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School of Commerce and Management

Four Years Undergraduate Program

Bachelor of Business Administration (Hons./Hons. with Research)
Business Analytics

Academic Year 2025 - 2026

TABLE OF CONTENTS

Sl. No.	Topic/Content	Page No.
1	Nature and extent of the program	
2	Program education objective (PEOs)	
3	Graduate attributes	
4	Qualifications descriptors	
5	Program outcomes (POs)	
6	Program Specific Outcomes (PSOs)	
7	Course structure	
8	Semester-wise Course Details ● Semester I ● Semester II ● Semester III ● Semester IV ● Semester V ● Semester VI ● Semester VII ● Semester VIII	
9	Mapping of course outcome, program outcomes and program specific outcomes	
10	Annexure Course Plan	

1. NATURE AND EXTENT OF THE PROGRAM

BBA Business Analytics is a specialised programme that is aimed to develop business analytics professionals for variety of industries. Business Analytics is a combination of Data Analytics and Business Intelligence. It is the science of analysing data to find out patterns that will be helpful in developing strategies.This programme helps to attain the knowledge required to drive key business decisions. It will also help in developing the necessary skills to carry out analytical procedures and support an organisation by figuring out ways to improve and optimise existing business processes with ease. It provides comprehensive knowledge about many topics such as advance statistics, application of business analytics, data mining, data visualisation etc.

Mode of Course Delivery: Offline

Future Career Prospects–

Students can choose from a variety of career profiles in the discipline of Business Analytics. As a BBA Business Analytics graduate, Student have the option of continuing your study or looking for work based on your qualifications, interests, and desired area. The top career paths to pursue after earning a BBA in Business Analytics are listed below.

- Data Visualization Analyst etc
- Fraud Analyst
- Retail Sales Analyst
- Statistician
- Data Scientist
- Financial Analyst
- Marketing Analytics Manager
- Business Intelligence and Analytics Consultant
- Analytics Associate Metrics and Analytics Specialist Database Administrator

2. PROGRAM EDUCATION OBJECTIVES (PEOs)

After completing BBA (Hons. with Research)

PEO No.	Education Objective
PEO1	Graduates should be able to think critically, analyze complex business problems, and apply appropriate problem-solving techniques to develop effective solutions.
PEO2	Graduates should have an entrepreneurial mindset, including the ability to identify opportunities, take calculated risks, and demonstrate creativity and innovation in the business context.
PEO3	Graduates should be able to work collaboratively in teams, contribute effectively to group projects, and demonstrate leadership qualities to inspire and motivate team members.

PEO4	Graduates should demonstrate an understanding of global business dynamics, cultural diversity, and the ability to work in multicultural environments.
PEO5	Graduates should be able to adapt to changing business environments, embrace lifelong learning, and continuously update their knowledge and skills to stay current in their field.

3. GRADUATE ATTRIBUTES

Sr. No.	Attributes	Description
1	Professional /Disciplinary Knowledge	Students shall Demonstrate knowledge of management theories, principles, practices & skills in the emerging business environment.
2	Technical / Practical Skills	Students shall apply critical thinking skills to design problem-solving strategies across management areas and implement innovative solutions.
3	Communication Skill	Students shall be able to engage effectively and develop interpersonal relationships through their ability to listen, read, write, interact, influence & negotiate in complex business situations.
4	Cooperation/Team work	Students shall be able to acquire social and emotional skills to work effectively with diverse groups in multicultural business environment.
5	Professional ethics	Students shall demonstrate ethical behavior and professional integrity in their conduct to strive for truth, fairness, humility and honesty in professional life.
6	Research / Innovation-related Skills	Students shall exhibit research acumen and research aptitude to provide innovative solutions in the different areas of management for the benefit of industry, academia and society at large.
7	Critical thinking and problem solving	Students shall apply critical thinking skills to design problem solving strategies across management areas and implement innovative business solutions.
8	Reflective thinking	Students shall demonstrate ability to identify with other or understand stakeholder's

		perspectives, innovate or perform tasks in a better manner for the well-being of the society
9	Information/digital literacy	Students shall demonstrate ability to access, evaluate and use ICT in a variety of work situations and access relevant information sources for analysis of data.
10	Multi-cultural competence	Students shall demonstrate competence in cross cultural environment, work in diverse groups in areas like health care , supply chain, operations, finance etc and emerge as responsible global citizens.
11	Leadership readiness/qualities	Students shall demonstrate leadership skills and work effectively with diverse teams through collaborative learning to deal with VUCA world.
12	Lifelong Learning	Student shall acquire knowledge and skills, including 'learning how to learn', that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill.

4. QUALIFICATION DESCRIPTORS:

The students who complete three years of full-time study of an undergraduate programme of study will be awarded a Bachelor's Degree. Some of the expected learning outcomes that a student should be able to demonstrate on completion of a degree-level programme may include the following:

- Student should able to demonstrate
    - A fundamental/systematic or coherent understanding of an academic field of study, its different learning areas and applications, and its linkages with related disciplinary areas/subjects;
    - Procedural knowledge that creates different types of professionals related to the disciplinary/subject area of study, including research and development, teaching and government and public service;
    - Skills in areas related to one's specialization and current developments in the academic field of study
- Use knowledge, understanding and skills required for identifying problems and issues, collection of relevant quantitative and/or qualitative data drawing on a wide range of

sources, and their application, analysis and evaluation using methodologies as appropriate to the subject(s) for formulating evidence-based solutions and arguments

- Communicate the results of studies undertaken in an academic field accurately in a range of different contexts using the main concepts, constructs and techniques of the subject(s)
- Meet one's own learning needs, drawing on a range of current research and development work and professional materials
- Apply one's disciplinary knowledge and transferable skills to new/unfamiliar contexts, rather than replicate curriculum content knowledge, to identify and analyse problems and issues and solve complex problems with well-defined solutions
- Demonstrate subject-related and transferable skills that are relevant to some of the job trades and employment opportunities.

5. PROGRAM OUTCOME

PO No.	Attribute	Competency
PO1	Professional /Disciplinary Knowledge	Demonstrate knowledge of management theories, principles, practices & skills in the emerging business environment.
PO2	Complex problem solving	Apply knowledge of management theories and practices to solve business problems
PO3	Communication skills	Ability to understand, analyze, and communicate business's global, economic, legal, and ethical aspects.
PO4	Coordination/collaborating with others	Ability to lead themselves and others in achieving organizational goals, contributing effectively to the team environment.
PO5	Professional ethics	Demonstrate ethical behavior and professional integrity in their conduct to strive for truth, fairness, humility and honesty in professional life.
PO6	Research / Innovation-related Skills	Exhibit research acumen and research aptitude to provide innovative solutions in the different areas of management for the benefit of industry, academia and society at large.
PO7	Critical thinking	Foster analytical and critical abilities in data-based decision-making.
PO8	Reflective thinking	Ability to identify with other or understand stakeholder's perspectives, innovate or perform tasks in a better manner for the well-being of the business and society

6. PROGRAM SPECIFIC OUTCOME

PSO No.	Competency
PSO1	Develop critical thinking and the ability to select and apply appropriate models, tools, and techniques to derive effective solutions.
PSO2	Acquire the ability to identify, analyze and resolve problems in business scenarios.
PSO3	Consume and produce quantitative and qualitative information to take informed decisions.
PSO4	Acquire a solid, interdisciplinary foundation in data analysis, information technology, and quantitative modelling.

7. COURSE STRUCTURE

SEMESTER – I

Course Code	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		Minimum marks	Total
06340101	Smart Business Decisions with Data, AI & GenAI	3	1	-	4	40	100
06340102	Business Economics	3	1	-	4	40	100
06340103	Financial Accounting	3	1	-	4	40	100
	Multidisciplinary Course	3	-	-	3	40	100
	Ability Enhancement Course	2	-	-	2	40	100
06340104	Soft Skills for Managers	-	-	**6**	3	40	100
	Value Added Course	2	-	-	2	40	100
Total		**16**	**3**	**6**	**22**		

Note – L: Lecture Hour/week, T: Tutorial Hour/week, P: Practical Hour/week, C: Credits, IAE: Internal Assessment Examination, ESE: End Semester Examination.

SEMESTER – II

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		ESE	Total

06340201	Data Analysis using Python	3	1	-	4	40	100
06340202	Principles of Marketing	3	1	-	4	40	100
06340203	Business Statistics	3	1	-	4	40	100
	Multidisciplinary Course	3	-	-	3	40	100
	Ability Enhancement Course	2	-	-	2	40	100
06340204	Digital Fluency	-	-	**6**	3	40	100
	Value Added Course	2	-	-	2	40	100
Total		**16**	**3**	**6**	**22**		

Note – L: Lecture Hour/week, T: Tutorial Hour/week, P: Practical Hour/week, C: Credits, IAE: Internal Assessment Examination, ESE: End Semester Examination.

SEMESTER – III

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		ESE	Total
06340301	Statistics and Computational Data Analysis	3	1	-	4	40	100
06340302	Data Analytics and Visualization – Tools and Techniques	3	1	-	4	40	100
06340303	Management Concepts and Organizational Behaviour	3	1	-	4	40	100
	Multidisciplinary Course	3	-	-	3	40	100
	Ability Enhancement Course	2	-	-	2	40	100
06340304	Foundation of Spreadsheet	-	-	**6**	3	40	100
06340305	Internship-I	-	-	4	2	40	100
Total		**14**	**3**	**10**	**22**		

Note – L: Lecture Hour/week, T: Tutorial Hour/week, P: Practical Hour/week, C: Credits, IAE: Internal Assessment Examination, ESE: End Semester Examination.

SEMESTER – IV

Course	Course Title	Teaching		Marks

		Hours/Week			Credits	Distribution	
		L	T	P		Minimum Marks	Total
06340401	Predictive Business Analytics with Generative AI	2	2	-	4	40	100
06340402	Marketing Analytics & Generative AI for Business Impact	3	1	-	4	40	100
06340403	Operations Management	2	2	-	4	40	100
06340404	Human Resource Management	3	1	-	4	40	100
	Ability Enhancement Course	2	-	-	2	40	100
	Value Added Course	2	-	-	2	40	100
Total		16	**14**	**6**	**0**	**20**	-

Note – L: Lecture Hour/week, T: Tutorial Hour/week, P: Practical Hour/week, C: Credits, IAE: Internal Assessment Examination, ESE: End Semester Examination.

SEMESTER – V

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		ESE	Total
06340501	Financial Management	3	1	-	4	40	100
06340502	Supply Chain Management	3	1	-	4	40	100
06340503	HR Analytics & Generative AI for People-Centric Decisions	3	1	-	4	40	100
06340504	Generative AI in Finance: Learn, Analyze, Decide	3	1	-	4	40	100
06340505	Data Visualization	3	1		4	40	100
06340506	Internship - II	-	-	4	2	50	100
Total		**15**	**5**	**4**	**22**	-	-

Note – L: Lecture Hour/week, T: Tutorial Hour/week, P: Practical/week, C: Credits, IAE: Internal Assessment Examination, ESE: End Semester Examination

SEMESTER – VI

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		Minimum Marks	Total
06340601	Risk and Fraud Analytics	3	1	-	4	40	100
06340602	R Programming	3	1	-	4	40	100
06340603	Project and Case Studies	3	1	-	4	40	100
06340604	Machine Learning for Business	3	1	-	4	40	100
06340605	Strategic Management	3	1	-	4	40	100
Total		**15**	**5**	**0**	**20**		`

SEMESTER – VII

For Students opting for Bachelor of Business Administration (Hons.)

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		Minimum Marks	Total
06340701	Application of Business Research Methods	3	1	-	4	40	100
06340702	Negotiation Skills	3	1	-	4	40	100
06340703	Digital and Social Media Marketing	3	1	-	4	40	100
06340704	International Business	3	1	-	4	40	100
06340705	Business Ethics and Corporate Governance	3	1	-	4	40	100
Total		15	5	0	20		

SEMESTER – VIII

For Students opting for Bachelor of Business Administration (Honours)

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		Minimum Marks	Total
06340801	Change Management	3	1	-	4	40	100
06340802	Big Data and Decisions	3	1	-	4	40	100
06340803	Consumer Behaviour Analytics	3	1	-	4	40	100
06340804	Advance Analytics Projects	3	1	-	4	40	100
06340805	Analytics for Business Decision Making	-	-	8	4	40	100
Total		**12**	**4**	**8**	**20**		-

SEMESTER – VIII

For Students opting for Bachelor of Business Administration (Honours with Research)

Course	Course Title	Teaching Hours/Week			Credits	Marks Distribution	
		L	T	P		Minimum Marks	Total
06340806	Fundamentals of Econometrics	3	1	-	4	40	100
06340805	Analytics for Business Decision Making	3	1	-	4	40	100
06340807	Dissertation	-	-	24	12	40	100
Total		**6**	**2**	**24**	**20**		-

Important Note:

1. The student will go for a summer internship after the 2nd and 4th semesters. The evaluation of these internships would be conducted in 3rd and 5th semester respectively.
2. Summer Apprenticeship shall also be considered as summer internship in Semester III and V.
3. If a student opts for exit after the 1st year, he needs to complete a summer internship of 4-6 weeks to get the certificate.

4. A student has two options to choose in 8th term. She/he can select the option of Hons /Hons with research.

Generic Electives (GE)

Multidisciplinary Generic Electives is credited and choice-based. The students make a choice from pool of MGE offered by the Faculty under the University. (Reference: University Umbrella Multidisciplinary Generic Electives)

Value Added Courses (VAC)

Value Added Courses is credited and choice-based. The students make a choice from pool of VAC offered by the Faculty under the University. (Reference: University Umbrella Value Added Courses)

Ability Enhancement Compulsory Course (AECC)

Ability Enhancement Compulsory Courses is credited and choice-based. The students make a choice from pool of AEC offered by the Faculty under the University. (Reference: University Umbrella Ability Enhancement Compulsory Course)

Skill Enhancement Courses (SEC)

Ability Enhancement Compulsory Courses is credited and choice-based. The students make a choice from pool of AEC offered by the Faculty under the University

SEMESTER WISE COURSE DETAILS

SEMESTER – I

Course Code	Course Title
06340101	Smart Business Decisions with Data, AI & GenAI
06340102	Business Economics
06340104	Soft Skills for Managers

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340101
Course Title	Smart Business Decisions with Data, AI, & GenAI
Academic Year	2025-26
Semester	I
Number of Credits	4
Course Prerequisite	Basic knowledge of computers, spreadsheets, and fundamental mathematics.
Course Synopsis	This course introduces students to the fundamental concepts and frameworks used in Artificial Intelligence (AI), Business Intelligence (BI), and Data Analytics. It focuses on data-driven decision-making, analytical techniques, and AI-powered tools that help organizations transform data into meaningful insights for business growth and innovation.
Course Outcomes: At the end of the course students will be able to:	
CO1	Understand the fundamental concepts, principles, and applications of Artificial Intelligence, Business Intelligence, and Data Analytics.
CO2	Apply data-driven approaches and analytical techniques to solve business problems and support decision-making.
CO3	Analyze business data using appropriate tools and methods to identify patterns, trends, and actionable insights.
CO4	Utilize AI-powered and BI tools for data visualization, reporting, and business performance evaluation.
CO5	Evaluate the role of AI, BI, and Data Analytics in driving organizational growth, innovation, and strategic decision-making.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	3	3	3	2	1	1	1	2	3	3
CO2	3	3	3	2	1	1	1	2	3	3
CO3	3	3	3	2	1	1	1	2	3	3
CO4	3	3	3	2	1	1	1	2	3	3
CO5	3	3	3	2	1	1	1	2	3	3
Average	3	3	3	2	1	1	1	2	3	3

Course Content:			
L (Hours/Week)	T (Hours/ Week)	P (Hours/Week)	Total Hour/Week
4	0	0	4

Unit	Content	Competencies
1	**Data in the Real World –** Understanding & Exploring Data What is Data Science and why does it matter in business, Types of Data: Structured, Unstructured, and Semi-structured, Understanding Business Data: Sales, Finance, HR, Customer, Introduction to Big Data and its role in modern decisions, Common data formats: Excel, CSV, JSON, SQL, Introduction to data types: text, numbers, categories, dates, Data sources: Internal vs. External data, Basics of data quality: accuracy, consistency, completeness, Data storytelling: turning raw data into insights, Ethics in data usage & privacy for business students, Overview of Data Science Process (ask, prepare, analyze, act), Career roles: What do data analysts, scientists & engineers do?	1. Understand Data Fundamentals 2. Recognize Business Data Applications 3. Apply Data Quality Principles 4. Interpret and Communicate Insights 5. Understand Data Science & Big Data Concepts 6. Develop Ethical and Career Awareness
2	**Foundations of Data Analytics with Excel & Power BI -** What is Data Analytics? Why is it important in business, Descriptive, Diagnostic, Predictive, and Prescriptive Analytics, Using Excel for basic analytics: functions & formulas,	1. Understand Data Analytics Concepts 2. Apply Excel for Data Analysis 3. Create Effective Data Visualizations 4. Use Power BI for Business Intelligence 5. Measure Business Performance

	Introduction to dashboards and visual reporting, What is Power BI? Why do businesses use it?, Types of charts: bar, line, pie, histogram, scatter, PivotTables and PivotCharts in Excel, Understanding KPIs and business metrics, Storytelling through dashboards, Data visualization best practices, Creating reports for business decisions, Introduction to using ChatGPT for Excel analysis support**.**	6. Design Insightful Dashboards and Reports 7. Leverage AI for Analytics Support
3	Introduction to Machine Learning for Business What is Machine Learning (ML) in simple terms, Difference between AI, ML, and Data Science, Types of ML: Supervised, Unsupervised, Reinforcement, Classification vs Regression (real-life business examples), Popular algorithms: Decision Trees, Clustering, Linear Regression, Use of ML in HR, Marketing, and Finance, Training vs Testing data – What does it mean?, Role of ML in Predictive Analytics, How ML helps in churn prediction, sales forecasting, Understanding accuracy and overfitting (simplified), GenAI vs Traditional ML: A beginner's comparison, Ethics in ML: Bias, transparency, accountability.	1. Understand Machine Learning (ML) 2. Differentiate AI, ML, and Data Science 3. Recognize Types of ML 4. Understand Classification and Regression 5. Identify Common ML Algorithms 6. Apply ML in Business Functions 7. Understand Data Preparation 8. Explore Predictive Analytics 9. Evaluate Model Performance 10. Understand Emerging Trends and Ethics
4	Introduction to Artificial Intelligence & Generative AI in Business What is Artificial Intelligence (AI)?, Real life business applications of AI, Generative AI: What it is and how it works (basic view), Tools: ChatGPT, Bard, Copilot, Notion AI, Canva AI, Prompt engineering: Getting better results from GenAI, Use of GenAI in content generation, marketing, summaries, AI for financial summaries and HR reports, Understanding hallucinations and limitations of GenAI, AI Ethics: Plagiarism, bias, accountability, Role of humans in AI-supported decisions, What AI can and cannot do in business today, Future of AI careers in business and data.	1. Understand AI Fundamentals 2. Identify Business Applications of AI 3. Understand Generative AI Concepts 4. Use Popular GenAI Tools 5. Apply Prompt Engineering Skills 6. Generate Business Content with AI 7. Evaluate AI Outputs Critically 8. Understand AI Ethics and Responsibility 9. Support Human-Centered Decision Making 10. Explore Future AI Opportunities

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, discussion, presentation, practical's and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10

Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	Summative
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4	CO5
Assignment	✓	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓	✓
Class Test	✓	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

1. Artificial Intelligence 3e: A Modern Approach Paperback – By Stuart J Russell & Peter Norvig; Publisher – Pearson
2. Artificial Intelligence Third Edition By Kevin Knight, Elaine Rich, B. Nair – McGrawHill
3. Artificial Intelligence Third Edition By Patrick Henry Winston – Addison-Wesley Publishing Company

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business analytics
Course Code	06340102
Course Title	Business Economics
Academic Year	2025-26
Semester	I
Number of Credits	4
Course Prerequisite	A basic understanding of general economic principles at the high school level is recommended. Students should be familiar with concepts such as supply and demand, scarcity, and basic mathematical skills (graphs, percentages, and simple equations) to analyze and interpret economic data.
Course Synopsis	This course introduces students to the core principles of Business Economics with a strong focus on managerial decision-making. It integrates microeconomic concepts—such as demand and supply analysis, production and cost functions, and market structures—with business applications like pricing strategies, budgeting, and investment decisions. The course also explores factor markets, public policy tools (fiscal and monetary), and basic game theory, equipping students with analytical frameworks to solve real-world business problems. Emphasis is placed on applying economic reasoning to evaluate choices in resource allocation, production planning, and strategic business operations in competitive and regulated environments.

