**BUSINESS ANALYTICS (M.S.)**

https://paulcollege.unh.edu/program/ms/business-analytics

**Description**

The Master of Science in Business Analytics (MSBA), offered by the Peter T. Paul College of Business and Economics, prepares students for careers related to data analytics and quantitative decision making in modern organizations. Graduates from the MSBA program will be armed with skills in data storing/pre-processing/visualization, in building prediction/forecasting models, and in formulating/solving optimal business decision problems when faced with limited resources. The MSBA program places heavy emphasis on building both the theoretical fundamentals and the practical applications of business analytics supported by relevant and modern programming skills. In addition, the MSBA curriculum is designed to foster teamwork and presentation skills that will help students to seamlessly transition into relevant corporate roles.

The MSBA is a STEM-designated program and consists of 12 courses totaling 36 credit hours of coursework (10 required courses and 2 elective courses from a suggested list). Each course follows an 8-week-long term. The program can be completed in 9 months (taking three courses per term), 12 months (taking two to three courses per term), or 28-33 months (taking one course per term). The MSBA program requires that applicants possess an introductory level of exposure to Calculus, Linear Algebra (basic matrix operations) as well as prior exposure to at least one programming language (C++, Python, R, Java, SQL, etc.) are highly desirable. Any students without Calculus, Linear Algebra, and programming fundamentals will have access to resources to acquire the relevant background prior to joining the program.

In addition, applicants are required to have a bachelor's degree and to submit a GMAT or GRE test score from within the last five years. The emphasis will be on the quantitative score for both tests, and waivers will be considered on a case-by-case basis. International students are also required to submit a TOEFL score (waivers will be considered on a case-by-case basis). The online module acts as a refresher for the mathematical background needed for the program and is designed to prepare students for the MSBA program.

Depending on the availability, students can take the below courses in a face-to-face format or in an online format.

**Student Learning Outcomes**

- Students will demonstrate knowledge of content areas of business analytics.
- Students will demonstrate the ability to solve complex problems.
- Students will demonstrate effective oral communication behaviors.
• Students will demonstrate effective written communication behaviors.
• Students will demonstrate ability to cleanse, aggregate, and visualize data.
• Students will apply statistical inference techniques to business problems.
• Students will effectively develop and interpret optimization & simulation software output.