



Academic Alert #2023-10

Date: April 13, 2023

College: The Graduate School of Business and Leadership (GSBL)

Decision: Revision to the Master of Science in Business Data Analytics (MSBDA)

Rationale: This Academic Alert highlights planned operational and curriculum changes to the Master of Science in Business Data Analytics (MSBDA) program. The current MSBDA AA# 2022-10, Amended July 2022, is housed in the provost's office.

<https://nl.edu/media/nledu/content-assets/documents/leadership/academic-alerts/2022/2022-10-MS-Business-Data-Analytics-Amendment.pdf>

This Academic Alert includes 1) updated admission criteria, 2) new practicum experience language, 3) updated program requirements, 4) updated course descriptions, 5) new required low residency weekend on-campus experience in Chicago, IL, and Tampa, FL., and 6) new language addressing program scheduling and advising. This is an update to MSBDA AA #2022-10, Amended July 2022.

Below are program descriptions (including program learning outcomes), course descriptions, admission criteria, curriculum, and the updated total credits required.

APPROVAL(S):

Jacqueline Callery, Ed.D., MSBDA Program Chair – 04/14/23

David San Filippo, Ph.D., Graduate School of Business and Leadership Curriculum Committee Chair – 04/19/23

Sarah Lukas, Director of Academic Operations, Tampa Campus

Anthony Spano, Executive Director, Tampa Campus

Janice Nilsen, Ph.D. Interim Dean, Graduate School of Business and Leadership 4/21/23

Implementation Date: **Summer 2023**

CURRENT PROGRAM AUTHORIZATIONS:

The MS in Business Data Analytics (MSBDA) program is currently authorized by the Illinois Board of Higher Education (IBHE) to be offered at National Louis University's (NLU) locations sites in the three home campus regions in Illinois (Chicago Region [Downtown Chicago Campus], North Suburban Region [Wheeling location], and South Metropolitan Region), plus the West Suburban Region (Lisle location).

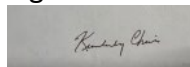
The program is authorized to be offered online to residents of NC-SARA member states. This academic alert reflects internal approval to supplement the Higher Learning Commission (HLC) notification.

HLC is a recognized accreditor by CHEA and the Department of Education. Additionally, the Master of Science in Business Data Analytics (MSBDA) is authorized to be offered at National Louis University's (NLU) Florida Regional Center and online through approval from the Florida DOE/CIE.

CONTACT(S): Jacqueline Callery, Ed.D., Associate Professor and MSBDA Program Chair

jcallery@nl.edu
312-261-3296

Signature:



Kimberly Chavis, Ed.D.
Vice Provost of Academic Programs & Accreditation

INFORMATION

1. Program Description

1.1. Purpose of the Program: Master of Science in Business Data Analytics (MSBDA)

The Master of Science in Business Data Analytics (MSBDA) is a 10-course curriculum (30-semester credit), STEM-designated, interdisciplinary program grounded in the practice of business data analytics (e.g., knowledge, applications, and tools) in various organizational settings. NLU graduates will be ready to enact data-driven decisions and analysis strategies using an ethical, effective, efficient, and compelling approach in their organizations and communities.

The MSBDA prepares graduate business students for in-demand data analytics positions. The MSBDA program builds competencies around techniques and tools business data analytic practitioners use to make informed business decisions using data. Students will build industry-relevant skills as they learn to use software and data analysis tools and techniques while

strengthening their ability to make decisions with relevant business data and present compelling data narratives to stakeholders.

The audience for the MSBDA includes early to mid-career professionals, managers, and leaders in current business positions seeking the opportunity for career advancement or a new career trajectory. Students will build skills via exposure to relevant industry, sector, or organizational data-driven decision-making. The MSBDA will expose students to analytics relevant to the ever-changing global market in various contexts (e.g., human resources, health care, banking, finance, and marketing). Students will learn the fundamentals of business analytics, statistics for business data analytics decision-making, big data management, operations analytics, predictive analytics, marketing analytics, business intelligence, and project management.

Graduates of the MSBDA program will have a solid foundation of knowledge, insights, and skillsets to impact optimal solutions to improve organizational performance.

