

# **Business Analytics (STEM)**

Business analytics combines the analysis of raw data with the tools and concepts of business to solve real-world problems. How can app-based delivery services increase productivity? How can a gym retain and grow memberships? How can a meal delivery service predict customer's demands while minimizing product spoilage?

Do you want to learn to answer questions like these and develop the problem-solving abilities to answer new questions? Duquesne's Business Analytics comajor will prepare you to find actionable answers to complex questions in any industry. You will gain the skills you need to be a leader in the business world and to shape the direction of your future employers.

Business Analytics complements and strengthens other business majors, which is why this program is a co-major (i.e., it cannot be taken as a stand-alone major). The program focuses on the ability to communicate the business analysis of data that spans all disciplines, making it a logical companion to other business majors. Recently, the Association to Advance Collegiate Schools of Business (AACSB) International estimated that there are more than 400 degree programs offered by nearly 220 business schools worldwide. Adding a Business Analytics co-major will give you an edge as you enter the professional world.

# Why study Business Analytics at the Palumbo-Donahue School of Business?

The School of Business's undergraduate course offerings have been recently revitalized to reflect the latest trends in business education. The School currently has eight majors (Accounting, Economics, Entrepreneurship, Finance, Information Systems and Technology, Management, Marketing, and Supply Chain Management), all of which can be paired with Business Analytics to give you additional problemsolving tools and increase your marketability in the business world.

Revitalization is also taking place in Rockwell Hall. Major renovations have created cutting-edge learning spaces that combine the latest technology with first-class centers and institutes.

The Business Analytics co-major will give you the opportunity to turn foundational knowledge into transformational experiences, through the co-major's cornerstone and capstone courses. These classes comprise the program's required courses and consist of two cornerstone courses and a capstone course. Students will take three elective courses, one of which is a course that will double-count toward their primary major and two courses outside of their primary major. There is no program-specific prerequisite requirement for business students as Business Statistics (STAT 285) is already in the business core required of all majors.

#### **Career Prospects**

Adding a Business Analytics co-major will give you a leg up on the competition. The Occupational Outlook Handbook compiled by the Bureau of Labor Statistics (BLS) lists the following analyst occupations that require data mostly in business disciplines: market research analysts, budget analysts, computer systems analysts, information security analysts, financial analysts, logisticians, and operations research analysts. These occupations are projected to grow 15%-25% faster than the average between 2020-2030, giving an edge to professionals with a thorough grounding in business and analytics.

#### **Graduate School Preparation**

The Business Analytics co-major provides excellent training for students who wish to go on to graduate school in programs that offer analytics or related quantitative areas either at the Palumbo-Donahue School of Business or elsewhere.

#### Courses

Course	Prerequisites	Semesters Offered	
BUSINESS CORE/REQUIRED COURSES (48 credits plus 6 additional credits of required courses. This information is subject to change.)			
REQUIRED COURSES (9 Credits)			
BUBA 285: Foundations of Business Analytics	STAT 285	Fall	
BUBA 286: Business Analytics for Decision Making	BUBA 285	Spring	
BUBA 490W: Business Analytics Capstone	BUBA 286	Spring	
ELECTIVES (9 Credits) 3 of these credits are shared with the primary major			
ACCT 310: Accounting Information Systems	ACCT 215	Fall	
BUAD 325: Data Analytics and Emerging Technologies in Accounting	ACCT 311 (for accounting majors) BUBA 285 (for all other majors)	Spring	
ECON 322: Advanced Excel Modeling	ECON 201, STAT 285	Offered Irregularly	
ECON 481W: Econometrics	STAT 285	Fall	
ECON 484W: Advanced Econometrics	ECON 481W	Spring	
FINC 334: Investments	FINC 313	Fall, Spring	
ISYS 382: Data and Information Management	ISYS 284	Fall, Spring	
ISYS 484: Business Intelligence	ISYS 382	Fall	
MGMT 364W: Critical Managerial Decision Making	MGMT 261	Fall, Spring	
MKTG 374W: Marketing Research	MKTG 271, STAT 285	Fall, Spring	
MKTG 442: Digital Sales and Marketing Tools	MKTG 373	Fall, Spring	
MKTG 472: Digital Marketing	MKTG 271, STAT 285	Fall, Spring	
SCMG 385: SCM Information Systems and Technology	SCMG 267	Fall, Spring	
SCMG 480: Forecasting, Production, and Inventory Planning	SCMG 375	Fall, Spring	

