

Boston University MS in Business Analytics: Program



Admitted Student Meet and Greet

- **Introductions**

- MSBA Career Team
- MSBA Faculty and Executive Director

- **Breakout Rooms**

- Drop in if you have any questions or would just like to say hello.
- Turn on your video if possible to meet other admits!

Program Curriculum: Introductions



Francois Charvet, PhD

Executive Director, MSBA
Program

*MSBA Program
Leadership and
Administration*

Capstone Project Support

Supply Chain Analytics



Giorgos Zervas, PhD

Associate Professor of
Marketing

*MSBA Faculty Director
BA810 Supervised ML*

**Large Scale Studies of
Internet Markets,
Sharing Economy, Machine
Learning**



Dokyun "DK" Lee, PhD

Kelly Questrom Associate
Professor in Management

BA840 Data Ethics

**Economic Impact of
Unstructured Data,
Interpretable ML, Human-AI
Collaboration**

MSBA in a nutshell...

CURRICULUM MAP*

16-MONTH TRACK	12-MONTH TRACK
PRE-PROGRAM START: PROGRAMMING AND STATISTICAL FOUNDATIONS BOOTCAMP**	
FALL	
• CORE CONCEPTS IN PROGRAMMING, MACHINE LEARNING, AND BUSINESS ANALYTICS • COMMUNICATIONS AND TEAMING	
SPRING	
ADVANCED DATA MODELING AND INITIAL ELECTIVES	
SUMMER	
• DATA ETHICS INTENSIVE MODULE • OPTIONAL INTERNSHIP	• DATA ETHICS INTENSIVE MODULE • FINAL ELECTIVE • CAPSTONE PROJECTS
FALL	
• FINAL ELECTIVES • ABILITY TO COMPLETE CONCENTRATION	

* The program curriculum is subject to change

** Bootcamp takes place in August and can be waived by demonstrating mastery of pre-requisite skills, or by successfully completing approved online coursework prior to program start.

- STEM designated degree prepares you for a career in advanced analytics or applied data science, from start-ups to Fortune 500
 - Data mining, modeling, visualization
 - Extract insights from (big) data and formulate actionable recommendations for business leaders
- Intensive, full-time program
- **NEW for MSBA2022-2023:**
 - Two distinct tracks
 - Summer internship or capstone industry projects
 - Expanded electives and option to select concentrations

Sample curriculum

The program begins with a Programming & Statistical Foundations Bootcamp** in August prior to the first fall semester.

12-MONTH TRACK



16-MONTH TRACK



FALL

- BA775: Business Analytics Toolbox
- BA780: Intro to Business Analytics
- BA810: Supervised Machine Learning
- BAXX1: Competing with Analytics
- ES710: Teaming

SPRING

- BA820: Unsupervised Machine Learning
- BA830: Business Experimentation and Causal Methods
- Elective 1
- Elective 2
- ES720: Communications

SUMMER

12-Month Track

- BA840: Data Ethics Intensive
- Elective 3
- BA888: Capstone Project
- BA890: Analytics Practicum (Research Project)

16-Month Track

- BA840: Data Ethics Intensive
- BA890: Analytics Practicum (Internship or Research Proj.)

FALL

- Elective 3
- Elective 4

While not a requirement for the program, students may choose to take additional electives or pursue part-time work/internship in the final semester.

* Curriculum is subject to final university approval and is subject to change

** May be waived by demonstrating mastery of pre-requisite skills, or by successfully completing approved online coursework prior to program start

Electives and Concentrations Overview

All Course and Schedule information is tentative and subject to change at any time

Course Nr.	Course Name	General MSBA Electives	Marketing Analytics	Data and Methods	Healthcare Analytics
BA870	Financial and Accounting Analytics	*			
BA875	Operations and Supply Chain Analytics	*			
BA880	People Analytics	*			
BA860	Digital Marketing Analytics	*	*		
MK864	Pricing Strategies		*		
MK852	Data Driven Marketing Decisions		*		
MK856	Consumer Insights		*		
BA865	Advanced Machine Learning 1 (Intro to Neural networks)	*		*	
BA885	Advanced Machine Learning 2 (Neural networks)	*		*	
IS843	Big Data Analytics for Business (tentative)			*	
DM	1 extra D&M elective to be announced			*	
BS803	Statistical Programing for Biostatisticians				*
BS806	Multivariable Analysis for Biostatisticians				*
PM804	Digital Disruption in Health				*
IS817	Advances in Digital Health				*

MSBA Capstone Projects

- Students work in teams with an industry sponsor (company)
- Real-life problem, real-life data
- Business Advisor & Faculty Advisor meet regularly with teams
- Midterm and final presentations
- Projects vary every year, typically range of industries/topics



Mohammad Soltanieh-Ha, Ph.D.
Course Coordinator



Oliver Bandte, Ph.D.
Faculty Advisor
VP Data and Analytics,
Wellframe



Shawn Jin, Ph.D.
Faculty Advisor
Head of Analytics,
Plymouth Rock
Insurance Home
Group



Jialin Li
Faculty Advisor
Lead Data
Scientist, Target



Elgar Pichler, Ph.D.
Faculty Advisor
Head Data Science &
Knowledge Engineering,
Brandpoint

MSBA Capstone: examples

Sponsor	Project
Global Pharma Company	A pharma company wants to smoothen excess demand faced by its quality control facilities. They solicit help from Team 1 to predict the demand patterns in advance using structured and unstructured data.
US Insurance Company	Fire loss is the biggest driver of loss in home insurance - what can Team 17 learn from the data to help predict the fire loss for a home insurance company?
US Govt. Agency	Climate change is here and national agencies provide rich data about drought. Team 3 utilizes this data for predictive analytics and for disseminating drought information effectively.
Social media start-up	Social media engagement is a highly sought after, elusive goal for many enterprises. Team 5 dives into the data investigating what drives engagement for a social media startup.
Tech Consulting Company	A risk analytics consulting company wants to improve the way its models understand the impact of black swan events. Team 7 is using NLP to identify and build the building blocks for this effort.
Investment Advice Company	An investment firm is looking into developing robust prediction of future environmental and social activities of a company by using the data on its past activities. Teams 8 & 13 are tackling this forecasting task with machine learning.
E-commerce Retailer	Can early days on a members-only platform define the whole customer journey? Team 4 delves into marketing analytics & explores ways to identify customer journey from early signals in user engagement.



QUESTIONS?

Please stay in touch!

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- Graduate Admissions and Financial Aid Office

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- Current Student Ambassadors

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