

# **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 co-major 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 comajor (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 COURSES (48 Credits)		
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	ACCT 311 (for accounting majors)	Spring
Accounting	BUBA 285 (for all other majors)	
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, STAT 285	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 287	Fall, Spring
SCMG 480 Forecasting, Production Planning and Inventory Management	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 Accounting Information Systems

BUBA 286 Business Analytics for Decision Making

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 BUBA 286 Business Analytics for Decision Making

Analytics

Senior Year Elective Course 1-- ECON 481W Elective Course 3

Econometrics BUBA 490W Business Analytics Capstone

**Elective Course 2** 

## **Recommended Sequence for Entrepreneurship Majors**

Fall Semester Spring Semester

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

**Analytics** 

Senior Year Elective Course 1 -- MGMT 364W Critical Elective Course 3

Managerial Decision Making BUBA 490W

Elective Course 2

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

Analytics 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** 

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

Fall Semester Spring Semester

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

**Analytics** 

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

Senior Year Elective Course 2 Elective Course 3

BUBA 490W Business Analytics Capstone

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

Fall Semester Spring Semester

Junior Year BUBA 285 Foundations of Business 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

**Senior Year** Elective Course 1 -- SCMG 480 Elective Course 3

Forecasting, Production and Inventory BUBA 490W Business Analytics Capstone

Planning

Elective Course 2

#### **Graduation Requirements**

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 requirement. Rev 6/2023