

## **Business Analytics (BA).**

Business Analytics (BA) addresses a growing demand for students with skills to extract insights from data and use those insights to make strategic business decisions.

The BA Program has a cross-disciplinary focus on the tools and techniques developed for descriptive, prescriptive, and predictive analytics. It provides a business degree with a special emphasis on the application of data analytics to solve complex business problems.

Students enrolled in the program will acquire a set of practical data analytics skills, including understanding patterns in data, applying analytical frameworks, constructing predictive models, analyzing social networks, and discovering hidden relationships in data. Students will learn how to present data using modern visualization techniques and will get acquainted with the state of the art data analytics software.

The BA program prepares graduates for jobs that involve data-driven, business intelligence, decision models, and big data analytics. Generally, the graduates of this program are prepared to be business analysts.

### Level 1

Code	Course title(s)	Lectures	Tutorials	Credits	Pre-requisite(s)
<b>Semester 1</b>					
ECO 101	Introduction to Microeconomics	3	1	3	
MTH106	Mathematics	3	1	3	
MGT 101	Introduction to Management	3	1	3	
IST103	Fundamentals of Information Systems.	2	2	3	
CS101	Introduction to Computer Science	2	2	3	
HM 003	English language 1	2	-	2	
	<b>Total Credits:</b>			<b>17</b>	
<b>Semester 2</b>					
ECO 102	Introduction to Macroeconomics	3	1	3	
ACC 125	Financial Accounting	3	1	3	
CS 102	Introduction to programming and algorithms.	2	2	3	CS101
CS 207	Operating Systems	2	2	3	
STA 104	Statistics for Business 1	3	1	3	MTH106
HM 004	English language 2	2	-	2	HM 003
	<b>Total Credits:</b>			<b>17</b>	

Level 2

Code	Course title(s)	Lectures	Tutorials	Credits	Pre-requisite(s)
<b>Semester 3</b>					
IST 205	Systems Analysis & design 1	2	2	3	CS207
STA 207	Statistics for Business 2.	3	1	3	STA 104
HM 006	Human Rights & Anticorruption.	2	-	2	
ACC 126	Managerial Accounting.	3	1	3	ACC 125
MGT 203	Introduction to Marketing.	3	1	3	MGT 101
CS 204	Object oriented programming.	2	2	3	CS 102
HM 001	Russian language 1.	2	-	2	
	<b>Total Credits:</b>			<b>19</b>	
<b>Semester 4</b>					
ECO 203	Money & Banking.	3	1	3	ECO 101   ECO 102
BA 201	Introduction to business Analytics.	3	1	3	STA 207
IST 204	Database Systems 1	2	2	3	CS 102
CS 209	Advanced programming language.	2	2	3	CS 204
HM 005	Scientific Thinking.	2	-	2	
MIS 201	Digital Marketing.	3	1	3	MGT 203
HM 002	Russian language 2.	2	-	2	HM 001
	<b>Total Credits:</b>			<b>19</b>	

### Level 3

Code	Course title(s)		Lectures	Tutorials	Credits	Pre-requisite(s)			
<b>Semester 5</b>									
MGT 305	Managerial finance & Investment.		3	1	3	MGT 101	ECO 203	ACC 126	
CS 203	Data structures		2	2	3	CS 102			
IST 306	Database Systems 2		2	2	3	IST 204			
BA 308	Data analysis for business applications.		3	1	3	STA 104			
IST 310	Systems Analysis & design 2		2	2	3	IST 205			
STA 309	Statistical Computing		3	1	3	CS 102	STA 207		
	<b>Total Credits:</b>				18				
<b>Semester 6</b>									
DS 305	Data warehouses		2	2	3	IST 306			
BA 303	Business Intelligence		3	1	3	MGT 101	STA 104		
BA 304	Predictive analytics.		3	1	3	BA 201			
IT 303	Networking & Telecommunications.		2	2	3	MTH106	CS 101		
<b>Elective 1</b>	ECO 414	Econometrics 2.	3	1	3	ECO 101	ECO 102	MTH 106	CS 101
	STA 205	Operation Research.				MTH 106			
<b>Elective 2</b>	BA 302	Marketing analytics.	3	1	3	MGT 203	BA 201		
	BA306	Supply Chain analytics.				MGT 101	BA 201		
	BA307	Special Topics in business analytics.				BA 201			
	<b>Total Credits:</b>				18				

### Level 4

Code	Course title(s)		Lectures	Tutorials	Credits	Pre-requisite(s)	
<b>Semester 7</b>							
HM 009	Scientific Research Methodology.		2	-	2		
DS 409	Data Mining.		2	2	3	IST 204	
BA 305	Prescriptive analytics.		3	1	3	BA 304	
BA 422	Graduation Project 1.		3	-	3		
<b>Elective 3</b>	BA409	Business Forecasting.	3	1	3	STA 207	
	STA 410	Qualitative & Quantitative analysis.					
<b>Elective 4</b>	MGT421	Strategic Management.	3	1	3	MGT 101	
	MGT450	Portfolio Management.				MGT 305	
	MIS409	Project Management.				MGT 101	IST 103
		<b>Total Credits:</b>			17		
<b>Semester 8</b>							
IT 406	Data Security.		2	2	3	IST 204	
DS 410	Foundation of Big Data.		2	2	3	IST 204	
BA 425	Graduation Project 2.		3	-	3		
<b>Elective 5</b>	AI 413	Machine learning.	2	2	3	STA 207	CS 102
	MIS 304	Financial Information systems.				IST103	
	IST 311	Web based applications .				CS 102	CS 204
<b>Elective 6</b>	IST 312	Online Analytical Processing.	2	2	3	IT 303	
	IST309	Information Retrieval and web search.					
		<b>Total Credits:</b>			15		