Data Analytics and Decision Making, Certificate of Proficiency

The Certificate of Proficiency in Data Analytics and Decision Making provides a skill set of recognizing the importance of data for solving operational, tactical, and strategic level organizational problems. Students will learn how to evaluate the characteristics, capabilities, and limitations of digital data as well as understand data-related laws and ethical practices. Courses cover topics related to the data analytics process, business rule modeling, data transformation, data management, applied statistics, data visualization, storytelling, and the ethical considerations of data analytics.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		**19**
Core Courses		
MGMT 1400	Introduction to Data Analytics	3
CS 1400	Fundamentals of Programming	3
MATH 1050	College Algebra QL	4
Complete one of the following:		3
MATH 1100	Survey of Calculus QL [3]	
MGMT 2240	Business Quantitative Analysis	
MGMT 2340	Business Statistics I	
STAT 2050	Introduction to Statistical Methods	
Elective Courses		6
Choose six credits from the following: [2]		
MGMT 2400	Data Analytics for Business	
MGMT 2240	Business Quantitative Analysis	
MGMT 2340	Business Statistics I	
MKTG 3300	Marketing Analytics	
CS 1410	Object Oriented Programming	
CS 2420	Introduction to Algorithms and Data Structures	
STAT 2050	Introduction to Statistical Methods	
BIOL 3100	Introduction to Data Analysis for Biologists	
BIOL 1011	Introduction to Bioinformatics BB	

[1]

Math courses numbered higher than MATH 1050 may also be used to fulfill the requirement.

[2]

Cannot use courses as electives that were counted in the core.

[3]

If this course was used to fulfill the MATH 1050 requirement, a different course must be selected for this category.

Graduation requirements:

- Completion of a minimum of 19 semester credit hours.
- Overall grade point average 2.0 (C-) or above.
- Residency hours: Minimum of 5 credit hours of course attendance at UVU.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http://www.uvu.edu/wolverinetrack/).

First Year		Credit Hours
Semester 1		**Credit Hours**
MGMT 1400	Introduction to Data Analytics	3
CS 1400	Fundamentals of Programming	3
MATH 1050	College Algebra QL	4
	Credit Hours	**10**
Semester 2		
Complete one of following:		3
MATH 1100	Survey of Calculus QL	
MGMT 2240	Business Quantitative Analysis	
MGMT 2340	Business Statistics I	
STAT 2050	Introduction to Statistical Methods	
Complete 6 credits of electives from list		6
	Credit Hours	**9**
	Total Credit Hours	**19**

Program Learning Outcomes

1. Identify and apply an appropriate statistical or analytical modeling methodology to solve an analytics problem.
2. Design and deliver visualizations, professional reports and presentations that effectively communicate the results of complex analytics problems.
3. Manage, structure, query, and manipulate data.
4. Use critical thinking in identification, analysis, and decision-making in a business analytics situation, including ethical dimensions.