Data Analytics

Degree Type Certificate Certificate Overview

The data analytics certificate at Nashua Community College offers students training in basic statistics, elementary computer programming and database basics as well as coursework specific to data analytics that focusses on developing skills with immediate applicability in the real word (Excel, PowerBI, Tableau, SAS, R/RStudio). Coursework is 100% online (and requires no on campus residency) in a structured format that allows for a high degree of student interactivity. Included in most courses are applied projects that enable students to practice skills and build a portfolio to present to prospective employers.

Why study Data Analytics here?

Nashua Community College's data analytics certificate offers students a certificate with college credit bearing and transferable coursework from a fully accredited (NECHE) institution that a non-credit career training program would not provide. Program faculty hold advanced degrees in relevant fields and have extensive hands-on professional experience in the subjects taught.

The certificate can be completed in 30 weeks (two semesters) with a fall or spring semester start. Because the program is 100% online all students -regardless of state residency -are eligible for in state tuition rates. This program is also available to eligible NH high school students in the EStart program available to CCSNH.

Career Options

Data analytics is a flexible career offering many job options using the skillset and can be used in different industries. Careers in data analytics frequently offer work from home and may accommodate nontraditional work schedules and needs of individual workers. Job titles of program graduates may include:

- Data analyst
- Business intelligence analyst
- Administrative/executive assistant
- Market research analyst
- Health data analyst
- Research assistant

Related Programs

- Data Analytics Degree
- <u>Spreadsheets Certificate</u>
- CCSNH Estart program

Program Outcomes

Upon the completion of the degree in Data Analytics, graduates will be able to:

- 1. Identify data sources, types of data, and data structures, including structured and unstructured data.
- 2. Remediate raw data as appropriate before analysis including cleaning and restructuring data using software tools and programming skills.
- 3. Collect and combine data from multiple sources using database programming (SQL) and related skills.
- 4. Use analytical tools to identify patterns and relationships in data sets including time trends, cluster analysis, association analysis, classification, and statistical associations and relations.
- 5. Apply data analytics to address real-world problems and communicate results to stakeholders
- 6. Visually communicate patterns and relations in data applying best practices of data visualization.
- 7. Identify legal and ethical issues in analyzing data and adhere to ethical standards.

Admissions Requirements

The data analytics certificate program is open admissions and has no prerequisites for students to begin coursework. Students are required to have a computer meeting the technical specifications necessary to run analytical software. Most software packages used in the program are open source, provided by the college or available at nominal cost to students. When possible, freely available open educational resources are utilized in coursework thus minimizing student cost.

Technical Standards

- Have command of the English language
- Have reading comprehension skills sufficient to read and comprehend college textbooks
- Have communication skills sufficient to prepare required reports
- Be able to understand and follow both written and oral instructions
- Be able to complete requirements for college level classes
- Have the ability to communicate information and ideas to others.

Fall Semester

ltem #	Title	Class Hours	Lab Hours	Credits	
DATA101N	Introduction to Data Analytics	2	2	3	
MATH106N	Statistics I: An Introduction to	4	0	4	
	Statistical Reasoning				
	CSCI120N or CSCI161N			3	
DATA105N	Data Mining	2	2	3	

Spring Semester

ltem #	Title	Class Hours	Lab Hours	Credits
DATA120N	Applied Data Analysis	2	2	3
CSCI130N or CSCI207N or BCPT213N				3
DATA205N	Data Visualization	2	2	3
DATA210N	Data Wrangling	2	2	3
	Total Credits		25	