

MAJOR IN BUSINESS ANALYTICS

Businesses have evolved into a big data-driven era. Business analytics is used to collect, organize, visualize and analyze business data to help businesses make better decisions and function optimally, including identifying new business opportunities, improving processes, changing policies or introducing new technology. Business demand for graduates with data analytics knowledge and skills has exploded, while the field itself is still evolving and changing rapidly, with new strategies, tools, and techniques coming daily.

Featured by business-focused analytics with ERP-based hands-on exercises, the Business Analytics major prepares students majoring in business administration to specialize in a promising career track in business analytics with needed analytical skills and tools.

Requirements

Students majoring in Business Analytics complete the shared courses in Business Administration (46-47 units) and 24 units in the major.

This is a screened program. Students will not be allowed to take majors only courses until they have successfully completed all of the PBUA courses and been admitted to their major. Please see the admission requirements for additional information.

Requirements for Business Majors*

Code	Title	Units
Courses Required for Admission to Business Majors		
ACCT 201	PRINCIPLES OF FINANCIAL ACCOUNTING	3
ECON 201	MICROECONOMIC PRINCIPLES	3
or ECON 203	HONORS MICROECONOMIC PRINCIPLES	
ECON 202	MACROECONOMIC PRINCIPLES	3
or ECON 204	HONORS MACROECONOMIC PRINCIPLES	
LEGL 225	LEGAL ENVIRONMENT OF BUSINESS	3
Select one of the following:		3
ECON 205	STATISTICS FOR BUSINESS AND ECONOMICS I	
MATH 231	BASIC STATISTICS	
or MATH 233	HONORS BASIC STATISTICS	
Math Requirement¹		3-4
Select one of the following (MATH 211 or higher is recommended for students studying Business Economics or Finance.):		
MATH 115	COLLEGE ALGEBRA	
MATH 211	CALCULUS FOR APPLICATIONS	
MATH 273	CALCULUS I	
Admission to the business majors requires a grade of C or higher in the six courses required for admission.		
Required Business Courses (open to pre majors)		
ACCT 202	PRINCIPLES OF MANAGERIAL ACCOUNTING	3
BUSX 301	BUSINESS COMMUNICATIONS	4
EBTM 300	PROBLEM SOLVING IN BUSINESS	3
FIN 331	PRINCIPLES OF FINANCIAL MANAGEMENT	3
MKTG 341	MARKETING AND CREATIVITY	3

or MKTG 342	HONORS MARKETING & CREATIVITY	
MNGT 361	LEADERSHIP AND MANAGEMENT	3
Required Business Courses (open to majors only)		
BUSX 460	PROFESSIONAL EXPERIENCE	3
EBTM 365	PRINCIPLES OF OPERATIONS MANAGEMENT	3
MNGT 481	STRATEGIC MANAGEMENT (must be taken at TU)	3
Business major, concentration or track		21-24
Total Units		67-71

* Business majors include majors in Business Administration, Business Analytics, Business Economics, Business Systems and Processes, Finance, Financial Planning, Marketing, and Project Management.

¹ MATH 115, MATH 117, MATH 119, MATH 211, MATH 273, or MATH 274 may be used to satisfy the Mathematics requirement.

Business Analytics Major Requirements

Code	Title	Units
Business Analytics Required Courses		
EBTM 320	DATA VISUALIZATION AND DASHBOARDS	3
EBTM 350	BUSINESS ANALYTICS	3
EBTM 400	APPLIED DATA ANALYTICS	3
EBTM 446	BUSINESS INTELLIGENCE	3
EBTM 455	BUSINESS DATA WAREHOUSING	3
EBTM 456	BUSINESS DECISION MODELING	3
EBTM 457	DATA MINING FOR BUSINESS ANALYTICS	3
Business Analytics Elective		
Select one from the following:		3
EBTM 310	INTRODUCTION TO ERP SYSTEMS	
EBTM 343	INTRODUCTION TO PROJECT MANAGEMENT	
EBTM 419	SUPPLY-CHAIN MANAGEMENT	
EBTM 422	CRM ANALYTICS	
EBTM 454	BUSINESS PROCESS MANAGEMENT	
EBTM 476	SPECIAL TOPICS IN BUSINESS ANALYTICS	
EBTM 490	DIRECTED READINGS IN BUSINESS ANALYTICS	
EBTM 493	INDEPENDENT RESEARCH IN BUSINESS ANALYTICS	
EBTM 499	BUSINESS ANALYTICS INTERNSHIP	
Total Units		24