Course Outcomes:

At the end of the course, students will be able to:

CO1	Explain the fundamental concepts of business economics, including scarcity, opportunity cost, and the role of marginal analysis in business decision-making.
CO2	Analyse consumer behaviour and demand patterns using utility theories, elasticity measures, and apply forecasting techniques to predict market demand.
CO3	Evaluate supply behaviour and production decisions using short-run and long-run production theories, isoquants, and understand cost-efficiency through economies of scale.
CO4	Interpret cost and revenue structures, calculate various cost and revenue metrics, and apply break-even and learning curve analyses for decision-making.
CO5	Compare and contrast different market structures, understand strategic behaviour using game theory, and assess the role of factor markets and government policies in shaping business strategies.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**2**	**1**				**2**	**1**	**2**	**1**
CO2	**3**	**3**	**2**				**3**	**2**	**3**	**2**
CO3	**3**	**3**	**1**			**2**	**3**	**1**	**3**	**3**
CO4	**3**	**3**	**1**			**2**	**3**	**2**	**3**	**3**
CO5	**3**	**3**	**2**	**1**	**2**	**2**	**3**	**3**	**2**	**3**
Average	**3**	**2.8**	**1.4**	**0.2**	**0.4**	**1.2**	**2.8**	**1.8**	**3**	**2.4**

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
4	**0**	**0**	**4**

Unit	**Content**	**Competencies**
1	**Introduction to Business Economics:** Meaning, Nature and Scope of Business Economics; Role of Economics in Business Decision-Making; Basic Economic Problems: Scarcity, Choice, Opportunity Cost; Micro and	• Define and distinguish the meaning, nature, and scope of business economics and explain its relevance to managerial decision-making.

	Macro perspectives; Marginal Analysis and Incremental Reasoning; Production Possibility Curve (PPC)	● Apply fundamental economic concepts such as scarcity, choice, and opportunity cost to business contexts. ● Differentiate between microeconomics and macroeconomics and understand their individual and interrelated roles in business analysis. ● Use marginal and incremental analysis along with the Production Possibility Curve (PPC) to evaluate trade-offs and resource allocation.
2	**Demand and Consumer Behaviour:** Theory of Demand: Law of Demand, Exceptions; Elasticities: Price, Income, Cross–types, measurements (point, arc, total outlay); Consumer Behaviour: Cardinal Utility Theory; Ordinal Utility: Indifference Curves, Budget Line, Consumer Equilibrium Price Effect, Income Effect, Substitution Effect; Applications: Demand Forecasting (Intro to qualitative & quantitative techniques)	● Explain the Law of Demand and its exceptions along with various types and measurements of demand elasticity (price, income, cross). ● Apply consumer behaviour theories, including Cardinal Utility and Ordinal Utility approaches, to understand consumer choices. ● Analyse consumer equilibrium using indifference curves, budget constraints, and the effects of price, income, and substitution. ● Demonstrate an understanding of demand forecasting methods, differentiating between qualitative and quantitative techniques in practical business scenarios.
3	**Supply and Production Decisions:** Law of Supply and Elasticity of Supply, Theory of Production: Short-run Production (Law of Variable Proportions); Long-run Production: Isoquants, Iso-costs, Producer Equilibrium; Returns to Scale, Economies of Scale & Scope; Expansion Path.	● Explain the Law of Supply and elasticity of supply and interpret their impact on market operations and pricing. ● Apply the Law of Variable Proportions to short-run production scenarios for optimal input usage. ● Analyse long-run production decisions using isoquants, iso-cost lines, and determine producer equilibrium.

		● Differentiate between returns to scale, economies of scale, and economies of scope, and trace a firm's expansion path.
4	**Cost and Revenue Analysis: Concepts:** Accounting Cost, Economic Cost, Sunk, Opportunity, Incremental, Cost Analysis: Short-Run: TFC, TVC, TC, AFC, AVC, ATC, MC, Long-Run Cost Curves; Learning Curve, Break-even Analysis; Revenue: TR, AR, MR and their relationships.	● Differentiate between various cost concepts such as accounting, economic, sunk, opportunity, and incremental costs in business decision-making. ● Construct and interpret short-run and long-run cost curves, including fixed, variable, average, and marginal costs. ● Apply learning curve and break-even analysis to assess production efficiency and financial viability. ● Analyse revenue concepts—total, average, and marginal revenue—and understand their interrelationships and business implications.

5	**Market Structures:** Perfect Competition: Features, Equilibrium; Monopoly: Price Discrimination, Deadweight Loss; Monopolistic Competition: Product Differentiation, Equilibrium; Oligopoly: Kinked Demand, Cartel, Price Leadership; Introduction to Game Theory: Nash Equilibrium, Dominant Strategy; Factor Markets: Labour Market: Demand, Supply, Wage Determination; Capital and Land Markets; Marginal Productivity and Input Demand; Public Policy and Business: Fiscal Policy: Taxation, Government Spending; Monetary Policy: Instruments and Business Implications; Market Failures and Government Interventions; Business Applications: Pricing strategies, Budgeting, Investment Decisions.	• Compare key features and outcomes of market structures—Perfect Competition, Monopoly, Monopolistic Competition, and Oligopoly—with practical applications. • Apply basic concepts of Game Theory, such as Nash Equilibrium and Dominant Strategy, to understand strategic business decisions. • Explain factor market dynamics, including wage, capital, and land pricing, using marginal productivity theory. • Evaluate the impact of fiscal and monetary policies on business decisions and recognise government interventions in market failures.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	Summative
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test (Oral / Written)	
Innovative and creative contribution	

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4	CO5
Assignment	✓	✓			
Project			✓	✓	
Case Based Presentation	✓				✓
Business News Analysis	✓				✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

1. Dwivedi, D.N., Economic Theory and Applications. Pearson Publications.
2. Reference Books: Ahuja, H.L., Business Economics, S. Chand & Sons
3. Petersen, Craig H., W. Chris Lewis and Sudhir K. Jain, Managerial Economics, Pearson Education, Delhi
4. Keat, Paul G. and Philip K.Y. Young, Managerial Economics, Economic tools for Today's Decision Makers, Pearson Education, Delhi.
5. Varshney, R.L. &Maheshwari, K.L., Managerial Economics, Sultan Chand & Sons.

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business analytics
Course Code	06340104
Course Title	Soft Skills for Managers
Academic Year	2025-26
Semester	I
Number of Credits	2
Course Prerequisite	Basic proficiency in English language skills (reading, writing, and speaking).
Course Synopsis	This course aims to equip students with essential soft skills necessary for effective management. It covers verbal and non-verbal communication, CV writing, group discussion and personal interview techniques, interpersonal skills, goal setting, time management, and corporate etiquette. Through interactive sessions, mock exercises, and practical applications, students will enhance their managerial capabilities and prepare for professional success.
Course Outcomes: At the end of the course students will be able to:	
CO1	Communicate effectively in both verbal and non-verbal forms.

CO2	Create professional CVs, participate in group discussions, and perform well in personal interviews.
CO3	Develop interpersonal skills and set realistic career goals.
CO4	Manage their time efficiently and handle multiple tasks.
CO5	Demonstrate appropriate corporate etiquette in various professional settings.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO-1**	**PO-2**	**PO-3**	**PO-4**	**PO-5**	**PO-6**	**PO-7**	**PO-8**	**PSO-1**	**PSO-2**
CO1	**3**	**3**	**2**	**2**	**3**		**2**	**3**	**3**	**3**
CO2	**3**	**2**	**3**	**3**	**2**	**2**		**2**	**3**	**2**
CO3	**2**	**3**	**2**	**2**	**3**		**2**		**2**	**3**
CO4	**2**	**3**					**2**	**2**	**2**	**2**
CO5	**2**	**2**							**2**	**2**
Average	2.4	2.6	2.3	2.3	2.7	2.0	2.0	2.3	2.4	2.4

Course Content:

L (Hours/Week)	**T (Hours/Week)**	**P (Hours/Week)**	**Total Hour/Week**
1	**1**	**0**	**2**

Unit	**Content**	**Competencies**
1	**Verbal and Non-Verbal Communication Skills:** ● Introduction & listening to customers, team members, and managers. ● Listening to electronic media; communication with customers, team members, and managers. ● Referencing for verbal communication. ● Presentation Skills – Stages involved in an effective presentation, selection of topic, content, aids, engaging	● Mastering the art of listening and effective communication. ● Developing and delivering impactful presentations.

	the audience, Time Management, Feedback, Mock Presentations.	
2	**CV, GD, and PI:** • SOP, career objective, educational qualification, projects and assignments, skill set, achievements and interests. • Introduction to GD, foundation skills in GD, Mock GD. • Introduction to PI, foundation skills in PI & Mock PI.	• Crafting professional CVs and SOPs. • Participating confidently in group discussions and personal interviews.
3	**Interpersonal Skills & Goal Setting Skills:** • Definition; understanding, analysis and response to the needs, requirements and capabilities of people at different levels. • Relevance of SWOT on goal setting; setting career goal; action plan and measures to achieve career goal; corporate role models; three to five years career roadmap; competitive work environment and realization of goals. • Anticipating challenges and utilizing opportunities.	• Developing strong interpersonal skills. • Setting and achieving realistic career goals.
4	**Time Management Skills:** • Planning, Scheduling, Prioritizing & multitasking. • Introduction & Importance of Time management Skills & Benefits of effective time management. • Techniques for setting realistic and achievable goals. • Creating a personal action plan, Methods for creating a daily, weekly, or monthly schedule. • Tips for managing multiple tasks simultaneously without sacrificing quality. • Introducing various time management tools such as calendars, planners, task management software, etc.	• Planning and prioritizing tasks effectively. • Utilizing time management tools to enhance productivity.
5	**Corporate Etiquette**: • Customer interaction etiquette; office etiquette. • Meeting etiquette & telephone etiquette. • Presentation etiquette.	• Demonstrating professional behavior in various corporate settings. • Applying proper etiquette in customer interactions,

		meetings, and presentations.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	10
Seminar/Journal Club	5
Small group discussion (SGD)	5
Self-directed learning (SDL) / Tutorial	3
Problem Based Learning (PBL)	3
Case/Project Based Learning (CBL)	3
Revision	
Others If any:	1
Total Number of Contact Hours	30

Assessment Methods:

Formative			**Summative**
Criteria	**Component**	**Marks**	End Semester Examination
Practical / Lab / Clinical Proficiency	Laboratory/Workshop Performance	20	
	Tool and Equipment Handling		
	Experiment/Task Execution		
	Clinical Procedure Execution		
	Patient Interaction and Care		
	Internal Jury		
	Any other*		
Quiz / Lab Test/ Internal Jury	Knowledge and Understanding	10	
	Critical Thinking and Problem-Solving		
	Depth of Understanding		
	Presentation Skills		
	Response to the queries		

	Any other*		
Documentation & Reporting	Lab Reports/Practical Journals	10	
	Case Studies / Clinical Case Record		
	Data Analysis and Interpretation		
	Presentation of Findings		
	Any other*		
Discipline Specific Practical / Lab Activities	Specific practical/lab/clinical activities related to the program**	20	
	For Example: Internal Jury, Pedagogy Club, Outdoor Catering, Moot Court etc.		

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Practical / Lab	✓				
Project		✓	✓		
Quiz / Lab Test/ Internal Jury				✓	✓
Documentation & Reporting		✓	✓		
Discipline Specific Practical / Lab Activities	✓	✓			
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

- Bradberry, T., & Greaves, J. (1st ed.). *Emotional Intelligence 2.0*. TalentSmart. ISBN: 978-0974320625.

- Patterson, K., Grenny, J., McMillan, R., & Switzler, A. (2nd ed.). *Crucial Conversations: Tools for Talking When Stakes Are High*. McGraw-Hill Education. ISBN: 978-0071771320.

- Strunk, W. Jr., & White, E. B. (4th ed.). *The Elements of Style*. Pearson. ISBN: 978-0205309023.

SEMESTER – II

Course Code	Course Title
06340201	Data Analysis using Python
06340202	Principles of Marketing
06340204	Digital Fluency

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340201
Course Title	Data Analysis using Python
Academic Year	2025-26
Semester	II
Number of Credits	4
Course Prerequisite	Basic knowledge of programming and data analysis
Course Synopsis	The objective of this course is to teach students the concepts of Python Programming Language with Libraries. Course starts with introduction to Python programming. It helps students install Python using Anaconda. The libraries covered are Numpy, pandas, matplotlib, and seaborn
Course Outcomes: At the end of the course students will be able to:	
CO1	Demonstrate the understanding of basic concepts of Python Programming and IPython
CO2	Apply the key python data structure such as list, dict, set, and tuple along with functions to clean data
CO3	Utilize the Numpy multidimensional arrays to slice, and index the data

CO4	Analyze the data using pandas data frame by loading data from system and build competency in data wrangling
CO5	Examine the data by plotting graphs using matplotlib and seaborn

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO5	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
4	**0**	**0**	**4**

Unit	**Content**	**Competencies**
1	**Python programming Basic:** Python interpreter, IPython Basics, Tab completion, Introspection, %run command, magic commands, matplotlib integration, python programming, language semantics, scalar types. Control flow.	1. Understand Python basics and syntax. 2. Apply tab completion and introspection tools. 3. Execute scripts using the %run command. 4. Utilize magic commands for efficient coding. 5. Create basic visualizations with Matplotlib. 6. Implement scalar data types and control flow statements.
2	**Data Structure, functions, files:** Tuple, list, built-in sequence function, dict, set, functions, namescape, scope, local function, returning multiple values, functions are objects, lambda functions, error and exception handling, file and operation systems	1. Understand Python data structures (List, Tuple, Dictionary, Set). 2. Apply built-in sequence functions effectively. 3. Develop and use user-defined and lambda functions. 4. Understand namespaces, scope, and local variables.

		5.Implement functions returning multiple values.
3	**NumPy: Array and vectorized computation:** Multidimensional array object. Creating ndarrays, arithmetic with numpy array, basic indexing and slicing, Boolean indexing, transposing array and swapping axes, universal functions, array-oriented programming with arrays, conditional logic as arrays operations, file input and output with array.	1. Understand NumPy arrays and vectorized computation. 2. Create and manipulate multidimensional arrays. 3. Perform array arithmetic and mathematical operations. 4. Apply indexing, slicing, and Boolean indexing. 5.Use array transposition and axis swapping.
4	**Pandas:** Pandas data structure, series, Data Frame, Index Object, Re-indexing, dropping entities from an axis, indexing, selection and filtering, integer indexes, arithmetic and data alignment, function application and mapping, soring and ranking, correlation and covariance, unique values, values controls and membership, reading and writing data in text format	1. Understand NumPy and Pandas fundamentals. 2. Create and manage Series and DataFrames. 3. Perform indexing, filtering, and data selection. 4. Apply re-indexing, sorting, and ranking techniques. 5. Execute data alignment and arithmetic operations. 6.Analyze data using correlation, covariance, and mapping functions.
5	**Visualization with Matplotlib:** Figures and subplots, colors, markers, line style, ticks, labels, legends, annotation and drawing on sublots, matplotlib configuration. **Plotting with pandas and seaborn:** Line plots, bar plots, histogram, density plots, scatter and point plots, facet grids and categorical data.	1. Understand the importance of data visualization. 2.Create different types of plots using Matplotlib. 3.Customize plots using colors, markers, legends, labels, and annotations. 4.Create statistical plots using Pandas and Seaborn. 5.Compare different visualization libraries in Python.

Pedagogy: Lectures: A mix of pedagogy would be adopted consisting of lecture, problem based learning practicals and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	Contact Hours
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5

Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	Summative
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4	CO5
Assignment	✓	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓	✓
Class Test	✓	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					

(List of reference books)

1. AchimKlenke, (2014), Probability Theory A Comprehensive Course Second Edition, Springer, ISBN 978-1-4471-5360-3

2. Christian Heumann, Michael SchomakerShalabh (2016), Introduction to Statistics and Data Analysis With Exercises, Solutions and Applications in R, Springer International Publishing, ISBN 978-3-319-46160-1

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340202
Course Title	Principles of Marketing
Academic Year	2025-26
Semester	II
Number of Credits	4
Course Prerequisite	Students should have a foundational understanding of business principles, including economics, organizational behavior, and strategic management. Familiarity with basic marketing concepts like the four P's and consumer behavior is beneficial. A keen interest in global marketing and business success is advantageous.
Course Synopsis	This course explores key marketing concepts, including value creation, consumer behavior, and market research. Students will learn to design strategies through segmentation, targeting, positioning, and branding. It also covers the development of an integrated marketing mix and evaluates sustainable, strategic marketing approaches in a global context.

Course Outcomes:

At the end of the course students will be able to:

CO1	Explain the fundamental concepts of marketing and the marketing process, including value creation and customer satisfaction **(RBT Level: 2 – Understand**).
CO2	Analyze the marketing environment and consumer behavior to develop actionable insights using marketing research tools **(RBT Level: 4 – Analyze**).
CO3	Design customer value-driven strategies through effective segmentation, targeting, positioning, and branding techniques (RBT Level: **6 – Create**).
CO4	Develop an integrated marketing mix strategy, encompassing product, pricing, place, and promotion for various markets **(RBT Level: 6 – Create).**
CO5	Evaluate sustainable and strategic marketing approaches in a global context, considering ethical and technological trends **(RBT Level: 5 – Evaluate).**

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

CO's	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO 8	PS O1	PS O2	Avg.
CO1	3	2	1	2	1	2	2	1	2	2	**1.8**
CO2	3	3	1	2	1	3	2	1	3	3	**2.2**
CO3	3	3	2	2	1	3	2	3	2	3	**2.4**
CO4	3	3	2	2	2	3	2	3	2	3	**2.5**
CO5	3	3	2	3	2	3	3	3	2	3	**2.6**

Course Content:

L (Hours/Week)	T (Hours/ Week)	P (Hours/Week)	Total Hour/Week
3	**1**	**0**	**4**

Unit	Content	Competencies
1	**Unit 1: Fundamentals of Marketing** **Introduction to Marketing:** Definitions, scope, and core concepts (needs, wants, demand, value creation, and customer satisfaction). Offerings—Products, Services, Solutions. Market Types. Marketing vs Selling: Key differences. Evolution of Marketing: From traditional to digital. **The Marketing Process:** Understanding customer needs. Customer engagement and relationship management. **Managing Marketing Information:** Developing customer insights using marketing research. Primary vs. secondary data and big data analytics.	• Identify and articulate key marketing concepts such as needs, wants, demands, and customer satisfaction. • Develop a market-oriented mission and integrated marketing strategy considering sustainability and digital trends.

