GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY

FACULTY OF MANAGEMENT SOCIAL SCIENCES AND HUMANITIES

DEPARTMENT OF MANAGEMENT & FINANCE

BSc Hons in Business Analytics

Background of the Degree Program

The BSc (Hons) in Business Analytics is a dynamic and interdisciplinary degree that merges the principles of business management with the technical and analytical skills needed to harness the power of data in business contexts. This program is designed to provide students with a thorough understanding of how businesses operate while equipping them with the tools and techniques to analyze data effectively and make strategic decisions.

Throughout the course, students will delve into key areas of business management, including finance, marketing, human resources, and operations. They will also develop strong analytical capabilities, learning how to collect, analyze, and interpret data to drive business decisions. This dual focus ensures that graduates are not only adept at understanding business processes but also proficient in leveraging data to enhance business outcomes.

Students will be trained in the latest data analytics tools and technologies, gaining hands-on experience with statistical analysis, predictive modeling, data visualization, and data mining. The program emphasizes the importance of integrating analytical insights with strategic thinking, preparing students to develop and implement initiatives that promote business growth and efficiency.

Moreover, the curriculum includes practical projects and a comprehensive workshops in the final year. These projects offer students the opportunity to apply their theoretical knowledge to real-world business challenges, often in collaboration with industry partners. This practical experience is invaluable in helping students transition from academic study to professional practice.

Graduates of the BSc (Hons) in Business Analytics program are well-equipped for a wide range of careers across various industries. They can pursue roles such as business analyst, data analyst, management consultant, operations manager, marketing analyst, financial analyst, and project manager. The unique combination of business acumen and analytical skills ensures that they are highly valued by employers and capable of making significant contributions to their organizations.

The BSc (Hons) in Business Analytics offers a comprehensive education that bridges the gap between business strategy and data science. It prepares students to meet the challenges of the modern business world by fostering both managerial expertise and analytical excellence, making them well-rounded and competitive professionals.

BSc (Hons) in Business Analytics - (Overview)				
Yr	Sem	Module Code	Name of Module	Credits
1	I	BM-11013	Principles of Management	3
1	I	BA-11022	Introduction to Business Analytics	2
1	I	BM-11033	Financial Accounting	3
1	I	BA-11042	Mathematical Foundations for Business Analytics	2
1	I	BA-12053	Programming for Business	3
1	I	BA-11062	IT for Business	2
1	I	DL-11072	Communication Skills	2
			Semester Total	**15**
1	II	BA-12012	Foundations of Business Statistics	2
1	II	BA-12023	Advanced Mathematics for Business Analytics	3
1	II	BM-12033	Cost and Management Accounting	3
1	II	BM-12042	Applied Managerial Operations Research	2
1	II	BM-12052	Business Process Management	2
1	II	BA-12063	Machine Learning for Business	3
1	II	DL-12071	Business Communication	1
			Semester Total	**15**
2	III	BM-21013	Financial Derivatives and Strategic Analytics	3
2	III	BA-21023	Economic Analysis for Business Decision-Making	3
2	III	BA-21032	Advanced Business Statistics	2
2	III	BA-21043	Auditing and Taxation for Business Analytics	3
2	III	BM-21052	Strategic Enterprise Risk Management	2
2	III	BA-22062	Strategic Operations Research	2
2	III	DL-21071	Analytical Writing Skills	1
2	III	BM-21082	Operations Management	2
			Semester Total	**15**
2	IV	BM-32012	Portfolio Management	2
2	IV	FA-32023	Applied Financial Economics in Business	3
2	IV	BM-32033	Data Management and Visualization	3
2	IV	BM-32042	Entrepreneurship and Innovation Analytics	2
2	IV	FA-32052	Customer Analysis and Market Inteligence	2
2	IV	BM-32062	Data Governance and Ethics	2
2	IV	BM-32072	Data Analytics in Enterprise Resource Planning	2
			Semester Total	**16**
3	V	BM-31013	Research Methodology	3
3	V	BA-31022	Business Ethics and Governance	2
3	V	BA-31033	Financial Management for Business Analytics	3
3	V	BA-31043	Supply Chain Analytics	2
3	V	BM-31052	Statistical Quality Management and Analysis	3
3	V	BA-31062	Cloud Computing for Analytics	2
3	V	BM-31072	Human Resource Analytics	2
			Semester Total	**15**
3	VI	BA-32013	Decision Modeling for Business Analytics	3
3	VI	BA-32023	Business Econometrics	3
3	VI	BA-32032	Data Mining and Warehousing	2
3	VI	BM-32042	Project Management Analytics	2
3	VI	BM-32052	Big Data Analytics in Business	2
3	VI	BA-32062	Blockchain Applications in Business	
3	VI	BM-32083	Research - I	3
			Semester Total	**15**
4	VII	BA-41013	Business Analytics Tools and Technologies	3
4	VII	BA-41023	Artificial Intelligence in Business Analytics	3
4	VII	BA-41033	Financial Analysis for Business	3
4	VII	BA-41042	Information Security and Fraud Analysis (Blended Learning))	2
4	VII	BA-41052	Business Data Base Management	2
4	VII	BM-41063	Predictive Analytics	3
4	VII	BM-41073	Research - II	3
			Semester Total	**17**
4	VIII	BA-42019	Professional Practice in Business Analytics	9
4	VIII	BA-42026	Business Analytics - Skill Based Project	6
4	VIII	BA-42031	Agile Business Analysis (+Seminar and Workshops)	1
4	VIII	BA-42041	Equity Investment (+Seminar+Workshops)	1
4	VIII	BA-42051	Contemporary Issues in Business (Seminar + Workshops)	1
			Semester Total	**15**
			Total Credit	**123**

