# Babu Banarasi Das University Lucknow

# School of Management

## Course Curriculum

# Integrated Master of Business Administration

# Data Science and Artificial Intelligence Program (IMBA-AI)

# In Collaboration with GUVI-HCL

**Effective from Academic Batch 2026-27**

COURSE STRUCTURE OF INTEGRATED MASTER OF BUSINESS ADMINISTRATION-DATA SCIENCE AND ARTIFICIAL INTELLIGENCE PROGRAM (IMBA-AI)

**Version Control**

| | |
|---|---|
| Version | 1.0 |
| Effective from | 1st July, 2026 |

**Approved by Board of Studies of School of Management on _____**

**Introduction**

School of Management, Babu Banarasi Das University ensures that learning is an interactive process. India is one of the fastest growing countries in the world and is poised to become the second largest economy in the world in the next two to three decades. This spectacular growth is being fuelled largely by the ever increasing domestic consumption and the entrepreneurial spirit of individuals. With the rapid integration of Data Science and Artificial Intelligence across industries, there is an ever-increasing demand for industry-ready management professionals equipped with AI-driven analytical, strategic, and decision-making capabilities. Therefore, there is a strong need to impart business management education and training integrated with Artificial Intelligence, digital technologies, and data-driven practices in order to prepare future leaders who can effectively address evolving business challenges and contribute to innovation-led organizational growth.

To cater the market needs, School of Management offer Program of Integrated Master of Business Administration in Data Science and Artificial Intelligence in collaboration with GUVI-HCL (IMBA- AI Full Time – nine semester program)

**INTEGRATED MASTER OF BUSINESS ADMINISTRATION in DATA SCIENCE and ARTIFICIAL INTELLIGENCE (IMBA-AI)**

The IMBA-AI is full time (Integrated UG + PG) regular program with specialisation in Data Science and Artificial Intelligence. The Program aims to provide students with comprehensive knowledge and practical exposure relevant to business, industry, trade, and emerging Data Science and Artificial Intelligence applications so that they can effectively function in diverse organizational environments and address the technological and managerial challenges arising in the digital era. The program not only focuses on developing managerial knowledge and AI-driven analytical skills across various domains of management, but also emphasizes the overall personality development of students by nurturing innovation, critical thinking, ethical decision-making, leadership abilities, communication skills, and adaptability required for the rapidly evolving global business environment.

The structure of the program consists of core courses and specialization courses in Data Science and Artificial Intelligence. From the first semesters, students are offered foundational and core courses integrating Management principles with Artificial Intelligence applications. Core papers such as Marketing, Finance, and Human Resource Management are designed with an AI-oriented approach to equip students with domain knowledge supported by data analytics, machine learning applications, digital transformation practices, and intelligent decision-making frameworks.

Right from the beginning of the program, the focus is on providing industry-relevant inputs through case discussions and analysis, AI-based simulations, management games, role plays, flipped classrooms, experiential learning, and technology-enabled projects, keeping in view the evolving requirements of Industry 4.0 and the digital business ecosystem. The detailed teaching and evaluation scheme is provided in the subsequent sections.

Summer Internship of minimum 45 days is compulsory for every student pursuing the programme, which they have to undergo between sixth and seventh semester. Beyond 45 days student has to take permission from the Dean of the School. During the training, the student is expected to learn about the organization and analyze and suggest solutions to a live problem. The objective is to equip the student with the knowledge of actual functioning of the organization and problems faced by them for exploring feasible solutions and suggestions. The student, after the completion of training will submit two spiral bound reports to the School/University, which will form part of seventh semester examination. It is mandatory that the student will make presentation in the presence of teachers and students. The detailed

guidelines regarding the report will be provided by the School at the beginning of the sixth semester.

The concept of "Research Based Learning (RBL)" is introduced from the session 2026-27. The RBL will start from semester fifth and in eighth semester student has to submit a Research Report/ Book Chapter as part of the course. The detailed guidelines regarding the RBL will be provided by the School at the beginning of each semester.

**Credit system will be followed during the entire course curriculum.**

## INTEGRATED MASTER OF BUSINESS ADMINISTRATION in DATA SCIENCE AND ARTIFICIAL INTELLIGENCE (IMBA-AI)

In the age of Data Science and Artificial Intelligence, Management is no longer about managing people, but about navigating change. The leaders of tomorrow will not just adapt to AI; they are required to lead with AI as their most important tool or resource. The Integrated MBA in Data Science and Artificial Intelligence **(IMBA-AI)** is a pioneering program designed to equip students with both **managerial expertise and technical proficiency in Data Science and AI**. Offered immediately after 10+2, the program aligns with **Skill India Mission**, ensuring graduates are industry-ready, globally competitive, and capable of driving innovation.

This initiative bridges the gap between traditional management education and emerging technological demands Graduates of this programme will be well-prepared to enter the workforce with a strong foundation in management and technology, making them highly competitive in the job market. The programme's emphasis on technology integration ensures that graduates recalibrate their business perspective, adapt to evolving industry dynamics, and assume leadership roles across diverse sectors.

We as School of Management have always been driven by building the most relevant Managerial capabilities aligned with employability in the Industry. New industry dynamics require a revived approach to build leaders equipped with technical know-how- this is what the IMBA with Data Science and Artificial Intelligence is designed to do.

**Objective and program relevance:**

To equip students with **managerial expertise integrated with Data Science and Artificial Intelligence skills**, making them industry-ready leaders capable of navigating rapid technological transformations.

**Early Advantage**: Students can begin their management education right after 10+2, gaining a head start in acquiring both managerial and technical expertise.

**Student –centric Outcomes**

- This course is Industry-aligned offering a transformative approach to education, ensuring that students graduate with skills that are not only theoretical but also highly practical and aligned with real-world industry requirements as **a dedicated HCL GUVI mentor will conduct in-person theory and lab sessions in the university.**
- Graduates possess both **managerial acumen and technical expertise** which promote innovation, adaptability, and problem-solving. This courses/programs will provide conceptual learning supported with real time industry scenarios. As a result, students will be exposed to the

fundamentals along with industry relevant knowledge derived from practical learning, thereby **improving the employability of the students.**

- Hands-on exposure to **cutting-edge tools, recognized certifications, and AI-driven applications** accelerates the transition of students into the competent workforce excelling in competitive global markets. Students **will receive access to practice platforms such as CODEKATTA, WEBKATTA, and Debugging modules** to support continuous learning and skill enhancement.
- The program combines **academic theory and hands-on exposure to AI applications**, ensuring students learn by doing, building a strong foundational background.

## PROGRAM OUTCOMES (POS) AND PROGRAM SPECIFIC OUTCOMES (PSO)

| **Programme Outcomes (POs)** | |
|---|---|
| **PO1** | **Management Knowledge:** To equip the students with requisite theoretical and practical management knowledge, skills & right attitude necessary to become management professional. |
| **PO2** | **Business Analysis:** Use analytical and reflective thinking techniques to identify and analyze business problems, develop viable solutions, and make effective decisions. |
| **PO3** | **Communication:** To impart knowledge to the students towards Business Communication for effective and Professional business management. |
| **PO4** | **Entrepreneurship:** To develop the entrepreneurship acumen. |
| **PO5** | **Individual and Team Work:** Develop young men and women into highly adept professional managers with ability to lead a team and develop group behaviour for achieving organizational goals. |
| **PO6** | **Design / Development of knowledge:** To develop the ability to understand, analyse and apply management concepts in the areas related to marketing, operations, human resources and finance for efficient running of the business organization of varying complexity in competitive era. |
| **PO7** | **Ethics:** To recognize and solve business problems in an ethical manner for continuous development of business venture. |
| **PO8** | **Technology Orientation:** To develop competency in the use of technology in modern organizational operations. |
| **PO9** | **Industry Orientation:** To provide professional learning opportunities in real industrial scenario through Summer Internship Program. |
| **PO10** | **The Business Leader and Society:** To help students to apply key systematic and analytical decision making skills to solve complex organizational problems. |
| **PO11** | **Environment and Sustainability:** Understand the relevant issues of environmental concern and sustainable development. |
| **PO12** | **Life Long Learning:** To stimulate an interest in research and its applications to find solutions for business problems and to acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes. |

| **Program Specific Outcomes (PSO)** | |
|---|---|
| **PSO1** | To build managerial capabilities by integrating with AI and data science technologies with conceptual learning aligned with Industry needs. |
| **PSO2** | To encourage and develop analytical thinking in both conventional as well as technical, management learning Practices. |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 1 SEMESTER I | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1101 | Major | Digital Transformation & Emerging Technologies | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1102 | Major | AI-Driven Business Analytics | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1103 | Core | Business Mathematics | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1104 | Core | Organizational Behavior & Principles of Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1105 | Core | Marketing Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1106 | Core | Economics for Managers | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Practical | GP1101 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **25** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 1 SEMESTER II | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1201 | Major | AI in Advertising & Digital Selling | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1202 | Major | Data Analytics with Power BI | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1203 | Core | Fundamentals of Accounting | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1204 | Core | Business Environment | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1205 | Core | Business Communication | 2 | 0 | 4 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1206 | Core | Managing Organizational Diversity | 2 | 0 | 0 | 40 | 60 | 100 | 2 |
| Practical | GP1201 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **23** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 2 SEMESTER III | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1301 | Major | AI-Driven Operations & Process Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1302 | Major | AI-Powered HRM & People Analytics | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1303 | Core | New Venture Planning and Development | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1304 | Core | Event Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1305 | Core | Cost and Management Accounting | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1306 | Core | Financial Literacy | 3 | 0 | 0 | 40 | 60 | 100 | 3 |
| Practical | GP1301 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **24** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 2 SEMESTER IV | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1401 | Major | AI-Powered Digital Marketing & Social Media Analytics | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1402 | Major | AI in Finance and Risk Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1403 | Major | AI & Data-Driven Operations Optimization | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1404 | Core | Marketing of Services | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1405 | Core | Rural Marketing | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1406 | Core | Leadership & Personality Development | 3 | 0 | 0 | 40 | 60 | 100 | 3 |
| Practical | GP1401 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **24** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 3 SEMESTER V | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1501 | Major | AI & Behavioural Analytics in Consumer Decision Making | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1502 | Major | AI-Driven Research & Business Intelligence | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1503 | Major | AI and Digital Transformation in International Business | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1504 | Core | Project Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1505 | Core | Entrepreneurial Finance | 2 | 0 | 0 | 40 | 60 | 100 | 2 |
| Practical | IMBAAI1506 | Core | Research Based Learning I | 0 | 0 | 2 | 100 | | 100 | 1 |
| Practical | GP1501 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **20** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 3 SEMESTER VI | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1601 | Major | AI for Marketing & Consumer Intelligence | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1602 | Major | AI-Powered Supply Chain & Logistics Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1603 | Major | Artificial Intelligence and Machine Learning Fundamentals | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1604 | Core | Business Ethics & Indian Value System | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1605 | Core | Goods & Services Tax | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Practical | IMBAAI1606 | Core | Research Based Learning II | 0 | 0 | 2 | 100 | | 100 | 1 |
| Practical | GP1601 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **22** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 4 SEMESTER VII | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1701 | Major | AI for Strategic Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1702 | Major | Financial Information System & Big Data Analytics | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1703 | Core | Legal Aspects of Business | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1704 | Core | Security Analysis & Portfolio Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1705 | Core | Capital Markets & Financial Instruments | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1706 | Core | Negotiation and Counseling | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1707 | Minor | Retail Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1708 | Minor | Integrated Marketing Communication | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Practical | IMBAAI1709 | Core | Summer Internship Project Report | | | | 100 | | 100 | 6 |
| Practical | IMBAAI1710 | Core | Research Based Learning-III | 0 | 0 | 4 | 100 | | 100 | 2 |
| Practical | GP1701 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **1100** | **41** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 4 SEMESTER VIII | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Theory | IMBAAI1801 | Core | Gen AI Strategy & Enterprise Transformation | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1802 | Core | Corporate Governance, Values & Ethics | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1803 | Core | Supply Chain Management | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1804 | Core | Industrial Relations & Labour Codes | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Theory | IMBAAI1805 | Core | Compensation & Benefits | 4 | 0 | 0 | 40 | 60 | 100 | 4 |
| Practical | IMBAAI1806 | Core | Research Based Learning-IV | 0 | 0 | 4 | 100 | | 100 | 2 |
| Practical | GP1801 | Core | General Proficiency | | | | 100 | | 100 | 1 |
| **Total** | | | | | | | | | **700** | **23** |

# Integrated Master of Business Administration
# in
# Data Science and Artificial Intelligence (IMBA-AI)
# In Collaboration with GUVI- HCL

## EVALUATION SCHEME

| YEAR 5 SEMESTER IX | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Theory/ Practical** | **Course Code** | **Course Category** | **Course Title** | **Contact Hours** | | | **Evaluation Scheme** | | | **Credits** |
| | | | | **L** | **T** | **P** | **CIA** | **ESE** | **Total** | |
| Practical | IMBAAI1901 | Core | Industrial Internship | | | | 300 | 500 | 800 | 25 |
| **Total** | | | | | | | | | **800** | **25** |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | I | |
| Course Title | Digital Transformation & Emerging Technologies | L | T | P | Credits |
| Course Code | IMBAAI1101 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand the role of digital transformation and emerging technologies in modern business environments. |
|---|---|
| | Analyze and apply digital tools and platforms to improve business processes and decision-making. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the concepts, drivers, and technologies involved in digital transformation and their impact on modern business models. |
| CO2 | Apply cloud computing platforms, digital ecosystems, and AI-driven tools to support business operations and decision-making. |
| CO3 | Analyze the role of emerging technologies such as IoT, Blockchain, AR/VR, and automation in business innovation and transformation. |
| CO4 | Develop digital transformation strategies considering customer-centric approaches, cybersecurity, ethics, and organizational change management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Digital Transformation**<br>● Digital Transformation: Definition, scope, and evolution<br>● Traditional vs Digital Business Models<br>● Key Drivers: Customer expectations, competition, data<br>● Digital Maturity Models (basic understanding)<br>● Core Technologies Overview: Cloud, AI, IoT, Big Data<br>● Value Creation through Digital Transformation<br>● Challenges: Organizational resistance, legacy systems<br>● Case Illustration: Digital transformation in retail/banking | 15 | CO1 |
| **Module II: Cloud Computing and Digital Platforms**<br>● Introduction to Cloud Computing (IaaS, PaaS, SaaS)<br>● Benefits of Cloud for businesses (cost, scalability, agility)<br>● Digital Platforms and Ecosystems (Amazon, Uber, etc.)<br>● SaaS tools for business operations (CRM, ERP basics)<br>● Data storage and accessibility in cloud systems<br>● Security and privacy considerations (basic)<br>● Platform-based revenue models<br>● Case Study: Cloud adoption in SMEs | 15 | CO2 |
| **Module III: Data, AI, Automation and Emerging Technologies in Business**<br>● Role of Data in Digital Transformation<br>● Introduction to Business Analytics and AI<br>● Automation and Robotic Process Automation (RPA) basics<br>● AI Use Cases: Marketing, HR, finance, operations<br>● Chatbots and virtual assistants<br>● Data-driven decision-making<br>● Risks and limitations of AI<br>● Internet of Things (IoT) in business applications<br>● Blockchain basics and business use cases<br>● Augmented Reality (AR) / Virtual Reality (VR) overview<br>● FinTech innovations (digital payments, crypto basics)<br>● Industry 4.0 concepts | 15 | CO3 |

| | | |
|---|---|---|
| • Innovation and digital product development<br>• Evaluating technology adoption (cost vs benefit)<br>• Case Study: AI-driven customer service<br>• Case Study: Smart supply chain or smart retail | | |
| **Module IV: Digital Strategy and Transformation Implementation**<br>• Digital Strategy Frameworks (basic)<br>• Customer-centric digital transformation<br>• Change management in digital initiatives<br>• Digital marketing basics (SEO, social media analytics)<br>• Measuring success: KPIs and performance metrics<br>• Cybersecurity awareness for businesses<br>• Ethical considerations in digital transformation<br>• Mini Project: Digital transformation plan | **15** | **CO4** |
| **Suggested Readings:**<br>• Thomas M. Siebel – *Digital Transformation: Survive and Thrive in an Era of Mass Extinction*, RosettaBooks.<br>• Bernard Marr – *Tech Trends in Practice*, Wiley.<br>• Andrew McAfee & Erik Brynjolfsson – *Machine, Platform, Crowd*, W.W. Norton & Company. | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | I | |
| Course Title | AI-Driven Business Analytics | L | T | P | Credits |
| Course Code | IMBAAI1102 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand how AI and analytics support business decision-making across functional domains. |
|---|---|
| | Apply basic data analysis and visualization techniques using simple tools for business insights. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of business analytics and AI applications in business decision-making. |
| CO2 | Apply data handling, visualization, and predictive analytics techniques using business analytics tools. |
| CO3 | Analyze business problems using AI-driven insights, dashboards, and forecasting methods. |
| CO4 | Develop AI-assisted business analytics solutions and communicate insights responsibly for organizational decision-making. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Business Analytics and AI**<br>● Introduction to business analytics<br>● Types of business analytics<br>● AI in business applications<br>● Types of business data<br>● Data-driven decision-making<br>● Analytics tools and dashboards<br>● Data lifecycle and processing<br>● Ethical considerations in AI<br>● Case studies in AI-driven business | 15 | CO1 |
| **Module II: Data Handling and Visualization**<br>● Data cleaning techniques<br>● Handling missing values and duplicates<br>● Basic Excel functions<br>● Data aggregation and grouping<br>● Charts and graph creation<br>● Data visualization principles<br>● Dashboard creation in Excel<br>● Storytelling with data<br>● Case study on sales visualization | 15 | CO2 |
| **Module III: Predictive Analytics and AI Applications**<br>● Introduction to predictive analytics<br>● Trend analysis and forecasting<br>● Regression concepts<br>● Forecasting using Excel<br>● AI-based prediction tools<br>● Prediction accuracy concepts<br>● AI for customer analytics<br>● Recommendation systems basics<br>● AI in marketing and finance<br>● Decision-making using dashboards<br>● Case study on customer segmentation and forecasting | 15 | CO3 |

| | | |
|---|---|---|
| **Module IV: AI-Driven Business Insight Generation**<br>● Business problem identification<br>● Data collection and preparation<br>● Data analysis and visualization<br>● AI tools for insight generation<br>● Generating business recommendations<br>● Dashboard and report presentation<br>● Ethical issues in analytics<br>● Project documentation and communication<br>● Mini Project: AI-driven business analytics solution | **15** | **CO4** |
| **Suggested Readings:**<br>● Wayne L. Winston – *Microsoft Excel Data Analysis and Business Modeling*<br>● Foster Provost & Tom Fawcett – *Data Science for Business*<br>● Bernard Marr – *Artificial Intelligence in Practice* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration -AI | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | I | |
| Course Title | Business Mathematics | L | T | P | Credits |
| Course Code | IMBAAI1103 | 4 | 0 | 0 | 4 |

| | |
|---|---|
| **Course Objectives:** | To familiarize students with the importance and growing role of Business Mathematics in modern society. |
| | To familiarize with working knowledge of mathematical tools and procedures which can be applied in solving varied business problems. |

| Course Outcomes: | |
|---|---|
| CO1 | Use the basic principles of arithmetic and apply mathematical skills to financial decisions. |
| CO2 | Apply the concept of ratio and percentage on calculating cost, discount, commission and profit & loss. Explain the use of interest, annuities and present value of money and apply this in risk and decision making. |
| CO3 | Develop strong problem-solving skills and the ability to handle non-routine problems by applying appropriate concepts and notation. Analyze the procedures for Sets, Matrices and Permutation & Combination. |
| CO4 | Recognize and solve linear programming problems, apply basic differentiation and integration, and explain the basic concepts, applications, and ethical issues of Artificial Intelligence in managerial decision-making. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Basic Arithmetic Ratio and Percentage**<br>Its application in calculating cost and invoice price, discount, commission and brokerage, Profit & Loss. Progression: Arithmetic, Geometric and Harmonic Progression. Basic problem on Time, speed and distance and mensuration. | **15** | **CO1** |
| **Module II: Mathematics of Finance**<br>Simple and Compound interest. Concept of present value and amount of money. Types of Annuities, Present value and Amount of an Annuity. Concept, calculation of Perpetuity | **15** | **CO2** |
| **Module III: Algebra and Coordinate Geometry**<br>Permutation and Combination. Surds and Indices, Law of Indices, Simultaneous linear equation Elements of Coordinate Geometry, Distance between two points, Equation of line, Slope of a line, Area of Triangles, Quadratic Functions, Slope of quadratic function, Polynomials and Arithmetic of Polynomials. | **15** | **CO3** |
| **Module IV: Linear Programming, Calculus and AI Applications in Business**<br>Graphical methods of Solution, Problems relating to two variables including the case of mixed constraints, Simplex Methods. Basic operations of Differentiation and Integration.<br>Basic concepts and applications of AI in managerial decision-making, its relation with business mathematics, and ethical issues in AI-based decisions. | **15** | **CO4** |
| **Suggested Readings:**<br>• Zameeruddin, Khanna and Bhambri, Business Mathematics, Vikas Publishing.<br>• Sharma J. K., Business Mathematics: Theory and Application, Ane Books Pvt. Ltd, 2nd Edition.<br>• Shukla S. M., Business Mathematics, Sahitya Bhawan Publication, Agra. | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | I | |
| Course Title | Organizational Behaviour & Principles of Management | L | T | P | Credits |
| Course Code | IMBAAI1104 | 4 | 0 | 0 | 4 |

| Course Objectives: | An understanding of Organizational Behavior and Management principles in modern organizations. |
|---|---|
| | The understanding of group behavior, leadership, motivation, and management functions in a dynamic environment. |

| Course Outcomes: | |
|---|---|
| CO1 | Demonstrate the knowledge of individual behavior, personality, attitudes, diversity, and the role of AI in shaping organizational behavior. |
| CO2 | Analyze and interpret group dynamics, leadership styles, motivation theories, and the impact of AI on leadership and team performance. |
| CO3 | Apply management concepts, functions, and evolution of management thought in a dynamic business environment |
| CO4 | Evaluate the role of AI in planning, forecasting, and controlling functions to enhance managerial effectiveness and organizational decision-making. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Organizational Behavior**<br>Concept, nature, and scope of OB, Importance of studying human behavior in organizations, OB models.<br>**Foundations of Individual Behavior:** Ability: meaning and types (intellectual & physical), Values: meaning, types, and importance in decision-making, Attitudes: meaning and components, Attitude formation (family, peers, experience), Basic theories of attitudes (Cognitive Dissonance Theory, Functional Theory of Attitudes, Social Judgment Theory). Personality: meaning and determinants (heredity, environment, situation), Key personality traits (Big Five Model), Meaning of workforce diversity, Cultural diversity and its impact on behavior.<br>Meaning of AI, Role of AI in modern organizations, Benefits and challenges of using AI at workplace. | 15 | CO1 |
| **Module II: Group Behavior, Motivation and Leadership**<br>Difference between group and team, Types of groups (formal & informal), Factors affecting group performance: Group Size, Composition, Roles, Norms and Cohesiveness.<br>Meaning and importance of leadership, Basic leadership styles (autocratic, democratic, laissez-faire), Qualities of a good leader. AI and leadership: data-driven decision-making and digital leadership skills<br>Meaning and Importance of motivation, Basic theories of motivation (Maslow's hierarch, Herzberg's Two-Factor Theory) | 15 | CO2 |
| **Module III: Principles of Management in a Changing Environment**<br>Management Concept, nature, process and significance of management. Managerial levels, skills, functions and roles. Management Vs. Administration. Coordination as essence of management. Development of management thought: classical, neo- classical, behavioral, systems and contingency approaches. | 15 | CO3 |
| **Module IV: Functions of Management and AI Applications**<br>Planning: nature, objectives, types of plans and planning process; organizing: concept, principles and types of organization (formal and | 15 | CO4 |

| | | |
|---|---|---|
| informal)<br>directing: concept and principles of directing<br>Controlling: Concept, process and relationship with planning Introduction to the role of AI in planning, forecasting and control. | | |

