# BUSINESS ANALYTICS

Based on 2021-22 Undergraduate Catalog

#### **BUSINESS ANALYTICS AS A MINOR**

From automotive and financial services to marketing, human resources and education, career opportunities abound for those who understand how to harness the power of data. Students minoring in business analytics will use statistics, mathematical modeling, databases, spreadsheets and computing technology to generate business insights and support managerial decision making throughout an organization. Oakland's business analytics minor can complement any major.

#### **BENEFITS**

- Gain a competitive edge in the job market as employers seek professionals with experience managing and analyzing data.
- Acquire skills to process and analyze data, and present findings to aid managerial decision making.
- Enhances any major, business or non-business.

# REQUIREMENTS FOR A MINOR IN BUSINESS ANALYTICS

A minimum grade of C must be earned in each course and in prerequisites for each course. The minor is open to all students except management information systems (MIS) majors with a business analytics specialization.

### The minor consists of four courses, including two of the required courses and two of the electives listed below:

■ MIS 4460/5460 Business Analytics (3 credits)

#### AND

■ MIS 4560/5560 Introduction to Data Science (3 credits)

#### OR

- MIS 4470/5470 Practical Computing for Data Analytics (3 credits)
- \* Students are recommended to take both MIS 4560/5560 and MIS 4470/5470. If students take both, one will be counted towards electives.

#### **Electives:**

- MIS 4500 Web Analytics (3 credits)
- POM/MIS 4410 Operations Analytics (3 credits)
- QMM 4400 Management Science (3 credits)
- QMM 4520 Forecasting (3 credits)
- ECN 4050 Econometrics (3 credits)
- ECN 4060 Time Series Econometrics (3 credits)
- FIN 4250 Financial Derivatives (3 credits)
- ACS 4660 Financial Economics (3 credits)
- APM 4334 Applied Numerical Methods: Matrix Methods (4 credits)
- STA 4002 Applied Linear Models (4 credits)

- STA 4330 Time Series I (4 credits)
- MTH 2775 Linear Algebra (4 credits)
- MIS 4900 Special Topics in MIS (3 credits) (approval needed from minor coordinator)
- POM 4900 Special Topics in Operations Management (3 credits) (approval needed from minor coordinator)

#### Prerequisites for non-business majors:

- MTH 1222 Calculus for the Social Sciences or MTH 1554 Calculus I
- QMM 2410 Statistical Methods for Business II or STA 2221 Intro to Statistical Methods or STA 2226 Applied Probability and Statistics or EGR 2600 Intro to Industrial and Systems Engineering

#### **Department of Decision and Information Sciences**

Business Analytics Minor Adviser

Mark Isken | isken@oakland.edu | (248) 370-3296

**Department Chair** 

Vijayan Sugumaran | sugumara@oakland.edu | (248) 370-4649

Office Assistant

Shannon Johnson | mjohnson3@oakland.edu | (248) 370-3283

#### SCHOOL OF BUSINESS ADMINISTRATION

#### **SKILLS AND ABILITIES**

Learn to leverage statistical and mathematical modeling, databases and technology to:

- Gain insights and support managerial decision making.
- Improve customer service and enhance operational performance.
- Identify new business markets and drive revenue growth.

#### **CAREER OPPORTUNITIES**

A minor in business analytics can further define the knowledge needed for professionals working to advance in a competitive marketplace. Typical career titles for students with a business analytics minor include:

- Management Analyst
- Market Research Analyst
- Marketing Analyst
- Financial Analyst
- Statistical Analyst
- Business Systems Analyst
- Data Analyst
- Clinical Data Analyst

Industries that commonly employ graduates with business analytics minors:

- Health Care
- Automotive
- Financial Services
- Marketing
- Human Resources
- Education

For more information on careers, please visit the Bureau of Labor and Statistics at **bls.gov.oco** or O\*Net at **onetonline.org**.

#### **JOB OPENINGS**

Access thousands of job and internship postings at Handshake (oakland.edu/careerservices/handshake). Handshake also provides the latest news from OU Career Services, exclusively for OU students and alumni.

#### RELATED STUDENT ORGANIZATIONS

- Association for Information Systems
- Society of Operations Management

Students are welcome to join any of the student organizations in the School of Business Administration to help network with other students, faculty and employers. For more information, visit **oakland.edu/business/orgs**.

#### **CAREER OUTLOOK\***

Median starting salary \$49,960 - \$56,500

Mid-career salary \$79,200 - \$123,000

National growth 27 percent by 2026

\*based on data from the National Bureau of Labor and Statistics for operations research analyst

#### FOR FURTHER INFORMATION

To help you choose your area of interest, plan your future career goals and monitor your progress, visit the Oakland business school undergraduate advising and career services offices.

#### School of Business Administration Undergraduate Advising

Elliott Hall, Room 232 275 Varner Drive

(248) 370-3285

oakland.edu/business/advising

## School of Business Administration Career Services

Elliott Hall, Room 232 275 Varner Drive (248) 370-3215

oakland.edu/business

#### **Career Services Main Office**

North Foundation Hall, Room 154 318 Meadow Brook Road (248) 370-3250

oakland.edu/careerservices

# DECISION AND INFORMATION SCIENCES

Elliott Hall, Room 440

