

Semester: VII							
Course Title: ARTIFICIAL INTELLIGENCE IN BUSINESS							
Course Code: C4BC230761T		Credits: 5					
Classes/week :							
Category: Major (Core)							
Theory/Practical/Composite : Theory							
No. of Units : 4							
<p>Course Overview: This course introduces learners to the foundational principles, strategic applications, and ethical dimensions of Artificial Intelligence (AI) in contemporary business environments. It explores the evolution of AI technologies and their transformative impact on business models, operational efficiency, and customer engagement. It can empower learners to analyse AI integration across key functional domains such as marketing, sales, supply chain management, customer relationship management, human resource management. Learners will understand how to deploy AI effectively, measure its impact, and address ethical and sustainability challenges. This course equips learners with critical insights for navigating AI-driven business environments. At the end of this course, learners can harness artificial intelligence to drive strategic insights and uphold ethical standards in business practices.</p>							
Course Outcomes: By the end of this course, learners will be able to:							
CO1. Recall key AI concepts and terminology, explain their relevance in business and differentiate their roles in value creation.							
CO2. Summarize the evolution of AI, analyze its impact on business models and evaluate strategic adoption approaches.							
CO3. Identify appropriate AI tools and techniques, use them across business domains and evaluate their effectiveness in solving functional challenges.							
CO4. Describe AI deployment frameworks, analyze organizational readiness and justify integration approaches for business transformation.							
CO5. Recognize ethical and sustainability issues, support responsible AI practices and design inclusive solutions aligned with Business 5.0 principles.							
CO6. Recall ideas generated from AI application areas, demonstrate their use in workflow design and formulate innovative business strategies.							
Prerequisites: A basic understanding of business management concepts is expected to grasp AI applications across various business domains; no prior knowledge of AI is required.							
SYLLABUS							
Unit with Topic Name	Content	Number of Classes	CO Mapping	Cognitive Level			
I. Foundations of Artificial Intelligence (AI) in Business	Artificial Intelligence (AI), Machine Learning (ML), Deep Learning (DL) for Business Transformation; Evolution of AI in Business (From Rule-based Systems to Machine	08	CO1 CO2 CO6	K1 (Remember) K2 (Understand) K3 (Apply) K4 (Analyze) K5 (Evaluate) K6 (Create)			

	Learning & Generative AI); Discriminative vs. Generative AI for business needs; AI as a General-Purpose Technology; AI vs. Automation vs. Digitalization; AI-first Firms vs. Traditional Firms; AI-in-a-Vacuum vs. AI-for-Everything (Pitfalls and Realistic Adoption Models); AI in Business Value Creation (Efficiency, Personalization, Innovation, and Revenue Models)			
II. AI Applications Across Business Domains	AI in Marketing; AI in Sales; AI in Operations & Supply Chain Management; AI in Customer Relationship Management; AI in Human Resource Management; AI Start-ups; Generative AI in Business Functions (Easy-Win Applications vs. Transformative Applications; LLM; Prompt Engineering; New Business Literacy); Generative AI Tools in Business Practice	25	CO3 CO6	K1 (Remember) K3 (Apply) K5 (Evaluate) K6 (Create)
III. Strategic AI Deployment in Business	Levels of AI Adoption in Business: From Proof of Concept (PoC) to Production; AI Maturity Models; Incremental vs. Radical AI Innovations, AI as a Strategic Asset; Data as Fuel for AI and Decision-Making Paradigms; AI Factory	15	CO2 CO4 CO6	K1 (Remember) K2 (Understand) K3 (Apply) K4 (Analyze) K5 (Evaluate) K6 (Create)

	(Components, Outputs); AI Ecosystem (Stakeholders, Business Processes Amenable to AI, Scalability, Cost Structures, AI ROI Measurement); Barriers to AI Adoption			
IV. AI and Business 5.0: Ethics, Sustainability and Emerging Trends	AI Ethics in Business (Digital Amplification, Bias, Cybersecurity, Privacy and Inclusiveness); AI-as-a-Service (AIaaS); Human–AI Collaboration: Design Thinking; Business 5.0 vs. Industry 4.0; Sustainable AI-driven Solutions; Agentic AI in Business; Hyper-Automation and AI-driven Workflows; Future of AI in Business; Industry-Specific AI Innovations	12	CO5 CO6	K1 (Remember) K3 (Apply) K5 (Evaluate) K6 (Create)