**Suggested Readings:**


- Prasad, L.M., Organizational Behavior, Sultan Chand and Sons, 2003.
- Prasad, L.M., Principles of Management, Sultan Chand and Sons, 8th Edition.
- Stephen P. Robbins, Organizational Behavior, Prentice Hall of India Pvt. Ltd., New Delhi, 2003.
- Chabbra T.N. and Singh B.P., Organization Behavior, Sultan Chand and Sons.
- Stoner, Freeman and Gilbert Jr., Management, Prentice Hall of India, New Delhi, 2003.
- Gupta, C.B., Management Concepts and Practices, Sultan Chand and Sons, New Delhi, 2003.
- Artificial Intelligence Basics: By Tom Taulli


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | I | |
| Course Title | Marketing Management | L | T | P | Credits |
| Course Code | IMBAAI1105 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with:<br>All aspects of marketing, including product planning &development, promotion, distribution, pricing and branding. Theories of the marketing mix. And practical applications of marketing theories in the context of the marketing management. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Understand and appreciate the concept of marketing in theory and practice. Identify different types of marketing environment and segmentation and learn different ways of selecting the appropriate product in the market. |
| CO2 | Analyses different types of products, levels of hierarchy and classification of Products along with the concept of branding and its types. |
| CO3 | Describe the marketing channels, channel dynamics and pricing of the products. |
| CO4 | Evaluate different promotional strategies and media planning. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction**<br>Scope of marketing, Concepts of markets, Consumer Markets and Industrial Markets, Market measurement and forecasting. Marketing mix, Generic value chain, Marketing Management Philosophies, Marketing Environment, Market segmentation, Levels of Market segmentation, Bases of market segmentation. Market Targeting: Introduction, Procedure. Product Positioning: Introduction, Objectives, Usefulness, Differentiating the Product and Product Positioning Strategy. | 15 | CO1 |
| **Module II: Concepts of Product and Branding**<br>Product: Concepts, Product Level Hierarchy, Classification of Products, Product Mix, Product Line, Product Life Cycle, Product Positioning, AI-based product design insights.<br>Brand: Concept, Challenges, Brand Equity, Brand Repositioning, AI-generated brand content. | 15 | CO2 |
| **Module III: Marketing Channels and Pricing**<br>Nature of Marketing, Channels, Channel functions and flows, Channel Design, and Management Channel Dynamics, Factors affecting choice of distribution channel, Role of AI in Real-time visibility and tracking<br>Pricing: objectives, factors influencing pricing, basic methods of pricing and pricing strategies. | 15 | CO3 |
| **Module IV: Promotion and Marketing Program**<br>Promotion: Promotion Mix. Managing Advertisement: Objectives, Budget, and Message. Media planning and Sales<br>Promotion Tools. AI-enabled marketing ecosystem, basic concepts of AI and algorithms, Chatbots, automation, marketing personalization | 15 | CO4 |
| **Suggested Readings:**<br>• Kotler Philip and Armstrong G., Principles of Marketing, Pearson.<br>• Sherlekar S. A., Marketing Management, Himalaya Publishing House.<br>• Saxena R., Marketing Management, Tata McGraw Hill | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | I | |
| Course Title | Economics for Managers | L | T | P | Credits |
| Course Code | IMBAAI1106 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with: The concept of economics, its application in the real business world, and the matrix of demand and supply. The knowledge of the economic theory with decision making techniques. The application of economic models to identify their relationships and formulate them into a<br>managerial model to which decision making tools can be applied. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Understand and interpret the concept of managerial economics and the role of managerial economists in forecasting and business decision making. |
| CO2 | Comprehend the concepts of demand, supply along with their elasticity for effective managerial decision making. Conceptualize and calculate the production function involved in predicting the short run and long run cost curves of the product. Interpret the cost concept with reference to laws of returns. |
| CO3 | Distinguish the different types of market with reference to price determination & strategies. |
| CO4 | Understand application of managerial economics at macro (national) level and the concept of profit and its theories. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Economics**<br>Introduction to Economics, Micro & Macro Economics, Nature and Scope of Managerial Economics, Significance in decision-<br>Making, Objectives of a firm. Basic Economic Concepts: Incremental Cost & Revenue, Opportunity Cost, Equi - Marginal Principle. | **15** | **CO1** |
| **Module II: Demand Analysis & Supply Analysis Demand Analysis**<br>Demand Analysis: Determinants of Demand, Law of Demand and Exceptions to the law of Demand. Elasticity of Demand: Price, Income, Cross Elasticity. Uses of Elasticity of Demand for managerial decision making, Supply Analysis: Law of Supply, Supply Elasticity, Analysis and its uses for managerial decision making.<br>Basic Production Concepts: Meaning of Production and Factors of Production, Law of Variable Proportions, Returns to Scale (Concept only), Cost concept and analysis: Total Cost, Fixed Cost, Variable Cost Marginal Cost, Average Cost, Average Variable Cost and their curves. Short-run and long-run cost curves and their managerial use. | **15** | **CO2** |
| **Module III: Market Structure Market Equilibrium and Average Revenue Concept.**<br>Revenue concepts: Total Revenue, Average Revenue, Marginal Revenue. Market structure: Perfect Competition & features, Market Equilibrium Condition and Determination of price under perfect competition. Monopoly & its features. Monopolistic market structure & Features, Oligopoly & Features, Cartels, Price leadership. | **15** | **CO3** |
| **Module IV: Macroeconomic Concepts**<br>National Income Accounting: Meaning of National Income Concepts: GDP, NDP, GNP, NNP (only basic understanding)<br>Methods of Measurement: Production Method, Income Method Expenditure Method. | **15** | **CO4** |

| | | |
|---|---|---|
| Importance of National Income in business decision-making<br>Inflation: Meaning of Inflation, Types: Demand-pull and Cost-push. Effects of Inflation on business and consumers.<br>Unemployment: Meaning of Unemployment, Types: Frictional, Structural, Cyclical, Impact on economy and business.<br>Business Cycle: Meaning and Phases: Boom, Recession, Depression, Recovery, Business implications | | |

**Suggested Readings:**


- Damodaran Suma , Managerial Economics (Oxford, 2006).
- Dominick Salvatore, Managerial Economics (Oxford, 2007).
- Hirschey Mark , Economics for Managers (Thomson, India Edition, 2007).
- Petersen Craig H. et al., Managerial Economics (Pearson Education, 2006).


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | II | |
| Course Title | AI in Advertising & Digital Selling | L | T | P | Credits |
| Course Code | IMBAAI1201 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand the application of Artificial Intelligence techniques in advertising, customer targeting, and digital selling strategies. |
|---|---|
| | Develop AI-enabled digital marketing solutions using predictive analytics, recommendation systems, and performance metrics. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of AI in advertising, digital commerce, and consumer analytics. |
| CO2 | Apply predictive analytics and statistical techniques for customer and sales analysis. |
| CO3 | Analyze and optimize digital advertising campaigns using AI-driven tools and performance metrics. |
| CO4 | Develop AI-enabled digital marketing solutions for customer targeting, forecasting, and business analytics. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of AI in Advertising and Digital Commerce**<br>● Introduction to AI in marketing and digital selling<br>● Evolution of digital advertising<br>● AI-driven business models in e-commerce<br>● Consumer data collection and processing<br>● Basics of marketing analytics<br>● Mean, median, and mode<br>● Probability concepts in advertising<br>● Correlation and regression basics<br>● AI tools for advertising automation<br>● Digital consumer journey mapping<br>● Ethics and privacy in AI advertising | 15 | CO1 |
| **Module II: Predictive Analytics and Consumer Intelligence**<br>● Consumer behavior analysis<br>● Customer segmentation techniques<br>● Predictive analytics in marketing<br>● Machine learning concepts for sales prediction<br>● Correlation analysis<br>● Linear and logistic regression basics<br>● Demand forecasting and trend prediction<br>● Sentiment analysis and opinion mining<br>● Marketing performance metrics and KPIs | 15 | CO2 |
| **Module III: Optimization Techniques in Digital Advertising**<br>● Advertising budget allocation<br>● Campaign optimization techniques<br>● Ad targeting models<br>● Search engine advertising analytics<br>● Cost functions and conversion optimization<br>● A/B testing concepts<br>● Statistical significance basics<br>● Revenue maximization using AI<br>● Recommendation systems in digital marketing<br>● Dynamic pricing concepts | 15 | CO3 |

| | | |
|---|---|---|
| **Module IV: AI-Driven Decision Systems and Business Analytics**<br>● Forecasting models for digital sales<br>● Sentiment analysis and feedback modeling<br>● Chatbots and conversational AI<br>● Time-series analysis basics<br>● Business intelligence dashboards<br>● Data visualization techniques<br>● Generative AI for advertising content<br>● Personalized marketing campaigns<br>● Predictive lead scoring<br>● Customer journey analytics<br>● Emerging trends in AI-driven commerce<br>● Ethical issues in AI marketing | **15** | **CO4** |
| **Suggested Readings:**<br>● Philip Kotler, Hermawan Kartajaya, and Iwan Setiawan – Marketing 5.0: Technology for Humanity<br>● V. Kumar – Customer Relationship Management: Concepts and Technologies<br>● Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani – An Introduction to Statistical Learning | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | II | |
| Course Title | Data Analytics with Power BI | L | T | P | Credits |
| Course Code | IMBAAI1202 | 4 | 0 | 0 | 4 |

| Course Objectives: | Develop interactive dashboards and reports using Power BI for effective business decision-making. |
|---|---|
| | Apply data modeling and DAX techniques to transform raw data into meaningful insights. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of Business Intelligence and Power BI concepts. |
| CO2 | Apply data preparation, transformation, and modeling techniques using Power BI. |
| CO3 | Develop interactive dashboards and visual reports for business decision-making. |
| CO4 | Analyze business data using DAX, advanced analytics, and Power BI deployment features. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Business Intelligence and Power BI**<br>● Introduction to Business Intelligence (BI)<br>● Overview of Power BI components<br>● Data sources in Power BI<br>● Data loading and connectivity<br>● Power BI interface and views<br>● Data types and basic transformations<br>● Introduction to Power Query Editor<br>● Importing and exploring datasets<br>● Case study on sales data analysis | 15 | CO1 |
| **Module II: Data Preparation and Modeling**<br>● Data cleaning techniques<br>● Handling missing values and duplicates<br>● Data transformation using Power Query<br>● Data modeling concepts<br>● Relationships and keys<br>● Star schema and snowflake schema<br>● Creating and managing data models<br>● Calculated columns and measures<br>● Introduction to DAX basics<br>● Case study on business reporting model | 15 | CO2 |
| **Module III: Data Visualization and Dashboard Design**<br>● Principles of data visualization<br>● Types of charts and visuals<br>● Creating interactive dashboards<br>● Filters, slicers, and drill-down features<br>● Custom visuals and report formatting<br>● Dashboard storytelling techniques<br>● Designing executive reports<br>● Dashboard layout and usability<br>● Case study on sales performance dashboard | 15 | CO3 |
| **Module IV: Advanced Analytics and Power BI Deployment**<br>● Advanced DAX functions<br>● Measures and KPI creation<br>● Trend analysis and forecasting | 15 | CO4 |

| | | |
|---|---|---|
| • Scenario analysis techniques<br>• Introduction to Python/R integration<br>• Data refresh and scheduling<br>• Performance optimization in reports<br>• Publishing reports to Power BI Service<br>• Dashboard sharing and collaboration<br>• Row-Level Security (RLS) basics<br>• Industry applications of Power BI<br>• Mini Project: Business dashboard solution | | |

**Suggested Readings:**

- Marco Russo & Alberto Ferrari – *The Definitive Guide to DAX*
- Reza Rad – *Power BI from Rookie to Rock Star*
- Avichal Singh & Bhavik Merchant – *Mastering Microsoft Power BI*

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | II | |
| Course Title | Fundamentals of Accounting | L | T | P | Credits |
| Course Code | IMBAAI1203 | 4 | 0 | 0 | 4 |

| Course Objectives: | To Familiarize students with: Basic concepts and standards underlying financial accounting systems and construction of the basic financial accounting statements as well as their interpretation. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Understand and recognize the development of accounting and purpose of maintaining records. |
| CO2 | Prepare and analyse financial statements of sole proprietor and explain the meaning of key terms. |
| CO3 | Understand and apply the various methods of charging depreciation and valuation of stock. Also explain the meaning and objective of preparing a Bank Reconciliation Statement. |
| CO4 | Analyse and make appropriate accounting entries regarding issue, forfeiture, redemption of shares and debentures. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction of Accounting**<br>Meaning and concepts of financial accounting, users of accounting information, fundamental books of accounting, accounting cycle, journal entries, ledger, cash book: three columns. | 15 | CO1 |
| **Module II: Financial Statements & Depreciation**<br>Trial Balance need, importance, limitations. Preparation of trading and P&L Account and balance sheet with simple adjustments. Depreciation: concept, rationale and methods of SLM, WDV. | 15 | CO2 |
| **Module III: Hire Purchase & Company Accounts**<br>Hire purchase and installment systems. Issue of shares including forfeiture of shares, issue of bonus shares, issue of Preference Share. Debenture: Redemption of Debenture and its methods. | 15 | CO3 |
| **Module IV: AI in Financial Accounting**<br>Introduction to artificial intelligence (AI), meaning of AI, role of AI in accounting, need of AI in accounting examples of AI in daily life (Google assistance, chat GPT etc.) Introduction to accounting software (Tally, Zoho Books, Quick Book). Impact of AI on accounting and accountants, advantages and limitations of AI in accounting, ethical issues of AI in era of accounting. Skills required for future accountants. | 15 | CO4 |

**Suggested Readings:**


- Chaturvedi C.L., Advanced Accountancy, Shree Mahavir Book Depot.
- Gupta R.L. and Radha Swami M., Financial Accounting, Sultan Chand & Sons.
- Gupta R. L., Advanced Accountancy, Sultan Chand and Sons.
- Maheshwari S.N & Maheshwari S.K, An Introduction to Accountancy, Vikas Publication.


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PO-PSO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
| CO1 | | | | | | | | | | | | | | |
| CO2 | | | | | | | | | | | | | | |
| CO3 | | | | | | | | | | | | | | |
| CO4 | | | | | | | | | | | | | | |
| Avg | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | II | |
| Course Title | Business Environment | L | T | P | Credits |
| Course Code | IMBAAI1204 | 4 | 0 | 0 | 4 |

| Course Objectives: | To Familiarize students with:<br>Various external and internal factors that impact business and understand the economic, cultural, legal and political issues associated with national and international business. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Explain the types of business environment viz Political, Economic, Socio- cultural, Legal, Technological and Global environment. |
| CO2 | Analyze the existence of business under various Policies Framework laid by legal environment.<br>Examining legal, industrial and policy frameworks including Competition Act, digital taxation and fintech ecosystem. |
| CO3 | Examine the role of public sector along with various government regulatory acts and policies regarding business environment including industrial, monetary and fiscal policies.<br>Analyzing the role of public sector, financial institutions and global organizations in business environment. |
| CO4 | Analyze and evaluate global business environment in terms of Global Trade Policies by respective Institutions along with determining the impact and prospects of Technology in shaping Business.<br>Assessing recent economic trends including globalization, AI, ESG practices and cybersecurity in business. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction**<br>Business Environment: Nature, dimensions and meaning. Components of Business environment: economic, political, technological and social environment. Consumerism and consumer protection in India. A brief study of capitalism, socialism and mixed economy. | 15 | CO1 |
| **Module II: Industrial and Legal Environment**<br>Industrial Growth and policy, industrial licensing policy. MRTP. Economic planning: aims, objectives and framework of development planning in India. Legal<br>Environment. India's Fiscal and Monetary Policies, Competition Act & CCI (Replacing MRTP focus), Digital Taxation & Cryptocurrency Regulation (Overview), FinTech Revolution & Digital Payments Ecosystem, Budget Analytics using Data (Practical Assignment), AI in Economic Forecasting | 15 | CO2 |
| **Module III: Public Sector and Economic Organizations:**<br>Public Sector: Concept, Rationale, Government Programmed, Role of Public Sector in India. Foreign Trade Policies. Development Banks: IFCI, IDBI, SIDBI, IIBI. International economic institutions - WTO, World Bank. IMF and their importance to India | 15 | CO3 |
| Recent Economic Trends Recent Economic Trends<br>Economic Liberalization, Privatization and Globalization. Foreign investment policy. Export Promotion councils and boards. Import Control. EXIM policy, FEMA, IPR (International and Indian Patent Rights Acts). Anti-Pollution Act. Environmental Groups and Bodies. Euro I, II and III Norms, Introduction to Goods and Services Tax.<br>Digital Globalization & Cross-Border E-Commerce, Artificial Intelligence in | 15 | CO4 |

| | | |
|---|---|---|
| Global Supply Chains, Corporate Sustainability & ESG Reporting, AI Ethics & Responsible Business, Cybersecurity & Business Risk Management | | |

**Suggested Readings:**


- Mishra S K & Puri V K, Economic Environment of Business, 3rd Edition, Himalaya Publishing House.
- Paul Justin, Business Environment Text and Cases, Tata McGraw Hill.
- Shaikh & Saleem, Business Environment, 1st Edition, Pearson Education.
- Cherunilam Francis**,** Business Environment, 27th Revised Edition, Himalayan Publishing House.
- Aswathappa K. Essentials of Business Environment, 12th Revised Edition, Himalayan Publishing House.