Programme Structure: BSc (Hons) in Business Analytics: Year 1- Course Units

Yr	Sem	Module Code	Name of Module	Credits
1	I	BM-11013	Principles of Management	3
1	I	BA-11022	Introduction to Business Analytics	2
1	I	BM-11033	Financial Accounting	3
1	I	BA-11042	Mathematical Foundations for Business Analytics	2
1	I	BA-12053	Programming for Business	3
1	I	BA-11062	IT for Business	2
1	I	DL-11072	Communication Skills	2
			Semester Total	**15**
1	II	BA-12012	Foundations of Business Statistics	2
1	II	BA-12023	Advanced Mathematics for Business Analytics	3
1	II	BM-12033	Cost and Management Accounting	3
1	II	BM-12042	Applied Managerial Operations Research	2
1	II	BM-12052	Business Process Management	2
1	II	BA-12063	Machine Learning for Business	3
1	II	DL-12071	Business Communication	1
			Semester Total	**15**

Semester - I

Principles of Management — BSM-11013

The Principles of Management module serves as an introduction to organizational operations. It covers how managers plan, lead, and achieve success by exploring core functions, decision-making models, and strategies for motivating teams. This foundational knowledge is designed to equip students with the skills needed to understand and navigate various organizational environments.

Credits 3 GPA-Compulsory

Introduction to Business Analytics — BA-11022

Introduction to Business Analytics provides a foundation for data-driven decision making in a business context. The course emphasizes the application of mathematical and statistical techniques to analyze key business metrics such as profit margins and break-even points. Students will learn to interpret data, identify trends, and make informed strategic decisions to achieve business objectives

Credits 2 GPA-Compulsory

Financial Accounting **BM-11033**

The Financial Accounting module teaches students to communicate the financial health of an organization. It covers analyzing financial statements and translating complex accounting concepts into clear and concise information for various audiences.

