# ONLINE GRADUATE CERTIFICATE IN

# **BUSINESS ANALYTICS**

The Lubar College of Business leverages the unique expertise of top faculty in Information Technology Management, Marketing, and Business Statistics to deliver knowledge and skills to students in the Business Analytics certificate program.

Our faculty use a vast array of business analytics software tools—including Business Objects, Excel Data Mining Client, Python, R, SAP BW, SAS, SPSS, SQL Server BI Development Studio—and other outstanding technologies and resources to deliver this program online to a worldwide audience.

Business analytics—the management, analysis, and utilization of data in strategic, operational, and tactical decision making—is increasingly critical as businesses around the world seek out new areas of competitive advantage. In recent years, CIOs have identified analytics and business intelligence as top priorities for the competitiveness of their enterprises.

This graduate-level curriculum includes predictive modeling, forecasting methods, data warehousing and data mining, web mining and analytics, marketing analytics, and customer relationship management. Graduates will be able to utilize their skills to drive improvement in business results, and influence strategy and decision making in their organizations.

The online certificate may be completed alone, or in combination with the MBA program or MS in Management program at the Lubar College of Business.

## **Program Objectives**

The Online Graduate Certificate in Business Analytics provides the knowledge and skills students need to manage, analyze, and use data to support strategic decision making. The curriculum is designed to provide students with the ability to:

- Develop statistical and predictive models for business analytics
- Use forecasting methods to support managerial, financial, and operational statistics
- Implement business intelligence solutions using data warehousing and data mining techniques
- Use reporting and OLAP tools for business analytics
- Employ text mining, web mining, and visualization tools for business decisions
- Perform marketing analytics using statistical models
- Analyze customer data for customer acquisition, retention, and profitability.





## **Curriculum**

#### PROGRAM OF STUDY

Students who wish to earn a Graduate Certificate in Business Analytics must complete the required 15 graduate credit hours with an overall GPA of 3.00 or better.

#### Required (3 credits):

BUS MGMT 709 Predictive Analytics for Managers, 3 cr.

#### Electives (12 credits), choose from:

BUS ADM 713 Business Forecasting Methods, 3 cr.

BUS ADM 741 Web Mining and Analytics, 3 cr.

BUS ADM 763 Marketing Analytics, 3 cr.

BUS ADM 769 Database Marketing, 3 cr.

BUS ADM 816 Business Intelligence Technologies & Solutions, 3 cr.

BUS MGMT 744 R Programming for Business Analytics, 3 cr.

The University of Wisconsin-Milwaukee will award a Graduate Certificate in Business Analytics upon completion of the program requirements. There is a time limit of three years from initial enrollment for completion of the Certificate program.

#### COURSE DESCRIPTIONS

#### BUS MGMT 709 Predictive Analytics for Managers, 3 cr.

Developing statistical thinking through basic concepts for data analysis. Models for analysis of business environment, software tools, interpretation and communication of results for management applications. Prereq: grad st; or consent of instructor.

#### BUS ADM 713 Business Forecasting Methods, 3 cr.

Overview and use of modern forecasting methods in support of managerial strategic planning, financial, and operational analysis of a dynamic global business environment. Prereq: grad st; BUS MGMT 709(P) or 754 (P).

#### BUS ADM 741 Web Mining and Analytics, 3 cr.

Measurement methods and analysis of web-based business data for strategic decisions; methods and technologies in web mining, visualization, and text mining of knowledge discovery and customer-relationship management. Prereq: grad st.

#### BUS ADM 763 Marketing Analytics, 3 cr.

Theoretical background provided to develop hands-on experience analyzing marketing data and using statistical models for marketing decisions. Not open for cr to those w/cr in BUS ADM 761 or 795 w/similar topic. Prereq: grad st; BUS MGMT 709(C) or consent of instructor.

#### BUS ADM 769 Database Marketing, 3 cr.

Introduction to using and analyzing data on current and prospective customers to increase sales, customer acquisition, and customer retention. Prereq: grad st; BUS MGMT 709(C) or consent of instructor.

#### BUS ADM 816 Business Intelligence Technologies & Solutions, 3 cr.

Develop business intelligence (BI) solutions using data warehousing, OLAP, and data mining technologies. Students will use SAP Analytics and other tools for implementing BI solutions. Prereq: grad st.

#### BUS MGMT 744 R Programming for Business Analytics, 3 cr.

Focus on basic data manipulation and statistical modeling in R. The objective is to develop R programming skills to investigate different types of business data to inform business decisions. Prereq: grad. st.; BusMgmt 709(P).

### Admission

Those who wish to enroll in the Certificate program must, at a minimum, have completed a bachelor's degree with an overall GPA of 2.75 or better. Prospective students may apply to the Graduate School as candidates for the certificate program alone (in non-degree status), or they may pursue the certificate in combination with the MBA program or MS in Management program at the Lubar College of Business.

Admission to the certificate requires an online application at **graduateschool-apply.uwm.edu**, unofficial transcripts, and a \$25.00 application fee.

For Further Information:

phone: 414-251-5252 email: mba-ms@uwm.edu

lubar.uwm.edu