

Business Analytics

Department Information

- **Program Director:**
Fone Pengnate, Ph.D.
- **Program Advisor:**
Elizabeth Worth, M.Ed.
- **Email:**
elizabeth.worth@ndsu.edu
- **Department Location:**
Richard H. Barry Hall
- **Department Phone:**
701-231-6038
- **Department Web Site:**
www.ndsu.edu/business/programs/graduate/msba/ (<http://www.ndsu.edu/business/programs/graduate/msba/>)
- **Credential Offered:**
M.S.
- **Test Requirement:**
GMAT or GRE
- **English Proficiency Requirements:**
TOEFL ibt 79; IELTS 6.5; Duolingo 105

The Master of Science in Business Analytics (MSBA) program at North Dakota State University (NDSU) is a non-thesis, professional program structured to serve qualified students with undergraduate degrees in a variety of fields, although it may be particularly attractive to students with undergraduate degrees in business, computer science, engineering, and statistics. The program is designed to provide students with advanced applied problem solving skills and an understanding of business analytics methodologies and tools mastery. Students get hands-on experience with the most up-to-date tools and methodologies for data management, data modeling, visualization, and data mining.

NDSU business analytics faculty use a variety of teaching methods including case studies, group and individual projects, computer applications, student presentations, and discussion. Many classes take place in the Barry Hall computer labs. The program has a significant capstone experience where students work with local companies analyzing real data and solving real-world problems with data. The program is designated as a STEM program reflecting the technical nature of current data analytics practices.

In addition to the Graduate School application requirements, an official GMAT or GRE exam score is required. Individuals seeking admission to the MSBA program may request a waiver of the GMAT/GRE requirement if they meet either of the following requirements:

- The applicant holds a terminal degree (e.g., Ph.D., M.D., J.D.).
- The applicant has a minimum of five (5) years of recent, post-bachelor's, full-time, professional work experience that is relevant to business analytics and data science.

Appropriate documentation (i.e. official transcript(s), Statement of Purpose, resume) must be uploaded to the application file. It does not, however, guarantee a waiver. Applicants should request the waiver in their Statement of Purpose and provide the rationale for the waiver request. Applicants are reviewed on a case-by-case basis, and waiver approval is determined at the discretion of the MSBA program coordinator.

MSBA Program Curriculum (30 credits):

Code	Title	Credits
Data Analysis Foundations		5-6
CSCI 765 or MIS 710	Introduction to Database Systems Database Management	2-3
STAT 725	Applied Statistics	3
Business Analytics Foundations		10
MBA 722	Marketing Analytics and Customer Intelligence	2
MBA 723	Digital Marketing	2
MBA 751	Business Analytics Concepts	2
MBA 752	Business Analytics Strategy	2
MBA 753	Business Analytics Methods	2
Business Analytics Advanced Courses		6

MIS 720	Visualization and Reporting	2
MIS 740	Advanced Business Analytics Methods	2
MIS 790	Graduate Seminar	2
Business Analytics Focus and Field Experience		8-9
Electives - choose from approved list or with advisory's approval		3-4
MIS 795	Field Experience	5

Somnath Banerjee, Ph.D.

University of Central Florida, 2015

Field: Marketing

James Caton, Ph.D.

George Mason University, 2016

Field: Economics

Linlin Chai, Ph.D.

Iowa State University, 2016

Field: Marketing

Anne Denton, Ph.D.

University of Mainz, 1996

Field: Computer Science

Supavich Pengnate, Ph.D.

Oklahoma State University, 2013

Field: Management Information Systems

Frederick Riggins, Ph.D.

Carnegie Mellon University, 1994

Field: Management Information Systems

Limin Zhang, Ph.D.

University of Arizona, 2005

Field: Management Information Systems