

STATISTICS AND DATA SCIENCE, MBA

The Statistics and Data Science major develops the skills and insights required to draw inferences and conclusions from many types of data. A key challenge facing managers is the interpretation of the vast amount of data generated in the world of business today. Modern computing systems now produce large volumes of information whereas previously one could often only rely upon intuition and guesses. Yet this information does not directly answer important business questions. What combination of features is most desirable for consumers? What will sales be next month? How did we do last month? Data analysis and statistics offer a systematic approach that can help provide answers to these questions.

Courses offered by the Statistics and Data Science Department develop the skills and insights required to make effective use of statistical methods. The courses provide the knowledge needed to select and apply techniques and to communicate statistical results. Interpretation in realistic applications offers guiding examples, and theory is used to motivate and compare alternative schemes.

Regardless of topic, all of these courses provide useful skills that augment the substantive managerial abilities of students. Courses also provide exposure to computer software that implements key techniques.

For more information: <https://statistics.wharton.upenn.edu/programs/mba/course-requirements/>

Curriculum Curriculum

A minimum of 19 course units is required for graduation.

Major electives taken on a pass/fail basis cannot be counted toward the Statistics and Data Science major.

Code	Title	Course Units
Statistics and Data Science Major Requirements		
Select 4 course units from the following:		4
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 7240	Text Analytics	
STAT 7700	Data Analytics and Statistical Computing	
STAT 7760	Applied Probability Models in Marketing	
STAT 7770	Introduction to Python for Data Science	
STAT 8990	Independent Study	
STAT 9200	Sample Survey Methods	
STAT 9740	Modern Regression for the Social, Behavioral and Biological Sciences	
Electives		
Select 5.5 course units of electives		5.5

MBA Core Requirements	9.5
Total Course Units	19

MBA Core Requirements

Code	Title	Course Units
Accounting		
Select one of the following:		0.5-1
ACCT 6110	Fundamentals of Financial Accounting	
ACCT 6130	Fundamentals of Financial and Managerial Accounting	
Finance ¹		
<i>Corporate Finance</i>		
Select one of the following:		0.5-1
FNCE 6110	Corporate Finance	
FNCE 6210	Corporate Finance (Half CU)	
<i>Macroeconomics</i>		
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 Environment	
Microeconomics		
MGEC 6110	Microeconomics for Managers: Foundations	0.5
MGEC 6120	Microeconomics for Managers: Advanced Applications	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		
Select one unit of the following:		0.5-1
OIDD 6110	Quality and Productivity	
OIDD 6120	Business Analytics	
OIDD 6130	Online Business Models and the Information-Based Firm	
OIDD 6140	Innovation	
OIDD 6150	Operations Strategy	
OIDD 6620	Enabling Technologies	
OIDD 6900	Managerial Decision Making	
Statistics		
STAT 6130	Regression Analysis for Business ²	1
or STAT 6210	Accelerated Regression Analysis for Business	
Management Communication		

WHCP 6110	Management Communication	0.25
Select one of the following:		0.25
WHCP 6120	Advanced Persuasive Speaking	
WHCP 6150	Communication Challenges for Entrepreneurs:	
WHCP 6240	Persuasive Writing for Business Leaders	
Total Course Units		9.5

¹ Students cannot enroll in both FNCE 6210 and FNCE 6230.

² STAT 6210 is by placement only.

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2023 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.
