

Data Science & Visualization Certificate

Updated April 2024

Name: SID:

CERTIFICATE REQUIREMENTS (12 UNITS)

Introductory Statistics Courses (Take 1)		
ESOC 214: Introduction to Data Science		<input type="checkbox"/>
ISTA 116: Statistical Foundations for the Info. Age	Pre-req: MATH 107 or MATH 112	
Core Courses (Take 2)		
ISTA 320: Applied Data & Visualization	Pre-req: ISTA 116 or ESOC 214 or DATA 363 or APCV 302, or instructor consent	<input type="checkbox"/>
ISTA 321: Data Mining & Discovery	Pre-req: ISTA 116 or ESOC 214 or DATA 363 or APCV 302, or instructor consent	<input type="checkbox"/>
Elective course (Take 1)		
		<input type="checkbox"/>

COMMENTS

IMPORTANT NOTES:

- Students must earn a minimum of a 2.0 (C average) to graduate with this minor.
- Students are allowed to use up to 2 courses (typically 6 units) between a major, minor, or general education and certificate program with departmental approval.
- Students may enroll in two certificate programs to fulfill required minor for iSchool majors.

Elective Course Options (Take 1)		
BIOS 376	Introduction to Biostatistics	Pre-req: MATH 108 or higher
ESOC 302	Quantitative Methods for the Digital Marketplace	
ESOC 414	Computational Social Science	Pre-req: ISTA 116 or ESOC 214
ISTA 130	Computational Thinking & Doing	Recommended pre-req: MATH 107 or higher
ISTA 322	Data Engineering	Pre-req: ISTA 130 or CSC 110 or ECE 175 or PHYS 105A
ISTA 331	Principles & Practices of Data Science	Pre-req: ISTA 131 AND ISTA 116
ISTA 421	Introduction to Machine Learning	Pre-req: MATH 129, MATH 313 and CSC 210
ISTA 429	Applied Cyberinfrastructure Concepts	Recommend pre-req: ISTA 131 or CSC 110
LIS 470	Database Management & Development	
WFSC 223	Dealing with Data in the Wild	