DATA ANALYTICS, ASSOCIATE OF SCIENCE

Program Code: 2208
Career Pathway: Science, Technology, Engineering, and Math

Location(s): General Education courses are offered at all BC locations (https://www.broward.edu/about/locations/). Program specific courses are offered at the A. Hugh Adams Central Campus. This program is also offered fully online.
Program Entrance Requirements: HS Diploma or GED

Program Description: This degree will equip students with the skills to extract valuable insights from data, translate them into compelling visuals, and leverage machine learning techniques for informed decision-making. The program prepares students for entry-level data analyst positions in various industries. Through a blend of coursework and hands-on labs, you'll gain expertise in:

- Data Fundamentals: Learn core data analysis concepts including data collection, cleaning, manipulation, and storage.
- Databases and SQL: Master querying relational databases using SQL, the essential language for interacting with structured data.
- Data Visualization: Develop proficiency in creating clear, informative, and impactful data visualizations using tools like Tableau, Power BI, or other industry-standard software.
- Statistics and Probability: Gain a solid foundation in statistical methods used for data analysis, hypothesis testing, and drawing meaningful conclusions.
- Machine Learning Fundamentals: Explore core machine learning concepts like supervised and unsupervised learning algorithms, model building, and evaluation.
- Programming Languages: Develop practical skills in programming languages like Python or R, essential tools for data manipulation, analysis, and machine learning.
- Data Communication: Hone your communication skills to effectively present data insights and recommendations to both technical and non-technical audiences.

Benefits of the Program:

- Career-Focused Curriculum: The program focuses on practical skills and tools that are in high demand by today's employers in data analytics.
- Industry-Standard Software: Learn how to use industry-standard software for data analysis, visualization, and machine learning.
- Preparation for Further Education: This degree can serve as a steppingstone towards our bachelor's degree in data Analytics.
- Enhanced Job Prospects: Gain the skills and knowledge to pursue data analyst, business intelligence specialist, or entry-level data scientist positions.

1. Data Analyst II, Technical Certificate 6379
2. Data Analytics, Associate of Science 2208
3. Bachelor of Applied Science

Course	Title	Credits
ENC1101	COMPOSITION I	3
GE Course	General Education Speech	3
MAC1105	COLLEGE ALGEBRA [1]	3
or MGF1131	MATHEMATICS IN CONTEXT	
GE Course	General Education Humanities Core	3
AMH2010	HISTORY OF THE UNITED STATES TO 1877	3
or AMH2020	HISTORY OF THE UNITED STATES SINCE 1877	
or POS2041	NATIONAL GOVERNMENT	
GE Course	General Education Natural Science Core	3
CGS1060C	COMPUTER AND INTERNET LITERACY	3
COP1000C	INTRODUCTION TO COMPUTER PROGRAMMING	3
CGS1510C	EXCEL DATA ANALYSIS	3
COP1700C	INTRODUCTION TO DATABASE AND MYSQL	3
GIS1040C	INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS I	3
COP2071C	SQL FUNDAMENTALS	4

STA2023	STATISTICS	3
CAP2788C	DATA+	3
CAP2787C	DATA WAREHOUSE AND DATA MINING FUNDAMENTALS	3
COP2044C	MACHINE LEARNING WITH PYTHON	4
ISM2410C	ANALYZING AND VISUALIZING DATA WITH POWER BI	4
ISM2139C	ADVANCED DATA VISUALIZATION WITH EXCEL	3
Elective	Math or Internship or IT Elective [2]	3
Total Credits		**60**

1 If a student places into MAC1105C COREQUISITE COLLEGE ALGEBRA instead of MAC1105, please note MAC1105C is a 5-credit course. Students who register for MAC1105C must see an advisor to discuss their academic plan.

2 Any course with a computing prefix.

CREDIT FOR PRIOR LEARNING

Accelerate your path to completion with these options:

- Credit by exam
- Prior Learning Assessment
- Earned industry certifications
- And much more…

RELATED INDUSTRY CERTIFICATIONS

Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:

- CompTIA Data+
- MOS Excel Expert
- CIW Database Design
- Microsoft MCSA BI Reporting

GET AN INTERNSHIP

After completing your first year of coursework make sure to visit Employment Solutions (https://www.broward.edu/career/) for internship opportunities and helpful tools like virtual job shadow, to help take your career to the next level!

Median Wage and Job Growth Outlook

Broward College has Career Coach! (https://www.broward.edu/career/career-exploration.html) It is designed to help you find a good career by providing the most current local data on wages, employment, job postings, and associated education and training.

Fund Your Education

Scholarships (https://www.broward.edu/admissions/financial-aid/scholarships/) may be available.

Program Learning Outcomes

Graduates from this program will:

- Learn core data analysis concepts including data collection, cleaning, manipulation, and storage.
- Master querying relational databases using SQL, the essential language for interacting with structured data.
- Develop proficiency in creating clear, informative, and impactful data visualizations using tools like Tableau, Power BI, or other industry-standard software.
- Hone your communication skills to effectively present data insights and recommendations to both technical and non-technical audiences.
- Gain a solid foundation in statistical methods used for data analysis, hypothesis testing, and drawing meaningful conclusions.
- Explore core machine learning concepts like supervised and unsupervised learning algorithms, model building, and evaluation.
- Develop practical skills in programming languages like Python or R, essential tools for data manipulation, analysis, and machine learning.