




# DS MINOR REQUIREMENTS

FOUNDATION AND CORE DATA SCIENCE		
Pre-Minor Computing Experience	Data Science Foundations	Data Science Core Knowledge <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<i>Students will need to complete one of the below <b>prior to declaring</b> the DS Minor</i>	<i><b>Continue the sequence</b> for route you selected and <b>choose at least one</b> mathematics foundation course from the options below</i>	<i>Complete <b>at least three</b> of the below</i>
<b>Route #1</b> <i>Exploring data science field <b>and</b> intro. to programming</i>	<b>Programming &amp; Mathematics Foundations</b>	CDS DS 210 Programming for Data Science
CDS DS 100 → CDS DS 110 <b>AND</b> (CDS DS 120 OR DS 121 OR DS 122)		CDS DS 310 Data Mechanics
		CAS MA 214 Applied Statistics
<b>Route #2</b> <i>Intended for those with prior programming exposure</i>	<b>Mathematics Foundations</b>	CDS DS 320 Algorithms
<b>NOTE:</b> Students who do not complete DS 110 must keep in mind the minimum requirements for CDS residency hours (bottom of page) to earn the minor		CDS DS 340 Machine Learning
CDS DS 110 OR CAS CS 111 → CDS DS 120 OR CDS DS 121 OR CDS DS 122		CDS DS 480 Ethical and Social Implications

ADDITIONAL BREADTH OR DEPTH	
Elective Options	CDS Practicums through 
<i>To reach the 24 minimum credit hour threshold, students may enroll in <b>elective choices from either track</b> -- Methodology or In-the-Field</i>	<i>To reach the 24 minimum credit hours or CDS residency requirement, students may enroll in <b>up to 8 credit hours of CDS practicums with Spark!</b></i>
<div>   </div> <div> In-the-Field Electives Methodology Electives </div>	CDS DS 519 -- Software Engineering Practicum CDS DS 539 -- Data Science Practicum CDS DS 549 -- Machine Learning Practicum

Minimum letter grade of C must be earned to satisfy course requirements

Maximum of two courses may be used toward major and minor requirements

Minimum Credit Hour Requirement: 24  
A total of 16 credit hours (4 courses) **MUST** be taken through CDS