Credits **3** GPA Compulsory

Mathematical Foundations for Business Analytics **BA-11042**

Mathematical Foundations for Business Analytics provides students with the essential mathematical and statistical concepts underpinning all areas of business analytics. This module covers fundamental topics such as calculus, linear algebra, probability, and statistics, equipping students with the necessary analytical and problem-solving skills to effectively analyze complex business data.

Credits 2 GPA - Compulsory

Programming for Business **BA-12053**

This module introduces fundamental programming concepts and their application in a business context. Students will learn basic programming logic, data structures, and problem-solving techniques using a relevant programming language

Credits 3 GPA-Compulsory

IT for Business **BA-11062**

The IT for Business module bridges the gap between technology and organizational success. It explores how information technology systems support core business functions, data analysis, and decision-making. Understanding the power of IT equips students with the knowledge to leverage technology to optimize operations and gain a competitive edge.

Credits **2** GPA-Compulsory

Communication Skills **DL-11072**

This module equips individuals with essential communication skills for personal and professional success. Students will develop effective verbal, written, and nonverbal communication skills for clear and persuasive communication.

Credits **2** NGPA

Semester - II

Foundations of Business Statistics **BA-12012**

The Foundations of Business Statistics module provides students with a fundamental understanding of statistical concepts and their applications in a business context. This course covers key topics such as data collection, data analysis, probability, and statistical inference. Students will learn to interpret data, draw meaningful conclusions, and make informed decisions based on statistical evidence.

Credits 2 GPA-Compulsory

Advanced Mathematics for Business Analytics **BA-12023**

Advanced Mathematics for Business Analytics builds upon foundational mathematical concepts and explores their applications within the field of business analytics. This module delves into advanced topics such as multivariate calculus, linear algebra, optimization techniques, and statistical modeling. Students will develop a strong understanding of these mathematical principles and their application to real-world business problems, including predictive modeling, data mining, and decision-making under uncertainty.

Credits 3 GPA-Compulsory

Cost and Management Accounting **BM-12033**

The Cost and Management Accounting module provides students with a comprehensive understanding of cost concepts and techniques used by businesses to make informed decisions. This course explores various cost accounting methods, including job costing, process costing, and activity-based costing. Students will learn to analyze cost behavior, prepare budgets, conduct variance analysis, and utilize cost information to support strategic decision-making in areas such as pricing, product mix, and resource allocation.

Credits 3 GPA-Compulsory

Applied Managerial Operations Research **BM-12042**

Applied Managerial Operations Research equips students with a range of quantitative techniques and analytical methods to solve complex decision-making problems within a business context. This course covers topics such as linear programming, network optimization, inventory management, simulation modeling, and decision analysis. Students will learn to apply these techniques to optimize business processes, improve resource allocation, and enhance organizational performance.

Credits 2 GPA-Compulsory

Business Process Management **BM-12052**

This course focuses on the design and improvement of business processes. Students will learn to analyze existing processes, identify inefficiencies, and implement changes to optimize workflows and enhance performance.

Credits 2 GPA-Compulsory

Machine Learning for Business **BA-12063**

This module equips students with the knowledge and skills to apply machine learning techniques, including supervised, unsupervised, and deep learning, to gain valuable insights from data and drive business success.

Credits 3 GPA-Compulsory

Business Communication **DL-12071**

This course focuses on developing effective communication skills essential for professional success. Students will learn to communicate clearly and persuasively in various business contexts, including written, verbal, and nonverbal communication.

