GANPAT UNIVERSITY

FACULTY OF ENGINEERING & TECHNOLOGY

Programme	Bachelor of Technology					Branch/Spec.	Computer Engineering/ Information Technology/ Computer Engineering (Artificial Intelligence)		
Semester	VIII					Version	1.0.0.0		
Effective from Academic Year	2025-26					Effective for the Batch admitted in	July 2022		
Course Code	2CEIT8PE1	Course Name				AI and Public Policy			
Teaching Scheme						Examination Scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	2	-	1	-	3	Theory	40	60	100
Hours	2	-	2	-	4	Practical	30	20	50

Pre-requisites

NA

Course Outcomes

On successful completion of the course, the students will be able to:

CO1	Recall and comprehend the global and national strategies, policies, and key considerations around AI by interpreting reports from various countries and organizations.
CO2	Analyze the socio-economic impacts of AI, business transformations enabled by AI, and AI's effect on different stakeholders through case studies, scenarios, and examples.
CO3	Evaluate different policy approaches regarding regulation, coordination, intellectual property, existential risk, data protection etc. related to AI development and adoption.
CO4	Develop contextual AI solutions, benchmarks, partnerships, and policy recommendations that address ethical concerns and facilitate responsible innovation.

Theory Syllabus

Unit	Content	Hrs.
1	**Global Strategies and Policies on Artificial Intelligence:** AI: An opportunity and a risk, Comparing and interpreting the strategy and reports of different countries on Artificial Intelligence: Singapore, USA, UK, Germany, India, China, Blockchain: Japan, China, USA, Switzerland, Singapore, India, Robotics: Singapore, Japan, USA, India, International AI Strategies: European Union, United Nations, AI Agreement between UAE and India, International Study Group of AI.	08
2	**AI Policies in India:** NITI Aayog, AI initiatives by Ministry of Electronics and IT, AI Initiative by Ministry of Commerce and Industry, National AI based portal, AI Academia/ Institutes and Centres in India, AI standardization in India: Bureau of Indian Standards (BIS), Department of Telecom (DOT), Key considerations for AI policymaking in India: Resources, Infrastructure, Markets, and Funding, Policy environment for AI innovation, Democratize AI technologies and data, National infrastructure to support domestic development: AI Data Storage, AI Networking Infrastructure, Awareness, Education, and Reskilling: Skill sets to successfully adopt AI, Early Childhood Awareness and Education, Focus on marginalised groups, Improved access to and awareness of Internet of Things, Public Discourse, Impact of AI on different stakeholders: Employees, Customers, Business, etc., How has COVID-19 affected the AI trends?, Business Transformations with AI	10
3	**Socio-Economic Impacts of Artificial Intelligence:** AI in warfare and diplomacy, AI shortfalls for military applications, Transparency in AI, Audits, Tiered Levels of Transparency, AI and economic growth: Economic characteristics of AI, Private equity investments in AI start-ups, Broader trends in development and diffusion of AI, How increases automation in the production of goods and services is impacting economic growth?, How can we reconcile the advent of AI with the observed constancy in growth rates and capital share over most of the twentieth century?, Should we expect such constancy to persist in the twenty- first century?, Can AI drive massive increases in growth	06

	rates? Under what conditions, and are these conditions plausible? How are the links between AI and economic growth modulated by firm- level considerations, including market structure and innovation incentives? How does AI affect the internal organization of firms, and with what implications?	
4	**Policy, Regulation and Ethics of AI:** Documentary on Impact of AI in economy, Case study: How do you organize the skills to best facilitate innovation for your firm? Pitch deck for ideas or new application of AI, Pitch deck for ideas or new application of AI, Coordination and collaboration across stakeholders, Development of Contextually Nuanced and Appropriate AI Solutions Continuing, deepening, and expanding partnerships for innovation, Develop contextual standard benchmarks to assess quality of algorithms, Frameworks for Regulation: National legislation, Data Protection Law, Discrimination Law, Frameworks for Regulation: Competition Law, Consumer Protection Law, Sectoral Regulation, AI Policy Challenges: Intellectual Property Regime and AI issues, Catastrophic and Existential Risk, AI Policy Challenges: Security and Cyber security, Re-thinking Intellectual Property Regimes	06
Practical Content		
Practicals, assignments and tutorials are based on the above syllabus.		
Text Books		
1	Turning Point: Policymaking in the Era of Artificial Intelligence by Darrell M. West and John R. Allen, Brookings Institution Press.	
Reference Books		
1	Artificial Intelligence: Evolution, Ethics and Public Policy by Pankaj Sharma and Saswat Sarangi, Taylor & Francis.	
ICT/MOOCs Reference		
1	https://courses.mooc.fi/org/uh-cs/courses/ai-in-society	

Mapping of CO with PO and PSO:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	2	0	1	1	1	0	1	1	2	0	1	1	1	1
CO2	1	3	1	2	1	2	0	2	1	2	0	1	1	1	2
CO3	1	3	2	2	1	3	0	3	1	3	0	2	1	1	2
CO4	1	2	3	1	2	2	0	2	2	2	1	1	2	2	3