SYLLABUS FOR BOARD OF STUDIES ADOPTION — generated from the live catalogue record

# AI in Crop Advisory and Farm Decision Systems

X-G3 · 3 days (configurable 1–5 days) · Agricultural Sciences · AI · Years: 2nd, 3rd, PG

## CONTENTS

1. Overview 2
2. Hours and credit position 2
3. Course outcomes 2
4. Course content — modules 2
5. Assessment scheme (100 marks) 2
6. CO–PO mapping 2
7. Every participant receives 3
8. Fee 3
9. Designed by 3

Catalogue X-G3 · version 2 · generated 2026-10-11

## OVERVIEW

Students build an AI-backed crop advisory that turns farm data into recommendations.

AI-driven advisory is reaching millions of farmers; graduates who can build crop-advisory decision systems sit at the intersection of agriculture and the fastest-growing tech skill.

## HOURS AND CREDIT POSITION

Contact hours: 24 Guided project: 6 Self-study: 0 Notional total: 30

**Credit claim: 1**
30 notional hours ÷ 30 hours per credit (NSQF track, UGC Micro-credentials Guidelines §5.3.3) = 1 credits.

## COURSE OUTCOMES

CO1. Describe AI use cases in crop advisory (K2)
CO2. Identify the farm data sources an advisory needs (K3)
CO3. Build advisory decision logic from farm data (K3)
CO4. Evaluate an advisory recommendation against agronomy (K4)
CO5. Produce a working crop-advisory prototype (K5)

## COURSE CONTENT — MODULES

Hours shown are the recommended format; module time scales proportionally when the engagement runs 1–5 days.

**Module 1 — AI in agriculture (4h recommended)**
Theory: Use cases, data sources
Lab: Map AI use cases in agriculture
Output: Use-case map

**Module 2 — Farm data (4h recommended)**
Theory: Weather, soil, crop and satellite data
Lab: Assemble farm data sources
Output: Data inventory

**Module 3 — Advisory models (4h recommended)**
Theory: Rules, prediction basics
Lab: Design advisory logic
Output: Advisory logic

**Module 4 — Building an advisory (4h recommended)**
Theory: Decision logic, thresholds
Lab: Build advisory decision logic
Output: Advisory engine

**Module 5 — Delivery (4h recommended)**
Theory: Advisory interfaces, farmer access
Lab: Design a farmer-facing interface
Output: Interface mockup

**Module 6 — Capstone (4h recommended)**
Theory: A working crop-advisory prototype
Lab: Ship an advisory prototype
Output: Advisory prototype

## ASSESSMENT SCHEME (100 MARKS)

Continuous exercises — 40 marks
Analytical report — 40 marks
Viva voce — 20 marks

## CO–PO MAPPING

CO1 !' PO1 (strength 2)
AI use cases are foundational domain knowledge.

CO2 !’ PO3 (strength 2)
Identifying data sources is solution design.
CO3 !’ PO3 (strength 2)
Advisory logic is solution development.
CO4 !’ PO4 (strength 2)
Evaluating against agronomy is investigation.
CO5 !’ PO3 (strength 2)
The prototype is a developed solution.

## EVERY PARTICIPANT RECEIVES

- Certificate of completion
- Course material
- LMS access
- Interview question bank
- Mock interview & viva practice

## FEE

¹850 per student, incl. GST
Excludes the optional nasscom assessment where offered. Final pricing on your college's quotation.

## DESIGNED BY

Venkat Kurela — Founder & Director, Kurela Cognisive Private Limited