2	**The Marketing Environment, Consumer Behavior and STP** **Marketing Environment:** Micro and macro environments. Natural, technological, political, and cultural factors. Frameworks for environmental analysis: PESTLE and competitive analysis. **Consumer Behavior** - concept. Models of consumer behavior. Buying Decision Process and Types. Psychological, cultural, and social factors influencing buying decisions. Business buyer behavior and major buying situations. Segmentation, Targeting, and Positioning (STP): Market segmentation: Consumer, business, and international markets. Market targeting and evaluating segments. Positioning strategies and delivering value. Differentiation. **Emerging Marketing opportunities in India** – Marketing at the bottom of the pyramid, growing middle class	● Conduct PESTLE and competitive analysis to assess micro and macro-environmental factors. ● Analyze consumer and business buying behavior using models and psychological, cultural, and social factors.
3	Unit 3: The Marketing Mix Introduction to the Marketing Mix: Definition and significance of the 4Ps (Product, Price, Place, Promotion). Role of the marketing mix in operationalizing customer-focused strategies. The Extended Marketing Mix – 7Ps. Overview of the Extended Marketing Mix: Evolution from 4Ps to 7Ps to address modern marketing complexities. Product - concept and strategies. Types of products and services: Consumer, business, and specialty products. Levels of Products	● Apply STP (Segmentation, Targeting, and Positioning) strategies for specific markets. ● Develop branding strategies that align with the product lifecycle and enhance customer value.

	and Services: Core, actual, and augmented. Product and Service Decisions. Product Lifecycle (PLC): Stages: Introduction, growth, maturity, and decline. Challenges and marketing strategies for each stage. New Product Development (NPD): Stages: Idea generation, screening, concept development, testing, and commercialization. Pricing - concept and strategies. Fundamentals: Cost-based, value-based, and competition-based pricing. Internal and External Considerations Affecting Price. Importance of pricing in creating customer value and competitive positioning. Advanced pricing approaches: Psychological pricing and dynamic pricing. Pricing strategies for digital and global markets.	
4	**Unit 4: Place, Promotion, People and Processes** Place (Distribution) - concept and strategies. Role of distribution in value delivery. Types of marketing channels: Direct and indirect. Introduction to logistics and supply chain management. E-commerce and omnichannel distribution strategies. Role of technology in modern logistics and supply chain management. Promotion - concept and strategies. Overview of promotional tools: Advertising, public relations, personal selling, and sales promotion. Basics of Brand Management: Building brand equity: Concepts, strategies, and measurement. Role of branding in promotion and building customer loyalty. Advanced branding strategies: Extensions, portfolios, and rebranding.	● Formulate a comprehensive marketing mix strategy, including product differentiation and pricing models. ● Implement effective promotional strategies, incorporating digital and social media platforms.

	Advanced Promotion Strategies. Integrated Marketing Communications (IMC): Importance, tools, and implementation. Digital and social media marketing: Strategies for customer engagement and analytics. Word-of-mouth and viral marketing: Principles and case studies. People - concept and strategies. Role of human interactions in delivering customer experiences. Importance of employee training and customer service in value creation. Process - concept and strategies. Designing systems and workflows for effective and efficient service delivery. Role of technology in process optimization and customer experience management. Physical Evidence - concept and strategies. Tangible cues in service marketing: Ambiance, branding, and design. Creating positive customer perceptions through physical elements.	
5	**Unit 5: Strategic and Sustainable Marketing** Company and Marketing Strategy. Defining market-oriented missions. Partnering with departments and marketing systems. Developing an integrated marketing mix. Creating Competitive Advantage. Analyzing competitors and developing competitive strategies. Strategies for market leaders, challengers, followers, and nichers. Global Marketing. Entry strategies: Exporting, joint ventures, and direct investments. Standardization vs. adaptation in global marketing.	• Create competitive marketing strategies tailored to different market roles (leaders, challengers, followers, and nichers). • Evaluate the role of ethics, CSR, and sustainability in global marketing strategies, leveraging future technological trends.

	Services Marketing and Service Quality. Sustainable Marketing. Ethical issues and corporate social responsibility (CSR). Consumer-oriented and societal marketing principles. Emerging Marketing Trends: AI, big data, IoT, and the metaverse. Skills for Modern Marketers: Analytical tools, creative thinking, and communication	

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem-Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Assignment
Case Based Presentation
Project
Business News Analysis
Mid Semester Examination

Mapping of Assessment with Cos

CO/Assessment	Assignment	Project	Case-Based Presentation	Business News Analysis	Mid-Semester Exam	End-Semester Exam
CO1	✓					✓
CO2	✓	✓	✓	✓		✓
CO3	✓	✓	✓			✓
CO4	✓	✓	✓			✓
CO5	✓	✓	✓	✓		✓

Student's Feedback
(List of reference books)
1. Principles of Marketing by Philip Kotler, Gary Armstrong, and Veronica Wong, Pearson Education 2. Marketing Management by Philip Kotler, Kevin Lane Keller, and Abraham Koshy, Pearson Education 3. Marketing Management: Indian Context by Arun Kumar, Ramesh Batra, and Sunil Jain, Tata McGraw-Hill Education 4. Marketing Management: Text and Cases by V.S. Ramachandran, Oxford University Press 5. Principles of Marketing by Dhruv Grewal and Michael Levy, Tata McGraw-Hill Education

School of Commerce and Management	
Name of the Program	BBA – Business Analytics
Course Code	06340204
Course Title	Digital Fluency
Academic Year	2025-26
Semester	II
Number of Credits	3

Course Synopsis	The Digital Fluency course is designed to equip students with the knowledge and skills required to navigate the digital business landscape effectively. This course integrates AI-powered applications, cloud collaboration, social media marketing, fintech, and cybersecurity principles to enhance business efficiency, security, and strategic decision-making.

Course Outcomes:	
CO1	Understand the fundamentals of AI-powered tools, cloud collaboration, and cybersecurity and their role in modern digital business environments.
CO2	Apply AI tools in digital communication, personal branding, and content creation for career development and online visibility.
CO3	Analyse social media marketing strategies, YouTube content creation techniques, and SEO best practices to enhance digital engagement.
CO4	Evaluate cybersecurity risks, ethical concerns in AI applications, and digital laws related to online transactions and data privacy.
CO5	Demonstrate proficiency in creating AI-assisted content, managing digital financial transactions, and implementing cybersecurity measures for safe digital

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	1	1	0	0	0	1	0	1	2
CO2	2	3	0	1	0	2	2	2	3
CO3	3	3	1	2	0	3	3	2	2
CO4	3	3	2	1	1	3	3	2	2
CO5	2	3	0	2	1	2	2	2	2
Average	2.2	2.6	0.6	1.2	0.4	2.2	2	1.8	2.2

Course Content:					
L (Hours/Week)	**T (Hours/Week)**	**P (Hours/Week)**	**CL (Hours/ Week)**	**Total Hour/Week**	

0	**0**	**4**	**2**	**4**	

Unit	Content	Competency
1	**AI-Powered Business Communication & Cloud Collaboration** ● Introduction to Digital Fluency & AI Tools ❖ Importance of digital skills in business and career development. ❖ Overview of AI-powered tools (AI, Generative AI, Big Data, IoT, Cloud Computing, Cybersecurity) for communication and productivity. ● Cloud Computing & Collaboration ❖ Using Google Drive for document sharing and workflow management. ❖ Collaborative document editing via Google Form, Sheets, and Doc. ● Professional Email Writing & AI Assistance ❖ Business email writing best practices and etiquette. ❖ Using generative AI for professional email drafting. ● Practical Sessions: ❖ Real-time collaboration using cloud-based tools. ❖ AI-assisted email writing tasks (job applications, business proposals, client communication). ❖ Group project: Drafting AI-enhanced reports and presentations.	● Demonstrate the ability to analyze and utilize AI tools and cloud collaboration for professional business communication. ● Exhibit proficiency in cloud-based teamwork and professional email writing using AI assistance.
2	**Social Media Marketing & Personal Branding for Career Growth** ● LinkedIn Profile Management & Digital Networking ❖ Optimizing LinkedIn Profiles: Crafting an impactful headline, summary, and skills to showcase expertise and career aspirations. ❖ AI-Generated LinkedIn Content & Engagement: Utilizing AI tools for personalized content creation, networking messages, and engagement strategies.	● Apply various digital branding and marketing strategies to enhance online professional presence and engagement. ● Develop AI-assisted content creation techniques to optimize LinkedIn and Instagram visibility.

	❖ Personal Branding Strategies: Defining a unique professional identity, building credibility, and increasing online visibility. ❖ Networking on LinkedIn: Effective connection requests, messaging strategies, and engaging in LinkedIn groups & discussions for career advancement. ● Instagram for Personal Branding & Visibility ❖ Creating & Optimizing an Instagram Personal Profile: Setting up a professional yet authentic presence on Instagram. ❖ Content Strategy: Using AI-generated captions, strategic hashtags, and engagement tactics to build a professional network. ❖ Understanding Instagram Reels, Stories & Engagement Tactics: Showcasing expertise through visual storytelling and maintaining consistency in posting. ❖ Building a Personal Brand: Leveraging Instagram to position oneself as a thought leader or influencer in a chosen domain. ● Practical Sessions: ❖ Optimizing a LinkedIn Profile and writing AI-generated LinkedIn posts for personal branding. ❖ Setting up & Managing an Instagram Personal Account with a focus on career growth & audience engagement.	
3	**YouTube Basics & Video Creation for Personal Branding** ● Getting Started with YouTube ❖ Creating a YouTube Channel: Simple steps to set up a personal YouTube channel. ❖ Basic Branding: Choosing a channel name, profile picture, and	● Demonstrate the ability to develop digital content and apply video marketing strategies for career growth.

	description to reflect personal interests. ❖ Understanding Content Types: Exploring different types of videos like vlogs, tutorials, interviews, and educational content. ● Making Simple Videos with AI Assistance ❖ Writing Video Scripts: Using basic AI tools to help structure ideas and create engaging scripts. ❖ Easy Video Editing: Introduction to beginner-friendly video editing apps like InVideo, CapCut, and Canva for quick edits. ❖ Thumbnails & Captions: Designing eye-catching thumbnails and adding AI-generated subtitles for better reach. ● Growing & Sharing Your Videos ❖ Basic YouTube Analytics: Understanding views, likes, and comments to see what works best. ❖ Sharing Videos Online: How to promote videos on Instagram, LinkedIn, and WhatsApp for better visibility. ❖ Engaging with Viewers: Simple ways to reply to comments, ask questions, and interact with the audience. ● Practical Sessions: ❖ Creating & Customizing a YouTube Channel with a basic setup. ❖ Writing a Short Video Script with AI assistance. ❖ Recording & Editing a Simple Video using easy-to-use tools. ❖ Uploading & Sharing a Video to practice online visibility.	● Utilize AI-powered video scripting and editing tools to enhance personal branding and content quality.
4	**Digital Banking, FinTech & Online Transactions** ● Introduction to Digital Banking & Online Payments	● Evaluate and implement secure digital financial transactions and fintech applications in business environments.

	❖ Basics of UPI, mobile wallets (Google Pay, Paytm, Apple Pay, PhonePe). ❖ Net banking & financial transactions in e-commerce. • FinTech & AI in Banking ❖ Role of AI in fraud detection, credit scoring, and personalized banking. ❖ Investment & trading platforms (Zerodha, Groww). • Digital Transactions & E-Commerce Payments ❖ Online shopping & secure payment gateways. ❖ Protecting financial data & avoiding online fraud. • Practical Sessions: ❖ Simulated digital banking transactions & UPI payments. ❖ Exploring AI-powered investment & stock trading platforms. ❖ Live demo: Recognizing and preventing phishing attacks in financial transactions.	• Analyze AI's role in fraud detection and personalized banking to enhance financial decision-making.
5	**Cybersecurity, Digital Laws & Ethical AI Usage** • Cybersecurity Awareness & Digital Identity Protection ❖ Common cyber threats: phishing, malware, social engineering. ❖ Password management & two-factor authentication (2FA). • Legal & Ethical Implications of AI & Social Media Usage ❖ Understanding Digital Arrests & Cyber Laws. ❖ Social media crimes & legal consequences of fake news & cyber harassment. ❖ Ethical considerations of AI-generated content & misinformation. • AI Ethics & Data Privacy Regulations ❖ GDPR, data protection laws, and ethical AI practices.	• Analyze and propose solutions to cybersecurity threats, ethical dilemmas, and data privacy issues in digital platforms. • Demonstrate the ability to identify and mitigate cybersecurity risks while ensuring ethical AI usage.

	❖ Avoiding AI biases in digital decision-making. • Practical Sessions: ❖ Live demo: Cybersecurity awareness & digital footprint tracking. ❖ Case study analysis: Ethical dilemmas in AI-generated content. ❖ Workshop on recognizing fake news and misinformation using AI tools.	

Teaching Learning Strategies and Contact Hours

Learning Strategies	**Contact Hours**
Tutorial	0
Practical	0
Seminar/Journal Club	5
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	10
Problem Based Learning (PBL)	30
Case/Project Based Learning (CBL)	2
Revision	1
Others If any:	0
Total Number of Contact Hours	50

Assessment Methods:

AI-Assisted Business Communication
Social Media Branding & Marketing
Youtube Content Creation
SEO & Digital Marketing Strategy
Fintech & Secure Digital Transactions

Cybersecurity & Ethical AI Awareness

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4	CO5
Ai-Assisted Business Communication	✓	✓			✓
Social Media Branding & Marketing		✓	✓	✓	
Youtube Content Creation			✓	✓	✓
Seo & Digital Marketing Strategy	✓			✓	
Fintech & Secure Digital Transactions	✓	✓			
Cybersecurity & Ethical AI Awareness			✓		✓
End Semester Examination	✓	✓	✓	✓	✓
Feedback Process			Student's Feedback		

Text Books / Reference Books:

1. Kaplan, A.M. & Haenlein, M., Users of the World, Unite! The Challenges and Opportunities of Social Media, Business Horizons.
2. Chaffey, D., Digital Business and E-Commerce Management, Pearson.
3. Official documentation of Google Workspace, LinkedIn, and UPI/NPCI digital payment platforms.

SEMESTER - III

Course Code	Course Title
06340301	Statistics and Computational Data Analysis
06340302	Data Analytics and Visualization – Tools and Techniques
06340303	Management Concepts and Organizational Behaviour
06340304	Foundation of Spreadsheet

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340301
Course Title	Statistics & Computational Data Analysis
Academic Year	2025-26
Semester	III
Number of Credits	4
Course Prerequisite	Basic knowledge of the Statistics and Python
Course Synopsis	The course is designed to develop the statistical analysis skills in the students. The statistical analysis is the backbone for the machine learning and data science. The key statistical concepts such as sampling techniques, data description, probability, probability distribution, normal distribution are essential for any statistical analysis of the data. Inferential statistics such as point estimation and interval estimation techniques are required to estimate a parameter. The Bayes theorem has been included to help student understand the statistical techniques

Course Outcomes:
At the end of the course students will be able to:

CO1	Explain the data gathering techniques
CO2	Inspect the data using descriptive statistics
CO3	Illustrate the probability and conditional probability concepts
CO4	Distinguish between various probability distributions and analyze the data following different probability distributions
CO5	Solve the inferential statistics problems using point and interval estimation techniques. Infer the statistical problems using hypothesis testing and p value

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO5	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:			
L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**0**	**2**	**5**

Unit	**Content**	**Competencies**
1	**Introduction to Statistics:** Introduction to Statistics. Role of statistics in scientific methods, current applications of statistics. **Scientific data gathering:** Sampling techniques, scientific studies, observational studies, data management. **Data description:** Displaying data on a single variable (graphical methods, measure of central tendency, measure of spread), displaying relationship between two or more variables, measure of association between two or more variables.	1. Understand the fundamental concepts, scope, and importance of statistics in scientific research and decision-making. 2. Explain the role and applications of statistics in various scientific and real-world domains. 3. Apply appropriate sampling techniques for collecting reliable and representative data. 4. Differentiate between scientific studies and observational studies for data collection. 5. Organize, manage, and prepare data for statistical analysis.
2	**Data description:** Displaying data on a single variable (graphical methods, measure of central tendency, measure of spread), displaying relationship between two or more variables, measure of association between two or more variables. **Probability Theory:** Sample space and events, probability, axioms of probability, independent events, conditional probability, Bayes' theorem.	1. Understand methods for describing and summarizing data. 2. Apply graphical techniques for single and multiple variables. 3. Calculate measures of central tendency and data dispersion. 4. Analyze relationships and associations between variables. 5. Explain fundamental concepts of probability and events. 6. Solve problems using conditional probability and independent events. Apply Bayes' Theorem for probability-based decision-making.
3	**Random Variables:** Discrete and continuous random variables. Probability distribution of discrete random variables, binomial distribution, poisson distribution. Probability distribution of continuous random variables, The uniform distribution, normal (gaussian) distribution **Interval Estimations:** Confidence interval of means and proportions, Distribution free confidence interval of percentiles	1. Understand discrete and continuous random variables. 2. Apply probability distributions to analyze random events4. Critical thinking 3. Solve problems using Binomial and Poisson distributions. 4. Interpret Uniform and Normal (Gaussian) distributions.7. Leadership readiness/ qualities 5. Apply distribution-free methods to estimate population percentiles.
4	**Test of Statistical Hypothesis and p-values:** **Tests** about one mean, tests of equality of two	1. Understand statistical hypothesis testing concepts.

	means, test about proportions, p-values, likelihood ratio test, Bayesian tests **Univariate Statistics using Python:** Mean, Mode. Median, Variance, Standard Deviation, Normal Distribution.	2. Perform tests for means and proportions. 3. Interpret p-values for decision-making. 4. Calculate descriptive statistics using Python. 5. Analyze data using normal distribution concepts. 6. Interpret statistical results for data-driven decisions.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem-based learning practical and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓	✓

Project	✓	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓	✓
Class Test	✓	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

- AchimKlenke, (2014), Probability Theory A Comprehensive Course Second Edition, Springer, ISBN 978-1-4471-5360-3
- Christian Heumann, Michael SchomakerShalabh (2016), Introduction to Statistics and Data Analysis With Exercises, Solutions and Applications in R, Springer International Publishing, ISBN 978-3-319-461
- 60-1

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340302
Course Title	Data Analytics and Visualization-Tools & Techniques
Academic Year	2025-26
Semester	III
Number of Credits	4
Course Prerequisite	Basic knowledge of the Data Analysis
Course Synopsis	Designed to help you become a successful Data Analyst, this Subject is for those just starting their career in Analytics. It will teach you how to understand data fundamental, analyze the data methodology, techniques, powerful dashboards, Power BI & Visualization power of data along with a strong focus on case studies to ensure hands on learning. Once armed with analytics, you will also learn the powerful data visualization tool like Advanced version of Excel, Power Map, Power BI, Business Intelligence software, Tableau desktop version & other open-source tools etc. to present your analysis.

Course Outcomes: At the end of the course students will be able to:	
CO1	Build data models and manage and manipulate data to extract useful information and insights
CO2	Apply functions to manipulate and analyze data
CO3	Discover customer preference, purchasing habits, and other behaviors.
CO4	Analyze internal and external factors by understanding "Mind and Market Factors" component of MIMI
CO5	Make use of Tableau software for data visualization

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO5	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**0**	**2**	**5**

Unit	**Content**	**Competencies**
1	**INTRODUCTION TO DATA HANDLING** Overview of Data analysis, Introduction to Data visualization, Working with statistical formulas - Logical and financial functions.	1. Understand the fundamentals of data analysis and handling. 2.Use statistical formulas for data analysis and interpretation. 3.Perform logical operations using built-in functions. 4.Apply financial functions for business data analysis. 5.Develop analytical and problem-solving skills using spreadsheet tools.

