Data Analytics

Degree Type
Associate in Science

The Data Analytics program provides a strong base for students interested in developing skills to collect, organize, analyze, interpret and present data. Students completing the program can pursue employment or a baccalaureate degree in the area of data analytics, business analytics, computer science, math, artificial intelligence, and other fields. The combination of courses in mathematics, computer science, and data analytics provides the student with the necessary knowledge and experience to use large data sets to make data driven decisions and to effectively communicate patterns and relationships. Program content is reinforced with hands on experience, and students will be required to apply course content to applications from business and industry.

Technical Standards: Please refer to Technical Standards for details regarding this program.

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

In addition, the graduate will be able to demonstrate competency in the general education outcomes.

First Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
ENGL101N	College Composition	4	0	4
DATA101N	Introduction to Data Analytics	2	2	3
MATH106N	Statistics I	4	0	4
	CSCI120N or CSCI161N			3
DATA105N	Data Mining	2	2	3

First Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
	CSCI130N or CSCI207N			3
ENGL109N	Public Speaking	3	0	3
DATA120N	Applied Data Analysis	2	2	3
MATH206N	Statistics II	4	0	4
	Behavioral Social Science or History/ Political Science			3

Second Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
BUS101N	Introduction to Business	3	0	3
MATH210N	Calculus I	4	0	4
	Humanities/Fine Arts/Philosophy or Global Awareness			3
	Science Elective			4

Second Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
MATH211N	Calculus II	4	0	4
DATA205N	Data Visualization	2	2	3
DATA210N	Data Wrangling with R and Python	2	2	3
	Linear Algebra OR Discrete Mathematics			4
		Total Credits		**61**