Credits 1 NGPA

Programme Structure: BSc (Hons) in Business Analytics: Year 2- Course Units

Yr	Sem	Module Code	Name of Module	Credits
2	III	BM-21013	Financial Derivatives and Strategic Analytics	3
2	III	BA-21023	Economic Analysis for Business Decision-Making	3
2	III	BA-21032	Advanced Business Statistics	2
2	III	BA-21043	Auditing and Taxation for Business Analytics	3
2	III	BM-21052	Strategic Enterprise Risk Management	2
2	III	BA-22062	Strategic Operations Research	2
2	III	DL-21071	Analytical Writing Skills	1
2	III	BM-21082	Operations Management	2
Semester Total				**15**
2	IV	BM-32012	Portfolio Management	2
2	IV	FA-32023	Applied Financial Economics in Business	3
2	IV	BM-32033	Data Management and Visualization	3
2	IV	BM-32042	Entrepreneurship and Innovation Analytics	2
2	IV	FA-32052	Customer Analysis and Market Inteligence	2
2	IV	BM-32062	Data Governance and Ethics	2
2	IV	BM-32072	Data Analytics in Enterprise Resource Planning	2
Semester Total				**16**

Semester - III

Financial Derivatives and Strategic Analytics — BM-21013

This module explores financial derivatives, their applications, and their role in strategic decision-making, covering topics such as options, futures, and risk management."

Credits 3 GPA-Compulsory

Economic Analysis for Business Decision-Making — BA-21023

This module equips students with the economic tools and frameworks needed to make informed business decisions."

Credits 3 GPA-Compulsory

Advanced Business Statistics — BA-21032

By mastering these advanced statistical techniques, students will gain a competitive advantage in the job market and be well-prepared to contribute to data-driven decision-making in various business settings.

Credits 2 GPA-Compulsory

Auditing and Taxation for Business Analytics **BA-21043**

This module explores the intersection of auditing, taxation, and data analytics, equipping students with the knowledge and skills to navigate the complexities of the modern business environment.

Credits 3 GPA-Compulsory

Strategic Enterprise Risk Management **BM-21052**

This module focuses on identifying, assessing, and mitigating organizational risks to enhance strategic decision-making and achieve sustainable success

Credits 2 GPA-Compulsory

Strategic Operations Research **BA-22062**

Strategic Operations Research equips students with advanced quantitative techniques to address complex business challenges and optimize organizational performance. This module explores advanced methodologies like simulation modeling, game theory, and multi-objective optimization, enabling students to develop and implement strategic solutions for improving efficiency, reducing costs, and achieving competitive advantage.

Credits **2** GPA -Compulsory

Analytical Writing Skills **DL-21071**

This course focuses on developing strong analytical and written communication skills. Students will learn to critically analyze information, construct well-supported arguments, and effectively communicate complex ideas in clear, concise, and persuasive written forms.

Credits 1 NGPA

Operations Management **BM-21082**

Operations Management focuses on the planning, control, and improvement of the processes that create goods and services. This course explores key concepts such as production planning, inventory management, quality control, supply chain management, and process improvement. Students will learn to optimize operational processes, improve efficiency, and enhance organizational competitiveness

Credits 2 NGPA

Semester - IV

Portfolio Management **BM-32012**

Portfolio Management equips students with the knowledge and skills to construct, analyze, and manage investment portfolios effectively. This module explores key concepts such as asset allocation, portfolio diversification, risk management, and performance evaluation. Students will learn to select and evaluate investment options, develop and implement investment strategies, and monitor portfolio performance to achieve investment objectives.

Credits 2 GPA-Compulsory

Applied Financial Economics in Business **FA-32023**

Applied Financial Economics in Business equips students with the knowledge and tools to apply economic principles to solve real-world financial problems. This module explores key concepts such as financial markets, asset pricing, risk management, and the impact of economic policy on business decisions. Students will learn to analyze financial data, forecast market trends, and make informed investment and financial management decisions in a dynamic business environment."

Credits 3 GPA-Compulsory

Data Management and Visualization **BM-32033**

Data Management and Visualization equips students with the skills to effectively manage, analyze, and communicate data. This module covers key concepts such as data collection, data cleaning, data transformation, and data warehousing. Students will learn to use data visualization techniques to effectively communicate insights from data, create interactive dashboards, and tell compelling data stories.

