DATA SCIENCE, ADVANCED CERTIFICATE

The 18-credit Advanced Certificate program in Data Science is designed for students who have completed their graduate studies in Computer Science, Information Technology, Computer Information Systems, or a similar program. The program gives students the opportunity to seek career advancement or to enhance their theoretical, analytical, and practical skills through a solid foundation in programming, databases, scientific methods, processes, systems, and analytics. Earning this credential provides career opportunities in a wide range of industry settings both private and public.

Students completing the program will be qualified for employment as a data scientist, data analyst, data statistician, predictive analyst, technical analyst, data engineer, machine learning engineer, or Instructor in private, government, and non-profit sectors. Students who complete the program will be prepared for various industry-recognized certifications such as Certified Analytics Professional (CAP), Data Science Council of America (DASCA), IBM Certified Data Architect, Microsoft MCSE: Data Management and Analytics, Microsoft Certified Azure Data Scientist Associate, SAS Certified Advanced Analytics Professional, SAS Certified Big Data Professional, SAS Certified Data Scientist and/or other certifications.

Upon completion of the Advanced Certificate program in Data Science, graduates will possess:

1. Strong theoretical and practical skills in coding, data modeling, statistical computing, data visualization, forecasting, and technical analytic techniques, which are all needed in modern business settings.
2. Competencies in the areas of big data, data science, cloud computing, artificial intelligence, machine learning, and statistical programming.
3. Skills for utilizing leading edge resources such as Hadoop, AWS, SAS, JMP, and Tableau; and languages such as Python and R.

Requirements

Code	Title	Credits
Required Core Courses		
CS-617	Statistical Computing	3
CS-628	Data Science	3
CS-655	Machine Learning	3
CS-665	Analytic Techniques	3
CS-675	Big Data: Management & Analytics	3
CS-703	Applied Data Science Project	3
Total Credits		**18**