2	Power BI Analytics, Data Validation & data models, Power Map for visualize data, Power BI-Business Intelligence, Data Analysis using statistical methods, Dashboard designing.	1. Develop interactive Power BI dashboards and reports. 2. Apply data validation and build efficient data models. 3.Visualize geographical data using Power Map. 4. Utilize Business Intelligence tools for informed decision-making. 5. Perform statistical data analysis to derive actionable insights.
3	**INTRODUCTION TO DATA MANIPULATION USING FUNCTION:** Heat Map, Tree Map, Smart Chart, Azure Machine learning, Column Chart, Line Chart, Pie, Bar, Area, Scatter Chart, Data Series, Axes, Chart Sheet, Trendline, Error Bars, Sparklines, Combination Chart, Gauge, Thermometer Chart. Gantt Chart, Pareto Chart etc , Frequency Distribution, Pivot Chart, Slicers, Tables: Structured References, Table Styles, What-If Analysis: Data Tables| Correlation model |Regression model.	1. Apply data manipulation techniques using Excel functions and analytical tools. 2. Create and customize charts for effective data visualization and reporting. 3. Analyze trends, patterns, and relationships using statistical and analytical models. 4. Develop interactive dashboards using Pivot Charts, Slicers, and Sparklines. 5. Perform predictive and decision-making analysis using What-If Analysis, Correlation, and Regression.
4	**Data Strategy & Consumer behavior Analytics:** Understanding Product & Category, Competitive Analysis, Market Share understanding- Market potential Index, Seasonality-Sales Trending, Consumer behavior Analytics-MIND AND MARKET FACTORS. Budget planning & Execution- MIMI, Regression & Correlation Analysis for Sales trending, Forecasting method with predictive investment modelling, Cohort Analysis, Google Analytics (GA), Case Studies-Assignments.	1. Understand data strategy and consumer behavior for business decisions. 2.Analyze market trends, competition, and market share performance. 3.Apply sales forecasting using regression, correlation, and predictive models. 4.Develop budget planning and marketing investment optimization skills. 5.Perform cohort analysis and interpret customer behavior using Google Analytics. 6.Solve real-world business problems through case studies and data-driven insights.
5	**TABLEAU SOFTWARE:** GETTING STARTED WITH TABLEAU SOFTWARE: What is Tableau? What does the Tableau product suite comprise of? How Does Tableau Work? Tableau Architecture, what is my Tableau Repository? Connecting to Data & Introduction to data source concepts, Understanding the Tableau workspace, Dimensions and Measures, Data Types & Default Properties, building basic views, saving	1. Understand Tableau architecture and product suite. 2. Connect Tableau to various data sources. 3. Identify dimensions, measures, and data types. 4. Create and customize basic visualizations. 5. Manage, save, and share Tableau workbooks.

	and sharing your work-overview. Introduction to QlikView and other tools.	6. Gain basic knowledge of QlikView and other BI tools.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem-based learning practicals and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓	✓

Class Test	✓	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

- Information Dashboard Design: Displaying Data for At-a-glance Monitoring" by Stephen Few
- Beautiful Visualization, Looking at Data Through the Eyes of Experts by Julie Steele, Noah Iliinsky

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340303
Course Title	Management Concepts & Organizational Behavior
Academic Year	2025-26
Semester	1II
Number of Credits	4
Course Prerequisite	Students should have a basic understanding of business studies or commerce, typically gained at the high school level. Familiarity with fundamental economic principles and organizational terms is beneficial. Additionally, proficiency in English communication, both written and verbal, is essential, as the course involves reading academic material and participating in discussions. Basic analytical thinking and a willingness to engage in teamwork will also help students grasp concepts effectively and participate in group-based activities.
Course Synopsis	This course provides a foundational understanding of both management principles and organisational behaviour, aimed at equipping students with the knowledge and skills necessary to function effectively in managerial roles. It begins with an exploration of core management functions—planning, organising, leading, and controlling—along with an overview of the evolution of management theories from classical to modern perspectives. The course then delves into the behavioural aspects of

	organisations, focusing on how individuals and groups interact within a workplace. Key topics include personality, perception, motivation, leadership, communication, group dynamics, and organisational culture. Through real-life case studies, role-plays, and interactive discussions, students will develop analytical and interpersonal skills relevant to today's dynamic and diverse business environments. The course also addresses contemporary challenges such as managing change, promoting ethical behaviour, and adapting to digital transformation.

Course Outcomes:

At the end of the course students will be able to:

CO1	Explain the various aspects of management and various perspective and business formats.
CO2	Apply the basic concept of planning and strategic decision-making.
CO3	Analyze the concept of organizing and understand the organization structure, staffing and directing.
CO4	Explain the various aspects of leadership, control and motivation.
CO5	Analyze the basic concepts of strategic change and stress

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**2**	**2**				**2**	**2**	**3**	**2**
CO2	**3**	**3**					**3**	**2**	**3**	**3**
CO3	**3**	**3**		**3**			**3**	**2**	**3**	**3**
CO4	**3**	**2**	**3**	**3**	**3**		**2**	**2**	**3**	**3**
CO5	**3**	**3**			**2**		**3**	**3**	**3**	**3**
Average	**3**	**2.6**	**1**	**1.2**	**1**		**2.6**	**2.2**	**3**	**2.8**

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	Importance, Nature, Definitions, Scope, Levels, Process and Significance of Management. Development of Management Thoughts: Classical, Neo-Classical Systems, Contingency and Contemporary Approaches	• Students will be able to understand the multiple perspectives of organisation and as student researchers.

	to Management (Drucker, Porter, Prahalad, Senge and Tom Peters) Multiple perspectives of business organisations- Consumers, Employees, Entrepreneurs, Community/Society at large; Perspective as a student & researcher- underlying disciplines; Ownership forms; Business formats- Brick & Mortar; Click; Brick & Click; Franchising location & scale- local, national, global; Micro, small, medium and large.	• Various ownership forms and business formats
2	Concept, Nature, Importance, Steps and Limitations, Types of Plans. Making Planning Effective – Strategic Considerations in Planning - Management by Objectives Communication – Formal and Informal Networks, Barriers and Principles. Decision Making Concept, Process, Rationality and Techniques. Short- and long-range planning, flexibility in planning. Characteristics of a sound plan. Heuristics and biases; includes role-play, simulations.	• Design effective short-term and long-term plans with strategic flexibility • Apply decision-making models considering behavioral aspects like heuristics and biases. • Participate in role-play and simulation exercises to enhance decision-making skills
3	Principles and Process of Organizing - Span of Management - Organization Structure - Variables affecting Structure - Departmentalization - Authority, Delegation and Decentralization - Committees. New Forms of Organization, Staffing - Concept, Nature, Importance and Steps, Directing – Concept, Nature and Importance Interdepartmental coordination, emerging trends in corporate structure, strategy, and culture, Mechanistic vs Adoptive structures – formal and informal organization.	• Evaluate organizational structures based on context: mechanistic vs adaptive • Distinguish between formal and informal organization structures.
4	Concept and Theories. Leadership - Concept and Theories, developing leaders across the organization, Control: Concept, Features, Importance and Limitations of Control. Control Process. Essentials of a Good Control System. Techniques of Control. Relationship between Planning and Control. Motivation-needs (including Maslow's theory), Meaning	• Students will be able to Compare and apply various motivation theories including Maslow, Herzberg, ERG, and Ken Thomas's model. • Recognize sources of stress at work and apply stress

	and importance of motivation; Theories-Equity, Intrinsic Motivation by Ken, Maslow, Herzberg, ERG;	prevention and management techniques.
5	Management of Strategic Change, Knowledge Management, Corporate Governance and social responsibility of business. Stress-individual and organisational factors to stress, prevention and	• Students will be able to Analyze organizational change models and methods for overcoming resistance. • Explore how strategic change and knowledge management shape future-ready organizations.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Mid Semester Examination	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓				
Project		✓	✓		
Case Based Presentation				✓	✓

Business News Analysis		✓	✓		
Mid Semester Examination	✓	✓			
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					
1. Robbins; S.P., Organizational Behaviour (13th edition), Prentice Hall of India Pvt. Ltd., New Delhi, 2016. 2. Luthans, Fred, Organizational Behaviour, 11th Edition, Mc Graw Hill International, New York, 2010. 3. Robins S.P., Organizational Theory: Structure Design and Application, 3rd ed. Prentice Hall of India Pvt. Ltd., 2009. 4. Management Process & Organisation Behaviour, Sahni NK, Kalyani Publishers					

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340304
Course Title	Foundation of Spreadsheet
Academic Year	2025-26
Semester	III
Number of Credits	3
Course Prerequisite	Basic understanding of computer operations and familiarity with Microsoft Excel Basic understanding of mathematical calculations, statistics and concept of tables
Course Synopsis	This course provides a comprehensive introduction to spreadsheet fundamentals, focusing on basic functions, data entry, and visualization techniques. Students will learn to navigate spreadsheets, apply essential formulas, manage data, and create basic charts and pivot tables. The course aims to build a solid

	foundation in spreadsheet skills necessary for effective data management and analysis.

Course Outcomes:

At the end of the course students will be able to:

CO1	Demonstrate the use of basic functions and formulas.
CO2	Demonstrate working knowledge of organizing and displaying large amounts of data.
CO3	Demonstrate formatting techniques and presentation styles.
CO4	Simplify formatting rules for business requirements.
CO5	Analyze data using Pivot Tables and Pivot Charts.

Mapping of Course Outcomes (COs) to Program Outcomes (POs) & Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	2	2					2		2	
CO2	2	2					3		3	
CO3	2	1					2		2	
CO4	2	2					2		2	
CO5	2	3					3		3	
Average	2.0	2.0	-	-	-	-	2.4	-	2.4	-

Course Content:

L (Hours/Week)	**T (Hours/Week)**	**P (Hours/Week)**	**Total Hour/Week**
0	**0**	**6**	**2**

Unit	**Content**	**Competencies**
1	**<u>Introduction to Spreadsheets:</u>** Overview of spreadsheet software, Basic spreadsheet navigation, Basic cell referencing (relative and absolute)	• Understand the basic interface and functions of spreadsheet software. • Navigate and perform basic operations in a spreadsheet.

2	**Data Entry and Basic Formulas:** Entering data, Basic arithmetic operations and functions (SUM, AVERAGE, COUNT), Introduction to text functions (LEFT, RIGHT, MID)	• Input and format data accurately. • Apply basic arithmetic operations and functions.
3	**Basic Functions and Conditional Formatting**: Using basic functions (MIN, MAX, TODAY, NOW), Introduction to Conditional Formatting, Applying conditional formatting rules	• Apply basic functions to perform data calculations. • Utilize conditional formatting for data visualization.
4	**Data Management**: Sorting and filtering data, Basic data validation, Introduction to tables and structured references	• Organize data using sorting and filtering. • Apply basic data validation techniques.
5	**Basic Charting and Data Visualization:** Introduction to creating charts (line, bar, pie), Introduction to Pivot Tables, Using Sparklines for trend analysis	• Create and interpret basic charts. • Construct and use simple pivot tables for data analysis.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	Contact Hours
Lecture	10
Seminar/Journal Club	4
Small group discussion (SGD)	4
Self-directed learning (SDL) / Tutorial	4
Problem Based Learning (PBL)	3
Case/Project Based Learning (CBL)	3
Revision	2
Others If any:	
Total Number of Contact Hours	30

Assessment Methods:

Assignment

Case Based Presentation
Project
Business News Analysis
Class Test (Oral / Written)
Innovative and creative contribution

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓		✓	
Case Based Presentation	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Business News Analysis	✓		✓		
Class Test (Oral /Written)	✓	✓	✓		
Innovative and creative contribution		✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

1. Microsoft Excel Formulas and Functions (Office 2021 and Microsoft 365),1st Edition by Paul McFedries, Pearson Education
2. Excel All-in-One for Dummies by Paul McFedriesa and Greg Harvey, Wiley Publication
3. Excel Basics In 30 Minutes: The beginner's guide to Microsoft Excel, Excel Online, and Google Sheets (Third Edition) by Ian Lamont
4. Excel 365 Basics: A Quick and Easy Guide to Boosting Your Productivity with Excel by Nathan George, GTech Publishing

SEMESTER - IV

Course Code	Course Title
06340401	Predictive Business Analytics with Generative AI
06340402	Marketing Analytics & Generative AI for Business Impact
06340403	Operations Management
06340404	Human Resource Management

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340401
Course Title	Predictive Business Analytics with Generative AI
Academic Year	2025-26
Semester	IV
Number of Credits	4
Course Prerequisite	Fundamentals of Business Analytics and Data Analytics
Course Synopsis	This course introduces students to the fundamentals of Predictive Business Analytics and the application of Generative AI in forecasting and data-driven decision-making. It covers predictive modeling concepts, forecasting techniques, scenario planning, and business reporting to support strategic decisions. Students will learn how to analyze business trends, evaluate predictive models, and communicate insights effectively using data visualization and predictive reports.
Course Outcomes: At the end of the course students will be able to:	
CO1	Explain predictive analytics concepts, forecasting fundamentals, regression, classification, and GenAI support.
CO2	Apply forecasting models, predictive techniques, evaluation metrics, and business forecasting tools.
CO3	Analyze forecasting scenarios, perform what-if analysis, validate AI-generated predictions, and support decision-making.
CO4	Design predictive reports, executive summaries, dashboards, and AI-assisted business insights with ethical considerations.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:				
L (Hours/Week)		**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3		**1**	**0**	**4**
Unit	**Content**			**Competencies**
1	**Building Predictive Thinking in Business** What is Predictive Analytics and why it matters in business, Business problems solved by forecasting (sales, churn, demand), Data requirements for prediction, Understanding trends, seasonality, and patterns, Basics of correlation and causation, Linear regression: concept and use, Classification vs. Regression problems, Evaluating predictions: Accuracy, MAE, RMSE, Common pitfalls: overfitting, underfitting, Ethics and fairness in prediction, Selecting the right prediction technique for the problem, Generating hypotheses for forecasting, How GenAI supports predictive reasoning (not modeling), Prompt templates for forecasting workflow.			1. Understand the fundamentals of predictive analytics and business forecasting. 2. Identify trends, patterns, and suitable prediction techniques for business problems. 3. Apply basic regression, classification, and prediction evaluation methods. 4. Develop forecasting hypotheses using business data and GenAI-assisted reasoning. 5. Recognize ethical issues and common challenges in predictive analytics.
2	**Tools and Techniques in Business Forecasting :** Forecasting models overview: Time series, Regression, Decision Trees, When to use which model, Introduction to Time Series Components (trend, seasonality), Lag features and rolling averages, Business use cases: demand forecasting, attrition, finance, Evaluation metrics: MSE, R^2, confusion matrix, Visualizing predictions and actuals, Understanding lead vs. lag indicators, Model deployment in decision-making, Data preparation for forecasting, Using GenAI for assumptions, insights, and summaries, Case study discussion: marketing campaign forecast.			1.Understand and apply business forecasting models and techniques. 2.Analyze time series data using trends, seasonality, and lag features. 3.Evaluate predictive models using appropriate performance metrics. 4.Interpret forecasting results for business decision-making and reporting. 5.Utilize Generative AI to generate forecasting insights, assumptions, and summaries.
3	**Forecasting, Scenario Planning & What-If Analysis:** Scenario-based forecasting in business, Short-term vs long-term prediction use cases, GenAI for what-if simulation prompts, Demand and supply forecasting frameworks, Risk			1. Apply scenario planning and what-if analysis for business forecasting. 2. Interpret forecasting results using historical and hypothetical data.

	modeling and stress testing, Customer behavior forecasting with text + numeric inputs, Back casting: working backward from goals, Combining historical and hypothetical data, Validating AI-generated forecasts, Natural language forecasting explanations, Asking GenAI "What insights can be drawn from this data?", Using GenAI to explain failure of a prediction.	3. Utilize GenAI to generate, validate, and explain business forecasts. 4. Evaluate forecasting risks and support data-driven decision-making. 5. Communicate predictive insights and recommendations effectively.
4	**Predictive Reporting, Insight Communication & Decision Support**: From forecast to business action, Designing insight-driven reports, GenAI for converting charts into insights, Crafting executive summaries using GenAI, Supporting presentations with predictive insights, Multi-format reporting: narrative, visual, tabular, GenAI-generated risk alerts and action suggestions, Prompting for storytelling: "So what?" behind data, Creating automated alerts and briefings with GenAI, Review of AI-generated conclusions — what to verify, Misuse of GenAI in predictive business settings.	1. Develop insight-driven predictive reports for business decisions. 2. Use GenAI to generate executive summaries and actionable insights. 3. Communicate predictive findings through narrative, visual, and tabular reports. 4. Create AI-assisted risk alerts, briefings, and data storytelling outputs. 5. Evaluate and verify AI-generated conclusions while ensuring ethical use of GenAI.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem based learning practicals and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4
Assignment	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓
Project	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓
Class Test	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340402
Course Title	Marketing Analytics & Generative AI for Business Impact
Academic Year	2025-26
Semester	IV
Number of Credits	4
Course Prerequisite	Basic knowledge of Marketing Analytics, Business Statistics, and Microsoft Excel & Familiarity with Generative AI tools
Course Synopsis	This course introduces students to the fundamentals of **Marketing Analytics** and the application of **Generative AI** in data-driven marketing. It covers customer analytics, market segmentation, campaign performance measurement, digital marketing metrics, predictive marketing, and consumer behavior analysis. Students will learn to use analytics and GenAI tools to generate marketing insights, optimize campaigns, create personalized content, automate reporting, and support strategic marketing decisions while understanding ethical considerations in AI-enabled marketing.
Course Outcomes: At the end of the course students will be able to:	

CO1	Explain marketing analytics concepts, digital metrics, dashboards, customer lifecycle, and the role of Generative AI in marketing.
CO2	Apply customer segmentation, personas, AI-driven targeting, personalization, and prompt engineering for marketing strategy.
CO3	Develop and evaluate AI-assisted marketing campaigns using A/B testing, content generation, SEO, and campaign analytics.
CO4	Analyze marketing performance and apply Generative AI for strategic decision-making, sentiment analysis, retention strategies, and ethical marketing practices.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	**Fundamentals of Marketing Analytics:** What is Marketing Analytics? Role of data in modern marketing, Introduction to customer lifecycle and funnel stages, Key metrics: CAC, CLV, ROAS, Conversion Rate, Web, social, email, and ad analytics, Descriptive vs Predictive analytics in marketing, Campaign tracking and attribution models, Customer segmentation basics, Introduction to dashboards and KPIs, Ethics in digital and marketing data, understanding cookies, consent, and privacy (GDPR basics), Why marketers are using Generative AI.	1.Understand core marketing analytics concepts, customer lifecycle, and marketing funnels. 2.Interpret key marketing KPIs and campaign performance metrics. 3.Apply customer segmentation and dashboard-based marketing analysis. 4. Use Generative AI to support marketing insights and decision-making. 5.Demonstrate ethical use of marketing data, privacy, and AI practices.

2	**Customer Segmentation, Personas & Targeting with AI:** Importance of customer segmentation in strategy, Demographic, psychographic, behavioral segmentation, RFM Analysis and clustering, Personalization in marketing, Customer personas: What, why, and how, Journey mapping and AI automation, Using AI for dynamic content and targeting, Prompt engineering for customer research, Understanding consumer trends through social data, Introduction to NLP (Natural Language Processing), Bias and fairness in AI-powered targeting, Do's and Don'ts of AI-driven personalization.	1.Apply customer segmentation techniques for targeted marketing strategies. 2.Develop customer personas and journey maps using AI-driven insights. 3.Use Generative AI and prompt engineering for personalized marketing and customer research. 4.Analyze consumer behavior and social data to identify market trends. 5.Evaluate ethical considerations, bias, and fairness in AI-powered targeting and personalization.
3	**Campaign Planning, Content & A/B Testing Using GenAI:** Campaign design: goals, targeting, timelines, Multi-channel strategy: email, social, paid, Copywriting essentials for marketing, A/B Testing: concepts and best practices, Landing pages and CTAs, Prompt design for campaign generation, Personalization at scale with AI, Evaluating campaign ROI and conversion, Visual content generation with AI tools, SEO basics and content optimization, Social media analytics, Role of GenAI in streamlining campaign creation.	1. Design and plan data-driven marketing campaigns using GenAI. 2. Create AI-assisted marketing content and personalized campaign assets. 3. Apply A/B testing, SEO, and social media analytics to optimize campaign performance. 4. Evaluate campaign effectiveness using ROI, conversion, and engagement metrics. 5.Utilize GenAI tools for efficient campaign creation and marketing decision-making.
4	**Marketing Strategy & Decision-Making with GenAI:** Using data for pricing, promotion, and product decisions, SWOT and PESTLE using AI, Competitor analysis with GenAI tools, Sentiment analysis: concept and tools, predicting churn and retention strategies, Strategic use of dashboards, Ethics of AI-generated content in marketing, Bias and risk in algorithmic targeting, interpreting analytics reports correctly, Customer feedback loops with AI, Marketing mix modeling.	1. Apply marketing analytics for strategic pricing, promotion, and product decisions. 2. Use GenAI for competitor analysis, sentiment analysis, and customer retention strategies. 3. Interpret dashboards and analytics reports to support business decision-making. 4. Develop AI-assisted marketing strategies using customer feedback and marketing mix modeling. 5. Evaluate ethical issues, bias, and risks in AI-powered marketing decisions.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem based learning practicals and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	Contact Hours
Lecture	35
Tutorial	10

Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	Summative
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4
Assignment	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓
Project	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓
Class Test	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340403

Course Title	Operations Management
Academic Year	2025-26
Semester	IV
Number of Credits	4
Course Prerequisite	Students are expected to have a foundational understanding of: • Basic understanding of business functions and management principles • Familiarity with quantitative methods and statistics is desirable but not mandatory
Course Synopsis	This course offers a comprehensive understanding of Operations Management (OM) and its strategic role in manufacturing and service organizations. It covers foundational concepts, tools, and contemporary practices related to process design, capacity planning, facility layout, inventory management, quality control, and operations strategy. Through theoretical insights and real-world case studies such as Toyota Production System, Amazon Fulfillment Centers, and Tesla Gigafactory, students will analyze and design efficient operational systems. The course aims to enhance decision-making skills, analytical thinking, and strategic alignment in operations to build competitive advantage.

