MBA in Business Analytics

Duration 12 months

ECTS 60 Credits

### About Program

The **MBA in Business Analytics** is a comprehensive two-semester program designed to equip future business leaders with strong analytical capabilities and strategic thinking. The program blends core management education with advanced training in data analytics, enabling students to make data-informed decisions across functional areas such as marketing, finance, operations, and strategy.

In the first semester, students build foundational knowledge in key business disciplines including accounting, economics, marketing, HR, operations, and strategic management, along with critical soft skills for effective communication and leadership.

The second semester focuses on business analytics, covering data management, visualization tools (Excel, Power BI, Tableau), programming in Python, advanced statistical analysis, and machine learning. Ethical considerations and legal frameworks around data use are also integrated to ensure responsible decision-making.

**Program Highlights – MBA in Business Analytics**

* **Balanced Curriculum**: Combines core business management subjects with specialized training in data analytics and machine learning.
* **Hands-on Learning**: Practical experience with tools like Excel, Power BI, Tableau, SQL, and Python through labs, assignments, and projects.
* **Capstone Projects**: Real-world business problems tackled through cross-functional and analytics-focused capstone projects.
* **Industry-Relevant Tools**: Exposure to widely used analytics platforms and technologies to build job-ready skills.
* **Data-Driven Decision Making**: Emphasis on using data for strategic planning, forecasting, and business optimization.
* **Ethics & Compliance**: Understanding of legal frameworks (like GDPR, CCPA) and responsible use of data in business.
* **Career Readiness**: Prepares students for roles in business analytics, data strategy, consulting, and digital transformation.
* **Experienced Faculty**: Learn from professionals and academics with expertise in analytics, business, and technology.

**Program Benefits – MBA in Business Analytics**

* **Career-Ready Skills**: Gain a strong mix of business knowledge and data analytics expertise to meet the growing demand for data-driven roles.
* **High Employability**: Open up diverse career paths in business analytics, consulting, marketing, finance, operations, and strategy.
* **Practical Learning**: Apply concepts through real-world projects, simulations, and case studies that enhance problem-solving and decision-making abilities.
* **Tool Proficiency**: Develop hands-on skills in top analytics tools such as Excel, Power BI, Tableau, SQL, and Python.
* **Strong Analytical Mindset**: Learn to analyze data, generate insights, and make strategic recommendations based on evidence.
* **Leadership Development**: Improve communication, teamwork, and leadership skills essential for management and executive roles.
* **Future-Proof Knowledge**: Stay ahead with exposure to AI, machine learning, and ethical data practices.
* **Global Relevance**: Understand global business and regulatory standards, making you competitive in international markets.

**Tools Covered**

| **Category** | **Tools & Technologies** |
| --- | --- |
| **Data Analysis & Visualization** | - Microsoft Excel (Advanced functions, Power Query, PivotTables)  - Power BI (Dashboards, DAX, Data Modeling)  - Tableau (Visualizations, Dashboard Creation) |
| **Programming & Analytics** | - Python  - Libraries: Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn |
| **Databases & SQL** | - MySQL / SQL Workbench  - Advanced SQL Queries (JOIN, GROUP BY, Subqueries)  - Data Modeling & Transaction Management |
| **Statistical & Analytical Tools** | - Exploratory Data Analysis (EDA)  - Basic Statistical Analysis (with Excel & Python) |

**Why Choose the MBA in Business Analytics?**

1. **High Demand for Analytics Skills**
2. **Balanced Business and Technical Curriculum**
3. **Hands-On Learning with Industry Tools**
4. **Career Versatility Across Industries**
5. **Real-World Projects and Case Studies**
6. **Leadership and Communication Development**
7. **Future-Proof Your Career**
8. **Ethical and Global Perspective on Data Use**

**Learning Outcomes**

* **Business Knowledge**  
  Understand core business areas such as finance, marketing, operations, and strategy.
* **Analytical Skills**  
  Apply data analysis techniques to extract meaningful insights from complex datasets.
* **Data Visualization**  
  Create effective visualizations using Excel, Power BI, and Tableau to communicate insights.
* **Programming Proficiency**  
  Use Python and SQL for data manipulation, analysis, and predictive modeling.
* **Machine Learning Fundamentals**  
  Implement basic machine learning algorithms to solve business problems.
* **Data Ethics and Governance**  
  Demonstrate awareness of data privacy laws, ethical considerations, and responsible data use.
* **Data-Driven Decision Making**  
  Make informed business decisions based on data insights.
* **Teamwork and Communication**  
  Collaborate with others and present analytics findings clearly to stakeholders.
* **Data Management**  
  Handle and analyze large datasets using industry-standard tools and techniques.
* **Project Execution**  
  Plan and execute capstone projects that address real-world business challenges using analytics.

Course Curriculum

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| Module | Title | Topics Covered |
| 1 | Financial Accounting & Analysis | - Accounting Principles - Journal Entries & Ledgers - Financial Statements (P&L, Balance Sheet, Cash Flow) - Ratio Analysis - Basics of Cost Accounting |
| 2 | Business Economics | - Demand, Supply & Elasticity - Cost & Production Analysis - Market Structures - GDP, Inflation, Fiscal & Monetary Policies - Business Cycles |
| 3 | Marketing Management | - Marketing Concepts & 4Ps - Segmentation, Targeting, Positioning (STP) - Branding & Consumer Behavior - Digital Marketing Basics - Marketing Research |
| 4 | Organizational Behavior & HR Basics | - Leadership & Motivation Theories - Team Building & Group Behavior - Organizational Culture - Recruitment & Selection Overview - Performance Management |
| 5 | Operations & Supply Chain Management | - Process & Operations Strategy - Quality Management (TQM, Six Sigma) - Inventory & Logistics Basics - Supply Chain Coordination - Lean Systems |
| 6 | Business Communication & Soft Skills | - Verbal & Written Communication - Presentation & Public Speaking - Business Etiquette - Email & Report Writing - Negotiation & Conflict Resolution |
| 7 | Strategic Management & Entrepreneurship | - Vision, Mission & Goal Setting - SWOT, Porter’s 5 Forces - Business Model Canvas - Innovation & Entrepreneurship - Scaling and Strategy Execution |
| 8 | Capstone Project / Simulation | - Cross-functional Business Challenge - Strategic Planning - Real-world Problem Solving - Group Presentation & Evaluation |