Four-Year Plan of Study

Sample Four-Year Plan

The selected course sequence below is an example of the simplest path to degree completion. Based on course schedules, student needs, and student choice, individual plans may vary. Students should consult with their adviser to make the most appropriate elective choices and to ensure that they have completed the required number of units (120) to graduate.

Freshman

First Term (Fall)	Units Second Term (Spring)	Units
ECON 201 or 203 (Core 6)	3 ECON 202 or 204	3
Prerequisite for MATH 211 or MATH 273 (Core 3)	3 MATH 211 (may substitute MATH 273)	3
Core 1 (or Core 2)	3 Core 2 (or Core 1)	3
Core 4	3 Core 10	3
Core 5	3 Elective	3
	15	15

Sophomore

First Term (Fall)	Units Second Term (Spring)	Units
ACCT 201	3 ACCT 202	3
ECON 205 or MATH 231	3 EBTM 250	1
LEGL 225 (Core 11)	3 EBTM 251	1
Core 7	4 Core 8	4
Core 12	3 Core 13	3
	Elective	3
	16	15

Junior

First Term (Fall)	Units Second Term (Spring)	Units
BUSX 301 (Core 9)	4 EBTM 350	3
EBTM 320	3 EBTM 365	3
EBTM 337	3 EBTM 455 ²	3
MKTG 341	3 FIN 331	3
MNGT 361	3 Elective	3
	16	15

Senior

First Term (Fall)	Units Second Term (Spring)	Units
EBTM 446	3 BUSX 460	3
EBTM 456 ¹	3 EBTM 400	3
MNGT 282 (Recommended Core 14)	3 EBTM 457 ²	3
Business Analytics Elective	3 MNGT 481	3
Elective	3 Elective	1
	15	13

Total Units 120¹ Offered only in the Fall semester.² Offered only in the Spring semester.

Learning Outcomes

Profile of a CBE Graduate

As a premier school of applied business learning, the College of Business and Economics prepares its graduates to achieve excellence in their professional careers. Rigorous academic studies and hands-on business experience—all subject to strict measures of performance—work in combination to **develop** the foundation for success, **connect** students with the professional community and **transform** students who will have a positive impact in and beyond Maryland.

Graduates of Towson University's College of Business and Economics will:

Apply Business Knowledge in the Context of Professional Employment

- Demonstrate knowledge of business concepts and theories
- Successfully complete a quality, mentored, reflective professional experience in preparation for future employment

Communicate Properly and Effectively

- Write professional documents that provide audience-centric content, rhetorically appropriate organization and follow accepted conventions of design, style, grammar, punctuation and mechanics
- Make articulate and persuasive oral presentations

Apply Critical Thinking and Problem-Solving Skills to Organizational Decision Making

- Conduct internal and external analyses of domestic and global organizations, formulate strategies and identify issues with implementing these strategies
- Practice creative ideation
- Develop comprehensive, justified conclusions that result from systematic application of relevant information and decision criteria to decision alternatives within a realistic organizational decision context

Use Technology Effectively in Business Settings

- Demonstrate competency in the use of analytical software
- Utilize state-of-the-practice software for business applications

Work Effectively Toward Achieving Common Goals within Diverse Teams

- Guide teams, as leaders and followers, to achieve team goals while maintaining group cohesion, follower satisfaction and efficient operations
- Treat others with respect and show sensitivity to their views, values, cultures and customs

Distinguish Between Ethical and Unethical Conduct in the Professional Lives

- Explain how ethical conduct of managers affects individuals' motivation and organizations' performance
- Apply ethics in business decision-making, considering the impact of ethical conduct on multiple stakeholders