Data Science + Business

"...I would encourage you to think of data science not as a new domain of knowledge to learn, but as a new set of skills that you can apply within your current area of expertise."



~ Jake VanderPlas, Python Data Science Handbook

Photo by Carlos Muza on Unsplash

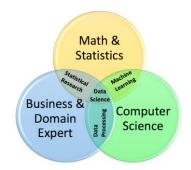
WHY DATA SCIENCE?

In the business world, data science provides awareness to what can and cannot be accomplished, what value can be extracted, and how to move towards a specific objective using data-driven decisions. As a business man or woman, the knowledge of what data science can do for your company is crucial in this day and age!

ADD A DATA SCIENCE CERTIFICATE TO YOUR AA/AS DEGREE IN:

- Data Science
- Business Administration
- Marketing
- Business Intelligence

DATA SCIENCE FACULTY ADVISOR Crystal Wiggins cwiggins@nwcc.edu



Data Science Certificate

Description

The Certificate in Data Science provides exposure to key elements of data science including data structures and data sources, programming languages, statistical principles, computing and analytics, data management, machine learning tools, and data science applications. This certificate needs to be paired with a transfer associates degree in any field (recommended fields include mathematics, applied sciences, computer science, computer programming, business, marketing, web design).

Outcomes

Upon successful completion of all program requirements, graduates should be able to:

- 1. Master key facets of data investigation, including data wrangling, cleaning, sampling, management, exploratory analysis, regression and classification, prediction, and data communication
- 2. Implement foundational concepts of data computation, such as data structure, algorithms, simulation, and analysis.
- 3. Utilize various technologies to organize, analyze, explore, and visualize data
- 4. Execute data organization, exploration, and develop proficiency in the programming language of R
- 5. Apply advanced statistical techniques
- 6. Understand machine learning models and their applications

Coursework

Semester 1 CSA*135 Spreadsheet Applications – 3 credits MAT*167 Principles of Statistics – 3 credits

Semester 2

MAT*222 Statistics II with Technology Apps -3 credits DTS*201 Data Science in R -3 credits

Semester 3

DTS*220 Intro to Machine Learning – 3 credits **Directed Elective – 3/4 credits

Total Credits 18 (19)

****** Directed Elective (see faculty advisor)