DATA ANALYTICS AND BUSINESS COMPUTING (MS)

Department Website (https://stern.shanghai.nyu.edu/en/program/ms-data-analytics-business-computing/)

NYSED: 41076 **HEGIS:** 0506.00 **CIP:** 52.0201

Program Description

The Master of Science in Data Analytics and Business Computing is a master's program with a global track at NYU Shanghai, and seeks to prepare pre-experience students with a strong analytical background for careers in a fast-growing field of business analytics. Students will learn how to use a data-driven approach to solve business challenges in the era of big data. With the interdisciplinary nature of business analytics, our program offers a broad yet rigorous curriculum in business (finance, marketing, revenue management, operations), data science (statistics, econometrics, data mining, data visualization), and management science (optimization, stochastic modeling, simulation). We emphasize both quantitative and technical methods and their applications in different functional areas in business. Students will benefit from the extensive industry experience of our faculty and seasoned professionals in the field.

Our program is a sister program of Stern's Master of Science program in Business Analytics (MSBA), which has been consistently in high demand in this field since its inception. While the MSBA program is for senior-level professionals, our MS program in Data Analytics and Business Computing caters to motivated pre-experience students or recent college graduates.

Admissions

Applications for the NYU Stern - NYU Shanghai Master of Science in Data Analytics and Business Computing program are accepted for the **Summer start** term only.

See MS in Data Analytics and Business Computing (https://stern.shanghai.nyu.edu/en/admissions/ms-data-analytics-and-business-computing/) for admission requirements and instructions specific to this program.

Program Requirements

The program requires the completion of 36 credits, comprised of the following:

Course	Title	Credits
Major Requirements		
SHBI-GB 7350	Generative AI: From Data to Business Workflow	3
SHBI-GB 7318	Deep Learning & AI	3
SHBI-GB 7300	Statistics & Data Analysis	3
SHBI-GB 7304	Dealing with Data and Introduction to Python Programming	3
SHBI-GB 7301	Stochastic Modeling & Simulation	3
SHBI-GB 7105	Business Communications	1.5
SHBI-GB 7100	Operations Management	1.5
SHBI-GB 7311	Machine Learning for Business	3
SHBI-GB 7302	Optimization Modeling	3
SHBI-GB 7315	Capstone Seminar	3
Electives		
Other Elective Credits		9
Total Credits		**36**

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
SHBI-GB 7300	Statistics & Data Analysis	3
SHBI-GB 7304	Dealing with Data and Introduction to Python Programming	3
SHBI-GB 7301	Stochastic Modeling & Simulation	3
SHBI-GB 7105	Business Communications	1.5
SHBI-GB 7100	Operations Management	1.5
Elective		1.5
	Credits	**13.5**
2nd Semester/Term		
SHBI-GB 7311	Machine Learning for Business	3
SHBI-GB 7350	Generative AI: From Data to Business Workflow	3
Elective		3
	Credits	**9**
3rd Semester/Term		
SHBI-GB 7302	Optimization Modeling [1]	3
SHBI-GB 7315	Capstone Seminar	3
SHBI-GB 7318	Deep Learning & AI	3
Elective		4.5
	Credits	**13.5**
	Total Credits	**36**

[1] This course is taken in January.

Learning Outcomes

Upon successful completion of the program, graduates will:

1. Develop data-analytic thinking and acquire knowledge of various quantitative and technical methods to make better business decisions and derive values.
2. Learn how to effectively deal with vast amounts of data through the whole data management process, from the initial data acquisition to the final data analysis and presentation.
3. Learn various methods and techniques to analyze data to generate business insights and to build predictive models to forecast and simulate future outcomes.
4. Learn how to formulate business problems as formal mathematical models and obtain optimal solutions to the formulated models.
5. Develop practical skills in programming using programming languages such as Python and R.
6. Learn how to apply data analytics, data management and data-driven decision making skills across various functional areas of an organization, including Finance, Marketing and Operations.

Policies

NYU Policies

University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

Stern Policies

Additional academic policies can be found on the Stern Graduate Academic Policies page (https://bulletins.nyu.edu/graduate/business/academic-policies/).