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | II | |
| Course Title | Business Communication | L | T | P | Credits |
| Course Code | IMBAAI1205 | 2 | 0 | 4 | 4 |

| Course Objectives: | To enhance the ability of the students to communicate successfully in the professional settings.<br>To develop communication skills so as to adopt technical nuances and extend it to larger communication objectives. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Explain the basics of business communication, its types & barriers. |
| CO2 | Design CV and participate in other communications related to employment. Construct an effective presentation using power point. |
| CO3 | Make use of technology in effective communication and draft various formats of professional communication. |
| CO4 | Use the basics of report writing to draft a report. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Understanding Business Communication**<br>**Communication:** Concept, definition, nature, importance and components of communication. Communication process, directions of communications, networks of communication.<br>**Types of communication:** formal, informal, verbal, and non-verbal.<br>Barriers to communication. Principles of effective communication: 7C's of communication. | 15 | CO1 |
| **Module II: Employment Communication & Presentation Skills**<br>**Employment Communications:** Introduction, Writing CVs, Group Discussions, Interview Skills<br>**Presentation Skills:** Meaning, Definition, Elements & 7P's of Presentation | 15 | CO2 |
| **Module III: Technology and Communication Accessing electronic information:**<br>Internet, internet protocol, browsing and searching the internet. Sharing electronic information: Word processing, MSWord. E-mail: Effective e-mail practices. Correspondence Planning, drafting, revising. Replies, routine claim letters, adjustment letter, goodwill messages, congratulating messages, thank-you notes, sympathy notes. Persuasive messages: Request. | 15 | CO3 |
| **Module IV: Report Writing & Its Essentials**<br>Report Writing Characteristics of business reports, types of reports, purpose of reports. Collecting and analysing data through questionnaire & interviews. Constructing tables, preparing charts and interpreting data. Writing report: planning, drafting, revising, formatting and proof reading. | 15 | CO4 |
| **Suggested Readings:-**<br>• Business Communication: Concept & Cases – T.N. chhabra<br>• Business Communication – P. Subba Rao, 1st Edition<br>• Business Communication: Skill, Concepts And Applications, P D Chaturvedi, Mukesh Chaturvedi, Pearson Education.<br>• Business Communication, Bisen & Priya, New Age International Publication | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | I | Semester | | II | |
| Course Title | Managing Organizational Diversity | L | T | P | Credits |
| Course Code | IMBAAI1206 | 2 | 0 | 0 | 2 |

| | |
|---|---|
| **Course Objectives:** | To familiarize students with:<br>The concept and importance of diversity in the workplace. |
| | The impact of diversity on organizational culture, productivity, and innovation. |
| | Strategies for recruiting, retaining, and promoting diverse talent within organizations. |
| | The global aspects of diversity and its implications for multinational organizations. |

| Course Outcomes | |
|---|---|
| **CO1** | Demonstrate the understanding of the basic concept of diversity in the workplace. |
| **CO2** | Analyze and interpret the impact of diversity on organizational culture, productivity, and innovation. |
| **CO3** | Apply the recruitment and retention strategies to attract, manage, and sustain a diverse workforce within the organization. |
| **CO4** | Evaluate the role of AI and ethical considerations in managing cultural diversity, cross-cultural communication, and global workforce effectiveness in multinational organizations. |

| Course Content | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Managing Organizational Diversity**<br>Understanding the concept of diversity and its significance in the workplace. Benefits, and challenges of managing diversity, Exploring various dimensions of diversity: race, ethnicity, gender, age, religion, Inter-Sectionalist and multiple identities, Impact of diversity on organizational performance. AI as a decision-support system in diversity management. | **8** | **CO1** |
| **Module II: Building an Inclusive Culture**<br>Creating an inclusive work environment, Inclusive leadership and management practices, Employee resource groups and affinity networks, Inclusive Organization Design. Developing cultural intelligence and sensitivity. AI for Monitoring Workplace Inclusion, Importance of human oversight in AI-Driven inclusion practices. | **7** | **CO2** |
| **Module III: Recruitment and Retention of Diverse Talent**<br>Strategies for attracting and retaining diverse talent, bias free Selection and equal employment opportunity practices, evaluating the effectiveness of diversity initiatives. Using AI for Sourcing Diverse Candidates, Algorithmic Screening and Bias Mitigation in Selection Process. | **7** | **CO3** |
| **Module IV: Global Diversity and Multi-Culturalism**<br>Managing cultural diversity in multinational organizations, Cross-cultural communication skills and global diversity trends. AI in Cultural Competence Training and Development, Ethical Considerations in AI for Global Workforce Management | **8** | **CO4** |

**Suggested Readings:**

- Stefan Kühl: Influencing Organizational Culture: A Very Brief Introduction.
- Rohini Anand: Leading Global Diversity, Equity, and Inclusion: A Guide for Systemic Change in Multinational Organizations.
- David A. Thomas and Robin J. Ely: HBR's 10 Must Read on Diversity.
- Achieving Organizational Diversity, Equity, and Inclusion with AI – Sandeep Kautish, Ankur Gupta, Sahil Sawhney (Ed.)
- Managing Diversity: Toward a Globally Inclusive Workplace – Michàlle E. Mor Barak
- Management Practices for Engaging a Diverse Workforce: Tools to Enhance Workplace Culture – Manish Gupta (Ed.)

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | III | |
| Course Title | AI-Driven Operations & Process Management | L | T | P | Credits |
| Course Code | IMBAAI1301 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand the mathematical and analytical foundations of AI applications in operations and process management. |
|---|---|
| | Analyze AI-driven operational models for enhancing productivity, efficiency, and organizational performance. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of AI applications in operations and process management. |
| CO2 | Apply forecasting, optimization, and analytical techniques for operational decision-making. |
| CO3 | Analyze AI-driven supply chain, inventory, and process automation systems for business efficiency. |
| CO4 | Develop AI-enabled operational models and dashboards for improving organizational performance. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of AI in Operations Management**<br>● Introduction to operations and process management<br>● AI in business operations<br>● Role of data analytics in operations<br>● Mathematical models in operations<br>● Probability and statistics basics<br>● Process mapping and workflow analysis<br>● Operational KPIs and performance metrics<br>● AI-enabled decision support systems | 15 | CO1 |
| **Module II: Predictive Analytics and Forecasting for Operations**<br>● Demand forecasting models<br>● Time-series analysis basics<br>● Regression models for forecasting<br>● Inventory prediction techniques<br>● Risk analysis and probabilistic models<br>● Capacity planning concepts<br>● Predictive maintenance analytics<br>● AI tools for operational forecasting | 15 | CO2 |
| **Module III: Optimization Techniques in Process Management**<br>● Linear programming concepts<br>● Transportation and assignment problems<br>● Resource allocation techniques<br>● Queuing theory basics<br>● Scheduling algorithms in operations<br>● Cost minimization models<br>● Profit maximization models<br>● AI-based optimization techniques | 15 | CO3 |
| **Module IV: AI Applications in Supply Chain and Process Automation**<br>● AI in supply chain analytics<br>● Inventory management systems<br>● Process automation techniques<br>● Machine learning for operational efficiency | 15 | CO4 |

| | | |
|---|---|---|
| • AI-based quality control systems<br>• Decision trees and classification models<br>• Business intelligence dashboards<br>• Data visualization for process analytics<br>• Industry 4.0 and smart manufacturing<br>• Ethical issues in AI operations<br>• Mini Project: AI-based operations management solution | | |

**Suggested Readings:**

- Ravi Shankar – *Industrial Engineering and Operations Management*
- Hamdy A. Taha – *Operations Research: An Introduction*
- Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani – *An Introduction to Statistical Learning*

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | III | |
| Course Title | AI-Powered HRM & People Analytics | L | T | P | Credits |
| Course Code | IMBAAI1302 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand the role of Artificial Intelligence and analytics in modern Human Resource Management practices. |
|---|---|
| | Analyze AI-driven HR systems for improving recruitment, employee engagement, performance, and organizational effectiveness. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of AI and analytics in Human Resource Management. |
| CO2 | Apply statistical and analytical techniques for recruitment, workforce planning, and HR decision-making. |
| CO3 | Analyze AI-driven HR systems for employee performance, engagement, and organizational effectiveness. |
| CO4 | Develop AI-based HR analytics solutions and dashboards for strategic human resource management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of AI in Human Resource Management**<br>● Introduction to AI in HRM<br>● Evolution of digital HR practices<br>● HR analytics and data-driven decision-making<br>● Types of HR data and metrics<br>● Statistical foundations for HR analytics<br>● HR performance indicators and KPIs<br>● Ethical and privacy issues in AI-based HR systems | 15 | CO1 |
| **Module II: AI in Recruitment and Talent Acquisition**<br>● AI-based recruitment systems<br>● Resume screening and candidate matching<br>● Predictive hiring analytics<br>● Skill gap analysis and competency mapping<br>● Chatbots in recruitment<br>● Employee selection models<br>● Decision trees in HR selection<br>● Bias and fairness in AI recruitment systems | 15 | CO2 |
| **Module III: Workforce Analytics and Employee Performance Management**<br>● Workforce planning and forecasting<br>● Employee performance analytics<br>● Attrition and retention prediction<br>● Productivity and efficiency measurement<br>● Sentiment analysis in employee feedback<br>● Learning and development analytics<br>● AI-based employee engagement systems | 15 | CO3 |
| **Module IV: AI-Driven Organizational Development and HR Analytics**<br>● HR process automation<br>● AI in payroll and attendance management<br>● Predictive analytics for organizational growth<br>● Decision support systems in HRM<br>● AI-based training recommendation systems | 15 | CO4 |

| | | |
|---|---|---|
| • Business intelligence dashboards for HR<br>• Data visualization for HR analytics<br>• Emerging trends in AI-powered HRM<br>• Strategic HR planning using AI<br>• Employee experience analytics<br>• Mini Project: HR analytics solution | | |
| **Suggested Readings:**<br>• Bernard Marr – *Data-Driven HR: How to Use Analytics and Metrics to Drive Performance*<br>• Dipak Kumar Bhattacharyya – *Human Resource Management*<br>• Jonathan Ferrar and David Green – *Excellence in People Analytics* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | III | |
| Course Title | New Venture Planning and Development | L | T | P | Credits |
| Course Code | IMBAAI1303 | 4 | 0 | 0 | 4 |

| Course Objectives: | To give exposure to learners regarding different aspects of setting up a new business. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Describe how to generate a business idea using different techniques and describe sources of innovative ideas. |
| CO2 | Examine the sources for entrepreneurial capital and the criteria for evaluating new venture. |
| CO3 | Prepare the business plan for new ventures. |
| CO4 | Assess the marketing plan of new ventures. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Starting New Ventures**<br>Meaning and features. Opportunity identification. The search for new ideas. Source of innovative ideas. Techniques for generating ideas. Entrepreneurial imagination and creativity: The role of creative thinking. | 15 | CO1 |
| **Module II: Search for Entrepreneurial Capital**<br>The Entrepreneur's Search for Capital. The Venture Capital Market. Criteria for evaluating New-Venture Proposals. Evaluating the Venture Capitalist. Financing stages. Alternate Sources of Financing for Indian Entrepreneurs. Bank Funding. Government Policy Packages. State Financial Corporation's (SFCs). Informal risk capital: Angel Investors. Government schemes for new : ventures like: Start up India, Stand Up India, Make in India, etc. | 15 | CO2 |
| **Module III: Business Plan Preparation for New Ventures**<br>Business Plan: Concept. Pitfalls to Avoid in Business Plan. Benefits of a Business Plan. Developing a Well-Conceived Business Plan. Elements of a Business Plan: Executive Summary. Business Description. Marketing: Market Niche and Market Share. Research, Design and Development. Operations. Management. Finances. Critical-Risk. Harvest Strategy. Milestone Schedule. | 15 | CO3 |
| **Module IV: Marketing Aspects of New Ventures**<br>Developing a Marketing Plan: Customer Analysis, Geographical Analysis, Economical Analysis, Linguistic Analysis, Sales Analysis and Competition Analysis. Market Research. Sales Forecasting. Evaluation. Pricing Decision. | 15 | CO4 |
| **Suggested Readings:**<br>• Allen, K. R. (2015). Launching New Ventures: An Entrepreneurial Approach. Boston: Cengage Learning.<br>• Barringer, B. R.,& Ireland, R. D. (2015). Entrepreneurship: Successfully Launching New Ventures. London: Pearson.<br>• Kuratko, D. F., & Rao, T. V. (2012). Entrepreneurship: A South-Asian Perspective. Boston: Cengage Learning. | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | III | |
| Course Title | Event Management | L | T | P | Credits |
| Course Code | IMBAAI1304 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with the skills to plan and manage events. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Exhibit the capability to organize a for male vent. |
| CO2 | Planning and Organizing events. Assessing risk management in event. |
| CO3 | Analyzing event marketing, Public relations and promotional tools. |
| CO4 | Assessing Plans and prepare sponsorship proposals, vent associates and event sponsor. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Event Management**<br>Event Management: Meaning, functions and Scope, Types of Events; Roles & Responsibilities of Event Manager in different events.<br>Planning and Organizing for Events: Characteristics of a Good Planner, SWOT Analysis, Understanding the client needs, identification of target audience; Event Planning Process: Outsourcing Strategies, working with Vendors, Negotiating Tactics, Accountability and Responsibility. Event Risk Management and IT for Event Management. | 15 | CO1 |
| **Module II: Event Marketing and Promotion**<br>Nature & Process of Marketing; Branding, Advertising; Publicity and Public relations. Types of advertising, merchandising, giveaways, competitions, promotions, website and text messaging. Media tools- Media invitations, press releases, TV opportunities, radio interviews. Promotional tools–Flyers, Posters, Invitations, Website, newsletters, blogs, tweets. | 15 | CO2 |
| **Module III Event Sponsorship**<br>Sponsorship Event Partners, Event Associates. Event Sponsor : Importance of Sponsorship- for event organizer, for sponsor; Type of Sponsorship; Making sponsorship database; Sponsorship Proposal; Ways to seek Sponsorship; Closing a sponsorship; Research on sponsorship avenues; Converting sponsorship into partnership. | 15 | CO3 |
| **Module IV: AI Application in Event planning & management**<br>Nature, meaning, and scope of AI in event management and planning, legal and ethical consideration of AI, AI in event execution & technology management, AI driven event planning, AI- driven operations and planning's. Recent trends of AI in event planning & organizing. | 15 | CO4 |
| **Suggested Readings:**<br>• Conway, D.G.(2006).The Event Manager's Bible. Devon: How to books Ltd.<br>• Gold blatt, J.(2005).Special Events: Event Leadership for a New World. New Jersey: John Wiley &Sons Inc.<br>• Hoyle, L.H.(2002).Event Marketing. New Jersey: John Wiley & Sons Inc. | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PO-PSO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
| CO1 | | | | | | | | | | | | | | |
| CO2 | | | | | | | | | | | | | | |
| CO3 | | | | | | | | | | | | | | |
| CO4 | | | | | | | | | | | | | | |
| Avg | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | III | |
| Course Title | Cost & Management Accounting | L | T | P | Credits |
| Course Code | IMBAAI1305 | 4 | 0 | 0 | 4 |

| | |
|---|---|
| **Course Objectives:** | Familiarize students with management accounting concepts related to the managerial functions of planning, control, and decision-making. |
| | Develop understanding of tools and quantitative techniques used to analyze how business processes consume resources and create value for a firm. |
| | Enhance the ability to evaluate data and develop analytical skills necessary to diagnose complex business problems in an accounting context. |
| | Develop an understanding of the application of Artificial Intelligence (AI) in management accounting, including the use of AI-driven tools for data analysis, forecasting, decision support, and improving the accuracy and efficiency of managerial decision-making processes. |

| Course Outcomes: | |
|---|---|
| **CO1** | To understand the usefulness of management accounting in managerial decision-making and to evaluate its role within an organization |
| **CO2** | To illustrate the use of financial statement analysis and the various methods employed to evaluate a company's financial performance. |
| **CO3** | To analyze cost behavior and use this information in a range of managerial decisions through Marginal Costing and Standard Costing techniques |
| **CO4** | To assess budgets and budgetary control systems, including the preparation and evaluation of different types of budgets. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Management Accounting, & Introduction to Artificial Intelligence in Management Accounting:**<br>Meaning, Nature, Scope, and Function of Management Accounting, Role of Management Accounting in Decision-Making, Management Accounting Vs Financial Accounting, Tools and Techniques of Management Accounting<br>Introduction to Artificial Intelligence, AI in Decision Making & Management Accounting, Basic AI Technologies Relevant to Management. | **15** | **CO1** |
| **Module II: Cost Accounting & Introduction to AI in Cost Accounting**<br>Concept of Cost and Costing-Importance and Features of Costing, Cost Classification, Cost Units and Cost Centers, Cost Accounting System.<br>Artificial Intelligence in Cost Accounting-AI for predictive cost analysis and forecasting, Automation of repetitive accounting and reporting tasks, AI-driven cost optimization and decision support. | **15** | **CO2** |
| **Module III: Marginal and Standard Costing**<br>Marginal Costing as a Tool for Decision Making-Meaning, Advantages, limitation, Applications.<br>Cost-Volume-Profit (CVP) Analysis, Artificial intelligence -Driven Forecasting for CVP Analysis.<br>Standard Costing and Variance Analysis- material cost and labour cost analysis. Artificial intelligence for Labor and Material Cost Optimization | **15** | **CO3** |
| **Module IV: Budgeting for Profit Planning ,Control and AI** | **15** | **CO4** |

| | | |
|---|---|---|
| Meaning of Budget and Budgetary Control- Objectives of Budgetary Control, Merits and Limitations, Types of Budgets. AI in Budget Forecasting, Automated Budget Reporting.<br>**Financial Statements Analysis and AI:** Meaning and components of financial statements, Objective, Methods of financial Statement Analysis: Ratio Analysis, Fund flow statement, Cash Flow Statement as per Accounting Standard-3, Applications of AI in Financial Statement Analysis. AI in Cash Flow Managements | | |

**Suggested Readings:**


- Lall, B.M. and I.C. Jain, Cost Accounting: Principles and Practice, Prentice Hall, New DELHI.
- Homgren, Charles T., George Foster and Srikant M. Dallar, Cost Accounting: A Managerial Emphasis Prentice Hall, New Delhi.
- Anthony, Robert, Management Accounting, Tara pore – wale, Mumbai.
- Homgren, Charles T., Gary L Sundem, and William D. Statton, An Introduction to Management Accounting, Prentice Hall, New Delhi.
- Pandey, I.M. Management Accounting, VIKAS publications, New Delhi.
- Horngren, Foster &Dater , Cost Accounting: A Managerial Emphasis (Pearson).


**Course Articulation Matrix**

| PO-PSO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | | | | | | | | | | | | | | |
| CO2 | | | | | | | | | | | | | | |
| CO3 | | | | | | | | | | | | | | |
| CO4 | | | | | | | | | | | | | | |
| Avg | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | III | |
| Course Title | Financial Literacy | L | T | P | Credits |
| Course Code | IMBAAI1306 | 3 | 0 | 0 | 3 |

| Course Objectives: | Develop financial awareness and responsible financial behaviour among students and Introduce emerging trends including Fin Tech and Artificial Intelligence in financial services |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Explain the structure and functioning of the Indian financial system and regulatory framework. |
| CO2 | Prepare and evaluate personal financial plans and budgets for informed financial decision-making. |
| CO3 | Demonstrate understanding of banking services, digital payment systems and safe financial practices |
| CO4 | Describe the role of Artificial Intelligence and Fin Tech in transforming modern financial services and evaluate their ethical implications. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Financial Literacy and Financial System**<br>Meaning, importance and scope of financial literacy, Financial literacy and economic development, Financial inclusion and Digital India initiatives, Prerequisites: numerical ability, communication skills and digital literacy, Structure of Indian financial system, Regulatory bodies: RBI, SEBI, IRDAI, PFRDA, Financial institutions: Banks, Insurance companies, NBFCs and Post Offices | **10** | **CO1** |
| **Module II: Financial Planning and Budgeting**<br>Meaning and objectives of financial planning, Personal, family, business and national budget, Steps in financial planning process, Budget surplus and deficit, Savings and investment avenues, Goal-based financial planning, Basic concept of risk and return, Time value of money (introductory concept) | **11** | **CO2** |
| **Module III: Banking and Digital Financial Services**<br>Types of deposit accounts: Savings, Current, Recurring Deposit, Term Deposit, Small savings instruments: PPF, NS, KYC norms, PAN, Aadhaar and documentation, Types of loans: short-term, medium-term, long-term, agricultural, MSME and microfinance, Interest rates and credit score (CIBIL, Digital payment systems: UPI, NEFT, RTGS, IMP, Debit card, Credit card, ATM services and mobile banking, Cyber security, digital fraud awareness and counterfeit currency detection | **12** | **CO3** |
| **Module IV: Artificial Intelligence in Financial Literacy and Financial Services**<br>Introduction to Artificial Intelligence and Machine Learning in finance, Role of AI in enhancing financial literacy and financial inclusion, AI-based budgeting and personal finance management tools, Robo-advisory platforms and automated investment planning, AI in credit scoring and loan approval systems, AI in fraud detection and cyber risk management, AI-powered chat bots and customer service automation in banking, Predictive analytics in financial decision-making, Block chain technology and AI integration in financial systems, Central Bank Digital Currency (CBDC) and digital financial innovation, Ethical issues, data privacy and regulatory challenges in AI-driven financial services | **12** | **CO4** |

**Suggested Readings:**


- Kothari, R. (2010). Financial Services in India-Concept and Application. New Delhi: Sage Publications India Pvt. Ltd.
- Milling, B. E. (2003). The Basics of Finance: Financial Tools for Non-Financial Managers. Indiana: universe Company.
- Mittra, S., Rai, S. K., Sahu, A. P., &Starn, H. J. (2015). Financial Planning. New Delhi: Sage Publications India Pvt. Ltd.
- Zokaityte, A. (2017). Financial Literacy Education. London: Palgrave Macmillan.
- Chishti, S., & Barberis, J. (2016). The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries. Wiley.
- Marr, B. (2019). Artificial Intelligence in Practice. Wiley. (Relevant chapters on AI in financial services)
- Gomber, P., Koch, J. A., & Siering, M. (2017). Digital Finance and Fin Tech: Current Research and Future Research Directions. Journal of Business Economics.


