BUSINESS ANALYTICS, MBA

The Business Analytics MBA major is designed to build deep competency in the skills needed to implement and oversee data-driven business decisions, including

- · collecting, managing and describing datasets,
- · forming inferences and predictions from data and
- · making optimal and robust decisions.

Business analytics makes extensive use of statistical analysis and the applications of business analytics span all functional areas.

Business analytics has emerged in recent years as a powerful and required capability for firms in competitive markets. The quantity, quality and diversity of available data have never been greater, which has created new and significant opportunities for organizations to use data to improve their decisions with respect to both internal resources as well as external interactions with suppliers and customers.

Students choosing the Business Analytics MBA major are ideally suited for the growing set of careers broadly defined under the header of "data science" with responsibilities for man-aging and analyzing data. In addition, the major provides an excellent complement to students who choose to focus on one of the functional areas of business (e.g., accounting, finance, marketing, operations).

For more information: https://mba-inside.wharton.upenn.edu/buan-major/

Curriculum

HCMG 8570

LGST 6420

Code

A minimum of 19 course units is required for graduation.

Title

Major electives taken on a pass/fail basis cannot be counted toward the Business Analytics major. Up to one (1) CU from a list of pre-approved non-Wharton courses may be counted towards the major.

Course

		Units
Business Analytic	cs Major Requirements	
Core Requirement	ts	
STAT 6130	Regression Analysis for Business	
or STAT 621	OAccelerated Regression Analysis for Business	
OIDD 6110	Quality and Productivity	
or OIDD 615	(Operations Strategy	
OIDD 6120	Business Analytics	
Select 3-4 course	units from the following:	3-4
ACCT 7420	Financial Reporting and Business Analysis	
ACCT 7470	Financial Disclosure Analytics	
BEPP 7800	Applied Data Analysis	
BEPP 8970	Special Topics	
FNCE 7050	Investment Management	
FNCE 7170	Financial Derivatives	
FNCE 7370	Data Science for Finance	
FNCE 7800	FinTech	

Healthcare Data and Analytics

Big Data, Big Responsibilities: Toward Accountable Artificial Intelligence

	MGMT/OIDD 7930	People Analytics	
	MKTG 7120	Data and Analysis for Marketing Decisions	
	MKTG 7520	Marketing Analytics (Students cannot count both MKTG 7520 and MKTG 8520 towards the BUAN major; they can only count ONE of the two courses)	
	MKTG 7540	Pricing Policy	
	MKTG 7710	Models for Marketing Strategy	
	MKTG/STAT 7760	Applied Probability Models in Marketing	
	MKTG 8090	Experiments for Business Decision Making (Center Special Topic)	
	MKTG 8520	Special Topics - Marketing Analytics (Students cannot count both MKTG 8520 and MKTG 7520 towards the BUAN major; they can only count ONE of the two courses.)	
	OIDD 5250	Thinking with Models: Business Analytics for Energy and Sustainability	
	OIDD 6360	Scaling Operations: Linking Strategy and Execution	
	OIDD 6420	Analytics for Services	
	OIDD 6430	Analytics for Revenue Management	
	OIDD 6530	Mathematical Modeling and its Application in Finance	
	OIDD 6590	Advanced Topics (Operations Analytics)	
	OIDD 6620	Enabling Technologies	
	OIDD 6630	Databases for Analytics	
	OIDD 6670	A.I., Business, and Society	
	STAT 7010	Modern Data Mining	
	STAT 7050	Statistical Computing with R	
	STAT 7100	Data Collection and Acquisition: Strategies and Platforms	
	STAT 7110	Forecasting Methods for Management	
	STAT 7220	Predictive Analytics for Business	
	STAT 7230	Applied Machine Learning in Business	
	STAT 7240	Text Analytics	
	STAT 7250	Sports and Gaming Analytics	
	STAT 7700	Data Analytics and Statistical Computing	
	STAT 7770	Introduction to Python for Data Science	
	STAT 9740	Modern Regression for the Social, Behavioral and Biological Sciences	
,		urse unit of the following:	1
	CIS 5190	Applied Machine Learning	
	CIS 5200	Machine Learning	
	CIS 5450	Big Data Analytics	
	CIS 5500 CIT 5900	Database and Information Systems Programming Languages and Techniques	
	CIT 5900 CIT 5910	Programming Languages and Techniques Introduction to Software Development	
	CIT 5910	Introduction to Software Development Introduction to Computer Systems	
	CIT 5930 CIT 5940	Data Structures and Software Design	
	CIT 5950	Computer Systems Programming	
	EDUC 5760	Applied Research Methods to Inform Policy	