Course Outcomes:
At the end of the course students will be able to:

CO1	Explain the scope, evolution, and strategic importance of operations management in both manufacturing and service sectors..
CO2	Analyze and design operational processes through tools such as flowcharts, bottleneck analysis, and alignment of product-process strategies
CO3	Apply capacity planning, facility layout, and location decision-making tools for optimizing operational performance.
CO4	Evaluate inventory models, supply chain coordination strategies, and demand forecasting techniques for effective supply chain operations.
CO5	Utilize quality management tools and lean practices such as Six Sigma, TQM, and Kaizen to improve operational efficiency

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

(COs)	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4
CO1	3	2	2	2	1	2	2	2	1
CO2	3	3	2	3	2	3	3	3	2
CO3	3	3	2	3	3	3	3	3	3
CO4	3	3	2	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3
Average	3.0	2.8	2.2	2.8	2.4	2.8	2.8	2.8	2.4

Course Content:

L (Hours/Week)	T (Hours/ Week)	P (Hours/Week)	Total Hour/Week
3	1	0	4

Unit	Content	Competencies
1	Introduction to Operations Management & Process Design: Scope, evolution, and role of operations management in strategic context, Types of operations: manufacturing vs. services, Process analysis: flow diagrams, bottlenecks, throughput, Product and process design alignment Case: Toyota Production System / McDonald's service process	Ability to critically understand and map business processes and align them with strategic objectives using industry frameworks and flow analysis.
2	Capacity Planning, Facility Layout & Location Decisions: Capacity concepts and measurement, Facility layout types and decision models, Location planning and site selection models, Line balancing and process optimization. Tools: Break-even analysis, Learning curves Case: Amazon Fulfillment Center Design	Competence in evaluating capacity requirements, designing optimal layouts, and applying site selection models for efficient resource utilization.
3	Inventory Management & Supply Chain Operations: Types and costs of inventory; EOQ, safety stock, reorder point, ABC analysis, Just-in-Time (JIT), Vendor Managed Inventory (VMI), Bullwhip effect, demand	Capability to manage inventory using EOQ, JIT, and demand forecasting techniques, and to optimize

	forecasting techniques, Supply chain integration and coordination Case: Zara's Fast Fashion Model / Dell's Supply Chain	supply chains through integration and coordination.
4	Quality Management & Lean Operations: Quality concepts: dimensions, costs of quality Tools: Six Sigma, Total Quality Management (TQM), SPC Lean principles and waste elimination (Muda), Kaizen, 5S, Poka-Yoke Case: Motorola Six Sigma / GE Lean Transformation	Proficiency in applying quality tools and le and enhance operational Excellence.
5	Technology, Sustainability & Operations Strategy: Role of technology: ERP, IoT, Automation in operations, Time-based competition and agile operations, Sustainable operations and green supply chains Operations strategy: Globalization, Outsourcing, Resilience Case: Tesla Gigafactory / Apple's Global Production Network	Strategic acumen to integrate technology, sustainability, and global operations decisions into business models to build competitive advantage. .

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem-Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Assignment
Case Based Presentation
Project
Business News Analysis
Mid Semester Examination

Mapping of Assessment with Cos

CO/Assessment	Assignment	Project	Case-Based Presentation	Business News Analysis	Mid-Semester Exam	End-Semester Exam
CO1	✓					✓
CO2	✓	✓	✓	✓		✓
CO3	✓	✓	✓			✓
CO4	✓	✓	✓			✓
CO5	✓	✓	✓	✓		✓

Student's Feedback

(List of reference books)

1. *Operations Management: Processes and Supply Chains* by Krajewski, L.J., Malhotra, M.K., & Ritzman, L.P.; Pearson Education.
   (Strong focus on real-world cases and process alignment)
2. *Operations Management* by Heizer, J., Render, B., & Munson, C.; Pearson
   (Covers essential tools and techniques including break-even, capacity, layout, and lean)
3. *Supply Chain Management: Strategy, Planning, and Operation* by Chopra, S., & Meindl, P. Pearson.
   (Essential for Unit III - inventory and supply chain coordination)
4. *Operations Management* by Slack, N., Brandon-Jones, A., & Johnston, R**.;** Pearson Education.
   (Global cases and in-depth focus on operations strategy and sustainability)
5. *Operations and Supply Chain Management by* Jacobs, F.R., & Chase, R.B**.,** McGraw-Hill Education.
   (Integrated view of supply chain and operations tools in practice)
6. *Managing for Quality and Performance Excellence* by Evans, J.R., & Lindsay, W.M**.;** Cengage Learning.
   (Dedicated to TQM, Six Sigma, and continuous improvement practices)

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340404
Course Title	Human Resource Management
Academic Year	2025-26
Semester	IV

Number of Credits	4
Course Prerequisite	Basic management understanding. Communication skills.
Course Synopsis	This Course is the basic course for Human resource management students to provide them knowledge and evolution of human resources. The units or modules in this subject are designed to deeply impart the understanding of functions of HRM along with light on human resource information system and contemporary challenges of HR field for managers. This course will help the students to realize the human resource management applications in organizations such as training and development activities and international issues.
Course Outcomes: At the end of the course students will be able to:	

CO1	Develop the understanding of the concept of human resource management and to understand its relevance in organizations.
CO2	Develop necessary skill set for application of various HR issues
CO3	Analyse the strategic issues and strategies required to select and develop manpower resources.
CO4	Examine the knowledge of HR concepts to take correct business decisions.
CO5	**Evaluate and apply labor laws and conflict resolution techniques** to effectively manage labor relations, ensuring legal compliance and fostering a fair and ethical workplace environment.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	1	1	3	1	1	1	3
CO2	1	3	1	1	1	3	1	1	1
CO3	1	1	3	1	1	1	3	1	1
CO4	1	1	1	3	1	1	1	3	1
CO5	1	1	3	1	1	1	3	1	1
Average	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Course Content:

L (Hours/Week)	T (Hours/ Week)	P (Hours/Week)	Total Hour/Week
3	1	0	4

Unit	Content	Competencies
1	Nature of Human Resource Management-Concepts, Objectives and Functions; HRD-Concept and Mechanisms; Role and status of HR Manager; Organization of HR Department; HR Policies; HRM in globally competitive environment; Strategic Human Resource Management.	● Demonstrate a comprehensive understanding of HRM concepts, objectives, and functions, including the role and status of the HR Manager. ● Analyze and implement HR policies and practices in a globally competitive environment, aligning them with strategic HRM principles.
2	Acquiring Human Resource: Human Resource Planning, Job analysis and job design, employee involvement, flexible work schedules, Recruitment and Selection-new trends; Placement and induction; Right sizing.	● Apply HR planning, job analysis, and modern recruitment methods to effectively acquire and induct new employees. ● Design and evaluate employee training programs, including executive development and career planning, to enhance organizational capabilities.
3	Developing human resource: Employee training, training need assessment, Training methods and evaluation, cross cultural training, Designing executive development programme, Techniques of Executive development, Career planning and development.	● Ability to distinguish between various leadership styles (Autocratic, Democratic, Laissez-faire, Situational, Servant Leadership) and understand their impact on team performance. ● Competence in leading and managing multicultural teams, recognizing the influence of cultural diversity on team dynamics.
4	Enhancing and rewarding performance: Establishing Performance Management system; Performance Appraisal-Techniques of appraisal; Potential Appraisal and employee counselling; Establishing reward	● Develop and implement performance management systems and appraisal techniques to assess and enhance employee performance.

	and pay plans-job evaluation, wage and incentive plans, employee benefits, ensuring safety and healthy work environme	● Establish and manage reward and pay plans, including job evaluation and incentive schemes, to motivate and retain employees.
5	Explore labor relations, trade unions, and their impact on organizational effectiveness. Understand key labor laws like the Industrial Disputes Act and the Employee Provident Fund Act. Learn conflict resolution techniques and ensure adherence to legal and ethical standards in HR practices.	● Apply knowledge of key labor laws and regulations to ensure compliance and address legal issues in HR practices. ● Develop and implement effective conflict resolution strategies to manage workplace disputes and uphold ethical standards.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem-Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination

Case Based Presentation	
Project	
Business News Analysis	
Mid Semester Examination	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓			✓
Case Based Presentation		✓	✓	✓	
Project			✓	✓	✓
Business News Analysis	✓			✓	
Mid Semester Examination					
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

1. "Human Resource Management: A Contemporary Approach" by Ian Beardwell, Len Holden, and Tim Claydon (Pearson, 8th Edition, 2021)
2. "Training and Development: Enhancing Skills for Organizational Success" by David A. DeCenzo and Stephen P. Robbins (Wiley, 3rd Edition, 2022)
3. "Performance Management: Changing Behavior that Drives Organizational Effectiveness" by Aubrey C. Daniels (Performance Management Publications, 3rd Edition, 2017)
4. "Employment Law for Human Resource Practice" by Stephen J. Perkins and Geoffrey Wood (Cengage Learning, 6th Edition, 2020)

SEMESTER V

Course Code	Course Title
06340501	Financial Management
06340502	Supply Chain Management
06340503	HR Analytics & Generative AI for People-Centric Decisions
06340504	Generative AI in Finance: Learn, Analyze, Decide
06340505	Data Visualization

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340501
Course Title	Financial Management
Academic Year	2025-26
Semester	V
Number of Credits	4
Course Prerequisite	Basic knowledge of Accounts and Financial Statements.
Course Synopsis	This course provides a comprehensive overview of financial management principles and their application in organizational decision-making. Students will gain a solid understanding of core financial concepts, including financial analysis, investment appraisal, cost of capital, capital structure, dividend policy, and working capital management. The course emphasizes both theoretical knowledge and practical application, equipping students with the skills to make informed financial decisions that contribute to organizational success and value creation.

Course Outcomes:

At the end of the course students will be able to:

CO1	Explain the fundamentals of financial management and its role in organizational success.
CO2	Evaluate investment opportunities using appropriate capital budgeting techniques.
CO3	Determine the optimal capital structure for a firm.

CO4	Analyze the impact of leverage and dividend policy on shareholder wealth.
CO5	Manage working capital efficiently to optimize liquidity and profitability.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	3	3	2	2	1	2	3	3	3	2
CO2	3	3	2	2	1	2	3	3	3	2
CO3	3	3	2	2	1	2	3	3	3	2
CO4	3	3	2	2	1	2	3	3	3	2
CO5	3	3	2	2	1	2	3	3	3	2
Average	3	3	2	2	1	2	3	3	3	2

Course Content:

L (Hours/Week)	T (Hours/Week)	P (Hours/Week)	Total Hour/Week
3	**1**	**0**	**4**

Unit	Content	Competencies
1	Financial Management: Meaning, concept, significance, objectives and scope; financial decisions. Time value of money, Risk and Return Analysis.	• Explain the significance and objectives of financial management in achieving organizational goals. • Describe the scope and functions of financial management in different organizational contexts. • Evaluate different investment options using time value of money concepts. • Assess the risk-return profile of various investment opportunities.
2	Investment Decisions: Capital Budgeting: Estimation of relevant cash flows and terminal value; Evaluation techniques -	• Describe the methods for estimating terminal value.

	Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index Method, RADR (Risk Adjusted Discount Rate).	• Calculate accounting rate of return, net present value, internal rate of return, profitability index, and risk-adjusted discount rate. • Explain the assumptions and limitations of each capital budgeting technique. • Define risk in the context of capital budgeting and its implications.
3	Cost of Capital and Financing Decisions: Concept, significance, computation of cost of capital: cost of debt, cost of preference capital, cost of equity share capital, cost of retained earnings. Weighted average cost of capital(WACC) and Marginal Cost of Capital Capital Structure: Theories of Capital Structure (Net Income; Net Operating Income; MM Hypothesis, Traditional Approach). Determinants of Capital Structure Leverages: Meaning and types (financial leverage, operating leverage, composite leverage and its computation.	• Determining the cost of different financing sources. **Compute** the weighted average cost of capital (WACC) and marginal cost of capital. • Understanding the mix of debt and equity financing. • Analyzing the impact of debt on a company's financial performance. • Analyze a company's capital structure and determine its optimal mix. • Evaluate the impact of changes in capital structure on a company's financial performance. • Calculate the impact of financial and operating leverage on a company's earnings.
4	Dividend Decision: Theories for Relevance and Irrelevance of dividend decisions for corporate valuation- Walter's model, Gordon's model, MM hypothesis.	• Understanding the different perspectives on the impact of dividends on firm value. • Analyze a company's dividend policy and its impact on shareholder wealth. • Evaluate the appropriateness of different

	Cash and Stock Dividends. Dividend Policy, determinants affecting dividend policy.	dividend policies under various circumstances.
5	Working Capital Decisions: Concepts of Working Capital; Operating and Cash Cycle; short term sources of finance; Determinants and need of Working Capital; Computation of working capital ; cash management; receivables management; inventory management	• **Explain** the operating and cash cycles and their impact on working capital requirements. • Identify different sources of short-term financing and **Select** appropriate short-term financing options based on a company's needs. • **Evaluate** the objectives and techniques of cash management, receivables management, inventory management and working capital estimation

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	30
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	5
Problem Based Learning (PBL)	6
Case/Project Based Learning (CBL)	4
Revision	1
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative

Assignment
Case Based Presentation
Project
Business News Analysis
Class Test (Oral / Written)

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment / Presentation / Practical Log Book/ Record Book	✓	✓	✓	✓	✓
Class test (Oral and written)/ Quiz		✓	✓	✓	✓
Project/ Case Studies/Case Concept Analysis		✓	✓		✓
Business News Analysis	✓				
Class room Exercise and Simulation	✓	✓	✓	✓	✓
Student's Feedback					

(List of reference books)

- Financial Management by IM Pandey, Vikas Publishing (11 Edition)
- Khan and Jain. Financial Management, Text, problems & Cases (Eight Edition) McGraw Hill Education
- R.P. Rustagi, Financial Management (14 edition), Taxmann Publications
- Chandra, P. Financial Management: theory & Practice. (10 edition) McGraw Hill Education

School of Commerce and Management	
Name of the Department	Commerce and Management

Name of the Program	BBA- Business Analytics
Course Code	06340502
Course Title	Supply Chain Management
Academic Year	2025-26
Semester	V
Number of Credits	4
Course Prerequisite	Students should have a basic understanding of Logistics. To develop competencies and knowledge of students to become logistics professionals
Course Synopsis	

Course Outcomes:

At the end of the course students will be able to:

CO1	Explain the fundamentals, components, and strategic role of Supply Chain Management in business operations.
CO2	Apply procurement and inventory management techniques to support efficient supply chain performance
CO3	Analyze logistics, transportation, warehousing, and distribution functions within supply chains.
CO4	Utilize supply chain planning tools and technologies to enhance coordination and decision-making.
CO5	Evaluate sustainable, ethical, and global supply chain practices for improved organizational effectiveness.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**		
CO1										
CO2										
CO3										
CO4										
CO5										
Average										

Course Content:

L (Hours/Week)	T (Hours/ Week)	P (Hours/Week)	Total Hour/Week
3	1	0	4

Unit no	Content	Competency
1	**Unit 1: Introduction to Supply Chain Management :** Meaning, evolution, and importance of Supply Chain Management; Components of SCM; Supply Chain Drivers; Supply Chain Network Structure; Supply Chain Processes; Role of SCM in Business Competitiveness; Global Supply Chain Trends and Challenges.	• Understand the fundamentals of supply chain management. • Explain the role of SCM in business success.• Identify key supply chain components and stakeholders.• Analyse supply chain structures and processes.• Develop awareness of global supply chain challenges.
2	**Unit 2: Procurement and Inventory Management:** Purchasing and Procurement Concepts; Supplier Selection and Evaluation; Strategic Sourcing; Inventory Management Principles; Types of Inventory; EOQ, Reorder Point, Safety Stock; Inventory Control Techniques (ABC, VED Analysis); Supplier Relationship Management.	• Apply procurement principles in business scenarios.• Evaluate supplier performance and sourcing decisions.• Analyze inventory requirements and control methods.• Use inventory management tools for decision-making.• Develop supplier relationship management skills.
3	**Unit 3: Logistics and Transportation Management:** Logistics Concepts and Functions; Transportation Modes and Selection Criteria; Warehousing and Material Handling; Distribution Management; Packaging and Labelling; Third-Party Logistics (3PL); Reverse Logistics; Last-Mile Delivery Concepts.	• Understand logistics operations and transportation systems.• Evaluate transportation and warehousing decisions.• Analyze distribution and material handling processes.• Apply logistics concepts to business operations.• Assess reverse logistics and sustainability practices.
4	**Unit 4: Supply Chain Planning and Technology**: Demand Forecasting; Aggregate Planning; Capacity Planning; Supply Chain Coordination; Information Sharing in Supply Chains; Enterprise Resource Planning (ERP); Supply Chain Analytics; Emerging Technologies in SCM (IoT, AI, Blockchain, RFID).	• Apply forecasting and planning techniques.• Understand the role of technology in supply chain integration.• Analyze supply chain data for decision-making.• Evaluate the impact of digital technologies on SCM.• Develop technology-enabled problem-solving skills.
5	**Unit 5: Sustainable and Global Supply Chain Management:** Global Supply Chains; Supply Chain Risk Management; Green Supply Chain Management; Sustainable Procurement; Circular Economy Concepts; Ethical Issues in SCM; Supply Chain Performance Measurement; Future Trends in Supply Chain Management.	• Analyze global supply chain operations and risks.• Evaluate sustainable and ethical supply chain practices.• Apply performance measurement techniques.• Understand environmental and social responsibilities in SCM.• Develop strategic thinking for future supply chain challenges.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Mid Semester Examination	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓				
Project		✓	✓		
Case Based Presentation				✓	✓

Business News Analysis		✓	✓		
Mid Semester Examination	✓	✓			
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					

List of Reference Books

1. *Supply Chain Management: Strategy, Planning, and Operation* – Sunil Chopra and Peter Meindl, Pearson Education.
2. *Logistics and Supply Chain Management* – Martin Christopher, Pearson Education.
3. *Supply Chain Logistics Management* – Donald J. Bowersox, David J. Closs, M. Bixby Cooper, and John C. Coyle, McGraw-Hill Education.
4. *Fundamentals of Supply Chain Management* – John T. Mentzer, Sage Publications.
5. *Purchasing and Supply Chain Management* – Robert M. Monczka, Robert B. Handfield, Larry C. Giunipero, and James L. Patterson, Cengage Learning.
6. *Operations and Supply Chain Management* – F. Robert Jacobs and Richard B. Chase, McGraw-Hill Education.
7. *Essentials of Supply Chain Management* – Michael H. Hugos, Wiley India.
8. *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* – David Simchi-Levi, Philip Kaminsky, and Edith Simchi-Levi, McGraw-Hill Education.
9. *Introduction to Materials Management* – J. R. Tony Arnold, Stephen N. Chapman, and Lloyd M. Clive, Pearson Education.
10. *Global Operations and Supply Chain Management* – John T. Mentzer, Sage Publications.

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340503
Course Title	HR Analytics & Generative AI for People-Centric Decisions
Academic Year	2025-26
Semester	V
Number of Credits	4
Course Prerequisite	Basic knowledge of Excel & HR Analytics
Course Synopsis	This course introduces students to the fundamentals of **HR Analytics** and the application of **Generative AI** in data-driven human resource management. It covers workforce analytics, talent

	acquisition, employee performance, engagement, retention, workforce planning, and HR decision-making using data. Students will learn to leverage HR analytics and GenAI tools to generate insights, automate HR reporting, support recruitment and performance management, predict workforce trends, and make people-centric decisions while understanding the ethical, legal, and responsible use of AI in Human Resource Management.

