



KAUTILYA SCHOOL OF PUBLIC POLICY
 GITAM (Deemed to be University)
 Rudraram, Patancheru Mandal
 Hyderabad, Telangana 502329

Course Code: PPOL7111	Course Title: Challenges of AI Technology Regulations.	
Trimester: 5	Course Type: Elective	Credits: 3
Home Program(s): MPP	Batch/Academic Year: 2023-25	
Course Lead: Dr. Vishnu S Pillai.	Assigned T/RA- Academic Associate:	

Course Description

Emerging technologies such as AI pose challenges to regulation due to their “relatively fast technological advancement, prominent impact, and uncertainty and ambiguity”¹. Rooted in the policy frameworks (especially policy formulation theories perspectives) discussed in PPOL6021 (Foundations of Public Policy), this course thoroughly examines the dimensions of AI technology forecasting, risks, and regulatory policy design. The course also combines the traditional domains of comparative public policy and the more recent agile governance approaches. Though this course is on the regulation of AI, the lessons learnt can be applied to address the regulatory challenges of other emerging technologies such as virtual reality, the internet of things and quantum computing.

Learning Objectives

The course tries to achieve the following learning objectives:

1. To explore the various AI technologies and recognize the contexts underlying their evolution.
2. To understand the underlying mechanisms with which AI technological advancements manifest into risks and regulatory challenges.
3. To explore the various regulations of AI and other technologies and assess their applicability in the Indian context.
4. To propose innovative solutions for regulating AI technologies by deriving insights from comparative policy analysis.

Course Outcomes

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

¹ Rotolo, Hicks, and Martin, “What Is an Emerging Technology?”

1. Understand the stages of the evolution of AI and the underlying body of knowledge for technology forecasting.
2. Approach AI as a complex adaptive system and adopt a systems approach to address the unintended consequences².
3. Be familiar with the processes and players in the AI policy domain.
4. Gain awareness of real-world tech-policy challenges and measures to address them.

Course Schedule

Unit I	Sessions: 3	Understanding the technology
<ul style="list-style-type: none"> ● Characteristics of emerging technologies. ● Evolution and the definition of AI. ● Methods of technology forecasting. ● AI technology forecasting - the challenges and way forward. 		
Unit II	Sessions: 4	AI and the society: AI systems
<ul style="list-style-type: none"> ● Characteristics of AI economy. ● Systems approach (review/introduction). ● Complicated systems and complex systems. ● AI systems as Complex Adaptive Systems. 		
Unit III	Sessions: 8	AI and society: risks of AI
<ul style="list-style-type: none"> ● Classification of impact groups³. ● Risks of AI: data security issues and privacy concerns ● Risks of AI: the lack of transparency ● Risks of AI: the liability puzzle ● Risks in using AI for Public Policy 		
Unit IV	Sessions: 3	Regulations (from policy formulation theories perspectives)
<ul style="list-style-type: none"> ● Types of regulation: command- and control regulation ● Types of regulation: self-regulation ● Types of regulation: risk-based regulation 		
Unit V	Sessions: 6	AI regulatory landscape

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- AI regulatory landscape in India: Mapping this to the NATO framework.
- Regulatory learnings from other countries and sectors: the regulatory spectrum from soft laws to stringent hard regulations.
- Innovative regulatory approaches for AI technologies.

