

AI-Powered Agribusiness Decision Making and Predictive Analytics

COURSE OVERVIEW

This course provides a practical understanding of how Artificial Intelligence (AI) and data analytics are transforming decision-making across the agribusiness value chain. It combines technology, agronomy, and business strategy to show how AI drives precision, efficiency, and competitiveness. Participants will learn how predictive modelling and machine learning support smarter forecasting, production planning, supply chain management, and profitability. They will also explore how to design data frameworks for yield prediction, market analysis, and resource optimization while promoting sustainability and risk reduction.

WHO SHOULD ATTEND?

This course is designed for Agribusiness executives, managers, analysts, agritech entrepreneurs and startup founders developing digital agriculture solutions. It is equally valuable for data scientists, engineers, policy makers, government officials, development partners and technology professionals, farm cooperatives and production managers, supply chain, finance, and marketing professionals, sustainability and ESG managers seeking to integrate data intelligence in decision making.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Understand the role of AI and data analytics in strategic agribusiness decision-making.
- Analyze and interpret large agricultural datasets to generate actionable insights.
- Implement AI-based tools for weather forecasting, crop health monitoring, and price prediction.
- Integrate predictive analytics into supply chain and logistics optimization.
- Evaluate the ROI and business impact of AI adoption in agribusiness operations.
- Utilize data visualization tools for effective communication of agribusiness insights.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- The fundamentals of predictive analytics and how they apply to agribusiness planning and investment decisions.
- Integration of AI and IoT data sources including sensors, drones, and satellite imagery for smarter decision systems.
- Machine learning models that predict weather risks, pest outbreaks, and soil performance.
- Decision-support systems (DSS) powered by AI for real-time operational management.
- The role of cloud computing and big data platforms in scalable agricultural data analytics.
- Ethical AI practices and data governance frameworks to ensure responsible agribusiness innovation.
- Emerging trends in agribusiness intelligence, including AI-driven automation, prescriptive analytics, and smart decision ecosystems.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate.
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded.