

Program Overview

The **Bachelor of Science in Business Analytics (BSBA)** is a four-year undergraduate program designed to equip students with the analytical, technical, and managerial skills required to make data-driven business decisions. The program integrates principles of business, statistics, and information technology to solve real-world problems, helping students become competent professionals in the evolving world of business intelligence and data analytics.

As per the **Higher Education Commission (HEC) of Pakistan**, the BS Business Analytics program aligns with the national curriculum framework, incorporating interdisciplinary learning with a strong emphasis on employability, ethics, and innovation.

Program Fact File

Program Title	Bachelor of Science in Business Analytics
Duration	4 years
Credit Hours	136 (as per HEC guidelines)
Semesters	8
Internship	3 credit hours
Final Year Project	3 credit hours

Career Prospects

Graduates of the BS Business Analytics program can pursue diverse roles in both public and private sectors, including:

- Data Analyst
- Business Intelligence Analyst
- Marketing Analyst
- Financial Analyst
- Risk Analyst
- Data Scientist (entry-level)
- Operations Analyst
- Research Associate
- Business Consultant

Eligibility Criteria

- Minimum 50% marks in intermediate or Equivalent
- Admission Test

Semester Plan

Bachelor of Science in Business Analytics (BSBA)
Fall 2025 onwards
Scheme of Studies

Course Code	Subject Name	Cr. Hrs	Pre-Req
Semester I			
AF 102	Financial Accounting-I	3-0-3	-
EL 170	Functional English	3-0-3	-
MA 120	Mathematics & Logics-I	3-0-3	-
CS 181	Applications of Information and Communication Technologies (ICT)	2-0-2	-
CS 181L	Applications of Information and Communication Technologies (ICT) Lab	0-1-1	-
BN 101	Introduction to Business Analytics	2-1-3	-
PY 115	Introduction to Psychology	2-0-2	-
	Total Credit Hours	17	
Semester II			
BA 151	Principles of Management	3-0-3	-
MK 101	Principles of Marketing	3-0-3	-
EL 271	Expository Writing	3-0-3	-
MA 121	Mathematics & Logics-II	3-0-3	MA 120
BN 102	Programming Fundamentals for Analytics	2-0-2	-
BN 102L	Programming Fundamentals for Analytics Lab	0-1-1	-
BA 135	Micro and Managerial Economics	3-0-3	-
	Total Credit Hours	18	
Semester III			
BN 231	Business Analytics and Data Visualization	2-0-2	BN 101
BN 231L	Business Analytics and Data Visualization Lab	0-1-1	BN 101
AF 251	Introduction to Business Finance	3-0-3	AF 102

MA XXX	Linear Algebra & Calculus	3-0-3	MA 120
PH 112	Introduction to Environmental Science	3-0-3	-
HU 115	Pakistan Studies	2-0-2	-
HU 124	Islamic Studies and Ethics	2-0-2	-
HU 411	Civics and Community Engagement	2-0-2	-
	Total Credit Hours	18	
Semester IV			
BN 211	Programming tools for Analytics	2-0-2	BN 102
BN 211L	Programming tools for Analytics Lab	0-1-1	BN 102
HU 405	Ideology and Constitution of Pakistan	2-0-2	-
BA 256	Entrepreneurship	3-0-3	-
MA 206	Statistical Inference	3-0-3	MA 121
BA 232	Macro Economics	3-0-3	-
CE 416	Database System	2-0-2	-
CE 416L	Database System Lab	0-1-1	-
	Total Credit Hours	17	
Summer Internship			
BN 491	Internship	3-0-3	-
	Total Credit Hours	3	
Semester V			
BN 321	Artificial Intelligence for Business	2-0-2	-
BN 321L	Artificial Intelligence for Business Lab	0-1-1	-
MK 302	Marketing Management	3-0-3	MK 101
AF 252	Financial Management	3-0-3	AF 251
BN 341	Time Series Analytics and Predictions	2-1-3	-
HR 301	Human Resource Management	3-0-3	BA 151
	Total Credit Hours	18	

Semester VI			
EL 202	Academic Writing	3-0-3	-
BN 343	Financial Analytics	3-0-3	AF 252
BN 322	Machine Learning for Predictive Analytics	2-0-2	-
BN 322L	Machine Learning for Predictive Analytics Lab	0-1-1	-
BN 346	Marketing Analytics	2-1-3	MK 302
BA 363	Business Research Methods	3-0-3	-
	Total Credit Hours	15	
Semester VII			
BN 442	Prescriptive Analytics	2-1-3	BN 322
BN 413	Data Mining for Business	2-0-2	-
BN 413L	Data Mining for Business Lab	0-1-1	-
BN 445	HR Analytics	3-0-3	HR
BN XXX	Elective I	3-0-3	301
BN XXX	Elective II	3-0-3	-
BN 497	Capstone Project-I	1-0-1	-
	Total Credit Hours	16	
Semester VIII			
BN 444	Strategic Business Decisions with Analytics	3-0-3	-
BN 414	Big Data Analytics	2-0-2	-
BN 414	Big Data Analytics Lab	0-1-1	-
BN XXX	Elective III	3-0-3	-
BN XXX	Elective IV	3-0-3	-
BN 498	Capstone Project-II	2-0-2	BN 497
	Total Credit Hours	14	
GRAND TOTAL (CREDIT HRS.)		136	

Elective Courses

Course Code	Subject Name	Cr. Hrs
BN 404	Advanced Business Analytics	2-1-3
BN 405	Agile Business Intelligence and Project Management	2-1-3
BN 415	Fintech	2-1-3
BN 416	Blockchain and Business Analytics	2-1-3
BN 417	Social Media Analytics	2-1-3
BN 423	Customer Analytics	2-1-3
BN 432	Digital Marketing Analytics	2-1-3
BN 433	Data Storytelling and Visualization	2-1-3
BN 434	Analytics for Effective Performance Management	2-1-3
BN 447	Financial Risk Management with Analytics	2-1-3
BN 448	Market Strategy and Forecasting	2-1-3
BN 449	Supply Chain Analytics	2-1-3