Credits 3 GPA-Compulsory

Entrepreneurship and Innovation Analytics **BM-32042**

Entrepreneurship and Innovation Analytics equips students with the data-driven skills necessary to identify, evaluate, and capitalize on entrepreneurial opportunities. This module explores the application of analytical techniques, such as market research, data mining, and predictive modeling, to understand market trends, identify customer needs, and assess the viability of new ventures. Students will learn to leverage data to make informed decisions throughout the entrepreneurial process, from idea generation and validation to business planning and growth.

Credits 2 GPA-Compulsory

Customer Analysis and Market Inteligence **FA-32052**

This module focuses on understanding customer behavior, analyzing market trends, and gathering market intelligence to inform effective business strategies.

Credits 2 GPA-Compulsory

Data Governance and Ethics **BM-32062**

Data Governance and Ethics explores the principles and practices for managing data responsibly and ethically. This module delves into key concepts such as data privacy, security, quality, and compliance. Students will learn about relevant regulations (e.g., GDPR, CCPA), develop ethical frameworks for data handling, and understand the importance of data governance in building trust and ensuring the responsible use of data in a data-driven world.

Credits 2 GPA-Compulsory

Data Analytics in Enterprise Resource Planning **BM-32072**

Data Analytics in Enterprise Resource Planning (ERP) focuses on extracting valuable insights from the vast amount of data generated by ERP systems. This course explores data mining, business intelligence, and other analytical techniques to analyze ERP data, identify trends, and optimize business processes. Students will learn to leverage ERP data to improve decision-making, enhance operational efficiency, and gain a competitive advantage.

Credits 2 GPA-Compulsory

Programme Structure: BSc (Hons) in Business Analytics: Year 3- Course Units

Yr	Sem	Module Code	Name of Module	Credits
3	V	BM-31013	Research Methodology	3
3	V	BA-31022	Business Ethics and Governance	2
3	V	BA-31033	Financial Management for Business Analytics	3
3	V	BA-31043	Supply Chain Analytics	2
3	V	BM-31052	Statistical Quality Management and Analysis	3
3	V	BA-31062	Cloud Computing for Analytics	2
3	V	BM-31072	Human Resource Analytics	2
Semester Total				**15**
3	VI	BA-32013	Decision Modeling for Business Analytics	3
3	VI	BA-32023	Business Econometrics	3
3	VI	BA-32032	Data Mining and Warehousing	2
3	VI	BM-32042	Project Management Analytics	2
3	VI	BM-32052	Big Data Analytics in Business	2
3	VI	BA-32062	Blockchain Applications in Business	
3	VI	BM-32083	Research - I	3
Semester Total				**15**

Semester - V

Research Methodology — BM-31013

The Research Methodology course equips students with the fundamental principles and techniques for conducting rigorous research. This course covers a range of research methodologies, including qualitative and quantitative approaches, and explores key stages of the research process, from formulating research questions and designing research methods to collecting, analyzing, and interpreting data, and finally, effectively communicating research findings

Credits 3 GPA-Compulsory

Business Ethics and Governance — BA-31022

Business Ethics and Governance explores the ethical principles and legal frameworks that guide responsible business conduct. This course examines key ethical issues facing businesses today, such as corporate social responsibility, environmental sustainability, ethical decision-making, and the role of governance structures in ensuring ethical and responsible business practices.

Credits 2 GPA-Compulsory

Financial Management for Business Analytics — BA-31033

Financial Management for Business Analytics equips students with the financial knowledge and analytical skills necessary for effective decision-making in a data-driven environment. This course explores key financial concepts, such as financial statement analysis, budgeting, forecasting, and risk management, within the context of business analytics. Students will learn to leverage data and analytical tools to make informed financial decisions, evaluate investment opportunities, and optimize financial performance

Credits 3 GPA-Compulsory

Supply Chain Analytics **BA-31042**

Supply Chain Analytics focuses on leveraging data and analytical techniques to optimize and improve the efficiency and effectiveness of supply chain operations. By applying data mining, predictive modeling, and other analytical methods, students learn to analyze supply chain data, identify trends, forecast demand, and make data-driven decisions to improve inventory management, logistics, and overall supply chain performance.