Program Learning Outcomes (May 2022)

Upon completion of the Master of Science in Business Data Analytics (MSBDA) program, students will be able to:

PLO 1 Articulate the value of business data analytics in informed decision-making to achieve organizational goals.

PLO 2 Apply ethical business data analytics practices in operational and managerial decision-making.

PLO 3 Assess analytic strategies for data-informed decision-making across varied business contexts to build data literacy skills.

PLO 4 Apply analytical methodologies to gather insights via data access, production transparency, and analytical transparency to inform decision-making.

PLO 5 Apply quantitative reasoning using descriptive, predictive, and prescriptive analytics, forecasting, and statistical methods to identify organizational opportunities or solve problems.

PLO 6 Communicate actionable insights to inform stakeholder decision-making via a compelling narrative.

PLO 7 Produce solutions or strategies using accepted analytics practices and relevant tools to improve organizational performance.

2. Program Design: Master of Science in Business Data Analytics (MSBDA)

2.1. Curriculum Requirements

The following curriculum is effective Fall 2023 (retro-active 2022) for current and prospective students in the program. Effective immediately, The Master of Science in Business Data Analytics consists of 10 courses (30 SH). Two of three foundational classes (BDA 500 and RES 510) are offered regularly to allow students to enter the program throughout the academic year.

= Highlights Change

	Previous Program Requirements	Program Requirements Effective Immediately for Current and Prospective Students	Comments
	MS Business Data Analytics (11 Courses/33 SH)	MS Business Data Analytics (MSBDA) (10 Courses/30 SH)	Removed 3 SH hours of coursework from the program.
Course Number	Foundational Courses	Foundational Courses	
BDA500	Introduction to Business Data Analytics	Introduction to Business Data Analytics	No Change
RES510	Critical Thinking and Research Skills	Critical Thinking and Research Skills	No Change
BDA502	Statistics for Business Data Analytics	Statistics for Business Data Analytics	No Change

Course Number	Core Courses	Core Courses	No Change
BDA505	Security and Ethics for Business Data Analytics	Security and Ethics for Business Data Analytics	Prerequisites modified to create scheduling flexibility for learners and support program start flexibility. See course description.
BDA506	Big Data Management and Databases	Big Data Management and Databases	No Change
BDA507	Data Driven Decisions and Strategy	Data Driven Decisions and Strategy	No Change
BDA508	Predictive Analytics and Forecasting	Predictive Analytics and Forecasting	No Change
BDA509	Data Visualization and Communication in Business Data Analytics	Data Visualization and Communication in Business Data Analytics	No Change
BDA510	Emerging Topics in Business Data Analytics I	Emerging Topics in Business Data Analytics	Course name change, course description updated, and prerequisites modified to create scheduling flexibility for learners and support program start flexibility.
BDA 511	Emerging Topics in Business Data Analytics 2	-----	Removed BDA 511 from the program curriculum. Updated references to BDA 511 as a prerequisite.
	Capstone Course	Capstone Course	
BDA550	Business Data Analytics Capstone	Business Data Analytics Capstone	No Change

2.2 Course Descriptions (wording improvements for clarity)

Foundational Courses (9 SH)

BDA 500: Introduction to Business Data Analytics (3SH) Students explore the fundamentals of the business analytics process and concepts from a business and managerial perspective. Emphasis includes the influence of data analytics and big data within the organization and its strategic plan, associated analytics techniques, and business applications. Prerequisite(s): Graduate standing or permission of the Program Chair or designate. Co-requisite(s): None. 3 semester hours

RES 510 Critical Thinking and Research Skills This gateway course reviews the principles of graduate academic writing. It introduces students to principles and methods of applied research for social sciences and professional programs. It prepares students to apply writing and research skills to their respective programs and professional careers for future coursework. The course emphasizes the research context for decision-making, program evaluation, information assessment, and clear communication of findings. Prerequisite(s): Admission to a GBSL graduate program. MSBDA students are encouraged to take BDA500 first if offered when they start. Co-requisite(s): None. 3 semester hours

BDA 502 Statistics for Business Data Analytics (3SH) In this course, students learn fundamental statistical methodologies useful in business data analytics focused on collecting, analyzing, interpreting, and visualizing data for organizational decision-making. Students will be introduced to the data analysis process and critical tenets of structured thinking for data analytics. This course will focus on statistics for descriptive analytics. Prerequisite(s): BDA500 and RES510; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

