

AI+ Program Director – Practitioner™ Training

Course Duration: 40 Hours

TOC

Module 1: Foundations of AI for Program Strategy – Introduction

- 1.1 Understanding of AI, ML, and Deep Learning
- 1.2 AI Lifecycle & Real-World Applications
- 1.3 Societal Impact of AI
- 1.4 Use Case: Triage System (AI for Emergency Services)
- 1.5 Case Study: Retail Recommendation System (Personalizing Customer Experience)
- 1.6 Hands-on: Use Teachable Machine to Build a Simple AI Classifier

Module 2: Identifying AI Opportunities & Use Cases

- 2.1 Introduce AI Strategy Alignment Frameworks: AI Canvas, Value vs Feasibility Matrix
- 2.2 Signs That a Process May Benefit from AI: Repetitive Tasks, Data-Rich Environments, Personalization Needs
- 2.3 Prioritization Techniques: Weighted Scoring, Risk-Adjusted ROI
- 2.4 Use-Case: Financial AI – Fraud Detection Systems Using AI
- 2.5 Case Study: AI-Driven Project Management System for a Program Director
- 2.6 Hands-on: Use Trello to Create a Board and Prioritize AI Opportunities Within a Given Scenario

Module 3: Governance & Ethics in AI

- 3.1 Responsible AI Principles
- 3.2 AI Bias & Risk Mitigation
- 3.3 Use-case: Auditing Bias in AI-Powered Recruitment to Ensure Fair Hiring
- 3.4 Case Study: Mitigating Algorithmic Bias in Credit Scoring Models to Ensure Fair Lending Practices
- 3.5 Hands-on: Use Google's What-If Tool in Google Colab to Evaluate Model Fairness and Bias

Module 4: AI Project Lifecycle & Integration

- 4.1 AI Project Planning & CRISP-DM
- 4.2 Integration: Build vs Buy vs Partner
- 4.3 AI Project Management Tools
- 4.4 Use Cases: AI for Predictive Maintenance (Asset Management in Manufacturing)
- 4.5 Tool-Based Hands-on Activity: Simulate an AI Project in Asana

Module 5: Data Strategy & Infrastructure for AI

- 5.1 Data Governance & Quality
- 5.2 Setting up Data Pipelines for AI
- 5.3 Sensitive Data Management
- 5.4 Use Case: Retail Inventory System — AI-driven Restocking and Demand Prediction
- 5.5 Case Study: Healthcare Data Security — Managing Patient Privacy in AI-Based Healthcare Systems
- 5.6 Tool-Based Hands-on Activity: Set up Airbyte Cloud and Build a Basic Data Pipeline

Module 6: AI Integration — Build vs Buy vs Partner

- 6.1 Evaluating AI Solutions
- 6.2 Vendor Evaluation & Management
- 6.3 Use Case: AI Vendor Selection — Choosing Predictive Maintenance Solutions for a Manufacturing Plant
- 6.4 Tool-Based Hands-on Activity: Use a Vendor Selection Template to Evaluate AI Vendors (Google Sheets)

Module 7: AI Risk Management & Compliance

- 7.1 Regulatory Frameworks
- 7.2 Bias Detection & Mitigation
- 7.3 Use Case: Facial Recognition Bias (Law Enforcement Systems)
- 7.4 Case Study: AI in Finance: Ensuring Compliance in AI Deployments

7.5 Tool-Based Hands-on Activity: Bias Testing & Fairness Evaluation Using KNIME and Google PAIR Facets Fairness Explorer

Module 8: AI Tools & Techniques for Project Management

8.1 AI Project Management Tools

8.2 Data Management Tools

8.3 Case Study and Use Case: AI Workflow Management: Using project management tools for AI deployment in the retail sector

8.4 Tool-Based Hands-on Activity: Use Asana to simulate project timelines, setting up tasks and milestones for an AI initiative

Module 9: Leadership in AI

9.1 Leading AI Teams & Change Management

9.2 Managing Stakeholders & Communication

9.3 Use Case: AI in Manufacturing: Leading AI Implementation in a Large-Scale Manufacturing Operation

9.4 Tool-Based Hands-on Activity: Use Miro to Map Stakeholder Communication Strategies and Identify Key Influencers

Module 10: Scaling AI Initiatives

10.1 From Pilot to Full-Scale Deployment

10.2 Organizational Maturity Models for AI

10.3 Use Case: Scaling AI in Retail: Expanding AI-driven Recommendations Globally

10.4 Tool-Based Hands-on Activity: Create a Scaling Roadmap Using Lucidchart Outlining Key steps in Scaling AI Initiatives.

Module 11: Future Trends in AI

11.1 Emerging AI Technologies

11.2 Use Case / Case Study: AI in Autonomous Vehicles: The future of AI in self-driving cars

11.3 Tool-Based Hands-on Activity: Explore Hugging Face Transformers for NLP and TensorFlow for Deep Learning Applications

Module 12: Capstone Project & Presentation

12.1 Capstone Project Overview

12.2 Presentation & Feedback

12.3 Final Review & Certification – Method, Process, and Feedback Mechanism