Course Outcomes:
At the end of the course students will be able to:

CO1	Explain HR analytics concepts, HR metrics, HRIS, Generative AI, and ethical AI practices in HR.
CO2	Apply HR analytics and GenAI to talent acquisition, recruitment, onboarding, and hiring decisions.
CO3	Analyze employee performance, learning, engagement, and AI-assisted feedback for workforce development.
CO4	Evaluate attrition, retention, workforce planning, and strategic HR decisions using predictive analytics and Generative AI.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:

L (Hours/Week)	T (Hours/ Week)	P (Hours/Week)	Total Hour/Week
3	**1**	**0**	**4**

Unit	Content	Competencies
1	**Foundations of HR Analytics & Generative AI:** Introduction to HR Analytics: Meaning & Importance, Evolution: From Traditional HR to Data-Driven HR, Overview of Structured vs	1. Understand the fundamentals of HR Analytics and key workforce metrics. 2. Use HRIS data and Generative AI tools for people analytics.

	Unstructured HR Data, Key HR Metrics: Headcount, Attrition, Time-to-Hire, Cost-per-Hire, Role of HRIS (Human Resource Information Systems), Introduction to Generative AI: What, Why, How, Key Generative AI Tools for HR (ChatGPT, Copilot, Bard), Opportunities of AI in People Analytics, Challenges and Risks in AI-Powered HR, Understanding Bias and Hallucination in GenAI, Data Ethics and Privacy in People Analytics, The Human + AI Collaboration Model in HR	3. Interpret structured and unstructured HR data for decision-making. 4. Apply ethical, responsible, and bias-aware AI practices in HR. 5. Leverage Human–AI collaboration to improve HR processes and workforce insights.
2	**Talent Acquisition & Onboarding Analytics with GenAI:** Understanding the Recruitment Funnel, Metrics in Talent Acquisition: TAT, Source Efficiency, CPH, Measuring Onboarding Effectiveness, AI in Resume Screening: Strengths and Limitations, Generating Job Descriptions with ChatGPT, AI Tools in Candidate Engagement, Diversity & Inclusion in Hiring Analytics, Early Attrition Analysis and Prediction, Candidate Experience Feedback Analytics, Prompts for Evaluating Candidate Fitment, Role of Predictive Analytics in Hiring Success, Ethics of AI in Recruitment and Hiring	1. Apply recruitment analytics to improve hiring and onboarding decisions. 2. Use GenAI for job description creation, resume screening, and candidate engagement. 3. Analyze recruitment metrics, onboarding effectiveness, and early attrition trends. 4. Evaluate candidate fit using predictive analytics and AI-assisted insights. 5. Ensure ethical, fair, and inclusive use of AI in talent acquisition and hiring.
3	**Employee Performance, Learning & Engagement Analytics:** Performance Metrics: KPIs, 360-Degree Feedback, Linking Employee Performance to Business Outcomes, Designing Data-Driven Appraisals, Identifying High Performers and Skill Gaps, Training Analytics: Need, Participation, Effectiveness, L&D ROI: Measuring Return on Training, Engagement Metrics: Surveys, eNPS, Participation, Sentiment Analysis from Feedback Text, Burnout Prediction & Wellness Tracking, Creating Personalized L&D Paths Using AI, Ethical Challenges in AI-Based Performance Reviews, Feedback Summarization Using Generative AI.	1. Measure employee performance using HR metrics and KPIs. 2. Analyze learning, training effectiveness, and employee engagement data. 3. Apply AI for performance evaluation, feedback summarization, and personalized learning paths. 4. Interpret workforce insights to support talent development and business outcomes. 5. Evaluate ethical considerations in AI-driven performance management and employee analytics.
4	**Attrition, Retention & Strategic Workforce Planning with GenAI** Attrition Types and Key Metrics, Drivers of Voluntary & Involuntary Attrition, Exit Data Analytics: Trends and Patterns, Predictive Modeling for Employee Retention, Workforce	1. Analyze employee attrition trends and workforce metrics. 2. Apply predictive analytics and GenAI for employee retention planning. 3. Develop strategic workforce plans and HR scorecards.

	Planning: Forecasting and Optimization, Career Path Mapping and Succession Planning, Building an HR Scorecard, Role of GenAI in Strategic HR Reports, Writing Retention Policies with AI Assistance, Visualizing Turnover Data, Building Flight Risk Profiles Ethically, Future of AI in Workforce Strategy.	4. Visualize workforce data and generate AI-assisted HR reports. 5. Evaluate ethical use of GenAI in workforce planning and retention strategies.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem based learning practicals and class test and certificate exam.

Teaching – Learning Strategies and Contact Hours

Teaching – Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with Cos

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**
Assignment	✓	✓	✓	✓

Case Based Presentation	✓	✓	✓	✓
Project	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓
Class Test	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓

SEMESTER VI

Course	Course Title
06340601	Risk and Fraud Analytics
06340602	R Programming
06340603	Project and Case Studies
06340604	Machine Learning for Business
06340605	Strategic Management

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA – Business Analytics
Course Code	06340601
Course Title	**Risk & Fraud &Analytics**
Academic Year	2025-26
Semester	VI
Number of Credits	4
Course Prerequisite	Basic knowledge of Excel.
Course Synopsis	The objective of learning risk and fraud analytics is to gain the skills and knowledge necessary to identify and mitigate risks and detect fraud using data analytics techniques. Risk and fraud analytics are essential for businesses and organizations to identify potential risks and frauds in their operations, products, and services. Marketing

	analytics involves using data analysis techniques to identify trends and patterns in consumer behavior, while customer analysis involves analyzing customer data to understand their preferences, behavior, and needs.

Course Outcomes: At the end of the course students will be able to:	
CO1	Classify different type of frauds and understand how to differentiate between anomalies and fraud within data
CO2	Make use of data to detect fraud.
CO3	Discover the fraud in billing scheme using different tools and techniques.
CO4	Inspect the possibility of a payroll and expense reimbursement fraud.
CO5	Identify trends and patterns in consumer behavior using data analytics techniques

Mapping of Course Outcomes (Cos) to Program Outcomes (Pos)& Program Specific Outcomes:

Cos	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO5	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	**Introduction** Define fraud, anomalies vs fraud, types of fraud, the risk of fraud, Fraud detection, Recognizing Fraud, Data analytical software, anomalies versus fraud within data, Fraud Data inclusions and deletions.	1. Understand fraud concepts, types, and fraud risks in business. 2. Differentiate between anomalies and fraudulent activities in data. 3. Identify fraud indicators using data analytical tools and techniques. 4. Analyze data inclusions, deletions, and irregular patterns for fraud detection. 5. Apply analytical thinking to recognize and investigate potential fraud cases.

2	**Fraud Data Analysis Process –** Evaluation and analysis, obtain data file, Type of file formats, Data analysis preparation, arrange data, organize data **Data Analysis Tests –** Benford's Law, Number duplication test, z-score, relative size factor test, same-same-same test, same-same-different test, even amounts, correlation, trend analysis.	1. Prepare and organize fraud-related data from multiple file formats for analysis. 2. Apply fraud detection techniques such as Benford's Law, duplication, and z-score tests. 3. Perform statistical analysis using correlation, trend, and anomaly detection methods. 4. Interpret analytical results to identify suspicious transactions and fraud patterns. 5. Support fraud investigation through data-driven evaluation and reporting.
3	**Billing Scheme –** Data familiarization, Benfords's law test, relative size factor test, z-score, even dollar amounts, same-same-same test, same-same-different test, payment without purchase orders test, length of time between invoice and payment dates test, search for post office box, match employee address to supplier, duplicate addresses in vendor master, payments to vendor not in master, gap detection of check number sequences.	1. Apply data familiarization techniques to identify anomalies and fraud indicators. 2. Perform statistical fraud detection using Benford's Law, Z-score, and Relative Size Factor tests. 3. Analyze billing and payment data to detect duplicate, unusual, and unauthorized transactions. 4. Validate vendor and employee records using data matching and exception testing techniques. 5. Identify payment irregularities through sequence analysis, gap detection, and compliance checks.
4	**Payroll Fraud and Expense Reimbursement Fraud –** Data familiarization, data analysis, the payroll register, payroll master and commission tests, Network Analysis.	1. Analyze payroll and expense reimbursement data to identify anomalies. 2. Apply payroll register, master, and commission tests for fraud detection. 3. Perform data familiarization and analytical techniques for fraud investigation. 4. Use network analysis to identify suspicious relationships and fraudulent patterns. 5. Interpret fraud analytics results to support audit and business decisions.
5	Introduction to Marketing Analytics and Customer Analysis, Market Segmentation, Customer Lifetime Value, New Product Decisions, Advertising, Overview of Google Analytics (GA), Campaign on TV/Print/OOH/Radio/Digital platforms.	1. Understand marketing analytics concepts and customer behavior analysis. 2. Apply market segmentation and Customer Lifetime Value (CLV) for decision-making. 3. Analyze new product and advertising performance using marketing data. 4. Use Google Analytics to monitor and evaluate campaign performance.

		5.Assess multi-channel marketing campaigns across digital and traditional media.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem-based learning practicals and class test and certificate exam.

Teaching – Learning Strategies and Contact Hours

Teaching – Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with Cos

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓	✓

Class Test	✓	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					
• Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection (Wiley and SAS Business Series) • by Bart Baesens (Author), Veronique Van Vlasselaer (Author), Wouter Verbeke (Author)					

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA – Business Analytics
Course Code	06340602
Course Title	R Programming
Academic Year	2025-26
Semester	VI
Number of Credits	4
Course Prerequisite	Basic knowledge of the programming and statistics
Course Synopsis	R programming is a popular language for statistical computing and data analysis, and it has become an important tool for business professionals in a wide range of fields. R programming is ideal for data analysis and visualization, making it an essential tool for professionals in fields such as finance, marketing, and operations management. Learning R programming can help students gain a better understanding of how data can be used to make informed business decisions

Course Outcomes:
At the end of the course students will be able to:

CO1	Experiment with basic R code, including creating variables, data types, and functions.
CO2	Examine and manipulate data using R, including importing and exporting data, subsetting data, merging data sets, and cleaning data.
CO3	Build visualizations using R, including basic and advanced plots, graphs, and charts.
CO4	Examine data with the help of statistical analysis using R, including descriptive statistics, regression analysis
CO5	Examine visualizations using R programming, including basic and advanced plots, graphs, and charts.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO5	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:			
L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**0**	**2**	**5**

Unit	**Content**	**Competencies**
1	**Getting Started with R and R Workspace:** Introducing R, R as a programming Language, the need of R, Installing R, RStudio, RStudio's user interface, console, editor, environment pane, history pane, file pane, plots pane, package pane, help and viewer pane R Workspace, R's working directory, R Project in R Studio, absolute and relative path, Inspecting an Environment, inspect existing Symbols, View the structure of object, removing symbols, Modifying Global Options, modifying warning level, Library of Packages, getting to know a package, installing a Package from CRAN, Updating Package from CRAN, Installing package from online repository, Package Function, Masking and name conflicts	1. Set up and manage the R programming environment using R and RStudio. 2. Organize projects and manage the R workspace, directories, and environments. 3. Install, update, and use R packages from CRAN and online repositories. 4. Inspect, manage, and modify R objects, symbols, and global options. 5. Resolve package dependencies, function masking, and naming conflicts effectively.
2	**Basic Objects and Basic Expressions:** Vectors, Numeric Vectors, Logical Vectors, Character Vectors, subset vectors, Named Vectors, extracting element, converting vector, Arithmetic operators, create Matrix, Naming row and	1. Create and manipulate vectors, matrices, arrays, lists, and data frames in R. 2. Apply arithmetic, logical, and relational operations for data processing. 3. Develop user-defined functions and implement dynamic programming concepts.

	columns, subsetting matrix, matrix operators, creating and subsetting an Array, Creating a List, extracting element from list, subsetting a list, setting value, creating a value of data frame, subsetting a data frame, setting values, factors, useful functions of a data frame, loading and writing data on disk, creating a function, calling a function, dynamic typing, generalizing a function. Assignment Operators, Conditional Expression, using if as expression and statement, using if with vectors, vectorized if: ifelse, using switch, using for loop, nested for loop, while loop.	4. Use conditional statements and iterative loops for problem-solving in R. 5. Import, manage, and transform data for basic analytical tasks.
3	**Working with Basic Objects and Strings:** Working with object function, getting data dimensions, reshaping data structures, iterating over one dimension, logical operators, logical functions, dealing with missing values, logical coercion, math function, number rounding functions, trigonometric functions, hyperbolic functions, extreme functions, finding roots, derivatives and integration.	1. Manipulate data structures and objects using built-in functions. 2. Apply logical operations and handle missing data effectively. 3. Perform mathematical, trigonometric, and rounding computations. 4. Reshape, iterate, and transform data for analysis. 5. Solve basic numerical problems using roots, derivatives, and integration functions.
4	Statistical function, sampling from a vector, working with random distributions, computing summary statistics, covariance and correlation matrix, printing string, concatenating string, transforming text, Formatting text, formatting date and time, formatting date and time to string, finding string pattern, using group to extract data, reading data.	1. Apply statistical functions and compute summary statistics for data analysis. 2. Perform random sampling, probability distributions, covariance, and correlation analysis. 3. Manipulate and format text, strings, dates, and time data effectively. 4. Extract and process data using string pattern matching and regular expressions. 5. Read, clean, and prepare data for analytical and reporting tasks.
5	**Working with Data** – Visualize and Analyze Data: Reading and Writing Data, importing data using built-in-function, READR package, export a data frame to file, reading and writing Excel worksheets, reading and writing native data files, loading built-in data sets, create scatter plot, bar chart, pie chart, histogram and density plots, box plot, fitting linear model and regression tree.	1. Import, export, and manage data using R and Excel files. 2. Read and process datasets using built-in functions and the **READR** package. 3. Create and interpret data visualizations using charts and plots. 4. Apply linear regression and regression tree models for predictive analysis. 5. Analyze datasets to derive meaningful insights and support data-driven decisions.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem-based earning practical and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓	✓	✓	✓
Case Based Presentation	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓	✓
Class Test	✓	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					

(List of reference books)
• Hands-On Programming with R by Garrett Grolemund • R for Data Science by Hadley Wickham & Garrett Grolemund

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA – Business Analytics
Course Code	06340604
Course Title	**Machine Learning for Business**
Academic Year	2025-26
Semester	VI
Number of Credits	4
Course Prerequisite	Basic knowledge of the Statistics & Python
Course Synopsis	Machine learning has become increasingly relevant in business, as it offers powerful tools for analyzing large datasets and making data-driven decisions. By learning a machine learning course, business graduate can equip their employees with the skills and knowledge necessary to leverage these tools and make informed decisions. Business graduates can use machine learning to optimize their operations, identify new opportunities, and create more value for their customers
Course Outcomes: At the end of the course students will be able to:	
CO1	Explain the use of Machine Learning Models in business and understand machine learning models can be used to solve business problems
CO2	Compare machine learning algorithms such as supervised, unsupervised, and reinforcement learning models
CO3	Identify the performance of different machine learning models and compare them to optimize the results
CO4	Make use continuous and discrete data set to fit regression and classification models

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO2	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO3	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**
CO4	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Average	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Course Content:			
L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	Introduction: Learning systems, real world applications of machine learning, why machine learning, variable types and terminology, function approximation. Types of machine learning: Supervised learning, unsupervised learning, reinforcement learning Important concepts of machine learning: Parametric vs non-parametric models, the trade-off between prediction accuracy and model interpretability, the curse of dimensionality, measuring the quality of fit, bias-variance trade off, overfitting, model selection, no free lunch theorem.	1. Understand core machine learning concepts and learning paradigms. 2. Differentiate supervised, unsupervised, and reinforcement learning techniques. 3. Identify appropriate machine learning models for different problem types. 4. Evaluate model performance considering bias-variance, overfitting, and model selection. 5. Apply foundational machine learning principles to real-world business and data-driven applications.
2	Linear Regression: Linear regression, estimating the coefficients, accessing the accuracy of coefficient estimates, accessing the accuracy of the model Classification: Logistic regression, estimating regression coefficients, making predictions, multiple logistic regressions, linear discriminant analysis, bayes' theorem of classification.	1. Apply linear and logistic regression techniques for predictive modeling. 2. Evaluate model performance using appropriate accuracy measures and metrics. 3. Perform classification using logistic regression, LDA, and Bayes' theorem. 4. Interpret regression coefficients and classification results for decision-making. 5. Select suitable predictive models for regression and classification problems.
3	Resampling Methods, Model Selection and Regularization: Cross-validation, leave-one-out cross- validation, k-fold cross-validation, the bootstrap, subset selection, shrinkage methods, ridge and lasso regression, dimension reduction methods, principal components regression Tree Based Methods: Advantages and disadvantages of trees, regression Trees,	1. Apply resampling techniques for model validation and selection. 2. Use regularization methods to improve model performance and reduce overfitting. 3. Perform dimensionality reduction for efficient predictive modeling. 4. Build and evaluate tree-based machine learning models for classification and regression.

	classification trees, bagging, random forest, boosting.	5. Compare ensemble methods such as bagging, random forests, and boosting for improved prediction accuracy.
4	Support Vector Machine: Maximum margin classifier, classification using a separating hyperplane, the maximal margin classifier, support vector classifier, support vector machines, classification with non-linear decision boundaries, support vector machine Unsupervised Learning: Principal component analysis, what are principal components, clustering methods, k-means clustering, hierarchical clustering.	1. Understand and apply Support Vector Machine (SVM) for classification problems. 2. Build classification models using linear and non-linear decision boundaries. 3. Perform dimensionality reduction using Principal Component Analysis (PCA). 4. Apply clustering techniques such as K-Means and Hierarchical Clustering. 5. Interpret and evaluate unsupervised learning results for data analysis and decision-making.

Pedagogy: A mix of pedagogy would be adopted consisting of lecture, problem-based learning practicals and class test and certificate exam.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Class Test	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**
Assignment	✓	✓	✓	✓

Case Based Presentation	✓	✓	✓	✓
Project	✓	✓	✓	✓
Business News Analysis	✓	✓	✓	✓
Class Test	✓	✓	✓	✓
End Semester Examination	✓	✓	✓	✓

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA-Business Analytics
Course Code	06340605
Course Title	Strategic Management
Academic Year	2025-26
Semester	VI
Number of Credits	4
Course Prerequisite	Students should have completed courses in Principles of Management, Consumer Behavior, and Marketing Management.
Course Synopsis	This course aims to provide students with a thorough understanding of strategic management principles and practices. Students will learn to formulate, implement, and evaluate cross-functional decisions that enable an organization to achieve its objectives. The course covers various strategic frameworks, tools, and techniques essential for analyzing and responding to complex business environments.
Course Outcomes:	

At the end of the course students will be able to:	
CO1	Define and explain key concepts and theories in strategic management, including competitive advantage, strategic intent, and strategic fit.
CO2	Analyze internal and external environments of organizations using strategic tools such as SWOT, PESTEL, and Porter's Five Forces.
CO3	Formulate and recommend strategic options based on analysis, considering the organization's strengths, weaknesses, opportunities, and threats.
CO4	Implement strategic plans effectively, considering organizational structure, culture, and resources.
CO5	Evaluate the outcomes of strategic decisions using key performance indicators and suggest improvements for future strategic initiatives.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	1			**2**				**2**	2	**1**
CO2	2	1	1	2	2			**2**	2	2
CO3	3	2	2	3	3	2	2	**2**	2	3
CO4	3	2	2	3	3	2	2	2	2	3
CO5	3	2	3	3	3	3	3	2	3	3
Average	2.4	1.75	2	2.6	2.75	2.25	2.25	2	2.2	2.4

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	**Introduction to Strategic Management** • Concepts of strategy and strategic management	• Understand and differentiate various levels of strategy and their importance in the strategic management process.

	• Levels of strategy: Corporate, Business, and Functional • The strategic management process	
2	**External Environment Analysis** • PESTEL Analysis • Porter's Five Forces Model • Industry and competitive analysis	• Analyze external factors affecting organizations and assess industry attractiveness
3	**Internal Environment Analysis** • Resource-based view of the firm • VRIO framework • SWOT analysis	• Evaluate internal capabilities and resources of an organization to identify strengths and weaknesses.
4	**Strategy Formulation** • Business-level strategy: Cost leadership, differentiation, and focus strategies • Corporate-level strategy: Diversification, M&A, and strategic alliances • Global strategies: Entering international markets.	• Develop and recommend appropriate business and corporate strategies.
5	**Strategy Implementation and Control & Emerging Trends in Strategic Management** • Organizational structure and culture • Strategic leadership and change management • Balanced scorecard and performance metrics • Digital transformation and its impact on strategy • Innovation and entrepreneurship • Sustainability and corporate social responsibility (CSR)	• Implement strategic plans effectively and monitor performance to ensure strategic goals are met. • Understand and evaluate the impact of emerging trends on strategic management practices.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	35
Tutorial	10

Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Assignment
Case Based Presentation
Project
Business News Analysis
Innovative and creative contribution
Peer and self-assessment

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓			✓
Case Based Presentation		✓	✓	✓	
Project			✓	✓	✓
Business News Analysis	✓				✓
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					

(List of reference books)

1. Hill, C. W. L., & Jones, G. R. (2020). "Strategic Management: An Integrated Approach". Cengage Learning.
2. Grant, R. M. (2021). "Contemporary Strategy Analysis". Wiley.
3. Dess, G. G., McNamara, G., Eisner, A. B., & Lee, S. H. (2021). "Strategic Management: Text and Cases". McGraw-Hill Education.
4. David, F. R., & David, F. R. (2020). "Strategic Management: A Competitive Advantage Approach, Concepts and Cases". Pearson.
5. Barney, J. B., & Hesterly, W. S. (2019). "Strategic Management and Competitive Advantage: Concepts and Cases". Pearson.

SEMESTER VII

Course	Course Title
06340701	Application of Business Research Methods
06340702	Negotiation Skills
06340703	Digital and Social Media Marketing
06340704	International Business
06340705	Business Ethics and Corporate Governance

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340701
Course Title	Application of Business Research Methods
Academic Year	2025-26
Semester	VII
Number of Credits	4
Course Prerequisite	A foundational understanding of statistical concepts and research methodologies is required. Prior coursework in statistics or research methods is preferred.

Course Synopsis	This course equips students with the knowledge and skills to conduct rigorous business research. It covers research design, data collection, analysis, and interpretation. Students will learn to apply statistical techniques and communicate research findings effectively.

Course Outcomes:

At the end of the course students will be able to:

CO1	Students will be able to explain the key components of the research process and their interrelationships.
CO2	
CO3	Students will be able to design a research proposal for a given business problem, including defining research questions, selecting appropriate research methodology, and developing data collection instruments.
CO4	Students will be able to critically evaluate research articles, identifying strengths, weaknesses, and potential biases in research design and methodology.
CO5	Students will be able to assess the validity and reliability of research findings and draw appropriate conclusions based on the evidence presented.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**
CO1	**2**	**1**	**1**	**1**	**1**	**3**			**2**	**1**
CO2	**2**	**2**	**2**	**2**	**2**	**3**			**3**	**2**
CO3	**3**	**2**	**3**	**3**	**3**	**3**			**2**	**3**
CO4	**1**	**2**	**2**	**1**	**2**	**2**			**3**	**2**
CO5	**1**	**1**	**1**	**1**	**1**	**2**	**3**		**2**	**3**
Average	**1.8**	**1.6**	**1.8**	**1.6**	**2**	**2.75**			**2.5**	**2.25**

Course Content:

L (Hours/Week)	**T (Hours/Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	Unit I: Research Foundations	• Demonstrate understanding of the research process and

	Nature and scope of business research, information-based decision making, and sources of knowledge The research process: problem formulation, literature review, research design, data collection, analysis, interpretation, and report writing Basic research approaches (exploratory, descriptive, explanatory) and terminologies (variables, hypothesis, population, sample, etc.) Research ethics and integrity, including data privacy and research misconduct	its application in a business context. • Critically evaluate research problems and formulate research questions.
2	Unit II: Research Design and Data Collection Research design: exploratory, descriptive, and causal research designs Sampling techniques (probability and non-probability) and sample size determination Data types (primary, secondary, qualitative, quantitative) and collection methods (surveys, interviews, observations, experiments, etc.) Data preparation: data cleaning, coding, and entry (Excel and SPSS) Data management and organization	• Design appropriate research designs and sampling strategies for specific research questions. • Collect, clean, and prepare data for analysis.
3	Unit III: Data Analysis and Interpretation Descriptive statistics (measures of central tendency, dispersion, and distribution)	• Apply statistical techniques to analyze data and draw meaningful conclusions. • Create effective data visualizations to communicate research findings.

	Inferential statistics: hypothesis testing (t-test, ANOVA, chi-square) and correlation analysis Data visualization techniques (charts, graphs, tables) Exploratory data analysis (EDA) techniques Introduction to data mining and big data analytics	
4	Unit IV: Advanced Statistical Techniques and Modeling Regression analysis (simple and multiple linear regression) Logistic regression Time series analysis Multivariate analysis techniques (factor analysis, cluster analysis) Model building and evaluation	• Build and evaluate statistical models to explain relationships between variables. • Apply advanced statistical techniques to address complex research questions.
5	Unit V: Research Report Writing and Presentation Research report structure and components (introduction, literature review, methodology, results, discussion, conclusions, recommendations) Academic writing style and citation formats (APA, MLA, Chicago) Research ethics and intellectual property Effective research presentation (oral and written)	• Communicate research findings clearly and effectively through written and oral presentations. • Adhere to ethical guidelines in research reporting and dissemination.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**

Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem-Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative
Assignment
Case Based Presentation
Project
Business News Analysis

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓				
Project		✓	✓		
Case Based Presentation				✓	✓
Business News Analysis		✓	✓		
Student's Feedback					
(List of reference books)					

1. Research Methodology: A Step-by-Step Guide for Beginners by C.R. Kothari, New Age International Publishers
2. Business Research Methods by Cooper and Schindler, Tata McGraw-Hill Education
3. Business Research Methods by Uma Sekaran, Wiley India
4. Research Methodology by N.K. Malhotra, Oxford University Press

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340702
Course Title	Negotiation Skills
Academic Year	2025-26
Semester	VII
Number of Credits	4
Course Prerequisite	Students are expected to possess basic knowledge of management, communication, and organizational functioning acquired through earlier BBA courses. A willingness to participate in discussions, role plays, presentations, and simulations is desirable.
Course Synopsis	The course introduces students to the fundamentals of negotiation and interpersonal effectiveness in personal, academic, and business settings. It focuses on communication, persuasion, conflict resolution, relationship building, and collaborative problem-solving. Through case discussions, simulations, role plays, and experiential exercises, students learn how to prepare for negotiations, manage disagreements, influence stakeholders, and reach mutually beneficial outcomes. The course also develops emotional intelligence, ethical awareness, and cross-cultural sensitivity essential for future managers and entrepreneurs.
Course Outcomes: At the end of the course students will be able to:	
CO1	Explain the basic concepts, importance, and process of negotiation in personal and business contexts.
CO2	Demonstrate effective communication, listening, and interpersonal skills during negotiations.

CO3	Apply basic negotiation strategies and techniques to resolve conflicts and reach agreements.
CO4	Recognize the influence of emotions, personality, and cultural differences on negotiation outcomes.
CO5	Conduct ethical and professional negotiations in workplace, customer, and team-based situations.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	–	–	2	1	–	–
CO2	2	3	2	1	–	3	2	1	–
CO3	1	2	3	2	1	2	3	2	1
CO4	1	2	2	3	2	2	2	3	1
CO5	2	2	2	2	3	3	3	2	2
Average	**1.8**	**2.2**	**2**	**1.8**	**1.2**	**2.4**	**2.2**	**1.6**	**0.8**

L (Hours/Week)	T (Hours/Week)	**P (Hours/Week)**
3	1	4

Course Content

Unit	Content	Competencies
1	**UNIT I: Introduction and Foundations of Negotiations:** Meaning, nature, scope, and importance of negotiation in personal, professional, and business contexts; role of negotiation in management and entrepreneurship; negotiation versus bargaining; characteristics of effective negotiators; stages of the negotiation process including preparation, opening, discussion, bargaining, agreement, closure, and follow-up; goal setting, planning, trust building, and collaborative approaches for achieving mutually beneficial outcomes.	**Fundamental Negotiation Competency:** Ability to explain the concepts, importance, and applications of negotiation in personal, professional, and business contexts. (CO1) **Negotiation Process Competency:** Ability to understand and describe the stages of the negotiation process and apply basic planning and goal-setting techniques. (CO1, CO5) **Collaborative Problem-Solving Competency:** Ability to identify opportunities for cooperation and develop mutually beneficial solutions during negotiations. (CO2, CO5)
2	**UNIT II: Communication and Interpersonal Effectiveness in Negotiation:**	

	Role of communication in negotiation; verbal and non-verbal communication; barriers to effective communication; communication etiquette in professional settings; active listening, questioning techniques, empathy, rapport building, trust development, and feedback mechanisms; persuasion and influencing skills; handling objections and maintaining positive relationships during negotiations.	**Communication Competency:** Ability to use verbal and non-verbal communication effectively in negotiation situations. (CO2) **Interpersonal Skills Competency:** Ability to demonstrate active listening, empathy, rapport building, and constructive feedback during interactions. (CO2, CO3) **Persuasion and Influence Competency:** Ability to apply persuasion and influencing techniques to support negotiation objectives while maintaining positive relationships. (CO2, CO3)
3	**UNIT III: Negotiation Strategies and Behavioral Dynamics** Types of negotiation including distributive and integrative approaches; introduction to BATNA and alternative evaluation; negotiation planning and preparation; competitive, collaborative, accommodating, avoiding, and compromising negotiation styles; perception, attitudes, and emotions in negotiations; persuasion techniques and managing difficult negotiation situations.	**Negotiation Planning Competency:** Ability to prepare for negotiations by gathering information, identifying alternatives, and setting objectives. (CO3) **Strategic Negotiation Competency:** Ability to distinguish between distributive and integrative negotiation approaches and select appropriate strategies. (CO3) **Behavioural Adaptability Competency:** Ability to recognize different negotiation styles and adapt behaviour according to situational requirements. (CO3, CO4)

4	**UNIT IV: Conflict Management and Workplace Negotiation** Meaning, nature, and causes of conflict; functional and dysfunctional conflict; conflict management styles and resolution strategies; negotiation in workplace situations including team interactions, employee-supervisor relationships, customer negotiations, and resource allocation; handling disagreements, resolving disputes, managing resistance, and maintaining professionalism and ethical conduct.	**Conflict Resolution Competency:** Ability to identify sources of conflict and apply appropriate conflict management techniques. (CO3, CO5) **Workplace Negotiation Competency:** Ability to handle negotiation situations involving teams, customers, supervisors, and workplace resources effectively. (CO3, CO5) **Professional and Ethical Competency:** Ability to manage disagreements professionally and demonstrate ethical conduct during negotiations. (CO5)
5	**UNIT V: Emotional Intelligence, Culture, and Professional Relationships** Concept and significance of emotional intelligence in negotiation; self-awareness, self-regulation, motivation, empathy, and social skills; cultural diversity and its impact on negotiation behaviour; communication across cultures, gender sensitivity, and multicultural interactions; managing difficult people, ethical negotiation practices, networking skills, and sustaining long-term professional relationships.	**Emotional Intelligence Competency:** Ability to demonstrate self-awareness, empathy, emotional control, and interpersonal sensitivity during negotiations. (CO4, CO5) **Cross-Cultural Competency:** Ability to recognize cultural and gender differences and adapt negotiation behaviour accordingly. (CO4, CO5) **Relationship Management Competency:** Ability to build professional relationships, manage difficult interactions, and sustain long-term business networks through ethical negotiation practices. (CO5)

	CO1	**CO2**	**CO3**	**CO4**	**CO5**
Quiz / Multiple Choice Questions	3	2	1	2	1
Classroom Exercise & Simulation	2	3	3	3	2
Case Studies /Project	2	3	2	3	3
Assignment / Presentation /Seminar/ Practical Log Book	3	2	3	2	2
Business News Analysis	2	2	1	2	3
Class Test	3	2	1	2	1

Experience Related learning activity	3	2	2	1	2
Feedback Process					
References:					

- Getting to Yes. (2011). *Getting to Yes: Negotiating Agreement Without Giving In* (3rd ed.). Penguin Books.
- Lewicki, R. J., Barry, B., & Saunders, D. M. (2021). *Negotiation* (8th ed.). McGraw-Hill Education.
- Thompson, L. (2020). *The Mind and Heart of the Negotiator* (7th ed.). Pearson Education.
- Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.
- Cialdini, R. B. (2021). *Influence: Science and Practice* (7th ed.). Pearson.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind* (3rd ed.). McGraw-Hill.
- Goleman, D. (1998). *Working with Emotional Intelligence*. Bantam Books.
- Brett, J. M. (2014). *Negotiating Globally: How to Negotiate Deals, Resolve Disputes, and Make Decisions Across Cultural Boundaries* (3rd ed.). Jossey-Bass.

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340703
Course Title	Digital and Social Media Marketing
Academic Year	2025-26
Semester	VIII
Number of Credits	4
Course Prerequisite	Student should have studied the course of Marketing Management.
Course Synopsis	The content of digital marketing course aims at developing the students for making digital marketing plans in order to manage a digital marketing performance efficiently.

Course Outcomes:

At the end of the course students will be able to:

CO1	Outline the basics of digital marketing and digital marketing plan. (RBT - 2)
CO2	Choose the appropriate social media for achieving the objectives of the campaign. (RBT - 3)

CO3	Appraise the SEO and SEM efforts of any business organization. (RBT - 5)
CO4	Explain Mobile Marketing and Web Analytics pertaining to any business. (RBT - 5)
CO5	Design and run a digital marketing campaign for a client. (RBT - 6)

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	
CO1									
CO2									
CO3									
CO4									
CO5									
Average									

Course Content:

L (Hours/Week)	T (Hours/Week)	P (Hours/Week)	Total Hour/Week
4	1	0	4

Unit	Content & Competencies
1	1.Define Digital Marketing (C1) 2.Describe Moving from Traditional to Digital Marketing, Integrating Traditional and Digital Marketing. (C2) 3.Explain Introduction to digital marketing communication, different types of digital media channels. (C1) 4.Describe Digital marketing applications and benefits, Digital marketing framework(C2)
2	1.Explain Online Marketing Strategy Development(C1) 2.Define Online marketing strategy (C1) 3.Describe Online marketing strategy groundwork, (C2)

	4.Defining the online marketing mix, offering mix for digital, Digital pricing models, (C1) 5. Analyze Channels of purchase-reaching the e-consumer, (C4) 6.Describe Managing promotional channels, developing the extended Ps-People, Process, Programs and Performance(C2)
3	1.Describe Online marketing communications and channel mix, Online marketing planning development, (C2) 2.Understanding digital media planning terminology, Digital media planning stages, Designing the communication mix, Marketing communications from mass market to mass customized (C2) 3.Analyze Steps to creating marketing communications strategy, (C4) 4.Understanding marketing operations set-up, Understanding digital marketing conversion, Basics of lead generations and conversion marketing, Lead nurturing and lead scoring concepts, (C2) 5. Setting up for conversion from web page to landing page. (C3)
4	1.Explain Online marketing Campaign Management (C1) 2.Describe Basic elements of digital campaigns, Basic elements of digital campaign management, (C1) 3.Define Campaign planning and budgeting, (C1) 4.Analyze Campaign set-up and launch, Campaign monitoring and reconciliation (C4) 5.Define Traffic building: SEO- Search engine optimization fundamentals(C1) 6.Describe Introduction to keywords, definition, importance, Types of Key words, on page SEO and off page SEO. Types of traffic, paid search and organic search. Introduction to Google AdWords. (C2)
5	1.Explain Importance of social media, Goal Setting, Strategy and Plan, Social Listening, Developing content marketing and engagement strategy for your brand, (C1) 2.Define Social media communication (C1) 3.Describe Introduction to Facebook Marketing, Instagram Marketing, Snapchat Marketing, Affiliate Marketing, E-mail Marketing and Mobile Marketing. Trust, Privacy and Ethics in digital marketing. (C2)

Learning Strategies and Contact Hours

Learning Strategies	Contact Hours
Lecture	22
Practical	7
Seminar/Journal Club	-
Small group discussion (SGD)	-
Self-directed learning (SDL) / Tutorial	-
Problem Based Learning (PBL)	-
Case/Project Based Learning (CBL)	5
Revision	6
Others If any:	
Total Number of Contact Hours	40

Assessment Methods:

Formative
Multiple Choice Questions (MCQ)
Quiz
Seminars
Group Discussion/ Role play
Practical Hands-On Assessment & Viva-voce

Mapping of Assessment with COs

Nature of Assessment	CO1	CO2	CO3	CO4	CO5	CO6
Quiz						
VIVA						
Assignment / Presentation						
Unit test						

Practical Log Book/ Record Book						
Feedback Process	• Student's Feedback					
References:	(List of reference books)					

Reference Books:

1. Gupta S. Digital Marketing. McGraw Hill Education.
2. Das A. Applications of Digital Marketing for Success in Business. BPB Publications.
3. Miller M. B2B Digital Marketing. Pearson Publication.
4. Dodson I. The Art of Digital Marketing. Wiley Publication.

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340704
Course Title	International Business
Academic Year	2025-26
Semester	IV
Number of Credits	4
Course Prerequisite	Students will gain insights into how global trade policies are shaped and how multinational firms adapt strategies in response to changing international environments. Through case studies and real-world examples, learners will be equipped to critically analyse global business challenges and opportunities.
Course Synopsis	This course offers a comprehensive overview of the international business landscape and the theories that govern global trade. It explores the dynamic environmental forces—economic, political, legal, cultural, and technological—that influence international business decisions. The course introduces classical and modern trade theories, regional trade agreements, foreign direct investment, balance of payments, and foreign exchange mechanisms.

Course Outcomes:

At the end of the course, students will be able to:

CO1	Explain the various aspects of the international business environment, including its nature, scope, and significance and discuss globalization and its implications.
CO2	Apply the various forms of economic integration and responses to integration and disintegration.
CO3	Analyse the concept of classical and modern trade theories, new trade theories, and competitiveness.
CO4	Explain the various institutions and agreements in international trade and regional and bilateral agreements: nature and implications.
CO5	Analyse the basic concepts of contemporary issues and strategic trends.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO 3**	**PSO4**	
CO1	**3**			**3**	**3**	**3**	**3**		**2**	
CO2	**3**			**3**	**3**	**3**	**3**		**2**	
CO3	**3**	**2**		**3**	**3**	**3**	**3**		**3**	
CO4	**3**	**3**		**3**	**3**	**3**	**3**		**3**	
CO5	**3**	**3**		**3**	**2**	**3**	**3**		**3**	
Average	**3**	**2.6**		**3**	**2.8**	**3**	**3**		**2.6**	

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	Introduction to International Business Environment- Nature, Scope & Significance of International Business; PESTEL; SWOT; Globalisation and its implications; Differences between domestic and International business.	• Understand the dynamic components of the international business environment

		● Analyse the impact of political, economic and cultural factors on global operations. ● Interpret the influence of globalisation on business structures and functions.
2	Economic Integration- Regional economic integration: EU, NAFTA, ASEAN and SAARC; Levels and types of integration; Strategic responses to integration and disintegration	● Explain the various forms of regional economic integration. ● Analyse the benefits and limitations of economic integration for international firms. ● Formulate strategic responses to regional integration opportunities and threats.
3	Classical and Modern Trade Theories-Mercantilism, Absolute and Comparative Advantage; Heckscher–Ohlin Theory; Product Life Cycle Theory; Porter's Diamond Model; New trade theories and competitiveness	● Explain and differentiate classical and modern trade theories. ● Apply theoretical models to global trade scenarios and decisions. ● Assess a country's competitive advantage using Porter's Diamond. ● Evaluate the practical relevance of evolving trade theories.
4	Institutions and Agreements in International Trade- WTO, IMF, World Bank, UNCTAD: roles and	● Describe the roles of global

	influence; Balance of Payments: structure and analysis; Trade agreements: GATT, TRIPS, GATS; Regional and bilateral agreements: nature and implications	institutions regulating trade and finance. ● Analyse a nation's balance of payments and its strategic implications. ● Evaluate how international trade agreements shape business environments. ● Examine the benefits and constraints of multilateral and bilateral agreements.
5	Contemporary Issues and Strategic Trends-Global supply chain and logistics; Protectionism and trade wars; Ethical issues and sustainable trade; Digital transformation and technological innovations; Emerging issues in international business strategy	● Identify contemporary issues affecting international trade. ● Evaluate the impact of global supply chains and protectionist policies. ● Discuss the ethical and sustainability considerations in global business. ● Assess the role of technology in transforming global trade dynamics.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45

Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Assignment
Case Based Presentation
Project
Business News Analysis
Mid Semester Examination

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓				
Project		✓	✓		
Case Based Presentation				✓	✓
Business News Analysis		✓	✓		
Mid Semester Examination	✓	✓			
End Semester Examination	✓	✓	✓	✓	✓

Student's Feedback
(List of reference books)
1. Paul R. Krugman, International Trade: Theory and Policy, Pearson Education 2. Paul, Justin. *International Business*. New Delhi: McGraw Hill Education (India) Pvt. Ltd. 3. Rakesh Mohan Joshi. *International Business*. New Delhi: Oxford University Press. 4. Daniels, John D., Radebaugh, Lee H., & Sullivan, Daniel P. *International Business: Environments and Operations*. New Jersey: Pearson Education Inc. 5. Hill, Charles W. L. & Hult, G. Tomas M. *International Business: Competing in the Global Marketplace*. New York: McGraw-Hill Education.