Credits 2 GPA-Compulsory

Statistical Quality Management and Analysis **BM-31053**

Statistical Quality Management and Analysis equips students with the statistical tools and techniques necessary to improve product and process quality. This module covers a range of statistical methods, including control charts, process capability analysis, and design of experiments, to identify and eliminate defects, reduce variability, and continuously improve operational efficiency

Credits 3 GPA-Compulsory

Cloud Computing for Analytics **BA-31062**

This module explores how cloud computing empowers data analysis, covering cloud-based platforms, services, and tools for tasks like big data processing and machine learning. Students will learn to select and utilize cloud services effectively, ensuring data security and privacy.

Credits 2 GPA-Compulsory

Human Resource Analytics **BM-31072**

Human Resource Analytics equips students with the skills to leverage data to drive effective human resource management decisions. This course explores the use of data analysis techniques to understand workforce trends, predict future workforce needs, improve employee engagement, and optimize HR processes. Students will learn to analyze HR data, identify key performance indicators (KPIs), and use data-driven insights to improve workforce planning, talent acquisition, employee development, and overall organizational performance.

Credits 2 GPA-Compulsory

Semester - VI

Decision Modeling for Business Analytics **BA-32013**

This module equips students with analytical techniques and tools to make informed business decisions. It explores models like optimization, decision trees, and simulations to analyze complex problems and select the best solutions.

Credits 3 GPA-Compulsory

Business Econometrics **BA-32023**

Business Econometrics applies statistical methods to analyze economic data and make informed business decisions. This course explores econometric models and techniques, such as regression analysis, time series analysis, and panel data analysis, to understand economic relationships, forecast market trends, and evaluate economic policies. Students will learn to interpret empirical results, draw meaningful conclusions, and apply econometric insights to solve real-world business problems.

Credits 3 GPA-Compulsory

Data Mining and Warehousing **BA-32032**

Data Mining and Warehousing equips students with the skills to extract meaningful insights from large datasets. This module explores techniques for collecting, storing, and analyzing vast amounts of data, including data warehousing, data mining algorithms, and data visualization. Students will learn to identify patterns, trends, and anomalies in data to support informed business decisions.

Credits 2 GPA-Compulsory

Project Management Analytics **BM-32042**

Project Management Analytics equips students with the data-driven skills to optimize project performance. This module explores the application of analytical techniques, such as predictive modeling, risk analysis, and resource optimization, to improve project planning, execution, and monitoring. Students will learn to leverage data to identify potential risks, optimize resource allocation, and make data-driven decisions to ensure project success.

Credits 2 GPA-Optional

Big Data Analytics in Business **BM-32052**

This module explores Big Data Analytics, covering techniques like data mining and machine learning. Students learn to analyze large datasets, identify trends, and make data-driven decisions to improve business performance.

Credits 2 GPA-Optional

Blockchain Applications in Business **BA-32062**

This module explores blockchain technology, including its applications in finance, supply chain, and healthcare. Students will learn about distributed ledger technology, cryptography, and smart contracts, and understand their impact on business.

Credits 2 GPA - Compulsory

Research - I **BM-32083**

Research - I introduces students to the fundamental principles and methodologies of research. This course covers key concepts such as research design, data collection methods, literature reviews, and ethical considerations in research. Students will develop critical thinking and research skills, enabling them to formulate research questions, design research projects, and analyze and interpret data effectively.

Credits 3 GPA-Compulsory

The students who are only seeking a BSc in Management degree can exit with the completion of above-mentioned set of modules. The 3-year exit point will not be marked as honors degree. Therefore, the completion of industrial training and skill-based project in sixth semester is only applicable for students who are seeking a 3-year degree exit point. The students who are willing to complete the 4 years degree program will have to continue the course and complete below mentioned subjects in order to graduate with a BSc (Hons) in Business Analytics.

