Course Name	**AI Essentials for Business: Strategy, Applications, and Ethics**
Course Duration	2 Day (16 hours)
Target Audience	Business Professionals, Managers, CEOs, etc.
Course Outcomes	Learn AI fundamentals and its application in business
	Apply AI for enhanced user experience, audience segmentation, asset security, and process optimization
	Develop and implement effective AI strategies based on business requirements and data analysis
	Identify and address AI-related risks and ethical considerations

Course Content

Module 01: AI Fundamentals

Define AI concepts: Artificial Intelligence - General AI - Narrow AI - Machine Learning - Supervised - Unsupervised - Reinforcement learning - Deep Learning - Robotics - Natural Language Processing (NLP) - Computer vision

Case Studies:
1.1. Research and discuss the ethical implications of General AI versus Narrow AI.
1.2. Analyze and compare the applications of supervised, unsupervised, and reinforcement learning algorithms.
1.3. Investigate the role of deep learning in robotics, natural language processing, and computer vision.

Acknowledge the history of AI: Timeline - Contributors: - Turing - IBM Deep Blue - DeepMind - Enabling Technologies: - Cloud - Big data - Graphics Processing Units (GPU)

Case Studies:
1.4. Research and present the contributions of Turing, IBM Deep Blue, and DeepMind to the field of AI.
1.5. Analyze the impact of enabling technologies like cloud computing, big data, and GPUs on the development of AI.

Module 02: AI in Business

Improve user experience: Chatbot - Assist Agents - Sentiment Analysis - Natural Language Processing - Emotion AI - Web personalization - Recommender systems

Case Studies:
2.1. Critically evaluate the effectiveness of chatbots in improving user experience, considering their limitations and potential benefits.
2.2. Explore the ethical concerns related to sentiment analysis, emotion AI, and personalization in AI-based systems.

Segment audiences: Target campaigns - Predictive systems

Case Studies:
2.3. Analyze the role of AI in segmenting audiences for targeted campaigns and its impact on marketing effectiveness.
2.4. Evaluate the potential benefits and challenges of predictive systems in identifying customer behaviour and preferences.

Secure assets: Threat analysis - Cloud security - IT Asset Management - Identify fraud - Notifications - Risk detection

Case Studies: 2.5 Investigate the role of AI in threat analysis and its effectiveness in enhancing cybersecurity. 2.6 Analyze the potential applications of AI in fraud detection and risk mitigation.
Optimize process: Industrial robots - Autonomous vehicles - Robotic Process Automation (RPA) - Predictive analytics - AI-enabled Supplier Relationship Management (SRM) - Cloud virtualization - Route optimization
Case Studies: 2.7 Evaluate the impact of industrial robots and autonomous vehicles in optimizing manufacturing and transportation processes. 2.8 Explore the potential benefits of Robotic Process Automation (RPA) in streamlining business operations.
Module 03: AI Business Requirements
Develop an AI strategy: Align AI to organizational initiatives - Digital transformation - Data strategy - Business strategy - Align with Environmental, Social, and Governance (ESG) initiatives - Diversity, equity, and inclusion - Sustainability - Data protection - Organizational Resources - Talent resources - Data resources - Computing resources - Budget resources - Stakeholders - Competitive considerations
Case Studies: 3.1 Analyze the importance of aligning AI initiatives with organizational goals and ESG initiatives. 3.2. Assess the resources and capabilities required for developing an effective AI strategy in line with organizational objectives. 3.3. Evaluate the competitive considerations and potential advantages of integrating AI into business operations.
Identify data and design requirements: Quantify value proposition - Identifying use cases - Review data quality
Case Studies: 3.4 Assess the value proposition of AI implementation in a specific business context and quantify its potential benefits. 3.5 Analyze real-world use cases of AI in different industries and evaluate their impact.
Module 04: Risk with AI
Identify organizational considerations: Employee impact - Organizational readiness (change management)
Case Studies: 4.1 Explore the potential impact of AI on employment and analyze strategies for mitigating its effects on employees. 4.2. Evaluate the organizational readiness for adopting AI technologies and the challenges associated with change management.
Identify data risks: Data quality - Data security - Data control
Case Studies: 4.3 Assess the risks and challenges related to data quality, security, and control in AI applications. 4.3. Analyze the potential consequences of data breaches and strategies for mitigating data-related risks in AI projects.

Identify governance: Ethical considerations - Privacy - Accountability - Transparency - Bias - Legal/regulatory considerations - EU AI Act - U.S. AI Bill of Rights - DoD AI Principles
Case Studies: 4.4 Examine the ethical considerations surrounding AI, such as privacy, accountability, transparency, and bias, and propose strategies for addressing them. 4.5. Analyze the legal and regulatory frameworks related to AI, including the EU AI Act, U.S. AI Bill of Rights, and DoD AI Principles, and their implications for businesses and society.