Core Courses (18 SH)

BDA 505 Security and Ethics for Business Data Analytics (3SH) This course examines security, privacy, and ethical implications in business data analytics. Students address challenges in the data life cycle from data collection to analysis. Students explore the associated consequences of misuse of information and equity in representation (data) and review legal and ethical policies in various industries and business settings in an ever-changing environment. Prerequisite(s): BDA500 and RES510; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

BDA 506 Big Data Management and Databases (3SH) This course introduces students to relational database concepts, data warehousing, data management, the rise of big data, data mining, and modeling tools. Students will be exposed to various applicable systems and data analysis tools, enabling them to effectively manage and apply actionable strategic insight and decisions garnered from data. Prerequisite(s): BDA500, RES510, and BDA502; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

BDA 507 Data-Driven Decisions and Strategy (3SH) In this case/scenario-based course, students utilize datasets to apply a variety of tools managers need to make decisions and create strategies based on actual data within an organization or industry. Prerequisite(s): BDA500, RES510, and BDA502; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

BDA 508 Predictive Analytics and Forecasting (3SH) This course augments the Statistics for Business Data Analytics (BDA502). Students learn the fundamentals of predictive and prescriptive analytics in decision-making. Predictive analytics uses data and statistical tools to forecast the likelihood of future outcomes based on historical data. Prescriptive analytics goes one step further to recommend solutions or new ideas to achieve future goals. Students explore predictive analytics and forecasting in practice in various contexts and industries. Prerequisite(s): BDA500, RES510, BDA502, BDA505, BDA506, BDA507, BDA509, and BDA510; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

BDA 509 Data Visualization and Communication in Business Data Analytics (3SH) This course teaches students to utilize industry-relevant data visualization tools, communicate actionable insights, and deliver compelling narratives to organizational or industry stakeholders. Students will use real-world data sets applicable to their visualization and communication assignments. Prerequisite(s): BDA500, RES510, and BDA502; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

BDA 510 Emerging Topics in Business Data Analytics (3SH) Students explore business data analytics from a managerial perspective to understand data's influence on organizational activities by examining real-world cases across relevant topics (e.g., data warehousing, data integration, business intelligence, data mining, and visualization, human resource management) and industries (e.g., health care, banking/finance, marketing/services, and operations). Students learn how data-informed strategies can create a competitive advantage and enhance the return on investment (ROI) in an industry, sector, or organization. Students are introduced to emerging data collection strategies, tools, and techniques currently used to develop actionable insights focused on informing organizational goals and delivering value. Prerequisite(s): BDA500, RES510, BDA502, BDA505, and BDA506; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

BDA 550 Capstone Course (3 SH)

BDA 550 Business Data Analytics Capstone (3SH) This is the final course in the Master of Science in Business Data Analytics (MSBDA) program. Students develop a comprehensive assignment demonstrating mastery of the (MSBDA) program learning outcomes and integrate all facets of business data analytics by applying lessons learned in a real-world project. Prerequisite(s): BDA500, RES510, BDA502, BDA505, BDA506, BDA507, BDA509, BDA510, and BDA508; or permission of Program Chair or designate. Co-requisite(s): None. 3 semester hours

2.3 Academic Progress Requirements

- Students must maintain a grade point average of 3.00 or higher (on a scale of 4.0)
- Students who earn a grade below a “C” in any course must retake the course.
- It is recommended that the course be retaken the next time it is available to remove the continued negative impact on the student’s GPA.

3. PROGRAM DELIVERY

The Master of Science in Business Data Analytics Program is part of The Graduate School of Business and Leadership (GSBL). Entry to the program will be offered four terms per year (Fall, Winter, Spring, and Summer starts) and delivered in online and low residency modalities. The low residency format will be delivered at the Chicago, IL, and Tampa, FL campuses. The MSBDA will no longer be delivered in a blended format with face-to-face meetings.

4. PROGRAM SCHEDULING

The University Central Scheduling Center will create and maintain the schedules for the MSBDA program.

5. PROGRAM ADVISING

Students in the MSBDA program will have a graduate NLU advisor assigned who uses the NLU and Graduate School of Business and Leadership (GSBL) advising practices.