## **Recommended Sequence for Accounting Majors**

	Fall Semester	Spring Semester
Junior Year	BUBA 285: Foundations of Business	Elective Course 2

Analytics Elective Course 1: ACCT 310

Elective Course 1: ACCT 310 Accounting Information Systems

**Senior Year** Elective Course 3 BUBA 490W: Business Analytics Capstone

## Recommended Sequence for Economics (BSBA) Majors

	Fall Semester	Spring Semester
Junior Year	BUBA 285: Foundations of Business Analytics	BUBA 286: Business Analytics for Decision Making
Senior Year	Elective Course 1 – ECON 481W:	Elective Course 3
	Econometrics	BUBA 490W: Business Analytics Capstone
	Elective Course 2	

BUBA 286: Business Analytics for Decision Making

#### Recommended Sequence for Entrepreneurship Majors

Fall Semester **Spring Semester** 

Junior Year BUBA 285: Foundations of Business BUBA 286: Business Analytics for Decision Making

**Analytics** 

Analytics

Senior Year Elective Course 1 - MGMT 364W: Critical

Managerial Decision Making

Elective Course 2

Elective Course 3

BUBA 490W: Business Analytics Capstone

#### **Recommended Sequence for Finance Majors**

**Fall Semester Spring Semester** 

Junior Year BUBA 285: Foundations of Business BUBA 286: Business Analytics for Decision Making

Elective Course 1 - FINC 334: Investments

Senior Year Elective Course 2 Elective Course 3

BUBA 490W: Business Analytics Capstone

#### Recommended Sequence for Information Systems and Technology Majors

**Fall Semester Spring Semester** 

Junior Year BUBA 285: Foundations of Business BUBA 286: Business Analytics for Decision Making

> **Analytics** Elective Course 1 - IST 382: Data and Information Management

Senior Year Elective Course 2 Elective Course 3

BUBA 490W: Business Analytics Capstone

BUBA 286: Business Analytics for Decision Making

#### **Recommended Sequence for Management Majors**

**Fall Semester Spring Semester** 

Junior Year BUBA 285: Foundations of Business

**Analytics** 

Senior Year

Elective Course 1 - MGMT 364W: Critical Managerial Decision Making

Elective Course 2 Elective Course 3

BUBA 490W: Business Analytics Capstone

#### **Recommended Sequence for Marketing Majors**

**Fall Semester Spring Semester** 

BUBA 285: Foundations of Business Junior Year BUBA 286: Business Analytics for Decision Making

> Analytics Elective Course 1 - MKTG 374W: Marketing Research

Senior Year Elective Course 2 Elective Course 3

BUBA 490W: Business Analytics Capstone

#### **Recommended Sequence for Supply Chain Management Majors**

Fall Semester Spring Semester

Junior Year BUBA 285: Foundations of Business BUBA 286: Business Analytics for Decision Making

Analytics

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Forecasting, Production and Inventory BUBA 490W: Business Analytics Capstone

Flective Course 3

Planning Elective Course 2

Elective Course 1 - SCMG 480:

#### **Graduation Requirements**

Senior Year

Students must earn a minimum overall GPA of a 2.0.

It is the responsibility of the student to know both University-wide graduation requirements and those of the major field of study and to meet all requirements satisfactorily for graduation.

This information is subject to change and this publication cannot be considered an agreement or contract between the individual and the School. The Palumbo-Donahue School of Business reserves the right to alter or amend the terms, conditions and requirements and to eliminate courses as necessary. Students should consult on a regular basis with their Student Success Coach for specific information related to their major and/or minor requirements. Rev.9/2024