Programme Structure: BSc (Hons) in Business Analytics: Year 4- Course Units

Yr	Sem	Module Code	Name of Module	Credits
4	VII	BA-41013	Business Analytics Tools and Technologies	3
4	VII	BA-41023	Artificial Intelligence in Business Analytics	3
4	VII	BA-41033	Financial Analysis for Business	3
4	VII	BA-41042	Information Security and Fraud Analysis (Blended Learning))	2
4	VII	BA-41052	Business Data Base Management	2
4	VII	BM-41063	Predictive Analytics	3
4	VII	BM-41073	Research - II	3
Semester Total				**17**
4	VIII	BA-42019	Professional Practice in Business Analytics	9
4	VIII	BA-42026	Business Analytics - Skill Based Project	6
4	VIII	BA-42031	Agile Business Analysis (+Seminar and Workshops)	1
4	VIII	BA-42041	Equity Investment (+Seminar+Workshops)	1
4	VIII	BA-42051	Contemporary Issues in Business (Seminar + Workshops)	1
Semester Total				**15**
Total Credit				**123**

Semester VII

Business Analytics Tools and Technologies **BA-41013**

This course equips individuals with the practical skills to leverage cutting-edge tools and technologies for data analysis. Students will gain hands-on experience with industry-standard software and platforms, learning to collect, clean, analyze, and visualize data to extract valuable insights and drive data-driven decision-making in a business context.

Credits **3** GPA-Compulsory

Artificial Intelligence in Business Analytics **BA-41023**

This course explores AI in Business Analytics, covering key techniques like machine learning and deep learning. Students will learn to leverage AI to analyze data, make predictions, and automate processes to gain a competitive advantage

Credits **3** 2 GPA-Compulsory

Financial Analysis for Business **BA-41033**

Financial Analysis for Business equips students with the skills to analyze financial information and make informed business decisions. This course covers key areas such as financial statement analysis, ratio analysis, cash flow analysis, and financial modeling. Students will learn to interpret financial data, evaluate investment opportunities, assess financial risk, and make strategic decisions to enhance business performance.

Credits **3** 2 GPA-Compulsory

Information Security and Fraud Analysis (Blended Learning)) **BA-41042**

Information Security and Fraud Analysis (Blended Learning) equips students with the knowledge and skills to identify, assess, and mitigate cybersecurity threats and detect and prevent fraud. This blended learning program combines in-class instruction with online learning modules, providing a comprehensive understanding of cybersecurity concepts, risk management frameworks, fraud detection techniques, and incident response procedures.

Credits **2** GPA-Compulsory

Business Data Base Management **BA-41052**

Business Database Management equips students with the skills to design, implement, and manage efficient and effective database systems. This course covers database concepts, including data modeling, database design, SQL (Structured Query Language), and database administration. Students will learn to create, maintain, and query databases to support business operations, improve decision-making, and gain a competitive advantage.

Credits **2** GPA-Compulsory

Predictive Analytics **BM-41063**

Predictive Analytics equips students with the skills to forecast future outcomes using historical data and advanced analytical techniques. This course explores a range of predictive modeling methods, including machine learning algorithms, statistical modeling, and time series analysis. Students will learn to build predictive models, interpret results, and apply these insights to make informed business decisions, such as customer churn prediction, demand forecasting, and risk assessment.

Credits **3** GPA-Compulsory

Research - II **BM-41073**

Research - II builds upon foundational research principles, focusing on advanced research methodologies and their application. This module delves into qualitative and quantitative research techniques, including data analysis, statistical methods, and research ethics. Students will gain practical experience in conducting independent research projects, developing critical thinking and problem-solving skills essential for academic and professional success.

