Detailed Programs Structure:

Program: Machine Learning Basics
Duration: 8 hrs, **Cost :** Rs 8,000

Delivered as 2 hrs / Day (Mon-Fri), 4 Hours / Day (Alternate Days). 8 Hrs / Day (Saturday)

Module 1 — Introduction to ML (1 hour)

- What is ML?
- Types of ML: Supervised, Unsupervised, Reinforcement
- How machines learn
- ML vs AI vs Deep Learning
- Real industry use cases

Module 2 — Python for ML (1 hour)

- Python basics for ML
- Numpy, Pandas, Matplotlib
- Working with datasets
- Cleaning and preparing data

Hands-On:

- Load and explore datasets
- Data cleaning & preprocessing

Module 3 — Supervised Learning (2 hours)

- Regression
- Classification
- Train/Test split
- Model building
- Accuracy measurement

Hands-On:

- Build your first ML model
- Predict housing prices
- Classification on Iris dataset

Module 4 — Unsupervised Learning (1 hour)

- Clustering (K-Means)
- Dimensionality reduction
- Real use cases: segmentation, anomaly detection

Hands-On:

- Customer segmentation model

Module 5 — ML Model Evaluation (1 hour)

- Confusion matrix
- Precision, recall, F1 score
- Bias & variance
- Overfitting & underfitting

Hands-On:

- Evaluate multiple ML models

Module 6 — Introduction to Neural Networks (1 hour)

- How neural networks work
- Activation functions
- Simple ANN model

Hands-On:

- Build a 3-layer ANN using Keras

Module 7 — Project + Career Roadmap (1 hour)

- Mini project using real dataset
- ML project lifecycle
- GitHub portfolio
- Resume building
- How to prepare for ML interviews

TOOLS COVERED

Free Tools:

- Google Colab
- Python
- Scikit-learn
- Pandas / Numpy
- Matplotlib
- Kaggle datasets

Cloud-Based Tools:

- Colab Notebooks
- AWS Sagemaker Studio Lab (free)

Program: "AI in Business Operations"

Duration: 16 hrs, **Cost :** 16,000

Delivered as **2 hrs / Day (Mon-Fri), 4 Hours / Day (Alternate Days). 8 Hrs / Day (Saturday)**

MODULE 1 – AI Foundations for Business (2 Hours)

- AI, ML, Generative AI
- AI in Industry 4.0
- Process automation vs AI
- How AI impacts cost, speed, quality & productivity
- Mapping operational waste

Outcome: Leaders understand how AI translates into operational excellence.

MODULE 2 – AI in Sales Operations (3 Hours)

Key Use Cases

- Lead scoring
- Forecasting
- Proposal automation
- Customer churn
- Pricing optimization

Tools

Free: HubSpot AI, ChatGPT, Google Sheets
Paid: Freshsales AI, Salesforce Einstein
Cloud: AWS Forecast, Azure Sales Insights

Hands-On

Sales forecasting + churn prediction + email automation.

MODULE 3 – AI in Production & Quality (4 Hours)

Production Use Cases

- Predictive maintenance
- Sensor anomaly detection
- Production scheduling
- Digital twins
- Energy optimization

Quality Use Cases

- Vision-based defect detection
- SPC automation
- Defect trend analysis

Tools

Free: Teachable Machine, OpenCV
Paid: Siemens Mindsphere, Qualitas Vision AI
Cloud: Azure Custom Vision, AWS Lookout

Hands-On

Defect detection model + vibration-based maintenance model.

MODULE 4 – AI in Operations (3 Hours)

Use Cases

- Inventory optimization
- Route optimization
- Delay prediction
- Automated reporting
- Capacity planning

Tools

Free: OR-Tools, Power BI
Paid: UiPath AI, o9 Solutions
Cloud: AWS Supply Chain, Vertex Time Series

Hands-On

Inventory prediction + route optimization lab.

MODULE 5 – AI in HR & Workforce Intelligence (2 Hours)

Use Cases

- Resume screening
- Attrition prediction
- Skill mapping
- Sentiment analytics
- Training needs analysis

Tools

Free: ChatGPT, Google Colab
Paid: Keka AI, Darwinbox
Cloud: AWS Comprehend, Azure NLP

Hands-On

Attrition prediction + AI-generated job descriptions.

MODULE 6 – AI Roadmap + ROI + Implementation Blueprint (2 Hours)

Activities

- AI Maturity Assessment
- Identify 10 AI opportunities
- Build an implementation roadmap
- Calculate ROI for AI projects

Program: "AI for Cost Saving & Digital Marketing"
Duration: 24 hrs, **Cost:** Rs. 24,000
Delivered as **2 hrs / Day (Mon-Fri), 4 Hours / Day (Alternate Days). 8 Hrs / Day (Saturday)**

MODULE 1 – AI Foundations for Cost & Marketing Efficiency

• AI fundamentals for leaders
• Cost leakage mapping
• AI efficiency models
• Activity: Productivity workflow automation

MODULE 2 – AI for Enterprise Cost Optimization

• Predictive maintenance
• Inventory optimization
• Energy & operations efficiency
• Activity: Power BI + OR-Tools

MODULE 3 – AI for Digital Marketing (Foundations)

• SEO automation
• Content creation AI
• Social media automation
• Activity: ChatGPT + Canva + Trends

MODULE 4 – AI for Digital Marketing (Advanced)

• Segmentation
• CLV prediction
• Funnel optimization
• Activity: GA4 + Vertex AI

MODULE 5 – Cross-Functional AI (Cost + Marketing Synergy)

• AI budgeting
• Channel optimization
• Attribution analysis
• Activity: Campaign performance modelling

MODULE 6 – AI Roadmap + ROI + Capstone

• AI maturity assessment
• ROI calculation
• Implementation blueprint

• Capstone project presentation

TOOLS COVERED

FREE: ChatGPT, Canva AI, Power BI, Google Trends, OR-Tools

PAID: Jasper, SEMrush, UiPath, Mixpanel, HubSpot AI

CLOUD: AWS Forecast, GA4, Vertex AI, BigQuery