6. ADMISSION REQUIREMENTS

Students applying for graduate admission to the Master of Science in Business Data Analytics (MSBDA) degree program must meet the following Graduate School of Business and Leadership Admission requirements:

- Applicants must submit a professional resume or curriculum vitae describing their relevant background and work experience. If not currently employed, the applicant must actively participate in professional organizations (documented through submitting a resume or career summary).
- A written statement of academic and professional goals. This statement is one of the criteria used to evaluate a person’s application. The applicant should present reasons for selecting the program. Reasons should include career goals and specific indications of how the program of study will help them realize these goals.
- Applicants must submit at least two letters of recommendation.
- Review can result in full admission, decline, or a 2-course review.
- Complete application, available at www.nl.edu/applyonline

- Provide official transcripts from all institutions where a degree was earned. Official E- transcripts are acceptable and must be sent directly from the issuing institution to admissions@nl.edu.
- A bachelor's degree from an accredited institution and the Department of Education.
- Graduate applicants with a baccalaureate degree or college coursework from an institution outside the U.S. must have their undergraduate transcripts evaluated by NLU's approved [foreign credential evaluation agencies](#), verifying degree equivalence to an accredited institution whose accreditor is recognized by CHEA and the Department of Education.
- A minimum score on a pre-approved English language proficiency test is required for all applicants whose native language is not English or who have not graduated from an institution where English is the language of instruction specified in the Admission Policies, [English Language Proficiency](#).
- An undergraduate degree grade point average of at least 3.0 on a scale of 4.0 or a graduate GPA of 3.25 on a scale of 4.0
- Students who do not meet admission criteria (with a GPA less than 3.0) but show potential for successful graduate work may be admitted with two-course review status based on the recommendation of the faculty in the program, program chair, Dean, or Dean's designee.
- A student admitted with two-course review status must maintain a GPA of 3.0 in the first two graded courses (generally, a minimum of six semester hours combined). These courses may not be extension courses, workshops, transfer credits, independent studies, or internships/practicum, except when taken by veterans receiving benefits. If the student has a minimum 3.0 GPA at the end of the review period, they will gain good academic standing. If the student's GPA falls below 3.0 at the end of the review period, they may be dropped from the GSBL graduate school.

International Student Admissions Criteria (In addition to the information listed above.)

- Due to Student and Exchange Visitor Program (SEVIS) regulations for academic admissions requirements, international students must be fully admitted to the BDA program; no provisional admittance will be allowed.

Please reference the following link or [CLICK HERE](#) for guidelines for students whose previous academic work was outside the United States.

<http://nl.smartcatalogiq.com/en/Current/Undergraduate-and-Graduate-Catalog/Admissions/International-Students>

- Please [CLICK HERE](#) for more details concerning NLU-approved examinations.

www.nl.edu/admissions/oar/englishlanguageproficiency/

7. IMPLEMENTATION

Upon issuance of this Alert, the following actions will be implemented:

- Registrar's Office:
 - Update the Academic Catalog
 - Enter changes in Banner, Degree Works, and NLU web pages as appropriate.
 - Update all manuals and operating procedures with new and updated information and guidance.
- Accreditation and Compliance:
 - Verify all required notifications and approvals, and file associated paperwork, if so required.
- Marketing:
 - Update all marketing materials with the new program information.
 - Update the MSBDA Program page with updated program information
 - Work with Program Chair and the GSBL Dean's office to offer program information sessions to internal undergraduate and prospective external students.
- Advising and Enrollment:
 - Train Chicago and Tampa advisor(s) on the program updates and implementation process.
 - Schedule and deliver training for all enrollment and outreach specialists on the program updates.
- The Graduate School of Business and Leadership:
 - Update the leadership, staff, and faculty regarding program changes.
- Program Director/Chair and Faculty:
 - Schedule and deliver training with colleagues in Advising and Enrollment.
- Learning and Information Technology Services:
 - Assign instructional designer(s) to Low Residency re-development for RES 510, BDA 500, and BDA 502.
- Tampa Campus:
 - Update the leadership and staff regarding program changes.
 - Conduct training for outreach, advising, and enrollment.
 - Coordinate scheduling of the program.