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | IV | |
| Course Title | AI-Powered Digital Marketing & Social Media Analytics | L | T | P | Credits |
| Course Code | IMBAAI1401 | 4 | 0 | 0 | 4 |

| Course Objectives: | To understand AI-powered digital marketing concepts, social media strategies, and customer engagement techniques using modern digital platforms. |
|---|---|
| | To apply AI-driven analytics, campaign optimization, and data-driven decision-making techniques for effective digital marketing and social media performance evaluation. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of AI-powered digital marketing, social media platforms, and customer engagement strategies in the digital business environment. |
| CO2 | Apply AI tools and techniques for content creation, audience targeting, consumer behavior analysis, and social media campaign management. |
| CO3 | Analyze marketing data using AI-driven analytics, web analytics, sentiment analysis, and performance measurement techniques for business decision-making. |
| CO4 | Evaluate digital advertising strategies, campaign optimization methods, emerging AI marketing trends, and ethical practices in digital marketing environments. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Digital Marketing and AI Applications**<br>● Fundamentals of Digital Marketing<br>● Evolution of AI in Marketing<br>● Digital Marketing Ecosystem<br>● Search Engines and Online Consumer Behavior<br>● AI in Customer Targeting and Segmentation<br>● AI-Based Recommendation Systems<br>● Marketing Automation Concepts<br>● Chatbots and Conversational AI<br>● Ethical and Privacy Issues in AI Marketing<br>● Introduction to Social Media Marketing<br>● Major Social Media Platforms and Business Applications | 15 | CO1 |
| **Module II: Social Media Marketing Strategies and Consumer Engagement**<br>● Content Marketing Strategies<br>● AI Tools for Content Creation<br>● Social Media Campaign Planning<br>● Influencer Marketing Analytics<br>● AI for Audience Engagement and Personalization<br>● Scheduling and Automation Tools<br>● Social Media Trends and Performance Metrics<br>● Basics of Marketing Analytics<br>● Data Collection from Digital Platforms<br>● AI-Based Consumer Behavior Analysis<br>● Customer Journey Mapping | 15 | CO2 |
| **Module III: AI-Driven Analytics, Advertising and Campaign Optimization**<br>● Sentiment Analysis in Social Media<br>● Predictive Analytics for Marketing | 15 | CO3 |

| | | |
|---|---|---|
| • AI in Lead Generation and Conversion Tracking<br>• Web Analytics and Traffic Monitoring<br>• KPI Measurement and Marketing Dashboards<br>• Online Advertising Fundamentals<br>• Search Engine Marketing (SEM)<br>• Search Engine Optimization (SEO) Concepts<br>• AI in Ad Targeting and Retargeting<br>• Programmatic Advertising Basics<br>• Email Marketing Automation | | |
| **Module IV: Emerging Trends in AI Marketing and Mini Project**<br>• Performance Marketing Metrics<br>• AI-Based Campaign Optimization<br>• Budgeting and ROI Analysis in Digital Campaigns<br>• AI in E-Commerce Marketing<br>• Voice Search and AI Assistants<br>• AI-Powered Video and Visual Marketing<br>• Real-Time Marketing Analytics<br>• AI for Brand Monitoring and Reputation Management<br>• Case Studies in AI-Driven Marketing<br>• Future Trends in Digital Marketing<br>• Responsible and Ethical AI Usage in Marketing<br>**Mini Project:**<br>AI-Based Social Media Campaign Analysis and Consumer Engagement Study. | **15** | **CO4** |
| **Suggested Readings:**<br>• Chaffey, D., & Ellis-Chadwick, F. — *Digital Marketing: Strategy, Implementation and Practice*<br>• Tuten, T. L., & Solomon, M. R. — *Social Media Marketing*<br>• Kumar, V., Sharma, A., & Gupta, S. — *Artificial Intelligence in Marketing: Practical Applications and Analytics* | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | IV | |
| Course Title | AI in Finance and Risk Management | L | T | P | Credits |
| Course Code | IMBAAI1402 | 4 | 0 | 0 | 4 |

| Course Objectives: | To build understanding of core financial management concepts and decision-making frameworks. |
|---|---|
| | To develop ability to evaluate financial decisions using both traditional and AI-enhanced tools |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of financial management and AI applications in finance and risk management. |
| CO2 | Apply financial analysis, investment evaluation, and working capital management techniques using AI-enabled tools. |
| CO3 | Analyze financing decisions, capital structure, and financial risks using traditional and AI-based approaches. |
| CO4 | Develop AI-assisted financial planning, control, and ethical decision-making strategies for business organizations. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Financial Management Foundations and AI**<br>● Introduction to financial management<br>● Profit vs wealth maximization<br>● Time value of money<br>● Present value and future value<br>● NPV, IRR, and payback period<br>● Financial statements and analysis<br>● Ratio analysis basics<br>● AI in financial analysis<br>● AI-powered financial dashboards<br>● Financial trend and anomaly detection<br>● Case studies in AI-based finance systems | 15 | CO1 |
| **Module II: Capital Budgeting and Working Capital Management**<br>● Capital budgeting process<br>● Investment evaluation techniques<br>● Risk and return analysis<br>● Sensitivity and scenario analysis<br>● Cost of capital and WACC<br>● AI in investment decisions<br>● Working capital concepts<br>● Cash management techniques<br>● Receivables and inventory management<br>● AI-based cash flow forecasting<br>● Short-term financing methods<br>● Case studies in AI-based budgeting and treasury systems | 15 | CO2 |
| **Module III: Financing Decisions and Risk Management**<br>● Sources of finance<br>● Capital structure theories<br>● Leverage concepts<br>● Dividend policy and decisions<br>● AI in credit rating and lending<br>● FinTech and digital finance | 15 | CO3 |

| | | |
|---|---|---|
| • Financial risk management basics<br>• Forecasting models in finance<br>• AI in fraud detection<br>• Corporate governance and compliance<br>• Case studies in AI-driven financial services | | |
| **Module IV: Financial Control, Ethics and Future of AI in Finance**<br>• Financial planning and budgeting<br>• Variance analysis and MIS reporting<br>• Financial control systems<br>• Ethics in financial management<br>• Responsible AI in finance<br>• AI in ESG and sustainability reporting<br>• Cybersecurity in financial systems<br>• Future trends in AI finance<br>• Autonomous finance and AI assistants<br>• Mini Project: AI-assisted financial analysis and risk management | **15** | **CO4** |
| **Suggested Readings:**<br>• I.M. Pandey – *Financial Management*<br>• Brealey, Myers & Allen – *Principles of Corporate Finance*<br>• Agrawal, Gans & Goldfarb – *Prediction Machines* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | IV | |
| Course Title | AI & Data-Driven Operations Optimization | L | T | P | Credits |
| Course Code | IMBAAI1403 | 4 | 0 | 0 | 4 |

| | |
|---|---|
| Course Objectives: | To understand the role of AI, business analytics, and data-driven models in operations management and process optimization. |
| | To apply AI-driven techniques for forecasting, inventory management, operational efficiency, quality improvement, and strategic decision-making in business operations. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of operations management, AI integration, and data-driven decision-making in modern business operations. |
| CO2 | Apply forecasting techniques, inventory analytics, and supply chain optimization methods using AI-based operational tools. |
| CO3 | Analyze operational performance using business analytics, workflow optimization, predictive maintenance, and AI-driven process improvement techniques. |
| CO4 | Evaluate smart operations technologies, Industry 4.0 concepts, automation systems, and emerging AI trends for sustainable and intelligent operations management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Operations Management and AI Integration**<br>● Fundamentals of Operations Management<br>● Operations Strategy and Business Performance<br>● Process Design and Process Mapping<br>● Introduction to AI in Operations<br>● Data-Driven Decision Making<br>● AI Applications in Manufacturing and Services<br>● Automation and Intelligent Systems<br>● Operational Efficiency Metrics<br>● Ethical and Organizational Challenges in AI Adoption<br>● Demand Forecasting Techniques<br>● AI-Based Predictive Forecasting | **15** | **CO1** |
| **Module II: Forecasting, Inventory Analytics and Supply Chain Optimization**<br>● Inventory Management Fundamentals<br>● EOQ and Inventory Control Concepts<br>● AI in Supply and Demand Optimization<br>● Warehouse and Logistics Analytics<br>● Procurement and Vendor Performance Analysis<br>● Real-Time Inventory Monitoring<br>● Data Visualization for Supply Chain Decisions<br>● Process Analysis and Bottleneck Identification<br>● Lean Operations and Continuous Improvement<br>● AI-Based Workflow Optimization<br>● Quality Control and Six Sigma Concepts | **15** | **CO2** |
| **Module III:** ***AI for Process Optimization and Operational Decision Making***<br>● Predictive Maintenance Fundamentals<br>● AI in Production Scheduling<br>● Process Automation Technologies<br>● Root Cause Analysis using AI | **15** | **CO3** |

| | | |
|---|---|---|
| • KPI Tracking and Operational Dashboards<br>• Introduction to Business Analytics in Operations<br>• Descriptive, Predictive, and Prescriptive Analytics<br>• AI-Based Risk and Performance Analysis<br>• Operational Cost Optimization<br>• Customer Service Operations Analytics<br>• Workforce and Resource Allocation Analytics | | |
| **Module IV: Smart Operations and Emerging AI Trends**<br>• AI in Service Operations Management<br>• Decision Support Systems<br>• Case Studies in AI-Driven Operational Excellence<br>• Smart Factories and Industry 4.0 Concepts<br>• AI in Logistics and Transportation Optimization<br>• Robotic Process Automation (RPA)<br>• AI for Sustainable Operations<br>• Cloud-Based Operations Analytics<br>• Digital Twin Concepts in Operations<br>• Future Trends in Intelligent Operations Management<br>• Responsible AI in Business Operations<br>**Mini Project:**<br>AI-Based Operations Performance Optimization and Demand Forecasting | **15** | **CO4** |
| **Suggested Readings:**<br>• Heizer, J., Render, B., & Munson, C. — *Operations Management*<br>• Chopra, S., & Meindl, P. — *Supply Chain Management: Strategy, Planning, and Operation*<br>• Marr, B. — *Artificial Intelligence in Practice: Business Operations and Analytics Applications* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | IV | |
| Course Title | Marketing of Services | L | T | P | Credits |
| Course Code | IMBAAI1404 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with:<br>The understanding of the foundations of service marketing, bank marketing, and its marketing mix. A comprehensive description of hotel and tourism industry, its marketing and marketing of some selected services. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Understand the basic concept of services marketing |
| CO2 | Illustrate the marketing mix for services and impact of technology |
| CO3 | Analyse banking and tourism marketing services |
| CO4 | Evaluate and formulate AI based Service Marketing |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I : Introduction**<br>Basics of Service Marketing, Nature and Types of Services, Difference between Service and Goods, Unique Characteristics of Services, Importance of Service Quality and Service Components, Framework for Marketing of Service, Improving Services, Relationship Marketing.<br>Environment for Service Marketing: Macro and Micro Environment, Understanding Service Customer, model of Service, Consumer Behaviour.<br>Market Segmentation and Selection: Service Marketing Segmentation, targeting and Positioning. | 15 | CO1 |
| **Module II: Service Marketing Mix and International MOS**<br>Service Marketing Mix: Need for Expanded Marketing Mix, Planning for Service Offer, Pricing , Promotion and Distribution of Services, Management of People, Process and Physical Evidence, Matching Demand and Supply of Services, Service Marketing Triangle. International Marketing of Services and GATT. The Service Based Business Plan. The Future of Marketing of Services. Technological Changes and the Services. | 15 | CO2 |
| **Module III: Marketing of Selected Services**<br>Bank Marketing: Structure of Bank Product, The Marketing Mix of Banking Services, Tourism Marketing: Tourism Product, Formulation of Marketing Mix for Tourism Industry. Hospital Marketing: Marketing Mix for Hospital Services, Hotel Marketing: The Concept and Its Topology, , Formulation of Marketing Mix of Hotel Industry. International Services, Education, Consultancy Services, Transportation Services and Communication Services. , Personal Care Service. | 15 | CO3 |
| **Module IV: AI-Based Service Marketing**<br>Introduction to Artificial Intelligence in Service Marketing ,<br>Role of AI in Understanding Service Customers, AI-Driven Customer Experience Management, Chat bots and Virtual Assistants in Service Delivery, AI in Service Personalization and Recommendation Systems, AI in Pricing and Revenue Management, AI-Enabled CRM Systems, Ethical Issues and Challenges in AI-Based Services, Future Scope of AI in Service Marketing | 15 | CO4 |

**Suggested Readings:**


- Donald, Cowell. Marketing of Service, Heinemann, London.
- Lovelock, C.H., Services Marketing, Prentice Hall, London.
- Duhan, S. & Bansal, S. (2022), *Artificial Intelligence for Business*, McGraw Hill India


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | IV | |
| Course Title | Rural Marketing | L | T | P | Credits |
| Course Code | IMBAAI1405 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with:<br>The role of rural sector in the development of the country's economy in recent years. The rural market, consumers and marketing strategies for the rural sector. The working of Co-operative Credit Societies and various financial schemes for rural development. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | To understand Concepts of Artificial Intelligence (AI) in rural management, and the rural problems & their remedies. |
| CO2 | Identify the characteristics of rural consumers, their sources and structure of income. Understand the rural financial environment for rural development. Understanding the Credit policies, deposits schemes and various credit programmes for rural development. |
| CO3 | Analyzing various marketing strategies adopted by rural industry for seeds, fertilizers and other rural products. |
| CO4 | Assessing the working of Co-operative Credit Societies. Illustrate. Case studies of digital and AI-enabled cooperative models in agriculture and dairy sectors. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I : Introduction**<br>Definition, Scope and Importance of Rural Management, Agriculture and Non-Agriculture sections of Economy. Rural Development problems and Remedies. | 15 | CO1 |
| **Module II: Rural Consumer and Rural Finance**<br>Consumption theory, rural consumer behaviour: meaning, characteristics, process and factors determining consumer behaviour, Village Economy sources.<br>Rural Financial Environment: Credit Planning and Implementation of Credit Programmers for Rural Development, Rural financial institutions, saving and Deposits; Cooperative management: meaning and types | 15 | CO2 |
| **Module III : Rural Marketing**<br>Marketing: Meaning, principles and practice. Rural marketing for Seed, Fertilizers, Pesticides advanced Machinery and other inputs of Rural Industry. Marketing Strategies for rural industry. | 15 | CO3 |
| **Module IV: Rural Digitalization and Role of AI**<br>Introduction to digitalisation in rural marketing, AI powered rural consumer insights and segmentations, AI in agricultural SCM, Rural marketing communication and promotion via AI, AI related challenges in Rural development. | 15 | CO4 |

**Suggested Readings:**


- Kashyap ,Pradeep., Raut, Siddhartha. And Biztantra ., Rural Marketing.
- GopalSwamy, T.P. , Rural Marketing, Vikas Publishing House, 2/e
- Barkar, J.W., Agricultural Marketing, Oxford University Press, New York.
- Mathur., Rural Marketing,Excel Books.
- Rural Marketing: Text and Cases – C. S. G. Krishnamacharyulu & Lalitha Ramakrishnan
- Cooperation and Rural Development – S. K. Singh

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | II | Semester | | IV | |
| Course Title | Leadership & Personality Development | L | T | P | Credits |
| Course Code | IMBAAI1406 | 3 | 0 | 0 | 3 |

| Course Objectives: | To familiarize students with:<br>The concept of leadership and challenges related to it |
|---|---|
| | The importance of evaluating the self for personality development |

| Course Outcomes: | |
|---|---|
| CO1 | Demonstrate the understanding of leadership concept, styles and theories |
| CO2 | Analyze and interpret effective leadership skills for optimum utilization of human resources |
| CO3 | Apply professional communication, workplace etiquette, time management, and AI-enabled decision-making skills to enhance effectiveness in organizational settings. |
| CO4 | Evaluate the role of AI, self-awareness, communication, and leadership skills in personality development and effective team management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Leadership**<br>Concept and nature of Leadership, Styles of Leadership, Leadership vs. Management Trait theory of Leadership, Behavioral theory of Leadership, Situational Theory of Leadership, Transformational & Transactional Leadership, Recognition and motivating tips for leading Staff. AI vs. Human Leadership | 12 | CO1 |
| **Module II: Leadership Skills**<br>Basic Leadership Skills, Emerging trends in leadership, Emotional Intelligence & leadership, Nature of Executive leadership, Emotional Intelligence & leadership, Ethical leadership & issues. Patterns of leadership effectiveness, Ethical challenges of AI in Leadership | 11 | CO2 |
| **Module III: Professionalism & Grooming**<br>Meaning of professionalism, Developing Professionalism at workplace, Goal setting & Time management, Dress and grooming for Success, Work ethics and Business Etiquettes, Role of verbal and non-verbal Communication in Organization, Barriers to Communication. Role of AI in enhancing professionalism, AI in Communication & Decision making | 11 | CO3 |
| **Module IV: Personality Development & Leadership**<br>Concept of Personality, Determinants of Personality, Significance of Personality Development, Self-awareness and self-concept, Johari Window, SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) Group Communication, Active Listening, Art of Public Speaking, improving public speaking skills, Building effective Teams, Stress management, Role of AI in personality development | 11 | CO4 |

**Suggested Readings:**


- John Mitchell, Natalie Mitchell & Bogdan Gudzenko (2012)-Leadership Development
- Hurlock, E.B. (2006), Personality Development, TMH, New Delhi.
- Stephen P. Robbins, Organization Behavior, Pearson Prentice Hall.
- Uday Kumar Haldar – Leadership & Team Building

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | V | |
| Course Title | AI & Behavioural Analytics in Consumer Decision Making | L | T | P | Credits |
| Course Code | IMBAAI1501 | 4 | 0 | 0 | 4 |

| | |
|---|---|
| Course Objectives: | To understand consumer decision-making theories, behavioural analytics concepts, and the role of AI in analyzing consumer behaviour patterns. |
| | To apply AI-driven analytical techniques and predictive models for customer engagement, personalization, and data-driven marketing decision-making. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand consumer behaviour theories, behavioural analytics concepts, and AI applications in consumer decision-making processes. |
| CO2 | Apply AI-driven tools and data analytics techniques for customer segmentation, behaviour tracking, sentiment analysis, and predictive consumer analysis. |
| CO3 | Analyze consumer insights using predictive modelling, neuromarketing concepts, and AI-based decision science techniques for marketing effectiveness. |
| CO4 | Evaluate strategic consumer analytics applications, personalized marketing approaches, emerging AI trends, and ethical issues in behavioural analytics systems. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Consumer Behaviour and AI Analytics**<br>● Introduction to Consumer Behaviour<br>● Consumer Decision-Making Process<br>● Psychological, Social, and Cultural Influences<br>● Digital Consumer Behaviour Trends<br>● Introduction to Behavioural Analytics<br>● AI and Machine Learning in Consumer Analysis<br>● Data Sources for Consumer Insights<br>● Ethics and Privacy in Consumer Data Analytics<br>● AI Applications in Customer Understanding<br>● Customer Data Collection Techniques<br>● Structured and Unstructured Consumer Data | 15 | CO1 |
| **Module II: Consumer Data Analytics and Behaviour Tracking**<br>● Online Tracking and User Journey Analysis<br>● Social Media Behaviour Monitoring<br>● AI-Based Customer Segmentation<br>● Web Analytics and Clickstream Analysis<br>● Sentiment and Opinion Mining<br>● Personalization and Recommendation Systems<br>● Data Cleaning and Preparation for Behaviour Analysis<br>● Introduction to Predictive Consumer Analytics<br>● Buying Pattern Identification<br>● AI-Based Demand Forecasting<br>● Consumer Preference Analysis | 15 | CO2 |
| **Module III: AI-Driven Consumer Insight and Decision Science**<br>● Predictive Modelling for Customer Retention<br>● AI in Loyalty and Engagement Programs<br>● Behavioural Pattern Recognition<br>● Real-Time Consumer Analytics | 15 | CO3 |

| | | |
|---|---|---|
| • KPI Measurement and Dashboard Reporting<br>• Fundamentals of Neuromarketing<br>• Behavioural Economics in Marketing<br>• Emotional and Cognitive Decision Factors<br>• AI in Emotion Detection and Analysis<br>• Eye-Tracking and Attention Analytics Concepts<br>• Consumer Trust and Brand Perception Analytics | | |
| **Module IV: Strategic Consumer Analytics and Emerging AI Applications**<br>• AI-Based Dynamic Pricing Strategies<br>• Ethical Issues in Behavioural AI<br>• Case Studies on AI-Driven Consumer Decision Systems<br>• AI for Customer Experience Management<br>• AI in E-Commerce Consumer Analytics<br>• Behavioural Analytics in Retail and Banking<br>• AI-Based Market Basket Analysis<br>• Consumer Churn Prediction Concepts<br>• AI for Personalized Marketing Campaigns<br>• Emerging Trends in Consumer Intelligence<br>• Future of AI in Behavioural Decision Science<br>**Mini Project:**<br>AI-Based Consumer Behaviour Analysis and Purchase Prediction | **15** | **CO4** |
| **Suggested Readings:**<br>• Schiffman, L. G., & Wisenblit, J. — *Consumer Behavior*<br>• Wedel, M., & Kannan, P. K. — *Marketing Analytics for Data-Rich Environments*<br>• Davenport, T., Guha, A., & Grewal, D. — *Artificial Intelligence in Marketing and Consumer Analytics* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | V | |
| Course Title | AI-Driven Research & Business Intelligence | L | T | P | Credits |
| Course Code | IMBAAI1502 | 4 | 0 | 0 | 4 |

| Course Objectives: | To develop advanced business research skills by integrating AI-powered tools and methodologies. |
|---|---|
| | To build strategic business intelligence capabilities for data-driven organizational decision-making. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the concepts, methodologies, and ethical considerations of AI-driven business research and intelligence systems. |
| CO2 | Apply AI-enabled tools and techniques for business data collection, measurement, and research analysis. |
| CO3 | Analyze quantitative, qualitative, and business intelligence data to generate actionable insights for strategic decision-making. |
| CO4 | Develop and present AI-assisted business research reports, strategic recommendations, and responsible AI-driven business solutions. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Business Research and AI Basics**<br>● Introduction to business research<br>● Types of business research<br>● Research process and research design<br>● Problem identification and hypothesis formulation<br>● Limitations of traditional research<br>● Introduction to AI in research<br>● AI tools for literature review and summarization<br>● Research ethics and plagiarism<br>● Source credibility and citation basics<br>● Case studies in AI-assisted business research | 15 | CO1 |
| **Module II: AI-Based Data Collection and Measurement**<br>● Primary and secondary data collection methods<br>● Questionnaire design and scaling techniques<br>● Sampling methods and sample size basics<br>● AI tools for data collection<br>● Social media and sentiment data collection<br>● Survey platforms and online forms<br>● Validity and reliability in research<br>● Introduction to web scraping and social listening<br>● Case studies in AI-based survey analysis | 15 | CO2 |
| **Module III: AI-Powered Data Analysis and Business Intelligence**<br>● Descriptive statistics and data interpretation<br>● Hypothesis testing concepts<br>● Qualitative and quantitative analysis<br>● Mixed methods research<br>● AI tools for data analysis<br>● Pattern detection and theme extraction<br>● Factor analysis and cluster analysis basics<br>● Business Intelligence concepts and architecture<br>● Competitive intelligence and market analysis | 15 | CO3 |

