

## **MASTER OF SCIENCE IN BUSINESS AND DATA ANALYTICS (MSBDA)**

***Dr. Taiwo Ajani, Program Director***

### **Program Mission Statement**

The MSBDA program prepares students with the strategic, quantitative and technological skills required by business leaders and managers to meet the demands of an increasingly dynamic work environment immersed in big data, advanced analytics and artificially intelligent technologies.

### **Program Description**

The MSBDA program (offered in-seat and online) is designed to help prepare candidates for careers in management and leadership of business analytics. It aims to impart strategic thinking and conceptual understanding of big data, analytics for value creation, along with hands-on exposure to quantitative and technological skills. The MSBDA requires a total of thirty credit hours to complete the program. Students will be able to complete the program in one year (standard), or a two-year (flexible) completion option.

### **Program Learning Outcomes**

At the end of this course of study, Graduates will be able to:

1. Create data driven insights into business scenarios using analytics methods and models.
2. Analyze structured and unstructured data and create effective data visualization.
3. Apply conceptual understanding to create applied predictive and business forecasting solutions.
4. Understand, apply and evaluate ethical principles for business and data analytics.

### **Program Structure**

The MSBDA is a 30-credit-hour program consisting of ten 3-credit-hour courses delivered in 7-week sessions. The program is offered in two modalities: fully online with weekly synchronous meetings or in person with weekly meetings and web-enhanced course activities. The program starts each fall semester for new students and is designed to be completed in either a 10-month pathway (typically with two courses each 7-week term) or a flexible two-year pathway (typically with one course each 7-week term).

Graduation from the MSBDA program requires a minimum cumulative GPA of 3.0 in MBDA coursework, calculated using the final grade for each course. Students should always maintain a minimum cumulative GPA of 3.0 in the program. Students falling below this level at the end of a course may be placed on academic probation and may be required to repeat a course(s) and/or do remedial work under the supervision of faculty members.

Students should achieve a cumulative GPA of 3.0 by the end of the academic term following the one in which the probation period was established, or they may be dismissed from the MSBDA program. Should the student wish to appeal his/her dismissal, he/she must do so within fourteen calendar days from the date of receipt of the dismissal letter, unless the Program Director grants a delay due to extenuating circumstances.

## What You Will Study

### One-Year Path (August-June)

One-Year Completion Pathway		
SEMESTER	Course	Credits
Fall -A-term	MBDA 700 Business Analytics for Managers	3
	MBDA 710 Big Data: Management & Applications	3
Fall-B-term	MBDA 720 Data Visualization & Data Mining	3
	MBDA 740 Data Science Applications & Technologies	3
Spring-A-term	MBDA 730 Data, AI, Ethics & Leadership	3
	MBDA 750 Predictive Modeling for Business & Data Analytics	3
Spring-B-term	MBDA 760 Quantitative Methods for Business & Economics	3
	MBDA 770 Machine Learning	3
Summer-A-term	MBDA 780 Business Forecasting for Analytics	3
	MBDA 790 Business Analytics Capstone	3

**Total Credits: 30**

### Flexible Two-Year Path

Year One of Two-Year Completion Pathway		
SEMESTER	Course	Credits
Fall -A-term	MBDA 700 Business Analytics for Managers	3
Fall-B-term	MBDA 740 Data Science Applications & Technologies	3
Spring-A-term	MBDA 730 Data, AI, Ethics & Leadership	3
Spring-B-term	MBDA 760 Quantitative Methods for Business & Economics	3

Year Two of Two-Year Completion Pathway		
Fall-A-term	MBDA 710 Big Data: Management & Applications	3
Fall-B-term	MBDA 720 Data Visualization & Data Mining	3
Spring-A-term	MBDA 750 Predictive Modeling for Business & Data Analytics	3
Spring-B-term	MBDA 770 Machine Learning	3
Summer-A-term	MBDA 780 Business Forecasting for Analytics	3
	MBDA 790 Business Analytics Capstone	3

**Total Credits: 30**

### Transfer Credit

Students must take a minimum of twenty-four (24) total credit hours from the University of Charleston, three (credits) of which must be MBDA 790 - Business Analytics Capstone.

Transfer credit up to a maximum of 9 credit hours from a regionally accredited university may be accepted (subject to approval by the MSBDA Program Director).

### **Admission Requirements**

Students must have an undergraduate degree from an accredited institution to be fully admitted to the MSBDA program. Applications will be accepted and reviewed from students who are in their final year of undergraduate study for conditional admission.

To be considered for admission, applicants must submit the following to the Office of Admissions:

Completed [MSBDA application](#);

Professional resume;

Official transcripts showing the student has earned a bachelor's degree from a regionally accredited institution with a minimum cumulative GPA of at least 2.50 (preference will be given to students with a 3.0 or higher cumulative GPA in a quantitative degree program (engineering, finance, computer science, mathematics/statistics, etc.);

Prior academic credentials and/or professional experience demonstrating acumen in statistics, analytics, and R-studio (may be satisfied with Udemy.com short course(s) as specified by program director);

GRE/GMAT scores are not required but may be submitted in support of the application.

Admissions decisions will be made on a rolling basis for fall-semester starts each year.