** Each unit is accompanied by relevant business case studies for practical understanding

Text Books

1. **Doug Rose, Artificial Intelligence for Business, Pearson Business Analytics Series, Pearson.**
2. **Bhuvan Unhelkar and Tad Gonsalves, Artificial intelligence for business optimization: research and applications, CRC Press.**
3. **Pavankumar Gurazada, and Seema Gupta, Artificial Intelligence in Business, Vikas Publishing House.**
4. **Kamales Lardi, Artificial Intelligence for Business: Harness AI for Value, Growth and Innovation, Kogan Page.**
5. **Noelle Silver Russel, Przemek Chojecki, Artificial Intelligence Business: How you can profit from AI, Packt Publishing.**

Suggested Readings

1. **Jeffrey L. Coveyduc, Jason L. Anderson, Artificial intelligence for business: A roadmap for getting started with AI, John Wiley & Sons.**
2. **Rajendra Akerkar, Artificial intelligence for business, Springer.**
3. **Saptarsi Goswami, Amit Kumar Das, Amlan Chakrabarti, AI for everyone: a beginner's handbook for artificial intelligence, Pearson India Education Services Pvt. Ltd.**

4. **Bernard Marr, Artificial Intelligence in Practice: How 50 Successful Companies Used AI and Machine Learning to Solve Problems, Wiley.**
5. **Sandeep Kumar Panda, Vaibhav Mishra, R. Balamurali, Ahmed A. Elngar, Artificial Intelligence and Machine Learning in Business Management - Concepts, Challenges, and Case Studies, CRC Press, Taylor & Francis.**
6. **Jeffrey Allan, AI in Business For Dummies, Wiley.**
7. **Phil Pallen, AI for Small Business: From Marketing and Sales to HR and Operations, How to Employ the Power of Artificial Intelligence for Small Business Success, Adams Media Corp.**
8. **Tom Taulli, Generative AI: How CHATGPT and Other AI Tools will Revolutionize Business, Apress.**
9. **Russel Grant, AI for Business: The Beginner's Fast Track to ChatGPT for Productivity, Profit, and Growth, Pebblefalls Publishing.**
10. **Hitesh Motwani, Generative AI 360°: Practical Guide to ChatGPT, Midjourney & AI Tools to Boost Productivity & Creativity, ZebraLearn.**

Web Resources

1. <https://share.google/9IhMaISbQoGTQIpWg>
2. <https://share.google/jZ42dNyVSVHHixUq>
3. <https://www.ibm.com/think/topics/artificial-intelligence-business>
4. <https://onlinedegrees.sandiego.edu/artificial-intelligence-business/>
5. <https://share.google/RIYKUHY6wN3umcpJT>

**Latest edition of the book is recommended.

Course outcomes (COs) and Cognitive Level Mapping

COs	CO Description	Cognitive levels
CO1	Recall key AI concepts and terminology, explain their relevance in business and differentiate their roles in value creation.	K1 (Remember) K2 (Understand) K4 (Analyze)
CO2	Summarize the evolution of AI, analyze its impact on business models and evaluate strategic adoption approaches.	K2 (Understand) K4 (Analyze) K5 (Evaluate)
CO3	Identify appropriate AI tools and techniques, use them across business domains and evaluate their effectiveness in solving functional challenges.	K1 (Remember) K3 (Apply) K5 (Evaluate)
CO4	Describe AI deployment frameworks, analyze organizational readiness and justify integration approaches for business transformation.	K2 (Understand) K4 (Analyze) K5 (Evaluate)
CO5	Recognize ethical and sustainability issues, support responsible AI practices and design inclusive solutions aligned with Business 5.0 principles.	K1 (Remember) K5 (Evaluate) K6 (Create)
CO6	Recall ideas generated from AI application areas, demonstrate their use in workflow design and formulate innovative business strategies.	K1 (Remember) K3 (Apply) K6 (Create)