| | | |
|---|---|---|
| • Trend forecasting and KPI analysis<br>• Case studies in AI-driven business intelligence | | |
| **Module IV: Research Communication and Responsible AI**<br>• Research report writing<br>• Executive summary and presentation techniques<br>• Academic vs industry reports<br>• Data visualization basics<br>• Research proposal preparation<br>• Responsible use of AI in research<br>• Bias, hallucinations, and AI limitations<br>• Research integrity and ethical practices<br>• Future trends in AI and business intelligence<br>• Career opportunities in research and BI<br>• Mini Project: AI-assisted business research report | **15** | **CO4** |
| **Suggested Readings:**<br>• C.R. Kothari – *Research Methodology*<br>• Bryman & Bell – *Business Research Methods*<br>• Thomas H. Davenport – *Competing on Analytics* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | V | |
| Course Title | AI and Digital Transformation in International Business | L | T | P | Credits |
| Course Code | IMBAAI1503 | 4 | 0 | 0 | 4 |

| Course Objectives: | To provide students with fundamental knowledge of Artificial Intelligence and digital transformation concepts in international business environments. |
|---|---|
| | To enable students to apply AI-driven strategies and intelligent decision-making techniques in global marketing, trade, logistics, and digital business operations. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of Artificial Intelligence, digital transformation, and their applications in international business environments. |
| CO2 | Analyze AI-driven strategies in global marketing, consumer analytics, international trade, logistics, and supply chain management. |
| CO3 | Apply AI-based tools and data-driven decision-making techniques to solve real-world international business challenges. |
| CO4 | Evaluate digital business models, intelligent decision systems, cybersecurity, ethical issues, and emerging AI trends in global business operations. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of AI and Digital Transformation in International Business**<br>● Introduction to International Business Environment<br>● Digital Transformation Concepts and Frameworks<br>● Fundamentals of Artificial Intelligence in Business<br>● Evolution of Global Digital Commerce<br>● AI Technologies in International Markets<br>● Data-Driven Decision Making in Global Business<br>● Challenges and Opportunities in Digital Transformation<br>● Generative AI in International Business<br>● Future Trends in AI and Global Commerce | 15 | CO1 |
| **Module II: AI-Driven Global Marketing and Consumer Analytics**<br>● Digital Marketing in International Business<br>● AI-Based Consumer Behaviour Analysis<br>● Customer Segmentation and Targeting<br>● Predictive Analytics for Global Markets<br>● Recommendation Systems in E-Commerce<br>● Social Media Analytics and Brand Intelligence<br>● Personalized Marketing Strategies using AI<br>● AI for Cross-Cultural Business Communication<br>● AI-Driven International Financial Technologies | 15 | CO2 |
| **Module III: AI in International Trade, Logistics and Supply Chain**<br>● AI Applications in Global Trade Management<br>● Smart Supply Chain and Logistics Systems<br>● Demand Forecasting and Inventory Optimization<br>● AI in Warehouse and Transportation Management<br>● Blockchain and AI in International Trade<br>● Risk Management in Global Supply Chains | 15 | CO3 |

| | | |
|---|---|---|
| ● Digital Trade Platforms and Automation<br>● Smart Global Enterprise Systems<br>● Sustainability and Green AI in International Business | | |
| **Module IV: Digital Business Strategy and Intelligent Decision Systems with Mini Project**<br>● AI-Based Business Intelligence Systems<br>● Digital Business Models and Innovation<br>● Strategic Decision Making using AI<br>● Financial Analytics and International Business Forecasting<br>● AI-Powered CRM Systems<br>● Cybersecurity and Data Privacy in Global Business<br>● Ethical and Legal Issues in AI-Based International Operations<br>● Case Studies on Digital Transformation in Multinational Companies<br>**Mini Project:**<br>Development of an AI-Based International Business Strategy Model for:<br>● Global Market Analysis<br>● Customer Behaviour Prediction<br>● International Supply Chain Optimization<br>● Digital Marketing Strategy<br>● Trade Risk Assessment | **15** | **CO4** |
| **Suggested Readings:**<br>● Satya Nadella, Greg Shaw, and Jill Tracie Nichols, *Hit Refresh: The Quest to Rediscover Microsoft's Soul and Imagine a Better Future for Everyone*, Harper Business.<br>● Bernard Marr, *Artificial Intelligence in Practice*, Wiley.<br>● Philip Kotler, Hermawan Kartajaya, and Iwan Setiawan, *Marketing 5.0: Technology for Humanity*, Wiley. | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | V | |
| Course Title | Project Management | L | T | P | Credits |
| Course Code | IMBAAI1504 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with:<br>The concepts, processes, methods, techniques and tools required for the proper selection and management of each stage of the project and techniques of project appraisal and risk control, needed for meeting stakeholder expectations. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Understand the principles of the project management and project lifecycle |
| CO2 | Analyse the different techniques tools and approaches to project management |
| CO3 | Apply project appraisal methods |
| CO4 | Evaluate project risks, problems and the role of AI in project management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Project Management**<br>Introduction to project management, starting a new venture, concept of projects. Characteristics need and scope of project management. Project financing. Identification of investment opportunities. Preliminary screening and Project formulation. Feasibility study: Pre-feasibility and project feasibility. Lifecycle phases of project. | 15 | CO1 |
| **Module II: Marketing and Technological Appraisal**<br>Market and Demand Analysis: Situational Analysis and Specification of Objectives. Collection of Secondary Information, Conduct of Market Survey, Characterization of Market. Demand Forecasting, Uncertainties in Demand Forecasting. Market Planning, Technical Analysis of project: Manufacturing Process/ Technology, Technical Arrangements, Material Inputs and Utilities, Product Mix, Plant Capacity, Location and Site, Machineries and Equipment, Structures and Civil Works, Environmental Aspects, Project Charts and Layouts. Schedule of Project Implementation, Need for Considering Alternatives. | 15 | CO2 |
| **Module III: Financial and Socio, Economic Appraisal**<br>Financial analysis of projects. Discount rates as project appraisal criteria. Social cost, benefit analysis. Environmental appraisal of projects. | 15 | CO3 |
| **Module IV: Risk and Cost Control**<br>Project risks: Types of Project risks and measures of Project risks. Risk Determination of the Critical Path, Resource allocation, Scheduling, PERT Model, CPM Model.<br>Introduction to AI in Project Management: Concept and definition of Artificial Intelligence Evolution and types of AI, Traditional project management vs AI-driven project management, Role of AI in digital transformation of projects, Role of AI in Project Planning and execution Tools of AI in project Management | 15 | CO4 |
| **Suggested Readings:**<br>• Marwah., Project Management, Wiley Dreamtech.<br>• Chaturvedi and Jauhari., Project Management, Himalaya Publishing.<br>• Chandra, Prasanna., Project: Preparation, Appraisal, Budgeting and Implementation, TMH, 5thEd.<br>• Mishra, Project Management, Excel Books.<br>• Goyal, B.B., Project Management: A Development Perspective, Deep and Deep. | | |

- Gopalan., Project Management Core Text Book ,Wiley.

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | V | |
| Course Title | Entrepreneurial Finance | L | T | P | Credits |
| Course Code | IMBAAI1505 | 2 | 0 | 0 | 2 |

| | |
|---|---|
| Course Objectives: | To familiarize students with:<br>To understand the role of finance in entrepreneurship and develop a new business plan. |
| | To analyze financial statements and ratios to assess the financial health of a start-up. |
| | To analyze the various sources of investment and also know the support provided by the state and central government for entrepreneurship. |
| | To determine the various financial support schemes provided by different institutions to entrepreneurs. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the importance of finance in entrepreneurship and developing a business plan. |
| CO2 | Analysis of the financial statements and ratios to assess the financial health of a start-up. |
| CO3 | Identify the various investment sources and the support provided by the state and Central Government for entrepreneurship. |
| CO4 | Determine the various financial support schemes provided by different institutions to Entrepreneurs. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Entrepreneurial Finance**<br>Definition and scope of entrepreneurial finance, Role of finance in entrepreneurship, Characteristics of entrepreneurial finance, developing a business plan, estimating start-up costs and funding needs, Financial projections and forecasting, Valuation of start-ups. Global Finance ecosystems, Banks, Fintech, challenges and advantages | 8 | CO1 |
| **Module II: Financial Statements & Analysis**<br>Introduction to financial statements (balance sheet, income statement, and cash flow statement), financial ratio analysis for start-ups, assessing the financial health of a start-up, Benchmarking, and industry analysis. Traditional banking & finance Vs. Digital Banking and Fintech | 7 | CO2 |
| **Module III: Sources of Finance**<br>Various sources of Investment - Basics of Venture Capital and Angel Investment - Start-up Culture - Various measures of encouragement and support being provided by the State and Central Government for strengthening the Entrepreneurial Culture. Fintech Statistics and Global Market | 7 | CO3 |
| **Module IV: Institutional Financial Support**<br>Schemes and functions of rate of Industries-District Industries Centres (DICs)-Industrial Development Corporation (IDC)-State Financial Corporation (SFCs)-Small Scale Industries Development Corporations (SSIDCs) -Khadi and Village Industries Commission (KVIC)-Technical Consultancy Organisation (TCO)- Small Industries Service Institute (SISI)-National Small Industries Corporation (NSIC)-Small Industries Development Bank of India (SIDBI). Fintech and society, Enabling green economic growth | 8 | CO4 |

**Suggested Readings:**


- Philip J. Adelman, Alan M. Marks, Entrepreneurial Finance, 5e, Pearson, 2011.
- Steven Rogers, Entrepreneurial Finance: Finance and Business Strategies for the Serious Entrepreneur 3e, Tata Mc Graw Hill, 2014.
- Charantimath, Poornima, Entrepreneurship Development and Small Business Enterprises, 2nd Edition, Pearson Education, 2012


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | V | |
| Course Title | Research-Based Learning I | L | T | P | Credits |
| Course Code | IMBAAI1506 | 0 | 0 | 2 | 1 |

| | |
|---|---|
| **Course Objectives:** | Understand the role of research in business decision-making. |
| | Develop skills to identify and frame research problems. |
| | Formulate a focused research title through critical thinking and collaboration. |
| | Strengthen the ability to review and synthesize literature from credible sources. |

| Course Outcomes: | |
|---|---|
| **CO1** | Explain the importance of research in business and apply it to real-world situations. |
| **CO2** | Identify and frame research problems by analyzing current industry trends. |
| **CO3** | Formulate precise and relevant research titles through critical thinking and collaboration. |
| **CO4** | Review, analyze, and synthesize literature from credible academic and industry sources. |

**Course Structure (Classroom Activity)**

| Topic | Learning Activities |
|---|---|
| Introduction to Research-Based Learning | Importance and use of research in business |
| Identifying Research Problems | Group activity: Problem framing from current industry trends |
| Finalize the Title for Research-Based Learning | Brainstorming session and peer review of proposed titles |
| Literature Review | Accessing authentic journals, databases, and industry reports |

**Assessment Pattern**

The performance of students will be evaluated through an audit-based evaluation system, which includes presentations and viva-voce.

**Guidelines for RBL Teacher**

- Introduce the importance of research in business through case discussions and examples.
- Guide students in identifying research problems using industry trends.
- Facilitate brainstorming sessions to guide students in identifying suitable titles.
- Train students in accessing and reviewing authentic journals, databases, and industry reports.
- Explain how to write using APA referencing style.
- Emphasize academic honesty and research ethics.

**Guidelines for RBL Guide**

- Guide students in refining research problems into focused titles.
- Provide academic or industry insights to strengthen research direction.
- Guiding Students in reviewing at least 10 good research papers related to the title.
- Guiding Students about drafting the literature review as per the given format.

**Format for Literature Review**

| S.No | Title of the Paper | Authors' Names | Abstract | Keywords | Summary (150-200 words) | Findings/ Conclusion |
|---|---|---|---|---|---|---|

- Provide a detailed explanation of writing in accordance with the APA referencing style.

- Interact regularly to monitor progress and resolve difficulties.
- Make helpful suggestions for viva-voce and presentation finalization.

**Guidelines for Students**

- Choose a broad area of interest (e.g., marketing, finance, HR, entrepreneurship, digital business etc.) and narrow it down to a feasible, relevant, and researchable problem.
- Engage actively in research discussions to frame problems and finalize titles.
- Read and summarize at least 10 research papers (200 words each), compare studies, and identify research gaps.
- Strengthen literature review skills through credible resources and systematic drafting.
- Present research progress confidently and respond effectively during viva-voce.
- Maintain academic integrity by avoiding plagiarism and applying APA referencing correctly.

**Referencing List (Strictly Follow APA Style)**

1. **Book**
   Author, A. A. (Year). *Title of the book* (xth ed.). Publisher.
   *(Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)*
2. **Journal Article**
   Author, A. A., & Author, B. B. (Year). Title of the article. *Title of the Journal, Volume*(Issue), page range. https://doi.org/xxxx
   *(Note: Journal title and volume are italicized; issue number is in parentheses but **not** italicized.)*
3. **Website**
   Author/Organization. (Year, Month Day). Title of the webpage. *Website Name*. URL
   *(Note: Italicize the webpage title, not the website name. If no date, use n.d.)*
4. **Report/Company Document**
   Organization. (Year). *Title of the report* (Report No. xxx if available). Publisher. URL
   *(Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)*

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | VI | |
| Course Title | AI for Marketing & Consumer Intelligence | L | T | P | Credits |
| Course Code | IMBAAI1601 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand the role of AI in marketing and consumer intelligence for enhancing customer engagement and decision-making. |
|---|---|
| | Develop AI-driven marketing strategies using insights from data, tools, and customer analytics. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of Artificial Intelligence in marketing and the role of AI-driven technologies in modern marketing practices. |
| CO2 | Apply customer intelligence, segmentation, targeting, and predictive analytics concepts for marketing decision-making. |
| CO3 | Analyze the application of AI in digital marketing, consumer engagement, and campaign performance measurement. |
| CO4 | Develop AI-driven marketing strategies using data analytics, dashboards, and ethical marketing practices. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Economics**<br>● Evolution of Marketing: Traditional → Digital → AI-driven<br>● Role of AI in Marketing: Personalization, targeting, automation<br>● Types of Marketing Data: Customer, transactional, behavioral<br>● Customer Intelligence: Concepts and importance<br>● Marketing Analytics lifecycle<br>● Overview of AI tools used in marketing (chatbots, analytics platforms)<br>● Customer Segmentation: Demographic, geographic, behavioral<br>● Customer personas and profiling<br>● Targeting strategies and positioning<br>● Personalization techniques in marketing<br>● Ethical issues in AI-driven marketing (privacy, bias)<br>● Case Illustration: AI in e-commerce personalization | 15 | CO1 |
| **Module II: Customer Segmentation, Predictive Analytics and Forecasting**<br>● Introduction to clustering concepts (non-technical)<br>● RFM (Recency, Frequency, Monetary) analysis<br>● Campaign planning basics<br>● Introduction to Predictive Analytics in marketing<br>● Customer churn prediction (conceptual)<br>● Sales and demand forecasting basics<br>● Lead scoring and conversion prediction<br>● Introduction to regression (intuitive understanding)<br>● Evaluating predictions (accuracy, error basics)<br>● AI tools for prediction (low-code/no-code)<br>● Case Study: Segmentation in retail marketing<br>● Case Study: Campaign performance prediction | 15 | CO2 |
| **Module III: AI in Digital Marketing and Consumer Engagement**<br>● AI in Social Media Marketing (analytics and targeting)<br>● Recommendation systems (e.g., product suggestions) | 15 | CO3 |

| | | |
|---|---|---|
| • Chatbots and conversational marketing<br>• Email marketing automation and personalization<br>• Sentiment analysis basics (customer feedback analysis)<br>• Digital advertising and targeting (conceptual)<br>• Measuring campaign effectiveness (CTR, ROI basics)<br>• Customer journey mapping<br>• Marketing dashboards and KPIs<br>• Case Study: AI-driven digital campaign | | |
| **Module IV: AI-Driven Marketing Strategy and Decision Making**<br>• Data-driven marketing strategy development<br>• Budget allocation and ROI optimization<br>• Ethical marketing and consumer data protection<br>• Limitations and risks of AI in marketing<br>• Future trends: Hyper-personalization, generative AI<br>• AI-driven decision making in marketing campaigns<br>• Integrated AI marketing strategy framework<br>• Mini Project: AI-driven marketing | **15** | **CO4** |
| **Suggested Readings:**<br>• Philip Kotler, Hermawan Kartajaya & Iwan Setiawan, *Marketing 5.0: Technology for Humanity*, Wiley.<br>• Paul Roetzer & Mike Kaput, *Marketing Artificial Intelligence: AI, Marketing, and the Future of Business*, Matt Holt Books.<br>• Wayne L. Winston, *Marketing Analytics: Data-Driven Techniques with Microsoft Excel*, Wiley.<br>• Raj Venkatesan & Jim Lecinski, *The AI Marketing Canvas*, Stanford University Press. | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | VI | |
| Course Title | AI-Powered Supply Chain & Logistics Management | L | T | P | Credits |
| Course Code | IMBAAI1602 | 4 | 0 | 0 | 4 |

| Course Objectives: | To understand AI-driven concepts, analytics techniques, and intelligent technologies used in modern supply chain and logistics management systems. |
|---|---|
| | To apply AI-based forecasting, inventory optimization, logistics analytics, and decision-support techniques for improving operational efficiency, visibility, and sustainability in supply chain operations. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of supply chain management, logistics systems, and AI integration in modern supply chain operations. |
| CO2 | Apply AI-driven forecasting, inventory management, procurement analytics, and logistics optimization techniques for effective supply chain decision-making. |
| CO3 | Analyze transportation systems, logistics analytics, supply chain data analytics, and decision-support systems using AI-based operational models. |
| CO4 | Evaluate smart supply chain technologies, Industry 4.0 concepts, sustainable logistics strategies, and emerging AI trends in intelligent supply chain management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Supply Chain Management and AI Integration**<br>● Fundamentals of Supply Chain Management<br>● Supply Chain Components and Network Design<br>● Evolution of Digital and Smart Supply Chains<br>● Introduction to AI in Supply Chain Management<br>● AI Technologies in Logistics and Distribution<br>● Data-Driven Supply Chain Decision Making<br>● Supply Chain Performance Metrics<br>● Challenges in Global Supply Chain Operations<br>● Ethical and Security Issues in AI-Based Supply Chains<br>● Demand Planning and Forecasting Concepts<br>● AI-Based Predictive Forecasting Models | 15 | CO1 |
| **Module II: AI-Based Inventory Optimization and Intelligent Logistics**<br>● Inventory Management Fundamentals<br>● Inventory Classification and Control Techniques<br>● Warehouse Operations and Automation<br>● AI in Procurement and Supplier Analytics<br>● Real-Time Inventory Monitoring Systems<br>● Data Visualization for Inventory Decisions<br>● Supply Chain Risk Prediction and Mitigation<br>● Logistics Management Fundamentals<br>● Transportation Planning and Route Optimization<br>● AI in Fleet Management<br>● Smart Warehousing and Distribution Systems | 15 | CO2 |
| **Module III:** ***Logistics Analytics and Supply Chain Decision Support***<br>● Internet of Things (IoT) in Logistics<br>● AI-Based Delivery Tracking Systems<br>● Last-Mile Delivery Optimization<br>● Logistics Cost Analysis and Optimization | 15 | CO3 |

| | | |
|---|---|---|
| • Sustainable and Green Logistics Practices<br>• Supply Chain Data Analytics<br>• Descriptive, Predictive, and Prescriptive Analytics<br>• AI-Based Supplier Performance Evaluation<br>• Customer Demand and Service Analytics<br>• AI in Supply Chain Collaboration<br>• Blockchain Concepts in Supply Chain Transparency | | |
| **Module IV: Smart Supply Chain Systems and Emerging Technologies**<br>• Decision Support Systems for Supply Chain Management<br>• KPI Dashboards and Business Intelligence Tools<br>• Case Studies in AI-Driven Supply Chain Optimization<br>• Industry 4.0 and Smart Supply Chains<br>• Autonomous Logistics and Robotics<br>• AI in E-Commerce Supply Chain Operations<br>• Cloud-Based Supply Chain Platforms<br>• Digital Twins in Supply Chain Simulation<br>• AI for Sustainable Supply Chain Strategies<br>• Emerging Trends in Logistics Technology<br>• Future Scope of Intelligent Supply Chain Systems<br>**Mini Project:**<br>AI-Based Supply Chain Optimization and Logistics Performance Analysis | **15** | **CO4** |
| **Suggested Readings:**<br>• Chopra, S., & Meindl, P. — *Supply Chain Management: Strategy, Planning, and Operation*<br>• Christopher, M. — *Logistics and Supply Chain Management*<br>• Marr, B. — *Artificial Intelligence in Practice: Supply Chain and Logistics Applications* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | VI | |
| Course Title | Artificial Intelligence and Machine Learning Fundamentals | L | T | P | Credits |
| Course Code | IMBAAI1603 | 4 | 0 | 0 | 4 |

