BUSINESS ANALYTICS - M.S.

Ambassador Crawford College of Business and Entrepreneurship
Department of Information Systems and Business Analytics
www.kent.edu/business

About This Program

Unlock the power of data and advance your career with the Master of Science degree in Business Analytics. Our program provides students with the knowledge and skills needed to leverage data analytics to make informed business decisions. With coursework designed to build proficiency in data analysis, data mining and data visualization, graduates are well-prepared to meet the demands of today's data-driven business environment. With our certificate, you'll be prepared to pursue a career in data analytics, business intelligence or consulting. Read more...

Contact Information

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- Connect with an Admissions Counselor: U.S. Student | International Student

Program Delivery

- **Delivery:**
  - Fully online
  - In person
- **Location:**
  - Kent Campus

Examples of Possible Careers and Salaries*

Chief executives

- -10.0% decline
- 287,900 number of jobs
- $185,950 potential earnings

Data scientists and mathematical science occupations, all other

- 30.9% much faster than the average
- 33,200 number of jobs
- $98,230 potential earnings

General and operations managers

- 5.8% faster than the average
- 2,486,400 number of jobs
- $103,650 potential earnings

Management analysts

- 10.7% much faster than the average
- 876,300 number of jobs
- $87,660 potential earnings

Operations research analysts

- 24.8% much faster than the average
- 105,100 number of jobs
- $86,200 potential earnings

Statisticians

- 34.6% much faster than the average
- 42,700 number of jobs
- $92,270 potential earnings

Accreditation

AACSB International - The Association to Advance Collegiate Schools of Business

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements

- Bachelor's degree from an accredited college or university[1]
- Minimum 3.000 undergraduate GPA on a 4.000-point scale
- Official transcript(s)
- Résumé
- Goal statement
- Two letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions to waive) by earning one of the following:[2]
  - Minimum 79 TOEFL iBT score
  - Minimum 6.5 IELTS score
  - Minimum 58 PTE score
  - Minimum 110 DET score

[1] Students entering the program are expected to have the requisite backgrounds in statistics, mathematics, computers and business required for the program. At a minimum, students should have general knowledge of inferential statistics, adequate general business knowledge, basic knowledge of business information systems and technologies and a solid understanding of algebra and general mathematics with some exposure to calculus. Students may fulfill deficiencies in these prerequisites by taking BA 24056, CIS 24053, MATH 11012, MGMT 24163 or equivalents as applicable. The business analytics program director may consider concurrent enrollment according to the strength of the student's baccalaureate curriculum and preparedness and the courses proposed to be taken concurrently with the prerequisites.

[2] International applicants who do not meet the above test scores may be considered for conditional admission.

Application Deadlines

- **Fall Semester**
  - Application deadline: March 15 (international student) and June 15 (domestic student)
- **Spring Semester**
  - Application deadline: October 1 (international student) and December 1 (domestic student)

Applications submitted after these deadlines will be considered on a space-available basis.

Program Requirements
Major Requirements

Code	Title	Credit Hours
Major Requirements		
BA 54038	ANALYTICS IN PRACTICE	3
BA 64018	QUANTITATIVE MANAGEMENT MODELING	3
BA 64036	BUSINESS ANALYTICS	3
BA 64037	ADVANCED DATA MINING AND PREDICTIVE ANALYTICS	3
BA 64060	FUNDAMENTALS OF MACHINE LEARNING	3
BA 64061	ADVANCED MACHINE LEARNING	3
BA 64082	DATABASE MANAGEMENT AND DATABASE ANALYTICS	3
Major Electives, choose from the following:		6
BA 54011	SYSTEMS SIMULATION	
BA 54050	DATA VISUALIZATION	
BA 54052	TEXT ANALYSIS AND NATURAL LANGUAGE PROCESSING	
BA 64028	GLOBAL SUPPLY CHAIN BUSINESS MODELS	
BA 64092	INTERNSHIP IN BUSINESS ANALYTICS	
BA 64099	CAPSTONE PROJECT IN BUSINESS ANALYTICS	
CS 63015	DATA MINING TECHNIQUES	
CS 63016	BIG DATA ANALYTICS	
ECON 62054	ECONOMETRICS I	
EMAT 61010	ENTERPRISE ARCHITECTURE	
EMAT 64210	DATA SCIENCE	
HI 60411	CLINICAL ANALYTICS	
KM 60370	SEMANTIC ANALYSIS METHODS AND TECHNOLOGIES	
MGMT 64160	LEADERSHIP AND ORGANIZATIONAL CHANGE	
MKTG 65057	MARKETING RESEARCH	
Culminating Requirement		
BA 64092	INTERNSHIP IN BUSINESS ANALYTICS	3
or BA 64099	CAPSTONE PROJECT IN BUSINESS ANALYTICS	
Minimum Total Credit Hours:		**30**

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
-	3.000

- No more than one-half of a graduate student's coursework may be taken in 50000-level courses.

- Grades below C are not counted toward completion of requirements for the degree.

Minimum 30 credit hours required for the degree is the assumption that students do not have any unmet requirements they need to be successful in the program. The business analytics program coordinator may make further determination of a student's preparedness for the program and what prerequisite courses, if any, may be required.

Program Learning Outcomes

Graduates of the program will be able to:

1. Identify key characteristics of the business problem.
2. Identify opportunities and constraints of various data analytical frameworks and tools.
3. Formulate appropriate data analytic techniques to solve the business problem.
4. Perform necessary data preparation steps (retrieve, clean and manipulate data).
5. Demonstrate necessary theoretical knowledge and practical skills to implement several data-analytic frameworks using different tools.
6. Lead and work with teams to frame the business problem.
7. Convey in writing the outcomes of analytics for stakeholders.
8. Use visual outcomes of analytics to communicate orally effective messages for stakeholders.

Full Description

The Master of Science degree in Business Analytics provides students with a comprehensive knowledge of analytics that balances the technologies, analytical methods and business expertise needed to glean useful information from data to make strategic business decisions. The language of business today is dependent on information and data management, and the emergence of advanced technologies for capturing, preparing and analyzing data provides unprecedented opportunities for those with business analytics expertise that spans all industries and organizations.

Students in the Business Analytics major gain the technical, analytical, communication, decision-making and leadership skills needed to be successful business analysts. The curriculum includes integrative capstone analysis projects, and there is an internship option for additional professional development through the on-site Career Services Office.