and Practice

EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization MUSA 5500 Geospatial Data Science in Python NPLD 7200 Data Analysis for Social Impact Electives Select 5.5 course units of electives 5.5 MBA Core Requirements 9.5 MBA Core Requirements Code Title Course	Accounting			
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization MUSA 5500 Geospatial Data Science in Python NPLD 7200 Data Analysis for Social Impact Electives Select 5.5 course units of electives 5.5 MBA Core Requirements 9.5 Total Course Units 19	Code	Title	Course Units	
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization MUSA 5500 Geospatial Data Science in Python NPLD 7200 Data Analysis for Social Impact Electives Select 5.5 course units of electives 5.5				
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization MUSA 5500 Geospatial Data Science in Python NPLD 7200 Data Analysis for Social Impact Electives	MBA Core Requirements		9.5	
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization MUSA 5500 Geospatial Data Science in Python NPLD 7200 Data Analysis for Social Impact	Select 5.5 course units of electives		5.5	
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization MUSA 5500 Geospatial Data Science in Python	Electives			
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing & Visualization	NPLD 7200	Data Analysis for Social Impact		
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for Urban Data Analysis MUSA 5090 Geospatial Cloud Computing &	MUSA 5500	Geospatial Data Science in Python		
EDUC 7668 Measurement Theory and Test Construction EDUC 7677 Structural Equations Modeling MUSA 5000 Statistical and Data Mining Methods for	MUSA 5090			
EDUC 7668 Measurement Theory and Test Construction	MUSA 5000			
EDUC 7668 Measurement Theory and Test	EDUC 7677	Structural Equations Modeling		
EDUC 7667 Regression and Analysis of Variance	EDUC 7668	The state of the s		
EDUO 7667 Demociar and Amelia in (Mariana)	EDUC 7667	Regression and Analysis of Variance		
EDUC 6683 Survey Methods & Design	EDUC 6683	Survey Methods & Design		

Select 5.5 course units of electives		5.5
MBA Core Requir	ements	9.5
Total Course Unit	s	19
MBA Core Re	quirements	
Code	Title	Course Units
Accounting		
Select one of the	3	0.5-1
ACCT 6110	Fundamentals of Financial Accounting	
ACCT 6130	Fundamentals of Financial and Managerial Accounting	
Finance ¹		
Corporate Finance		
Select one of the	following:	0.5-1
FNCE 6110	Corporate Finance	
FNCE 6210	Corporate Finance (Half CU)	
Macroeconomics		
Select one of the	following:	0.5-1
FNCE 6130	Macroeconomics and the Global Economic Environment	
FNCE 6230	Macroeconomics and The Global Economic Environment (Half CU)	
Legal Studies		
LGST 6110	Responsibility in Global Management	0.5
or LGST 6120	Responsibility in Business	
or LGST 6130	Business, Social Responsibility, and the Enviro	onment
Microeconomics		
MGEC 6110		0.5
MGEC 6120		0.5
Management		
MGMT 6100	Foundations of Teamwork and Leadership	0.5
MGMT 6110	Managing Established Enterprises	1
or MGMT 6120	Management of Emerging Enterprises	
Marketing		
MKTG 6110	Marketing Management	0.5
MKTG 6120	Dynamic Marketing Strategy	0.5
or MKTG 6130	Strategic Marketing Simulation	
OIDD		

Total Course Units		
WHCP 6240	Persuasive Writing for Business Leaders	
	Entrepreneurs	
WHCP 6150	Communication Challenges for	
WHCP 6120	Advanced Persuasive Speaking	
Select one of the	following:	0.25
WHCP 6110	Management Communication	0.25
Management Con	nmunication	
or STAT 6210	Accelerated Regression Analysis for Business	
STAT 6130	Regression Analysis for Business ²	1
Statistics		
OIDD 6900	Managerial Decision Making	
OIDD 6620	Enabling Technologies	
OIDD 6150	Operations Strategy	
OIDD 6140	Innovation	
OIDD 6130	Online Business Models and the Information-Based Firm	
OIDD 6120	Business Analytics	

 $^{^1\,}$ Students cannot enroll in both FNCE 6210 and FNCE 6230. $^2\,$ STAT 6210 is by placement only.

0.5-1

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2024 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.

Quality and Productivity

Select one unit of the following:

OIDD 6110