| Course Objectives: | To understand the fundamental concepts of Artificial Intelligence, Machine Learning, data preprocessing, and predictive modelling techniques. |
|---|---|
| | To apply machine learning algorithms and AI techniques for solving real-world problems using data-driven approaches and analytical tools. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of Artificial Intelligence, Machine Learning paradigms, data preprocessing techniques, and model evaluation methods. |
| CO2 | Apply supervised learning algorithms and predictive modelling techniques using machine learning tools and real-world datasets. |
| CO3 | Analyze unsupervised learning methods, clustering techniques, neural networks, and advanced AI concepts for data analysis and problem-solving. |
| CO4 | Evaluate AI applications, ethical considerations, and emerging trends in Artificial Intelligence and Machine Learning for practical business and industry use cases. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to AI, Machine Learning and Data Preparation**<br>● Introduction to Artificial Intelligence<br>● Types of AI (Narrow, General, Super AI)<br>● Machine Learning Overview<br>● Types of Machine Learning:<br>○ Supervised Learning<br>○ Unsupervised Learning<br>○ Reinforcement Learning (intro)<br>● Applications of AI & ML (Healthcare, Finance, NLP, Vision)<br>● ML Workflow (Data → Model → Evaluation → Deployment)<br>● Data Cleaning & Preparation<br>● Feature Selection & Engineering (overview)<br>● Train-Test Split<br>● Overfitting vs Underfitting<br>**Hands-On:**<br>● Set up Python environment and explore a sample dataset<br>● Prepare dataset and evaluate a basic ML model | **15** | **CO1** |
| **Module II: Model Evaluation and Supervised Learning Algorithms**<br>● Model Evaluation Metrics:<br>○ Accuracy<br>○ Precision<br>○ Recall<br>○ F1-score<br>● Introduction to Scikit-learn<br>● Linear Regression<br>● Logistic Regression<br>● k-Nearest Neighbors (KNN)<br>● Decision Trees<br>● Model Evaluation & Comparison<br>● Applications of Supervised Learning<br>● Introduction to predictive modelling techniques | **15** | **CO2** |

| | | |
|---|---|---|
| ● Basic regression and classification workflows<br>● Performance comparison of ML models<br>**Hands-On:**<br>● Build regression and classification models | | |
| **Module III: *Unsupervised Learning and Advanced AI Concepts***<br>● Clustering Concepts<br>● K-Means Clustering<br>● Hierarchical Clustering (overview)<br>● Dimensionality Reduction (PCA – concept level)<br>● Applications of Unsupervised Learning<br>● Basics of Neural Networks<br>● Introduction to Deep Learning<br>● Natural Language Processing (NLP – overview)<br>● Computer Vision (overview)<br>● Ethics in AI (bias, fairness, privacy)<br>● Future Trends in AI<br>**Hands-On:**<br>● Perform clustering on datasets and visualize results | **15** | **CO3** |
| **Module IV: AI Applications, Ethics and Mini Project**<br>● AI applications in real-world problem solving<br>● AI model deployment concepts<br>● Data-driven decision-making using ML models<br>● AI in business and industry applications<br>● Responsible AI and ethical considerations<br>● Emerging AI technologies and innovations<br>● Introduction to intelligent automation systems<br>● AI challenges and limitations<br>● Future scope of AI and Machine Learning<br>● Case studies in AI applications<br>● Industry-oriented AI solution development<br>**Mini Project:**<br>● House Price Prediction<br>● Customer Segmentation<br>● Spam Email Classification | **15** | **CO4** |
| **Suggested Readings:**<br>● ***Hands-On Machine Learning with Scikit-Learn & TensorFlow* –** Aurélien Géron<br>● ***Artificial Intelligence: A Modern Approach*** – Stuart Russell & Peter Norvig<br>● ***Machine Learning*** – Tom M. Mitchell | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | VI | |
| Course Title | Business Ethics & Indian Value System | L | T | P | Credits |
| Course Code | IMBAAI1604 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with:<br>Theoretical issues and dilemmas faced by the managers in most business organizations and the concepts of CSR, Consumer Protection, Success, Dharma, Karma, etc. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Understand the relevance of ethics and values in business. |
| CO2 | Describe and demonstrate the concept of corporate governance |
| CO3 | Apply transformation and make use of the stories of business gurus |
| CO4 | Evaluate the relationship between ethics, corporate excellence and corporate mission. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction**<br>Business Ethics- An Overview; Concept, nature, evolving ethical values, Arguments against business Ethics. Ethics: development of ethics, ethical decision making, ethos of Vedanta in management, Business Ethics in Different Organizational contexts; Sustainability: A Goal for Business Ethics; Approaches and Practices of Business Ethics; Ethical theories and approaches - The Teleological approach and the Deontological approach. Universalism vs. Ethical relativism, Utilitarianism; Hierarchism as an organizational value. Values: Concept, types and formation of values. Relationship between ethics, values and behavior, Values of Indian Managers. Artificial Intelligence and Ethical decision-making | 15 | CO1 |
| **Module II: Corporate Social Responsibility & Consumer Protection**<br>Corporate responsibility of business towards employees, consumers and community. Corporate Governance & Code of Corporate Governance. Different approaches of corporate governance, Corporate Philanthropy, Relationship of CSR with Corporate Sustainability; CSR and Business Ethics, CSR and Corporate Governance, Global Corporate Governance Practices. AI and Corporate Governance, Consumerism. Case Studies CSR success stories | 15 | CO2 |
| **Module III: Understanding Progress & Results, Managing Transformation and Success**<br>Progress & Results: Definition and functions of progress. Progress in business, difference between: Short-term profit vs long-term success.<br>Transformation: Need for transformation, process and challenges of transformation. Role of AI in business transformation.<br>Understanding Success: Definitions of success, Principles for competitive success, pre-requisites to create blueprint for success. Successful stories of business Gurus. | 15 | CO3 |
| **Module IV: Ethical Philosophies**<br>Relationship between Ethics &Corporate Excellence, Gandhian Ethics in Business, Philosophy of Trusteeship, Gandhiji's Seven Greatest Social Sins, Corporate Mission and Code of Ethics, Meaning of mission Statement, Role of ethical values in mission Code of Ethics, Organizational Culture, How culture influences employee behavior, Creating an ethical work culture.<br>TQM: Link between quality and ethics Concept of Knowledge management | 15 | CO4 |

| | | |
|---|---|---|
| and wisdom management. AI vs. human wisdom. | | |

**Suggested Readings:**


- Chakraborty, S.K., Human values for Managers.
- Chakraborty, S.K., Ethics in Management: A Vedantic Perspective, Oxford University Press.
- Gaur, R.R., Sangal, R. and Bagaria, G.P., A Foundation Course in Human Values and Professional Ethics
- Excel Books Private Limited, New Delhi.
- Velasquez, M.G. – Business Ethics: Concepts and Cases, Pearson Education
- Fernando, A.C. – Business Ethics: An Indian Perspective, Pearson Education India
- Stanwick, P.A. & Stanwick, S.D. – Understanding Business Ethics, Sage Publications
- Mitchell, M. – Artificial Intelligence: A Guide for Thinking Humans, Farrar, Straus and Giroux


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | VI | |
| Course Title | Goods & Services Tax | L | T | P | Credits |
| Course Code | IMBAAI1605 | 4 | 0 | 0 | 4 |

| | |
|---|---|
| **Course Objectives:** | To familiarize students with: -<br>To provide understanding about salient features of GST law and implications of its various provisions for different classes of suppliers. It also aims to provide an understanding of compliances and procedures laid down in GST law and to provide the understanding about significant provisions of the customs law. Artificial Intelligence (AI) is rapidly being integrated into the Goods and Services Tax (GST) landscape, changing it from a manual, compliance-heavy process to an automated, data-driven system. Key areas where AI is used, which are increasingly appearing in updated GST syllabi |

| Course Outcomes: | |
|---|---|
| **CO1** | To understand the need, and utility of indirect taxes and analyze the constitutional aspects of GST. |
| **CO2** | To apply the provisions relating to levy of GST; |
| **CO3** | To analyze the procedure and exemptions for different types of goods and services. Examine the various provisions of input tax credit and use of AI in various GST compliance and procedures. |
| **CO4** | To Evaluate the provisions of the customs law. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Basic Concepts**<br>Concept and features of Indirect Taxes, Difference between Direct and Indirect Taxes, Need of GST, Advantages of GST. Structure of GST in India: Dual Concept– CGST – SGST – UTGST - IGST. Subsuming of Taxes-GST Rate Structure in India Constitutional aspects of GST. GST Council: Constitution, Structure and functioning. | **15** | **CO1** |
| **Module II: Concept of supply and Levy of GST**<br>Concept of supply including composite and mixed supply, Place, Time and Value of taxable supply, Significance of consideration. Basis of Charge of GST, Inter-State Supply, Intra- state supply, GST rates notified for supply of various goods and services, Reverse charge mechanism, Composition levy, Exemptions from GST, Power to grant exemptions, Exempted goods under exemption notifications, Exempted services under exemption notification. | **15** | **CO2** |
| **Module III: Procedures under GST (Including AI Enabled Compliance and Automation)**<br>Registration under GST law, Compulsory Registration - Deemed Registration- Procedure for Registration - GSTIN - Amendment of Registration -Cancellation of Registration - Revocation of cancellation.<br>Automated Return Preparation: Using AI to prepare various returns and summaries under GST Law.<br>AI-Driven Reconciliations: Automatic matching of GSTR-2B vs. Purchase Register and B2B invoices using AI algorithms.<br>Invoicing & Data Validation: Automated extraction and validation of data from invoices, debit/credit notes to check for invalid GSTINs, duplicate vendors, or missing HSN codes.<br>**Input Tax Credit & Payment of GST:** | **15** | **CO3** |

| | | |
|---|---|---|
| Input service distribution - Computation - Recovery of Credit - Reversal of credit - Utilization of Input tax credit. Tax invoice credit and debit notes, Different GST returns, Electronic liability Ledger, Electronic credit Ledger, Electronic cash ledger, Different assessment under GST, Interest applicable under GST (Period) | | |
| **Module IV: Special Provisions in GST**<br>Various provisions regarding e-way bill in GST, Mechanism of Tax Deducted at Source (TDS) and tax collected at source (TCS) & Refunds, Audit under GST. Penalty under GST | **15** | **CO4** |
| **Suggested Readings:**<br>• Singhania,V.K.,& Singhania,M.(2020). Student's Guide to Income Tax Including GST . New Delhi: Taxmann Publication.<br>• Singhania,V.K.,& Singhania, K.(2020). Direct Taxes: Law & Practice. New Delhi: Taxmann Publication.<br>• Ahuja,G.,&Gupta,R.(2020).Direct Taxes Ready Reckoner. New Delhi: Wolters Kluwer India Private Limited.<br>• The ICAI Study Material for Final Course Group-II, Paper-8: Indirect Tax Laws [Module1, 2, 3 and 4] | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | III | Semester | | VI | |
| Course Title | Research-Based Learning II | L | T | P | Credits |
| Course Code | IMBAAI1606 | 0 | 0 | 2 | 1 |

| | |
|---|---|
| Course Objectives: | Help students understand fundamental research methods and approaches. |
| | Enable students to transform finalized research titles into clear research objectives, questions, and hypothesis. |
| | Enhance student's capability to conduct a critical and comparative literature review. |
| | Develop Conceptual Framework by identifying the variables and define relationship among them. |

| Course Outcomes: | |
|---|---|
| CO1 | Explain different types of research designs and methodologies. |
| CO2 | Frame well-defined research objectives aligned with business problems. |
| CO3 | Develop research questions and hypothesis logically derived from literature. |
| CO4 | Identify research gaps through comparative analysis of studies. |

**Course Structure (Classroom Activity)**

| Topic | Learning Activities |
|---|---|
| Research Design Basics | Types of research, qualitative vs. quantitative<br>Activity: Case discussion |
| Objectives & Research Questions | Framing research objectives, research questions, and hypothesis<br>Activity: Group exercise |
| Literature Review (Advanced) | Comparing prior studies and finding research gaps<br>Activity: Literature comparison table |
| Develop Conceptual Framework | Identify variables and define relationship among them |

**Assessment Pattern**
Student performance shall be evaluated through continuous assessment by RBL Guide and Viva-Voce under an audit-based evaluation system,

**Guidelines for RBL Teacher**
Introduce students to the objectives, outcomes, and expectations of Research-Based Learning (RBL).
Explain basic research concepts including research design, objectives, research questions and hypothesis
Provide illustrative examples, case discussions, and hands-on activities to reinforce learning.
Encourage that students adhere to APA referencing standards.

**Guidelines for RBL Guide**
Guide students in formulating clear research objectives, research questions, and hypothesis.
Mentoring students in identifying research gaps
Provide feedback on research methodology draft and ethical considerations.
Assess student performance through continuous evaluation.

**Guidelines for Students**
Actively participate in classroom discussions, group activities, and research exercises.
Follow the instruction in developing research objectives and drafting research methodology
Use APA style consistently for citations and references.
Meet all submission deadlines as prescribed by the RBL Teacher and Guide.

**Referencing List (Strictly Follow APA Style)**

1. Book

Author, A. A. (Year). Title of the book (xth ed.). Publisher.
(Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)

2. Journal Article

Author, A. A., & Author, B. B. (Year). Title of the article. Title of the Journal, Volume (Issue), page range. https://doi.org/xxxx
(Note: Journal title and volume are italicized; issue number is in parentheses but not italicized.)

3. Website

Author/Organization. (Year, Month Day). Title of the webpage. Website Name. URL
(Note: Italicize the webpage title, not the website name. If no date, use n.d.)

4. Report/Company Document

Organization. (Year). Title of the report (Report No. xxx if available). Publisher. URL
(Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | AI for Strategic Management | L | T | P | Credits |
| Course Code | IMBAAI1701 | 4 | 0 | 0 | 4 |

| Course Objectives: | To understand the role of AI in competitive strategy, business intelligence, and strategic decision-making using modern strategic frameworks and analytics. |
|---|---|
| | To apply AI-driven strategic planning, governance, and organizational transformation techniques for achieving sustainable competitive advantage and business innovation. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand AI-driven strategic frameworks, competitive advantage concepts, and the impact of AI on industry structure and business ecosystems. |
| CO2 | Apply AI-enabled decision-making tools, predictive analytics, and strategic planning techniques for organizational growth and performance management. |
| CO3 | Analyze AI strategy formulation, implementation processes, governance frameworks, and organizational transformation challenges in modern enterprises. |
| CO4 | Evaluate emerging AI trends, strategic risks, ethical governance practices, and future AI-driven business models for sustainable strategic management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: AI and Competitive Strategy Foundations**<br>● Evolution of Strategy in the AI Era: Data-driven competition<br>● Revisiting Classical Frameworks: Porter's Five Forces, Value Chain in AI context<br>● Resource-Based View (RBV) and Data as a Strategic Asset<br>● AI-driven Competitive Advantage: Cost leadership vs differentiation<br>● Network Effects, Platform Economies, and AI ecosystems<br>● Strategic Role of Data, Algorithms, and Infrastructure<br>● Industry Disruption Patterns due to AI<br>● Case Study: AI-led transformation in digital platforms<br>● From Descriptive to Prescriptive Analytics in strategy<br>● Decision Support Systems (DSS) and Executive Dashboards<br>● Predictive Analytics for Strategic Planning (demand, risk, growth) | 15 | CO1 |
| **Module II: AI-Driven Decision Making and Strategy Formulation**<br>● Scenario Planning and Simulation using AI<br>● KPI Design and Data-driven performance management<br>● Visualization and storytelling for executives<br>● Biases in algorithmic decision-making<br>● Case Study: Data-driven strategic planning in retail/finance<br>● Identifying Strategic AI Use Cases across value chain<br>● Build vs Buy vs Partner decisions in AI adoption<br>● AI Maturity Models and Readiness Assessment<br>● Aligning AI initiatives with corporate strategy<br>● Business Model Innovation using AI (servitization, personalization)<br>● Investment Planning and ROI measurement for AI projects | 15 | CO2 |
| **Module III:** ***AI Strategy Implementation and Organizational Transformation***<br>● Scaling AI initiatives across the organization<br>● Case Study: Enterprise AI adoption roadmap | 15 | CO3 |

| | | |
|---|---|---|
| • Organizational Structures for AI (centralized, decentralized, hybrid)<br>• Change Management in AI-driven transformation<br>• Talent Strategy: Upskilling, hiring, and cross-functional teams<br>• Data Governance and AI Governance frameworks<br>• Risk Management: Model risk, operational risk, reputational risk<br>• Ethical AI and Responsible Innovation<br>• Leadership in AI-driven organizations<br>• Case Study: Managing enterprise-wide AI transformation<br>• Autonomous Decision Systems and Strategy Automation | | |
| **Module IV: Future of Strategy in the Age of AI and Capstone Project**<br>• AI in Dynamic Strategy: Real-time adaptation and feedback loops<br>• Role of Generative AI in strategic planning and innovation<br>• Hyper-personalization and customer-centric strategies<br>• AI in Global Strategy: Geopolitics, regulation, and competition<br>• Sustainability and ESG considerations using AI<br>• Strategic Risks: Over-reliance on AI, loss of human judgment<br>• Future trends in AI-driven strategic management<br>• Responsible AI adoption in strategic leadership<br>• AI-enabled innovation and competitive transformation<br>• Emerging strategic business models using AI<br>• Ethical governance in AI-powered enterprises<br>**Capstone/Mini Project:**<br>AI-driven strategic plan for a business | **15** | **CO4** |
| **Suggested Readings:**<br>• Marco Iansiti & Karim R. Lakhani – *Competing in the Age of AI*, Harvard Business Review Press<br>• Ajay Agrawal, Joshua Gans & Avi Goldfarb – *Prediction Machines: The Simple Economics of Artificial Intelligence*, Harvard Business Review Press<br>• Thomas H. Davenport & Rajeev Ronanki – *Artificial Intelligence for the Real World*, Harvard Business Review (Article/Collection) | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Financial Information Systems & Big Data Analytics | L | T | P | Credits |
| Course Code | IMBAAI1702 | 4 | 0 | 0 | 4 |

| Course Objectives: | To understand the concepts of financial information systems, big data technologies, and AI applications in financial management and decision-making. |
|---|---|
| | To apply financial analytics, predictive modelling, and AI-enabled tools for financial forecasting, reporting, and strategic business analysis. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of financial information systems, big data concepts, and financial data management techniques. |
| CO2 | Apply big data technologies and predictive analytics methods for processing, analysing, and forecasting financial information. |
| CO3 | Analyze AI-driven financial analytics, risk assessment, investment analysis, and business intelligence systems for decision-making. |
| CO4 | Evaluate emerging financial technologies, FinTech innovations, cybersecurity practices, and ethical AI applications in modern financial systems. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Financial Information Systems and Big Data**<br>● Fundamentals of Financial Information Systems (FIS)<br>● Components and Architecture of FIS<br>● Financial Data and Information Flow<br>● Role of Information Systems in Financial Management<br>● Transaction Processing Systems<br>● Enterprise Resource Planning (ERP) in Finance<br>● Financial Databases and Data Warehousing<br>● Introduction to Big Data in Finance<br>● Ethical and Security Issues in Financial Information Systems<br>● Financial Data Collection and Classification<br>● Structured and Unstructured Financial Data | 15 | CO1 |
| **Module II: Financial Data Management and Predictive Analytics**<br>● Big Data Concepts: Volume, Velocity, Variety<br>● Data Storage and Data Warehousing Concepts<br>● Cloud-Based Financial Data Systems<br>● Data Cleaning and Data Preparation<br>● Financial Data Integration Techniques<br>● Real-Time Financial Data Processing<br>● Data Governance and Regulatory Compliance<br>● Introduction to Financial Analytics<br>● Descriptive and Diagnostic Analytics<br>● Predictive Analytics in Finance<br>● Financial Forecasting Techniques | 15 | CO2 |
| **Module III: AI-Based Financial Analytics and Decision Making**<br>● AI-Based Risk and Fraud Detection<br>● Credit Scoring and Investment Analytics<br>● Customer Financial Behaviour Analysis<br>● Portfolio and Performance Analytics | 15 | CO3 |

| | | |
|---|---|---|
| • KPI Dashboards and Financial Reporting Tools<br>• AI Applications in Banking and Financial Services<br>• Algorithmic Trading Concepts<br>• AI in Budgeting and Financial Planning<br>• Business Intelligence for Financial Decisions<br>• Sentiment Analysis in Financial Markets<br>• AI-Based Customer Relationship Management in Finance | | |
| **Module IV: Emerging Financial Technologies and Mini Project**<br>• Blockchain and Financial Technology (FinTech) Concepts<br>• Cybersecurity in Financial Systems<br>• Case Studies in Financial Analytics Applications<br>• Digital Transformation in Financial Services<br>• FinTech Innovations and AI Integration<br>• Robotic Process Automation (RPA) in Finance<br>• Smart Financial Reporting Systems<br>• AI for Sustainable Financial Management<br>• Cloud-Based Financial Analytics Platforms<br>• Future Trends in Financial Information Systems<br>• Ethical AI and Responsible Financial Analytics<br>**Mini Project:**<br>Big Data-Based Financial Performance Analysis and Forecasting | **15** | **CO4** |
| **Suggested Readings:**<br>• Romney, M. B., & Steinbart, P. J. — *Accounting Information Systems*<br>• Kumar, V., & Ravi, V. — *Big Data Analytics in Finance*<br>• Marr, B. — *Big Data in Practice: Financial Analytics and Business Intelligence* | | |

