	_____	3			_____		
_____	_____	3			_____		
<b>SENIOR CAPSTONE REQUIREMENT</b> Choose DS 4800, 4850 (Project) or DS 4940, 4970 (Thesis)							
DS _____	_____	3			_____		
DS _____	_____	3		⊗	_____		

Ⓒ Honors options available see [honors.utah.edu](https://honors.utah.edu)

\* 4 credit options accepted

■ Engineering Calculus, MATH 1310 and 1320, also accepted

⊙ CS 3130 or ECE 3530 also accepted

⊗ Students pursuing Honors and choosing project must take CS 4998 concurrently with DS 4800 to satisfy the Honors Thesis Work

● Minimum 122 credits required for graduation

‡ MATH 2200 also accepted