

JADAVPUR UNIVERSITY
COMPUTER AIDED DESIGN CENTRE
Comp. Sci. & Engg. Dept.
Kolkata - 700032
Certificate Course on
AI–IoT–Cloud–Drone for Social Good

(Organized by JUSense In collaboration with CAD Centre, Jadavpur University)

Course Description

Emerging technologies like **Artificial Intelligence (AI)**, **Internet of Things (IoT)**, **Cloud Computing**, and **Drone Technology** are transforming industries and societies alike. But their real power lies in addressing **social and environmental challenges** — from smart surveillance and sustainable agriculture to pollution tracking and energy-efficient computing.

This **hands-on certified course** is designed to equip students and professionals with practical exposure and real-world insights into how these technologies can be **combined to drive social good**. Through expert-led sessions, working prototypes, and use-case demonstrations, participants will gain cutting-edge knowledge and actionable skills that can inspire impactful innovations.

Whether you're an engineering student, a researcher, or a working professional — this course offers a powerful launchpad to explore the world of **Tech for Social Impact**.

Course Duration: 15 Hours (Spread across 4 days)

Class Schedule: Saturdays (Daytime)

Certificate: Certificate of Completion will be provided

Course Fee: ₹2500 (inclusive of 18% GST)

Target Audience

- Students (Engineering, Science, etc.)
- Working Professionals and Innovators
- Anyone passionate about Tech for Social Good

Course Content

Module	Topics Covered	Theory Hours	Hands-on Hours	Total Hours
Day 1	Introduction to AI–IoT–Cloud–Drone ecosystem and its relevance for Social Good AI-powered Drone Applications for Social Good (Surveillance, Infrastructure, Plantation Monitoring, Agriculture, etc)	2	-	2
	Face the Cause: Practical AI and Vision Systems for Social Good. A hands-on session on artificial intelligence for real-world surveillance applications	1	1.5	2.5
Day 2	Hands On FPV Drone Building and its Use Cases in Social Good: From Implementation Viewpoint	2	2.5	4.5
Day 3	IoT Projects for Social Impact: <ul style="list-style-type: none">IoT Enabled Personal Sign Language Translator Kit for Deaf and Mute UsersAir Pollution Monitoring using IoT Device	1	1.5	2.5
Day 4	Sustainable and Green Cloud Computing: <ul style="list-style-type: none">Sustainable Cloud Computing: Environmental Impact and Green SolutionsEnergy-Efficient Cloud Computing for a Greener Society	2	1.5	3.5
Total	–	8	7	15

Learning Outcomes

By the end of the course, participants will be able to:

- Understand the applications of AI, IoT, Cloud, and Drone technologies in social good
- Analyze and design solutions for real-world problems using these technologies
- Apply sustainable and inclusive principles while designing tech systems
- Explore opportunities in emerging domains like smart cities, agriculture, and health monitoring
- Gain hands-on experience with sensors, drones, and AI models