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Legal Aspects of Business | L | T | P | Credits |
| Course Code | IMBAAI1703 | 4 | 0 | 0 | 4 |

| Course Objectives: | To have an in-depth knowledge about the basics of contract act & various laws related to business.<br>To equip the students with practical implication of various issues of business laws. |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Describe the basics of Indian Contract Act & special contracts (Bailment and Pledge, Indemnity and Guarantee). |
| CO2 | Explain the basic concept of Sales of Goods Act & Negotiable Instruments Act. |
| CO3 | Interpret the basics of Partnership Act, its essentials, rights & duties of partners etc. |
| CO4 | Understand various laws related to Consumer Protection Act & Information Technology Act. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Indian Contract Act, 1872**<br>Definition of a Contract and its essentials, Kinds of Contract, Formation of a valid Contract: Offer and Acceptance, Consideration, Capacity to Contract, Free consent, Breach of Contract, Quasi contracts, Contract of Indemnity and Guarantee, Bailment and Pledge, Contract of Agency. | 15 | CO1 |
| **Module II: Sales of Goods Act, 1930 & Negotiable Instrument Act, 1881**<br>Sales of Goods Act: Definition of a Contract of Sale, Sale v/s Agreement to Sell, Conditions and Warranties, Rights of Unpaid Seller against the Goods.<br>Negotiable Instrument Act: Definition and characteristics of negotiable instrument, Kinds of negotiable instruments, Promissory Note, Bill of Exchange and Cheques, Holder and Holder in due course, Crossing of Cheques, Bouncing of Cheques. | 15 | CO2 |
| **Module III: Partnership Act, 1932**<br>Partnership Act: Definition of Partnership and its essentials, Rights and Duties of Partners, Types of Partners, Partnership Deed, Reconstitution of Partnership, Registration of Firms, Dissolution of firms. | 15 | CO3 |
| **Module IV : Consumer Protection Act, 2019 & The Information Technology Act, 2000**<br>Consumer Protection Act: Aims and Objects of the Consumer protection Act, Rights of Consumers, Redressal Machinery under the act, Procedure for complaints under the act.<br>**The Information Technology Act**: Definition of the Information technology Act, Digital Signature, Electronic Governance, Regulation of Certifying Authorities, Digital Signature Certificates, Penalties and Offences. | 15 | CO4 |

**Suggested Readings:-**


- Gulshan J.J. Business Law Including Company Law, 13th Edition, New Age International Publisher.
- Kuchhal M.C. Business Law , 4th Edition, Vikas Publication.
- Avtar Singh, Principles of Mercantile Law, 7th Edition, Eastern Book Company.
- N.D. Kapoor, Business Law, 7th Edition ,Sultan Chand & Sons

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Security Analysis & Portfolio Management | L | T | P | Credits |
| Course Code | IMBAAI1704 | 4 | 0 | 0 | 4 |

| | |
|---|---|
| **Course Objectives:** | Familiarize students with:<br>To develop an understanding of the regulatory environment, risk–return concepts, and valuation techniques used in security analysis.<br>To introduce market microstructure concepts and the fundamentals of AI, machine learning, and statistical analysis using R.<br>To explain portfolio construction, diversification, and optimization techniques using quantitative and asset pricing models.<br>To develop an understanding of portfolio management strategies, performance evaluation, and AI-driven investment decision-making. |

| Course Outcomes: | |
|---|---|
| **CO1** | Students will be able to analyze securities using risk–return measures, fundamental analysis, and technical analysis within the regulatory framework of financial markets. |
| **CO2** | Students will be able to analyze market liquidity and apply basic AI and statistical techniques to financial data using R programming. |
| **CO3** | Students will be able to construct and optimize investment portfolios and evaluate risk and return using asset pricing models. |
| **CO4** | Students will be able to evaluate portfolio performance and apply AI-based models for trading, forecasting, and portfolio management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Regulatory Framework and Risk and Return**<br>Introduction and regulatory framework, Securities: Investor Vs Speculator, Types of Investors. Types of Securities, Introduction to Blockchain and How it works, Benefits and How blockchain will impact the financial sector, Limitations of Blockchains, Cryptocurrencies, Different types of cryptos.<br>**Risk and Return:** Concept of Risk, Measures of risk and return, calculation, trade off, systematic and unsystematic risk components.<br>**Nature of Stock Markets:** Efficient Market Hypothesis and its implications for investment decision,<br>**Fundamental and Technical Analysis:** Approach to Equity valuation. economy, industry and company analysis, Technical Analysis charts: candlestick, bar, and line charts, Price trends, Gap Wave theory and Dow theory, Technical vs Fundamental analysis. | **15** | **CO1** |
| **Module II: Market Microstructure & Liquidity and Overview of AI, Machine Learning Models and R**<br>**Market Microstructure & Liquidity:** Order-driven vs. Quote-driven markets, Market efficiency, Risk preferences, Limit order books, market microstructure types, economic theory of choice, interest rate compounding<br>**Overview of AI and Machine Learning:** Probability modelling, inferential statistics, Supervised and Unsupervised learning algorithms, regression and classification algorithms. | **15** | **CO2** |

| | | |
|---|---|---|
| **Introduction to R Programming**: R Fundamentals, Exploratory data analysis and data visualization with R. Statistical Analysis with R, Inferential statistics and hypothesis testing with R. | | |
| **Module III: Portfolio Construction and Optimization**<br>**Portfolio construction:** Portfolio risk and expected returns for two securities and multiple securities, risk diversification with portfolios, correlation structure, mean-variance framework, portfolio construction with R<br>**Portfolio Optimization:** Portfolio Possibility curve, Efficient frontier, Minimum Variance portfolios, Introduction to risk-free lending and borrowing, market risk and beta, portfolio optimization with R<br>**Asset Pricing Models:** Capital Asset Pricing Model, Capital Market Line, Security Market Line, Fallings of CAPM, Single-Index and Multi-Index models, Expected Risk and Return with Index models, 3-Factor Fama-French Model. | **15** | **CO3** |
| **Module IV: Portfolio Management & Performance Evaluation using AI**<br>Portfolio Management strategies, Active vs Passive Portfolio Management, Value vs Growth investing, One-parameter performance measures Timing & Selection performance measures, application of asset pricing models in performance management<br>**AI and machine learning in Trading execution and portfolio management:** Regression and Classification algorithm applications in security analysis, forecasting, and prediction, Case Study examples | **15** | **CO4** |

**Suggested Readings:**


- Kevin –Security Analysis and Portfolio Management –PHI
- Jack Clark Francis - Management of Invest, McGraw Hill
- Elton & Gruber - Modern Portfolio Theory and Investment Strategy, Willey
- Shape Alexander Ballen - Investment, Eastern Economy Ed
- Donald E. Fisher and Ronald J. Jordan, "Securities Analysis and Portfolio Management", Prentice Hall, New Delhi
- Sourain, Harry. "Investment Management", Prentice Hall of India
- Machine Learning in Finance by M. Dixon, I Halperin, and P. Bilokon, Springer, 1st Edition
- Machine Learning for Asset Managers, Marcos Lopez, Cambridge University Press, 1st Edition
- Advances in Financial Machine Learning, Marcos Lopez, Wiley, 1st Edition


| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Capital Markets & Financial Instruments | L | T | P | Credits |
| Course Code | IMBAAI1705 | 4 | 0 | 0 | 4 |

| Course Objectives: | The history of Indian capital market along with their working and detailed study about the regulatory body governing the capital market. |
|---|---|
| | Market intermediaries and their working in primary Market |
| | Working Mechanisms of secondary market along with Investor and speculator working |
| | Bond market and the working of credit rating agencies. |

| Course Outcomes: | |
|---|---|
| CO1 | Identify the working of Indian capital market and regulation body regulating and controlling the Capital Market |
| CO2 | To understand the process for issue of shares in primary market and its functioning |
| CO3 | Illustrate the working of stock exchange which helps them to analyze the importance of various procedures and stock exchange intermediaries involve in it. |
| CO4 | Understand how bond market mechanism and to Identify the relevance of credit rating agencies and their role in India. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Indian Capital Market, Regulation of Indian Capital Market:** Development Since 1991, Traditional and Emerging (ECB, ADR, GDR). SEBI - Objectives - Management - Powers and functions - Regulatory role - Investor Protection - Insider Trading. Rationale - Insiders - Insider information - Connected persons. National Stock Exchange (NSE), Bombay stock Exchange (BSE) & Over the Counter Exchange of India(OTCEI) | 15 | CO1 |
| **Module II:** Primary Market Meaning – New Issue Market Vs Secondary Market - Methods of New Issue - Intermediaries in the New issues market - SE BI Guidelines on Primary Market - Listing - Agreement - Benefits - Consequences of Non-listing - Underwriting - Definition - Types - Mechanics - Benefits - Book Building - Concept - Characteristics - Process - IPO including e-IPO - Reverse book - building. | 15 | CO2 |
| **Module III: Stock Exchanges in India:** History and development and importance listing of Scripts, On-line Trading, and Managing Shareholder Relations. Depositories: Growth & Development<br>Share Market Instruments: Stock Exchange Trading Mechanism, Basics of Pricing Mechanism, Demat Account - Electronic Settlement of Trading Process, Carry Forward, Badala Transaction, . Players on Stock Exchange: Investors, Speculators, Market Makers, Bulls, Bears, Stags | 15 | CO3 |
| **Module IV: Bond Market Instruments and Credit Ratings:** Concept of Bond Market. Bond Structure in India, bonds with embedded option, types of risk in bond investment. Credit rating: concept & types, Functions & limitations, Profile of Indian Rating Agencies. Merchant Banking: Functions & Roles of Merchant Banking in India. | 15 | CO4 |

**Suggested Readings:**

- Relevant text of SEBI guidelines.
- Merchant Banking & Securities Management - M.A.Kohak.
- Khan, M. Y., Indian Financial System-Theory and Practice, TMH.
- Bhole, L. M.,: Financial Markets and Institutions, TMH.
- Nayak and Sana,: Indian Financial System and Financial Market Operations, Rabindra Library.
- Gurusamy; Financial Services, TMH.

- Pathak, B.,: Indian Financial System, Pearson.

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Negotiation and Counselling | L | T | P | Credits |
| Course Code | IMBAAI1706 | 4 | 0 | 0 | 4 |

| Course Objectives: | Understand the fundamental structure of negotiation and its sub processes |
|---|---|
| | Provide insights into the core approaches, skills, and models of counselling and the its application in organizational settings |

| Course Outcomes: | |
|---|---|
| CO1 | Demonstrate the knowledge of the fundamentals of the negotiation process. |
| CO2 | Apply the understanding of negotiation process in different cultural settings |
| CO3 | Demonstrate the understanding of the core approaches, skills, and models of counselling |
| CO4 | Apply the counselling skills, and ethical principles to address behavioural and performance-related challenges in organizational settings |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Fundamentals of Negotiation**<br>Negotiation: Nature, Characteristics, Strategy and Tactics of Distributive Bargaining, Strategy and Tactics of Integrative Negotiation; Strategy and Planning for Negotiation. Negotiation Sub processes: Perception, Cognition and Emotion, Communication Styles, What is communicated during negotiation and how people communicate in Negotiation | 15 | CO1 |
| **Module II: Negotiation Issues across Culture, Negotiation Context & Individual Differences**<br>Fundamental Structure of negotiation and BATNA, International and Cross Cultural Negotiation: Context and Concept, Influence of Culture on Negotiation, Relationships in Negotiation: Agents, Constituencies, Audiences, and Coalitions. Multiple Parties and Teams, Individual Differences: Gender, Personality, Work- Experience, and Family Background. | 15 | CO2 |
| **Module III: Introduction to Counselling**<br>Defining counselling, Major goals of counselling, Role of a counsellor<br>Approaches to Counselling: Psychoanalytic approach, Behaviouristic and Humanistic approach.5-D Model of the Counselling process, Counselling skills | 15 | CO3 |
| **Module IV: Role Conflicts & Organizational Application of Counseling Skills**<br>Role conflicts in Counselling: Dilemmas of a manager counsellor.<br>Changing Behaviours through Counselling: Specific Techniques of Counselling. Dealing with problem Subordinates. Career Counselling and Performance Counselling. Alcoholism and Other Substance Abuse, Ethics in Counselling. | 15 | CO4 |

**Suggested Readings:**


- Singh Kavita - Counseling Skills for Managers, 2nd Ed., PHI Learning Private Limited.
- Robert L. Gibson, Marianne H. Mitchell, Introduction to Counseling and Guidance, 7th Ed., PHI Learning Private Limited.
- Roy J. Lewicki, Bruce Barry, David Saunders, Essentials of Negotiation, 6th Ed., McGraw- Hill
- Roy J. Lewicki, Bruce Barry, David Saunders, Negotiation: Readings, Exercise & Cases, 6th Ed., McGraw-Hill
- Moursund, J.: The Process of counselling and therapy, New Jersey: Prentice Hall.
- Patterson, L. E., &Welfel, E. R.: The counselling process: A multi theoretical integrative approach,

New York: Brooks Cole.

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Retail Management | L | T | P | Credits |
| Course Code | IMBAAI1707 | 4 | 0 | 0 | 4 |

| Course Objectives: | To familiarize students with a comprehensive understanding of the theoretical and applied aspects of retail management. |
|---|---|
| | To examine the importance of retailing to the overall economy and explore the opportunities available within the retail sector. |

| Course Outcomes: | |
|---|---|
| CO1 | Analyze modern retailing concepts, evaluate strategies, understand current retailing trends, and compare various retail formats to effectively navigate and contribute to the dynamic retail industry. |
| CO2 | Understand the significance of retail store location decisions, evaluate retail performance ,and formulate effective pricing strategies. |
| CO3 | Apply the concept of merchandising in retail and demonstrate understanding of consumer behaviour in retail context. |
| CO4 | Demonstrate the retail Store operations, retail Store Design and evaluate the supply chain management with its practical implications. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I :** An overview of Retailing, Classification and Types of retail store format, Product Retailing vs. Service Retailing. Retail strategy: Achieving competitive advantage and positioning, Retailing environment: Legal, Social, Economic, and Technological, Trends in the Indian Retailing and future prospects, The role of franchising in the retail industry. Globalization and changing retail formats: Online retailing, International retailing-Opportunities and Challenges | 15 | CO1 |
| **Module II: Store Location & Pricing**<br>The importance of store locations, Types of locations, Steps involved in choosing a location, Trade areas and their evaluation, Evaluation of a retail location, Measures of Financial Performance, the strategic profit model, Measures of retail performance, the concept of retail pricing and the factors affecting price, Elements of retail price, Developing a pricing strategy, Adjustment to retail price. | 15 | CO2 |
| **Module III: Retail Merchandising**<br>The concept of merchandising, the Evolution of the merchandising function in retail, the Process of Merchandising Buying, the Procedure for selecting vendors and building partnerships, the Concept of own brand and manufacturer's brand, the Concept of Category Management, the Role of private labels, Retail Communication, the concept of retail marketing mix, Segmentation Targeting and Positioning. | 15 | CO3 |
| **Module IV: Retail Store Operation, SCM, and Role of IT**<br>Retail Store Operations and Retail Store Design. The relationship between store image and store design, Components of exterior and interior, Consideration for selecting layout.<br>Supply Chain Management: The concept of SCM, Retail logistics, and Reverse logistics.<br>Retail Management (IT) - Role and importance of IT, Application of IT, Customer Relationship Management (CRM), and HR in Retail. | 15 | CO4 |
| **Suggested Readings:**<br>• Retail Management **by** Rosemary Varley **and** Mohammed Rafiq **–** Palgrave Macmillan | | |

- Retail Management **by** Chetan Bajaj **–** Oxford University Press
- Information Technology for Retail **by** Giridhar Joshi **–** Oxford University Press, New Delhi

| **Course Articulation Matrix** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Integrated Marketing Communication | L | T | P | Credits |
| Course Code | IMBAAI1708 | 4 | 0 | 0 | 4 |

| Course Objectives: | |
|---|---|
| | To develop basic knowledge of Consumer Behaviour. |
| | To develop conceptual and theoretical understanding of variables affecting behavioural with their strategic implications to marketers |
| | To equip with different elements of integrated marketing communications and basics of marketing communications. |
| | To understand role of E-Commerce in Marketing Communication. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the theoretical concepts of consumer behavior. |
| CO2 | Identify and understand the major individual and external factors that affect consumers' decision-making process. |
| CO3 | Analyze Marketing Communication, Integration of marketing tools and role of advertising. |
| CO4 | Apply marketing messages strategy and implementing it through right media strategies using traditional and emerging marketing concepts. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I : Understanding Consumer Behavior**<br>Meaning, scope and contemporary significance of consumer Behavior.<br>Level of analysis in consumer Behavior. Consumer Decision Making Process. Consumer Behaviour Models: Black Box Model; Hawkins Stern Model; Howard-Sheth Model and Nicosia Model. | 15 | CO1 |
| **Module II: Internal and External Influences on Consumer Behaviour**<br>Internal influences on Consumer Behaviour- Motivation: theories and their application. Perception: Meaning and application of perception. Meaning and nature of personality and its effects on purchasing Self-Concept, Development of the self-Image Congruence assumptions. Application of absolute and differential threshold in consumer Behavior. Psychographics and Lifestyle. External influences on Consumer Behaviour- Cultural and subcultural influences- Social class- Reference groups and family influences- Opinion leadership and the diffusion of innovations Marketing implications of the above influences. | 15 | CO2 |
| **Module III: Marketing Communication and IMC and Advertising**<br>Marketing Communication process, Establishing marcom Objectives, Budgeting for Promotional Programmes, DAGMAR approach for setting objectives. Meaning and Role of IMC in marketing. IMC tools, Participants in IMC, Model of the IMC Planning Process, Challenges in IMC.<br>Advertising Management: Meaning, Nature and Scope of Advertising, Classification of advertising, Process of Advertising, Fundamentals of Advertising Campaigns, Advertising Effectiveness & its measurement. Advertising Agencies – their role, functions. Global vs local advertising. | 15 | CO3 |
| **Module IV: Message Development, Media Planning and Emerging Concepts**<br>Message Strategies, Executional Framework of messages, Sources and Spokespersons, Source Characteristics, The Creative Brief, and Advertising Appeals. Media Planning and Strategy: Steps involved in media planning, Media Types and their characteristics; Setting Media objectives, Media | 15 | CO4 |

| | | |
|---|---|---|
| Selection & Media Strategy. Interactive Marketing, Placing Ads and Promotions online, Buzz Marketing, Viral Marketing, and Mobile marketing. | | |

**Suggested Readings:**


- Leon G. Schiffman and Keslie, L.KamK.: Consumer Behavior, PHI, New Delhi.
- Batra &Kazmi: Consumer Behavior, Excel Books, New Delhi.
- Kotler, Keller, Koshy and Jha: Marketing Management, Pearson Education.
- Shah Kruti& D' Souza Alan, Advertising & promotions an IMC perspective, McGraw Hill education.
- Belch George E & Belch Michael A, Advertising and promotion- An integrated Marketing Communication Perspective, McGraw Hill Education.


| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VII | |
| Course Title | Research-Based Learning III | L | T | P | Credits |
| Course Code | IMBAAI1710 | 0 | 0 | 4 | 2 |

| | |
|---|---|
| Course Objectives: | Enable students to develop appropriate research instruments for data collection. |
| | Train students in conducting pilot studies and refining research tools. |
| | Develop practical understanding of primary and secondary data collection procedures. |
| | Enhance students' capability in data coding, tabulation, and preparation for analysis. |
| | Develop students' ability to perform data analysis and derive meaningful findings from Collected data. |
| | Strengthen ethical practices in field research and data handling. |

| Course Outcomes: | |
|---|---|
| CO1 | Develop structured questionnaires/interview schedules aligned with research objectives. |
| CO2 | Conduct pilot testing and refine research instruments. |
| CO3 | Execute primary and/or secondary data collection systematically. |
| CO4 | Apply ethical practices during field research and respondent interaction. |
| CO5 | Organize, code, and prepare collected data for statistical analysis. |
| CO6 | Analyze collected data using appropriate statistical tools. |
| CO7 | Present findings through tables, charts, and graphical representations. |
| CO8 | Draw preliminary conclusions based on the analyzed data. |

**Course Structure (Classroom Activity)**

| Topic | Learning Activities |
|---|---|
| **Research Instrument Development** | Questionnaire and interview schedule drafting |
| **Measurement Scales** | Designing Likert scale, ranking scale, semantic differential scale |
| **Pilot Study** | Activity: Pilot testing and refinement of tools |
| **Data Collection Process** | Field survey/interview/secondary data collection |
| **Ethical Considerations in Research** | Consent, confidentiality, and academic integrity |
| **Data Preparation** | Coding, tabulation, data entry, and data cleaning |
| **Data Analysis** | Descriptive statistics using SPSS/Excel (frequency, percentage, mean, charts) |
| **Findings and Interpretation** | Preparation and presentation of key findings and observations |

**Assessment Pattern**

Student performance shall be evaluated through continuous assessment, research instrument development, data collection progress, data analysis, practical exercises, presentations, and viva-voce under an audit-based evaluation system.

**Guidelines for RBL Teacher**

- Guide students in developing appropriate data collection instruments.
- Conduct practical sessions on measurement scales and questionnaire design.
- Explain pilot testing procedures and refinement techniques.
- Train students in ethical data collection practices.
- Introduce students to data coding, tabulation, data analysis, and software tools such as SPSS/Excel.
- Guide students in presenting findings through tables, charts, and graphical representations.
- Ensure adherence to APA referencing standards.

