Savitribai Phule Pune University

(Formerly University of Pune)

Department of Technology
(A Programme under Department of Technology, SP Pune University)

Curriculum Structure for

Professional Certification Programme

in

ETHICS IN AI CERTIFICATION PROGRAM (CPEAI)

Course Name: Professional Certification Programme in Ethics in AI

Compulsory Modules – 4

Duration: 3 Months

Savitribai Phule Pune University

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Department of Technology

Board of Studies, Computer and Information Technology(CI)

Curriculum Structure for Professional Certification

Programme in

ETHICS IN AI CERTIFICATION PROGRAM

Sr. No.	Subject Code	Subject Name	Credits	Teaching Scheme (Theory)	Teaching Scheme (Practical)
1	CPEAI1	Introduction to Ethics in AI	4	√	√
2	CPEAI2	Privacy and Data Ethics	4	√	√
3	CPEAI3	Autonomous Systems and Ethics	4	√	√
4	CPEAI4	AI and the workforce	6		
		Total Course Credits	**18**		

TAKE AWAY'S AFTER COMPLETION OF COURSE

Become an industry ready Expert with Professional Certification Programs in Ethics in AI; And transform your career in 3 months. Course provides a high-engagement learning experience with real-world applications and is designed for individuals who want to start a new, more fulfilling challenging distinct career.

Teaching Scheme:	**Examination Scheme:**
Lectures: 4 hrs/ week	Assignment/Quiz: 40 Marks
Tutorial:	End Exam: 60 Marks

CPEAI1: Introduction to Ethics in AI

Introduction: Overview of the course, AI industry growth, Ethics and society, Applications of AI in different industry sectors, Historical context and milestones in AI ethics

AI and Data manipulation: Understanding data manipulation in AI, Sources of AI manipulation, Case studies of AI manipulation.

Mi tigating AI manipulation: Concept of mitigating AI manipulation, Methods for detecting AI manipulation, Fairness in Machine Learning algorithms

CPEAI2: Privacy and Data Ethics

Privacy: The need for transparency in AI systems, Techniques for explaining AI decisions, Privacy concerns in building AI, Data collection, consent, and anonymization, GDPR and other privacy regulations

Data Ethics: Legal and ethical aspects of AI accountability, Responsibility in AI development and deployment, Case studies of AI failures and their consequences.

CPEAI3: Autonomous Systems and Ethics

Autonomous Systems and Ethics: The use of AI in autonomous machines, Ethical issues in autonomous machines (vehicles and drones), Ethical AI implementation in building autonomous machines

AI in Big Data: Big data challenges, Ethical concerns in big data, Ethical AI in Big data

AI in Healthcare: As is healthcare system, AI driven healthcare ,Ethical challenges in AI-driven healthcare, Patient data privacy and consent, AI and medical decision-making, Ethical AI implementation in Healthcare

AI in Judicial system: As is Judicial system in India, AI driven Judicial system, Predictive algorithm system, Ethical challenges in AI-driven judicial system, AI and judicial decision-making, Ethical AI implementation in Judicial system

CPEAI4: AI and the workforce

AI and the workforce: The impact of AI on employment, Reskilling workforce, Ethical consideration in HR AI systems

Global Perspective on AI Ethics: Global approaches to Ethics in AI, Global institutions addressing AI ethics, National variations in AI ethics

AI Ethics in Practice: Real-world case studies, Ethical guidelines from organizations, Guest speakers

AI and Society: Social impact on growing AI industry, Need of Ethical AI, Ethical consideration in AI policy and regulations