

Data Science Sample Curriculum

	WashU Course	Fall	Spring
Home Institution (3-4 years)			
Calculus II, III	Math 132, 233	3	3
General Physics I, II	Physics 191, 192	3	3
General Physics Lab I, II	Physics 191L, 192L	1	1
Intro Computer Science, Computer Science elective	CSE 131, CSE XXX	3	3
English Composition	CWP 100	3	
Humanities and social science electives		6	9
Additional home institution degree requirements		varies	varies
90 units or more of transferable college credit	Subtotal	90+ to transfer	
First Year of Dual Degree Curriculum at WashU			
Numbers in bold denote courses typically offered in both fall and spring semesters			
Introduction to Data Science	CSE 217A 02 Subsection B	3	
Algorithms and Data Structures	CSE 247	3	
Matrix Algebra	Math 309	3	
Statistics for Data Science I	Math 3211	3	
Technical Writing	ENGR 310	3	
Data Manipulation and Management	CSE 314A		3
Statistics for Data Science II	Math 4211		3
Data Science Technical Electives*	CSE/Math		6
Ethics and Professional Responsibility **	ENGR 4501, 4502, 4503		3
	Subtotal	15	15
Second Year of Dual Degree Curriculum at WashU			
Practicum***	CSE 400E	3	
Introduction to Machine Learning	CSE 417T	3	
Linear Statistical Models	Math 439	3	
Data Science Technical Electives*	CSE/Math	3	3
Free electives		3	12
	Subtotal	15	15
60 units or more must be taken at Washington Univ.	Total	60+ for WU degree	

*Candidates for the BSDS must complete at least 36 Core and CS/Math Elective units from approved WashU coursework. For additional information, please consult your WUacheive audit, your Engineering Student Services advisor, and your CSE faculty advisor.

**3 units from an approved list that includes Engr 4501, 4502 and 4503 (which also count as social science level 300 and above).

***3 units of an approved comprehensive data science project or experience

Master's degree candidates should consult with their faculty advisor regarding graduate courses taken third year. Note some graduate courses may be necessary second year. 84 minimum WashU residency units are required for the Master's degree.