**Guidelines for RBL Guide**

- Review and approve research instruments before data collection.
- Guide students during pilot study and refinement of tools.
- Monitor progress of primary/secondary data collection.
- Verify authenticity, adequacy, and ethical compliance of collected data.
- Assist students in coding, organizing, and analyzing data.
- Review preliminary findings and provide constructive feedback.
- Provide continuous feedback and mentoring.

**Guidelines for Students**

- Develop research instruments aligned with approved objectives and hypothesis.
- Conduct pilot study and incorporate suggested modifications.
- Complete primary and/or secondary data collection within the semester timeline.
- Follow ethical standards while interacting with respondents.
- Organize, code, and analyze collected data using appropriate tools.
- Prepare tables, charts, and graphical presentations of findings.
- Present preliminary findings and observations systematically.
- Maintain APA style in all documentation and references.

**Referencing List (Strictly Follow APA Style)**

1. **Book**
   Author, A. A. (Year). *Title of the book* (xth ed.). Publisher.
   (Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)
2. **Journal Article**
   Author, A. A., & Author, B. B. (Year). Title of the article. *Title of the Journal, Volume(Issue)*, page range. https://doi.org/xxxx
   (Note: Journal title and volume are italicized; issue number is in parentheses but not italicized.)
3. **Website**
   Author/Organization. (Year, Month Day). *Title of the webpage*. Website Name. URL
   (Note: Italicize the webpage title, not the website name. If no date, use n.d.)
4. **Report/Company Document**
   Organization. (Year). *Title of the report* (Report No. xxx if available). Publisher. URL
   (Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VIII | |
| Course Title | Gen AI Strategy and Enterprise Transformation | L | T | P | Credits |
| Course Code | IMBAAI1801 | 4 | 0 | 0 | 4 |

| Course Objectives: | To understand Generative AI strategies, enterprise AI architectures, and business transformation frameworks for AI-driven organizations. |
|---|---|
| | To apply GenAI technologies, governance principles, and implementation strategies for responsible and scalable enterprise AI adoption. |

| Course Outcomes: | |
|---|---|
| CO1 | Understand the fundamentals of Generative AI, enterprise AI architectures, and business value creation through AI-driven transformation. |
| CO2 | Apply supervised learning algorithms and predictive modelling techniques using machine learning tools and real-world datasets. |
| CO3 | Analyze organizational transformation, governance frameworks, AI risks, and compliance requirements for responsible GenAI adoption. |
| CO4 | Evaluate enterprise GenAI use cases, implementation roadmaps, performance metrics, and emerging trends in AI-driven business innovation. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Foundations of Generative AI and Enterprise Value**<br>● Evolution of AI to Generative AI: LLMs, diffusion models (high-level)<br>● GenAI Capabilities: Content generation, summarization, code, multimodal use cases<br>● Enterprise Value Mapping: Productivity, revenue uplift, cost optimization<br>● Use-Case Taxonomy by Function: Marketing, sales, operations, HR, finance<br>● Build vs Buy vs Partner decisions for GenAI solutions<br>● Total Cost of Ownership (TCO) and ROI estimation frameworks<br>● Risk Landscape: Hallucinations, bias, IP concerns<br>● Case Study: GenAI-driven customer support transformation<br>● Data Strategy for GenAI: Proprietary data, data readiness, governance<br>● Knowledge Integration: RAG (Retrieval-Augmented Generation) concepts<br>● Enterprise Architecture: APIs, microservices, model orchestration layers | 15 | CO1 |
| **Module II: Data, Platform Strategy and Enterprise AI Architecture**<br>● Model Choices: Foundation models, open-source vs proprietary, fine-tuning vs prompting<br>● Prompt Engineering and Evaluation basics for business users<br>● Vector Databases and Embeddings (conceptual overview)<br>● MLOps/LLMOps lifecycle: Versioning, monitoring, rollback<br>● Vendor Landscape and tooling (cloud AI platforms overview)<br>● GenAI Operating Models: Centralized, federated, hub-and-spoke<br>● Cross-functional Teams: Product, data, engineering, domain SMEs<br>● Workflow Redesign and Human-in-the-Loop systems<br>● Change Management: Adoption barriers, training, incentives | 15 | CO2 |

| | | |
|---|---|---|
| • Governance Structures: AI councils, model review boards<br>• Capability Building: Upskilling, prompt literacy, citizen developers | | |
| **Module III: Responsible AI, Governance and Organizational Transformation**<br>• KPI Design: Productivity metrics, quality, risk indicators<br>• Case Study: Enterprise-wide rollout of AI copilots<br>• Responsible AI Principles: Fairness, accountability, transparency<br>• Model Risks: Hallucination, drift, prompt injection, data leakage<br>• Privacy and Security: PII handling, access control, secure deployment<br>• Regulatory Landscape: Global perspectives (EU AI Act overview, sectoral norms)<br>• IP and Copyright considerations in generated content<br>• Evaluation and Guardrails: Red-teaming, content filters, human review<br>• Auditability and Documentation (model cards, data lineage)<br>• Case Study: Risk mitigation in regulated industries (banking/healthcare)<br>• Organizational transformation using GenAI systems | **15** | **CO3** |
| **Module IV: Enterprise Implementation Roadmap and Industry Use Cases**<br>• Use-Case Prioritization Framework: Value vs feasibility matrix<br>• Pilot-to-Scale Roadmap: MVPs, experimentation, scaling stages<br>• Integration with Enterprise Systems: CRM, ERP, knowledge bases<br>• Cost Management: Inference costs, optimization strategies (caching, batching)<br>• Performance Measurement: A/B testing, ROI tracking, business KPIs<br>• Industry Playbooks: Customer service automation, Marketing content generation, Software development copilots<br>• Partner Ecosystem and Vendor Management<br>• Enterprise AI transformation strategies<br>• Emerging trends in Generative AI adoption<br>• Future scope of GenAI in business operations<br>• AI-driven enterprise innovation models<br>**Capstone/Mini Project:**<br>• GenAI transformation plan for a chosen enterprise | **15** | **CO4** |
| **Suggested Readings:**<br>• **Tom Taulli** – *Generative AI: How ChatGPT and Other AI Tools Will Revolutionize Business*, Apress<br>• **Bernard Marr** – *Generative AI in Practice: 100+ Amazing Ways Generative AI Is Changing Business and Society*, Wiley<br>• **Marco Iansiti & Karim R. Lakhani** – *Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World*, Harvard Business Review Press | | |

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VIII | |
| Course Title | Corporate Governance, Values & Ethics | L | T | P | Credits |
| Course Code | IMBAAI1802 | 4 | 0 | 0 | 4 |

| Course Objectives: | To develop knowledge about the importance of corporate governance and the need for business ethics to ensure sustained business growth & stability |
|---|---|

| Course Outcomes: | |
|---|---|
| CO1 | Describe the concept of corporate values and governance |
| CO2 | Explain Intellectual property rights and CSR |
| CO3 | Explain and apply the concept learnt from the value system based on Indian scriptures and tradition. |
| CO4 | Explain the concept of ethics and its incorporation into different business functions. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Corporate Governance**<br>A brief history of Corporate Governance, Need of corporate governance, Evolution of Corporate Governance system worldwide, Corporate Governance in India, Social responsibility of Corporate, Corporate Social reporting, Corporate Governance Issues, Code of Corporate Practices, Corporate Governance and the role of Board (BOD), Corporate disclosure and Investor protection in India. | 15 | CO1 |
| **Module II: Board of Directors, CSR & IPR**<br>Board of Directors, Types of Directors & composition of Board, Corporate Social Responsibility, Need and significance of CSR, Growth and sustainability with CSR, Laws and regulations related to CSR, Corporate Social Reporting. | 15 | CO2 |
| **Module III: Values-impact on Business**<br>Indian Value system and Values. Management lessons from Indian scriptures and traditions namely Geeta, Ramayana, Mahabharata, Upanishads and Vedas, Bible and Quran. | 15 | CO3 |
| **Module IV: Ethical-impact on Business**<br>Business Ethics, Features of Ethics, Ethical theories and approaches, Ethical Issues in Capitalism and market systems, Ethics and social responsibility. Ethical issues in functional areas of marketing, finance, human resource and Information Technology, with Discussions related contemporary Business cases. | 15 | CO4 |

**Suggested Readings:**


- S.S. Iyer - Managing for Value (New Age International Publishers, 2002)
- Laura P Hartman Abha Chatterjee - Business Ethics (Tata McGraw Hill, 2007)
- S.K. Bhatia - Business Ethics and Managerial Values (Deep & Deep Publications Pvt. Ltd, 2000)
- Velasquez – Business Ethics – Concepts and Cases (Prentice Hall, 6th Ed.)
- 5. Neeru Dr.Vasishtha – Business Ethics & Values-Taxmann's II ed.

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VIII | |
| Course Title | Supply Chain Management | L | T | P | Credits |
| Course Code | IMBAAI1803 | 4 | 0 | 0 | 4 |

| Course Objectives: | To develop knowledge about the elements of Logistics and Supply Chain Management processes. |
|---|---|
| | To acquaint with the recent trends and issues in the supply chain management function. |

| Course Outcomes: | |
|---|---|
| CO1 | Describe the role and basic concepts of supply chain management, various value flows and key issues in supply chain management |
| CO2 | Explain logistic management, different models including distribution and warehouse management. |
| CO3 | Explain various techniques of inventory management. Calculate various costs associated with inventory, EOQ, buffer stock, lead time etc. |
| CO4 | Explain the role of IT in supply chain management and Customer relationship management. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Introduction to Supply Chain Management**<br>Basic Concept, Objectives and importance of Supply Chain Management, Cycle view of SCM, Pull & Push system, competitive and supply chain strategies, achieving strategic fit, Supply chain Drivers & Obstacles, Key Issues in SCM and Benefits. | 15 | CO1 |
| **Module II: Logistics Management, Purchase and Vendor Management**<br>Logistics Management: Logistics as part of SCM, Logistics costs, Inbound and outbound logistics, Bullwhip effect in logistics. Reverse Logistics. Distribution and warehousing management, Cross docking, Milkrun, Super stores. Purchase & Vendor management, vendor rating. | 15 | CO2 |
| **Module III: Inventory Management**<br>Concept of Inventory Management, Various costs associated with inventory, Various EOQ models, Buffer stock (trade- off between stock out / working capital cost), Lead time reduction, Re-order point / re-order level fixation, ABC, SDE / VED Analysis, Just-In-Time & Kanban System. | 15 | CO3 |
| **Module IV: Recent Issues in SCM**<br>Role of Computer & IT in Supply Chain Management, CRM Vs SCM, Bench-marking concept: Features and Implementation, Outsourcing basic concept, 3 PL, 4 PL, Value Addition in SCM, Concept of demand chain management. | 15 | CO4 |

**Suggested Readings:**


- Raghuram G. (I.I.M.A.) - Logistics and Supply Chain Management (Macmillan, 1st Ed.)
- Krishnan Dr. Gopal - Material Management, (Pearson, New Delhi, 5th Ed.)
- Agarwal D.K. - A Text Book of Logistics and Supply chain management (Macmillan, 1st Ed.).
- Sahay B.S. - Supply Chain Management (Macmillan, 1st Ed.)
- Chopra Sunil and Peter Meindl - Supply chain management (Pearson, 3rd Ed.)
- Ballou, Ronald H: Supply Chain Management: Pearson Education

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VIII | |
| Course Title | Industrial Relations & Labour Codes | L | T | P | Credits |
| Course Code | IMBAAI1804 | 4 | 0 | 0 | 4 |

| Course Objectives: | A comprehensive understanding of India's reformed labour law framework, including Industrial Relations, Wages, Social Security, and Occupational Safety codes, and their practical implications for employers and workers. |
|---|---|
| | The emerging challenges in employment relations arising from automation and Artificial Intelligence, with a focus on legal, ethical, and governance issues in the world of work. |

| Course Outcomes: | |
|---|---|
| CO1 | **Demonstrate the understanding of** the concept of IR and basic provisions related to Code on Wages, including wage components, minimum wage fixation, payment of wages, deductions, and overtime provisions |
| CO2 | Analyze the provisions of the Industrial Relations Code, 2020, and evaluate their practical implications in industrial relations through case studies. |
| CO3 | Apply the provisions of the Social Security Code relating to employee compensation, ESI benefits, provident fund, gratuity, and workplace social security measures. |
| CO4 | Evaluate workplace safety, health, welfare, and working condition provisions under the OSH Code and the implications of AI on employment relations. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I: Industrial Relations & Code on Wages, 2019**<br>**Introduction to Industrial Relations:** Meaning, Scope & Objectives of Industrial Relations, Evolution of IR in India, Role of Trade Unions and Employers' Associations, Role of Government in IR, Emerging Trends in Industrial Relations, Impact of Liberalization, Privatization & Globalization, Case Study<br>**Code on Wages, 2019:** Objectives and Scope of the Code, Concept of "Wages" under the Code, Minimum Wages & Floor Wages, Payment of Wages, Bonus Provisions, Gender Equality in Wages, Authorities & Inspectors under the Code, Penalties and Compliance, Case Study | 15 | CO1 |
| **Module II: Trade Unions & Industrial Relations Code, 2020**<br>**Trade Unions:** Meaning & Types of Trade Unions, Trade Union Movement in India, Registration & Recognition of Trade Unions, Rights & Liabilities of Trade Unions, Problems of Trade Unionism, Case Study<br>**Industrial Relations Code, 2020:** Standing Orders, Notice of Change, Lay-off, Retrenchment & Closure, Strikes and Lockouts, Grievance Redressal Mechanism, Industrial Tribunals & Adjudication, Concept of Fixed-Term Employment, Case Study | 15 | CO2 |
| **Module III: Social Security & Code on Social Security, 2020**<br>**Social Security:** Concept of Social Security, Types of Social Security: Social Assistance & Social Insurance, Role of Social Security in Employee Welfare, Case Study<br>**Code on Social Security, 2020:** Applicability of the Code, Provident Fund, Employees' State Insurance, Gratuity, Maternity Benefit, Employee Compensation, Coverage of Gig & Platform Workers, Social Security Funds, Compliance & Registration, Case Study. | 15 | CO3 |
| **Module IV: Occupational Safety & Health and Code on OSHWC, 2020** | 15 | CO4 |

| | | |
|---|---|---|
| **Occupational Safety & Health:** Concept of Occupational Safety & Health, Importance of Workplace Safety, Duties of Employer & Employees, Role of Safety Committees, Case Study<br>**Code on Occupational Safety, Health & Working Conditions (OSHWC), 2020:** Applicability of the Code, Health, Safety & Working Conditions Standards, Working Hours & Leave, Welfare Provisions, Employment of Women, Contract Labour Provisions, Inter-State Migrant Workers, Inspector-cum-Facilitator, Offences & Penalties, Case Study | | |

**Suggested Readings:**

- Taxmann's New Labour Codes, 1st Edition 2025, Taxmann Publications Private Ltd.
- Mamoria CB, Mamoria, Gankar, Dynamics of Industrial Relations, Himalayan Publications, 15th Ed.
- Universal Law Publishing – Labour Codes with Rules
- Ministry of Labour & Employment – Bare Acts of Four Labour Codes
- Dr. Bhagyashree A. Despande, Textbook on new labour and industrial laws, Central Law Publications

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VIII | |
| Course Title | Compensation & Benefits | L | T | P | Credits |
| Course Code | IMBAAI1805 | 4 | 0 | 0 | 4 |

| Course Objectives: | |
|---|---|
| | Introduce the fundamental concepts and strategic importance of compensation. |
| | Understand the components and structure of compensation systems. |
| | Understand employee benefits, incentives, and pay-for-performance plans. |
| | Examine compensation issues related to special employee groups and legal frameworks. |

| Course Outcomes: | |
|---|---|
| CO1 | Explain key theories and principles of compensation and benefits. |
| CO2 | Design and evaluate compensation structures aligned with organizational goals. |
| CO3 | Analyze and apply various incentive plans, employee services, and benefits. |
| CO4 | Design compensation strategies for special employee categories within legal frameworks. |

| Course Contents | No of Hours | Mapped CO |
|---|---|---|
| **Module I : Introduction to Compensation and Benefits-**<br>Role and significance of compensation in organization, Economic and Behavioural theories related to compensation, Strategic perspectives and motivational aspects of compensation, Compensation policy, Pay models and structure design, Job analysis, Job evaluation. | 15 | CO1 |
| **Module II: Compensation Structure and Competitiveness-**<br>Person based and skill-based pay systems, defining competitiveness, Designing pay levels, mix and pay structure, Employee contribution and Compensation differentials, Administrating compensation package. | 15 | CO2 |
| **Module III: Incentives and Employee Benefits-**<br>**Components of compensation:** fixed, variable, and fringe benefits, incentives and retirement plans Pay for performance plans, Employee benefits, Compensation of social group, Role of trade unions in compensation management. | 15 | CO3 |
| **Module IV: Compensation of Special Group and Legal Framework-**<br>**Compensation of special group:** Corporate Directors, Chief Executives & Senior Managers, Components of executive compensation package, Compensation of professionals and knowledge workers, R&D staff, Sales compensation plan, International compensation, Statutory provisions and institutional mechanisms (Wage Boards, Pay Commissions), Tax planning in compensation. | 15 | CO4 |

**Suggested Readings:**


- Milkovich, George T. & Newman, J.M. – *Compensation*, Tata McGraw Hill
- Henderson, R.O. – *Compensation Management*, Pearson Education
- Martocchio, J.J. – *Strategic Compensation*, Pearson Education
- Armstrong, M. & Murlis, H. – *Reward Management*, Kogan Page
- Singh, B.D. – *Compensation and Reward Management*, Excel Books

| Course Articulation Matrix | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PO-PSO** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** |
| **CO1** | | | | | | | | | | | | | | |
| **CO2** | | | | | | | | | | | | | | |
| **CO3** | | | | | | | | | | | | | | |
| **CO4** | | | | | | | | | | | | | | |
| **Avg** | | | | | | | | | | | | | | |

| Program | Integrated Master of Business Administration in Data Science and Artificial Intelligence | | | | |
|---|---|---|---|---|---|
| Year | IV | Semester | | VIII | |
| Course Title | Research-Based Learning IV | L | T | P | Credits |
| Course Code | IMBAAI1806 | 0 | 0 | 6 | 3 |

| | |
|---|---|
| Course Objectives: | Enable students to interpret research findings and draw meaningful conclusions. |
| | Develop the ability to derive managerial implications and practical recommendations from Research outcomes. |
| | Enhance students' skills in academic writing and report preparation. |
| | Familiarize students with book chapter writing and publication ethics. |
| | Prepare students for effective presentation and defence of their research work. |

| Course Outcomes: | |
|---|---|
| CO1 | Interpret research findings in relation to research objectives and hypothesis. |
| CO2 | Draw valid conclusions and formulate recommendations based on research outcomes. |
| CO3 | Prepare a structured research report following academic standards. |
| CO4 | Develop a book chapter from their research work |
| CO5 | Demonstrate effective presentation and communication skills during viva-voce |
| CO6 | Adhere to publication ethics, plagiarism guidelines, and APA referencing standards. |

**Course Structure (Classroom Activity)**

| Topic | Learning Activities |
|---|---|
| **Interpretation of Findings** | Relating findings to research objectives, hypothesis, and existing literature |
| **Conclusion, Recommendations and Managerial Implications** | Drawing conclusions and developing practical recommendations based on research findings |
| **Research Report Writing and Documentation** | Preparation of final RBL report, APA referencing, formatting, and documentation |
| **Publication Ethics and Publication-Oriented Writing** | Similarity check, ethical publishing practices, and preparation of book chapter manuscript |
| **Presentation and Viva Preparation** | PPT preparation, mock presentations, and viva-voce practice |
| **Final Submission of RBL Report / Book Chapter** | Submission of the final RBL report by all students and preparation of book chapters for publication based on the quality of research work |

**Assessment Pattern**

Student performance shall be evaluated through continuous assessment, research report preparation / book chapter development, presentation, and viva-voce under an audit-based evaluation system.

**Guidelines for RBL Teacher**

- Guide students in interpreting research findings and developing conclusions.
- Conduct sessions on report writing and academic documentation.
- Introduce publication ethics, plagiarism guidelines, and manuscript preparation.
- Train students in APA referencing and citation management.
- Facilitate mock presentations and viva sessions.
- Provide constructive feedback on research reports and manuscripts.

**Guidelines for RBL Guide**

- Guide students in drawing conclusions and managerial implications.
- Review draft reports / book chapters.
- Ensure quality, originality, and academic rigor in the final submission.

- Verify adherence to ethical standards and plagiarism norms.
- Mentor students in preparing presentations and viva-voce.
- Assess student performance through continuous evaluation and feedback.

**Guidelines for Students**

- Interpret research findings logically and objectively.
- Prepare conclusions and recommendations aligned with research objectives.
- Prepare a complete research report in the prescribed format / convert quality research work into book chapters for publication.
- Follow APA style consistently for citations and references.
- Ensure originality and compliance with plagiarism guidelines.
- Participate actively in presentations and viva-voce sessions.
- Submit all deliverables within the prescribed timeline.

**Referencing List (Strictly Follow APA Style)**

1. **Book**
   Author, A. A. (Year). *Title of the book* (xth ed.). Publisher.
   (Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)
2. **Journal Article**
   Author, A. A., & Author, B. B. (Year). Title of the article. *Title of the Journal, Volume(Issue)*, page range. https://doi.org/xxxx
   (Note: Journal title and volume are italicized; issue number is in parentheses but not italicized.)
3. **Website**
   Author/Organization. (Year, Month Day). *Title of the webpage*. Website Name. URL
   (Note: Italicize the webpage title, not the website name. If no date, use n.d.)
4. **Report/Company Document**
   Organization. (Year). *Title of the report* (Report No. xxx if available). Publisher. URL
   (Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)