SMESTER VIII

For Students opting for BBA (Honours)

Course	Course Title
06340801	Change Management
06340802	Big Data and Decisions
06340803	Consumer Behaviour Analytics
06340804	Advance Analytics Projects
06340805	Analytics for Business Decision Making

SGT Global Business School	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340801
Course Title	Change Management
Academic Year	2025-26
Semester	VIII
Number of Credits	4

Course Prerequisite	Basic knowledge of Human Resource Management
Course Synopsis	This course introduces students to the concepts and practices of Change Management in organizations. It focuses on understanding organizational change, diagnosing readiness, managing resistance, and implementing effective change interventions. The course also examines leadership, ethical issues, and contemporary challenges in managing change in dynamic and global environments.

Course Outcomes:

At the end of the course, students will be able to:

CO1	Understand the concepts, types, and drivers of organizational change.
CO2	Diagnose organizational culture and readiness for change.
CO3	Apply change interventions to manage resistance and facilitate change.
CO4	Analyze structural, technological, and performance-driven change initiatives.
CO5	Evaluate leadership and ethical challenges in managing organizational change.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

Cos	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	2		3	1	2	
CO2	2	3			2	3	3	2	1
CO3	2	3		1	2	3	3	3	2
CO4	1	3			2	2	3	3	3
CO5	2	3	2	2	3	3	3	3	3
Average	2	2.8	1.33	1.75	2.25	2.8	2.6	2.6	2.25

Course Content:				
L (Hours/Week)		T (Hours/Week)	P (Hours/Week)	Total Hour/Week
2		1		3
UNIT	Content		Competencies	
1	Introduction to Change Management: Meaning, nature, scope, and types of organizational change; drivers of change in contemporary organizations; planned versus emergent change; overview of key change models (Lewin's Change Model, Action Research); evolution of Change Management with reference to Organizational Development (OD); values and assumptions of planned change.		• Ability to distinguish between different types and drivers of organizational change • Capability to apply major change models such as Lewin's and Action Research • Understanding of the linkage between Change Management and Organizational Development	
2	Organizational Culture and Change Diagnosis Organizational culture and its role in change; cultural dimensions influencing change; managing change in global and cross-cultural contexts; change diagnosis and data collection methods; readiness for change; use of data analytics and AI tools for diagnosing organizational issues and change preparedness.		• Ability to assess organizational culture and its impact on change initiatives • Capability to diagnose change readiness using qualitative and data-driven methods • Understanding of managing change in global and cross-cultural contexts	
3	Human Process Interventions for Managing Change Human process interventions as change tools—team building, process consultation, coaching and mentoring; role-focused and intergroup interventions;		• Ability to apply human process interventions to facilitate organizational change • Capability to manage resistance, conflict, and intergroup issues during change • Understanding of the practical application of OD interventions in change initiatives	

	managing resistance to change; third-party interventions and conflict management; application of OD interventions in change initiatives.	
4	Structural, Technological, and Performance-Driven Change Techno-structural interventions including work redesign, self-managed teams, quality of work life (QWL), and Total Quality Management (TQM); building high-performance work culture (HPWC); organizational transformation; integrating sustainability into organizational structures; impact of digitalization, automation, and AI on organizational design and employee roles.	• Ability to design and evaluate techno-structural change interventions • Capability to integrate sustainability and high-performance work practices • Understanding of the impact of digitalization, automation, and AI on organizations.
5	Leadership and Contemporary Issues in Change Management: Role of leadership and change agents in managing change; ethical issues, power, and organizational politics in change processes; managing change during mergers, acquisitions, and strategic alliances; change management in dynamic and uncertain environments; emerging trends in Change Management—hybrid workplaces, remote teams, cross-border collaboration, and sustainable transformation.	• Ability to lead and support change as a leader or change agent • Capability to address ethical issues, power, and politics in change processes • Understanding of contemporary change challenges in dynamic and global environments

	CO1	CO2	CO3	CO4	CO5	
Quiz / Multiple Choice Questions	✓	✓	✓	✓	✓	

Classroom Exercise & Simulation		✓	✓			
Case Studies /Project		✓	✓	✓		
Assignment / Presentation /Seminar/ Practical Log Book			✓	✓	✓	
Business News Analysis	✓	✓	✓			
Class Test	✓	✓	✓	✓	✓	
Subjective assessment	✓	✓	✓	✓	✓	
Feedback Process	1. Student's Feedback					

References:

(List of reference books)

- Burnes, B. (2020). *Managing change* (8th ed.). Pearson Education.
- Cameron, E., & Green, M. (2019). *Making sense of change management* (5th ed.). Kogan Page.
- Cummings, T. G., & Worley, C. G. (2019). *Organization development and change* (10th ed.). Cengage Learning.
- French, W. L., Bell, C. H., & Zawacki, R. A. (2005). *Organization development and transformation: Managing effective change* (6th ed.). McGraw-Hill.
- Hayes, J. (2022). *The theory and practice of change management* (6th ed.). Palgrave Macmillan.
- Kotter, J. P. (2012). *Leading change*. Harvard Business Review Press.
- Schein, E. H. (2017). *Organizational culture and leadership* (5th ed.). Wiley.
- Senior, B., & Swailes, S. (2020). *Organizational change* (6th ed.). Pearson Education.

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	BBA- Business Analytics
Course Code	06340802
Course Title	Big Data and Decisions
Academic Year	2025-26
Semester	VIII
Number of Credits	4
Course Prerequisite	Basic knowledge of Analytics.
Course Synopsis	The objective big data analytics is to help student gain insights and make more informed decisions. By analyzing large, complex sets of data, student can identify patterns and trends that would not be visible using traditional analytical techniques, helping them to improve efficiency, enhance customer experiences, manage risk, and gain a competitive advantage.

Course Outcomes:

At the end of the course students will be able to:

CO1	Examine the leveraging big data technologies and techniques, businesses can gain valuable insights and competitive advantages, improving operational efficiency, developing new products and services, and creating personalized customer experiences
CO2	Explain the Hadoop ecosystem that provides a wide range of tools and technologies for storing, processing, and analyzing large datasets
CO3	Illustrate the function of GPUs for accelerating data processing and analysis, particularly for tasks that require large amounts of data to be processed in parallel
CO4	Utilize Spark, a powerful framework for distributed computing and data processing, particularly for large-scale data analytics and machine learning applications
CO5	Make use of Spark SQL and Graph, powerful tools for data processing and analysis, particularly for structured data and graph data, respectively

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	
CO1									
CO2									
CO3									
CO4									
CO5									
Average									

Course Content:

L (Hours/Week)	T (Hours/Week)	P (Hours/Week)	Total Hour/Week
3	**1**		**4**

Unit	Content & Competencies
1	1. Explain characteristics of Big Data Big Data Analytics. (C2) 2. Typical Analytical Architecture and requirement for new analytical architecture. (C2) 3. What are the Challenges in Big Data Analytics. (C2)
2	1. Explain Hadoop , Requirement of Hadoop Framework, Explain design principle of Hadoop, describe hadoop components , Hadoop 1 vs Hadoop 2, Hadoop Daemon's. (C2) 1. Describe HDFS Commands, Map Reduce Programming: I/O formats, Map side join, Reduce Side Join, Secondary sorting, Pipelining MapReduce jobs. (C2) 1. Define Hadoop Ecosystem, Introduction to Hadoop ecosystem technologies, Serialization: AVRO, Co-ordination: Zookeeper, Databases. HBase, Hive, Scripting language: Pig, Streaming: Flink, Storm. (C2)

3	1. Analyse the concept of GPU Computing, CUDA Programming Model, CUDA API, Simple Matrix, Multiplication in CUDA, CUDA Memory Model. (C2) 2. Describe Shared Memory Matrix Multiplication, Additional CUDA API Features. (C2)
4	1. Apply the concept of Data Analysis with Spark Shell, Writing Spark Application. (C5) 2. Apply the concept of Spark Programming in Scala, Python, R, Java. (C5)
5	1. Evaluate the concept of SQL, Importing and Saving data, Data frames using SQL. (C5) 2. Analyse the concept of GraphX overview, Create Graph and Graph Algorithms.(C5) 3. Evaluate the concept of Spark Streaming Overview, Errors and Recover, Streaming Source and Streaming live data with spark(C5)

Learning Strategies and Contact hours

Learning Strategies	Contact Hours
Lecture	20
Practical	2
Seminar/Journal Club	2
Small group discussion (SGD)	
Self-directed learning (SDL) / Tutorial	
Problem Based Learning (PBL)	2
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	30

Assessment Methods:

Formative
Multiple Choice Questions (MCQ)
Viva-voce
Objective Structured Practical Examination (OSPE)
Quiz
Seminars
Problem Based Learning (PBL)
Journal Club
Objective Structured Practical Examination (OSPE)
Practical Examination & Viva-voce

Mapping of Assessment with COs

	CO1	CO2	CO3	CO4	CO5	CO6
Quiz		✓				
VIVA						
Assignment / Presentation	✓		✓			
Unit test		✓	✓			
Practical Log Book/ Record Book		✓				
Feedback Process	1. Student's Feedback					

(List of reference books)

1. Frampton M. Mastering Apache Spark. Packt Publishing; 2015.
2. White T. Hadoop: The Definitive Guide. O'Reilly; 2015.
3. Pentreath N. Machine Learning with Spark. Packt Publishing; 2015.

SEMESTER VIII

For Students opting for BBA (Hons./Hons. with Research)

Course	Course Title
06280806	Fundamentals of Econometrics
06340805	Analytics for Business Decision Making

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	Bachelor of Business Administration
Course Code	06280806
Course Title	Fundamentals of Econometrics
Academic Year	2025-26
Semester	VIII
Number of Credits	4
Course Prerequisite	This course introduces the fundamental concepts and techniques of econometrics and their application in business, economics, and research. It focuses on understanding economic relationships through statistical and mathematical models. The course covers regression analysis, correlation, hypothesis testing, model estimation, interpretation of results, and forecasting techniques. Students will learn how econometric tools are used for data-driven decision-making, policy analysis, and business problem-solving using real-world economic data.
Course Synopsis	Basic knowledge of Economics, Business Mathematics, and Statistics. Familiarity with concepts such as averages, probability, graphs, and algebra will help students understand econometric models and data analysis techniques effectively.

Course Outcomes:

At the end of the course students will be able to:

CO1	Understand the basic concepts, scope, and importance of econometrics in business and economic decision-making.
CO2	Apply statistical and mathematical tools to formulate and estimate econometric models.
CO3	Analyze relationships between economic variables using regression and correlation techniques.
CO4	Interpret econometric results and evaluate the validity and reliability of econometric models for forecasting and policy analysis.
CO5	Use econometric methods and software tools for data analysis, hypothesis testing, and business research applications.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO 1**	**PO 2**	**PO 3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	
CO1									
CO2									
CO3									
CO4									
CO5									
Average									

Course Content:			
L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	Content	Competencies
1	Introduction to Econometrics: Meaning, scope, importance and applications of econometrics; Types of data – cross-sectional, time series and panel data; Role of econometrics in business decision-making; Basic concepts of variables, parameters and models.	• Understand the meaning, scope and importance of econometrics. • Differentiate between various types of data. • Explain the role of econometrics in business and economic analysis. • Identify variables and formulate simple econometric models.
2	Correlation and Regression Analysis: Correlation analysis; Simple linear regression model; Estimation using Ordinary Least Squares (OLS); Coefficient of determination; Interpretation of regression coefficients; Introduction to multiple regression.	• Apply correlation techniques to study relationships among variables. • Construct and estimate regression models. • Interpret regression coefficients and goodness of fit. • Analyze business data using regression techniques.
3	Hypothesis Testing and Model Evaluation: Statistical inference; Hypothesis testing; t-test, F-test and p-values; Standard error and confidence intervals; Assumptions of regression model; Model adequacy and diagnostic checking.	• Perform hypothesis testing for econometric models. • Evaluate the significance and reliability of regression results. • Understand assumptions underlying econometric models. • Conduct diagnostic checks for model validation.
4	Time Series and Forecasting Techniques: Components of time series; Trend analysis; Moving averages; Index numbers; Forecasting methods and business applications of forecasting models.	• Analyze time series data and identify its components. • Apply trend and forecasting techniques. • Interpret index numbers for business analysis. • Use forecasting methods for managerial decision-making.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	Contact Hours

Lecture	30
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem-Based Learning (PBL)	5
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Assignment
Case Based Presentation
Project
Business News Analysis
Mid Semester Examination

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓			✓
Case Based Presentation		✓	✓	✓	
Project			✓	✓	✓
Business News Analysis	✓			✓	
Mid Semester Examination					

End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
List of reference books:					
• Basic Econometrics – Damodar N. Gujarati – McGraw Hill Education • Introductory Econometrics: A Modern Approach – Jeffrey M. Wooldridge – Cengage Learning • Introduction to Econometrics – James H. Stock & Mark W. Watson – Pearson Education • Fundamentals of Econometrics – B. C. Mehta & Arun C. Mehta – Himalaya Publishing House • Econometric Analysis – William H. Greene – Pearson Education • Introduction to Econometrics – G. S. Maddala – Wiley India • Econometric Methods – Jack Johnston & John Dinardo – McGraw Hill • Applied Econometrics – Dimitrios Asteriou & Stephen G. Hall – Palgrave Macmillan					

School of Commerce and Management	
Name of the Department	Commerce and Management
Name of the Program	Bachelor of Business Administration
Course Code	6280201
Course Title	Human Resource Management
Academic Year	2025-26
Semester	II
Number of Credits	4
Course Prerequisite	Basic management understanding. Communication skills.
Course Synopsis	This Course is the basic course for Human resource management students to provide them knowledge and evolution of human resources. The units or modules in this subject are designed to deeply impart the understanding of functions of HRM along with

	light on human resource information system and contemporary challenges of HR field for managers. This course will help the students to realize the human resource management applications in organizations such as training and development activities and international issues.
Course Outcomes: At the end of the course students will be able to:	

CO1	Develop the understanding of the concept of human resource management and to understand its relevance in organizations.
CO2	Develop necessary skill set for application of various HR issues
CO3	Analyse the strategic issues and strategies required to select and develop manpower resources.
CO4	Examine the knowledge of HR concepts to take correct business decisions.
CO5	**Evaluate and apply labor laws and conflict resolution techniques** to effectively manage labor relations, ensuring legal compliance and fostering a fair and ethical workplace environment.

Mapping of Course Outcomes (COs) to Program Outcomes (POs)& Program Specific Outcomes:

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	1	1	3	1	1	1	3
CO2	1	3	1	1	1	3	1	1	1
CO3	1	1	3	1	1	1	3	1	1
CO4	1	1	1	3	1	1	1	3	1
CO5	1	1	3	1	1	1	3	1	1
Average	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Course Content:

L (Hours/Week)	**T (Hours/ Week)**	**P (Hours/Week)**	**Total Hour/Week**
3	**1**	**0**	**4**

Unit	**Content**	**Competencies**
1	Nature of Human Resource Management-Concepts, Objectives and Functions; HRD-	• Demonstrate a comprehensive understanding of HRM concepts, objectives, and functions,

	Concept and Mechanisms; Role and status of HR Manager; Organization of HR Department; HR Policies; HRM in globally competitive environment; Strategic Human Resource Management.	including the role and status of the HR Manager. ● Analyze and implement HR policies and practices in a globally competitive environment, aligning them with strategic HRM principles.
2	Acquiring Human Resource: Human Resource Planning, Job analysis and job design, employee involvement, flexible work schedules, Recruitment and Selection-new trends; Placement and induction; Right sizing.	● Apply HR planning, job analysis, and modern recruitment methods to effectively acquire and induct new employees. ● Design and evaluate employee training programs, including executive development and career planning, to enhance organizational capabilities.
3	Developing human resource: Employee training, training need assessment, Training methods and evaluation, cross cultural training, Designing executive development programme, Techniques of Executive development, Career planning and development.	● Ability to distinguish between various leadership styles (Autocratic, Democratic, Laissez-faire, Situational, Servant Leadership) and understand their impact on team performance. ● Competence in leading and managing multicultural teams, recognizing the influence of cultural diversity on team dynamics.
4	Enhancing and rewarding performance: Establishing Performance Management system; Performance Appraisal-Techniques of appraisal; Potential Appraisal and employee counselling; Establishing reward and pay plans-job evaluation, wage and incentive plans, employee benefits, ensuring safety and healthy work environme	● Develop and implement performance management systems and appraisal techniques to assess and enhance employee performance. ● Establish and manage reward and pay plans, including job evaluation and incentive schemes, to motivate and retain employees.
5	Explore labor relations, trade unions, and their impact on organizational effectiveness. Understand key labor laws like the Industrial Disputes Act and the Employee Provident Fund Act. Learn conflict resolution techniques and ensure adherence to legal and ethical standards in HR practices.	● Apply knowledge of key labor laws and regulations to ensure compliance and address legal issues in HR practices. ● Develop and implement effective conflict resolution strategies to manage workplace disputes and uphold ethical standards.

Note: The course plan included as an annexure has the details of each unit with the number of hours and mode of delivery and pedagogical approach.

Teaching - Learning Strategies and Contact Hours

Teaching - Learning Strategies	**Contact Hours**
Lecture	45
Tutorial	15
Seminar/Journal Club	2
Small group discussion (SGD)	2
Self-directed learning (SDL) / Tutorial	2
Problem-Based Learning (PBL)	10
Case/Project Based Learning (CBL)	2
Revision	2
Others If any:	
Total Number of Contact Hours	60

Assessment Methods:

Formative	**Summative**
Assignment	End Semester Examination
Case Based Presentation	
Project	
Business News Analysis	
Mid Semester Examination	

Mapping of Assessment with COs

Nature of Assessment	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Assignment	✓	✓			✓

Case Based Presentation		✓	✓	✓	
Project			✓	✓	✓
Business News Analysis	✓			✓	
Mid Semester Examination					
End Semester Examination	✓	✓	✓	✓	✓
Student's Feedback					
(List of reference books)					

5. "Human Resource Management: A Contemporary Approach" by Ian Beardwell, Len Holden, and Tim Claydon (Pearson, 8th Edition, 2021)

6. "Training and Development: Enhancing Skills for Organizational Success" by David A. DeCenzo and Stephen P. Robbins (Wiley, 3rd Edition, 2022)

7. "Performance Management: Changing Behavior that Drives Organizational Effectiveness" by Aubrey C. Daniels (Performance Management Publications, 3rd Edition, 2017)

8. "Employment Law for Human Resource Practice" by Stephen J. Perkins and Geoffrey Wood (Cengage Learning, 6th Edition, 2020)