Credits 3

GPA-Compulsory

Semester VIII

Professional Practice in Business Analytics **BA-42019**

This course provides students with real-world experience in applying business analytics techniques. Through internships, capstone projects, and case studies, students develop essential professional skills and gain practical experience.

Credits 9 GPA -Optional

Business Analytics - Skill Based Project **BA-42026**

This module provides hands-on experience through a skill-based project. Students apply their knowledge to solve a real-world business challenge, developing crucial professional skills and gaining valuable industry insights.

Credits 6 GPA -Optional

Agile Business Analysis (+Seminar and Workshops) **BA-42031**

This program provides a comprehensive understanding of Agile principles and methodologies. Through interactive seminars and workshops, participants learn Scrum, Kanban, and essential skills like user story mapping and sprint planning to succeed in today's dynamic business environment.

Credits 1 GPA -Optional

Equity Investment (+Seminar+Workshops) **BA-42041**

This program provides a comprehensive understanding of equity markets and equips participants with the skills to make informed investment decisions. Through seminars and workshops, participants will learn about equity valuation, portfolio management, and risk assessment.

Credits 1 GPA -Compulsory

Contemporary Issues in Business (Seminar + Workshops) **BA-42051**

This program explores critical business issues like sustainability and AI through seminars and workshops. Participants gain insights into modern business challenges and develop essential critical thinking skills.

Credits **1** GPA -Compulsory

Career Opportunities

The BSc (Hons) in Business Analytics programme at KDU offers numerous benefits for students aspiring to build careers in business management and analytics. Here are some key benefits.

Specialized Knowledge: This programme provides in-depth knowledge and skills in areas such as Business Data Base Management, data analysis, and business intelligence, making graduates highly sought after by employers in various industries.

Career Advancement: The degree opens up new career opportunities and enhances prospects for career progression in Business analytics. Graduates are equipped to assume leadership roles and specialized analytical positions.

Industry-Relevant Curriculum: The curriculum is closely aligned with current industry trends and best practices. This ensures that students are well-prepared to tackle real-world business and analytical challenges.

Networking Opportunities: Students have ample opportunities to network with professionals in the business and analytics sectors. Building a strong professional network is invaluable for finding job opportunities and staying updated on industry developments.

Problem-Solving Skills: The programme emphasizes complex problem-solving and strategic decision-making. Students learn how to analyze data, make informed decisions, and optimize business processes, which are highly valuable skills in the business and analytics fields.

Soft Skills Development: In addition to technical skills, the programme focuses on developing soft skills such as leadership, communication, teamwork, and negotiation, which are essential for success in Business analytics roles.

Entrepreneurial Opportunities: The skills and knowledge gained from this programme also provide a strong foundation for students interested in

entrepreneurship, enabling them to start their own businesses or consulting firms.

Business Analytics Career Paths:

1. **Data Analyst**

    - Interpret data and analyze results using statistical techniques.
    - Develop data collection systems and strategies to optimize efficiency.

2. **Business Intelligence Analyst**

    - Design and develop data analysis and reporting solutions.
    - Provide insights through data visualization and dashboards.

3. **Data Scientist**

    - Use advanced analytics and machine learning to analyze large datasets.
    - Build predictive models to solve complex business problems.

4. **Quantitative Analyst**

    - Develop mathematical models to inform business strategies.
    - Use statistical techniques to analyze financial and market data.

5. **Market Research Analyst**

    - Study market conditions to examine potential sales of products/services.
    - Gather and analyze data on consumers and competitors.

6. **Operations Analyst**

    - Analyze business operations to identify inefficiencies.

- Provide recommendations for improving operational performance.

7. **Risk Analyst**

- Identify and analyze potential risks to assets and earning capacity.
- Develop strategies to mitigate and manage risks.

8. **Consultant in Analytics**

- Provide expertise to help businesses use data effectively.
- Develop strategies for implementing data analytics solutions.

9. **Product Analyst**

- Analyze product performance and customer feedback.
- Provide insights to improve product features and development.