

# DATA ANALYTICS AND VISUALIZATION, CERTIFICATE

## Degree Requirements (12 Hours)

The student will select a minimum 12 credits (4 courses) and must be earned in concurrence with an undergraduate degree program.

Some courses or course sections may have enrollment restrictions. Pursuing this certificate does not override those restrictions and another course or section should be chosen from the Course List.

Course	Title	Credits
Select four courses from the following:		12
ARTS 102	Design Technology and Concepts	
ARTS 245	Typographic Design I	
CSCE 101	Introduction to Computer Concepts	
CSCE 102	General Applications Programming	
CSCE 104	Program Design and Development	
	or ITEC 204	
CSCE 106	Scientific Applications Programming	
GEOG 105	The Digital Earth	
GEOG 341	Cartography	
GEOG 263	Geographic Information Systems	
ISCI 201	Data, Information & Society	
ISCI 202	Information Literacy and Technology	
ISCI 250	Information Design	
ISCI 301	Text Mining in Big Data Analytics	
ISCI 310	Information Science Data Analysis and Evaluation	
ITEC 264	Computer Applications in Business I	
JOUR 203	Principles of Visual Communications	
JOUR 346	Graphics for Visual Communications	
JOUR 400	Digital Media and Big Data Analysis	
MGSC 290	Computer Information Systems in Business	
MGSC 291	Applied Statistics for Business	
	or STAT 301 Statistical Methods for Data Analytics	
PSYC 220	Psychological Statistics	
	or SOCY 392 Elementary Statistics for Sociologists	
	or STAT 201 Elementary Statistics	
	or STAT 205 Elementary Statistics for the Biological and Life Sciences	
	or STAT 206 Elementary Statistics for Business	
	or STAT 509 Statistics for Engineers	
	or STAT 515 Statistical Methods I	
<b>Total Credit Hours</b>		<b>12</b>