

## **COURSE OUTLINE**

**Course Code / Title** : HA3034 Governing Algorithms: Asia-Pacific

**Pre-requisites** : HA1003

**No. of AUs.** : 3

**Contact Hours** : 39

### **Course Aims**

- 1) Analyze the policy challenges posed by algorithmic systems in public services, online platforms, and digital infrastructure, with particular focus on fairness, accountability, and transparency.
- 2) Examine the governance strategies employed across the Asia-Pacific, including regulatory instruments, technical standards, and institutional innovations such as regulatory sandboxes and co-regulatory models.
- 3) Apply frameworks from policy design, regulatory governance, and multilateral digital policy to assess the effectiveness of algorithmic governance initiatives, drawing from comparative case studies in Singapore, South Korea, the EU, and beyond.
- 4) Equip students with practical skills to formulate policy options that balance innovation and social accountability in the context of emerging algorithmic technologies and regional governance dynamics.

### **Intended Learning Outcomes (ILO)**

Upon the successful completion of this course, you would be able to:

- 1) Critically assess public policy responses to algorithmic systems across Asia-Pacific jurisdictions, identifying the strengths and limitations of different regulatory and governance approaches.
- 2) Compare and evaluate policy instruments and frameworks—such as standards, regulations, and co-regulation models—used to govern algorithmic harms in digital platforms and public sector applications.
- 3) Formulate evidence-based policy recommendations that address algorithmic accountability, balancing innovation with fairness, transparency, and social impact.

### **Course Content**

- **Conceptual Foundations of Algorithmic Governance**  
Introduction to algorithmic systems as socio-technical constructs; their implications for public accountability, democratic legitimacy, and institutional design.

- Regulatory Governance and Policy Design for Emerging Technologies**  
 Theoretical and applied perspectives on how governments craft responsive regulatory frameworks for rapidly evolving technologies, including AI.
- Policy Instruments for Algorithmic Regulation**  
 Analysis of core instruments such as legislation, technical standards, regulatory sandboxes, and certification schemes, with attention to institutional fit and enforceability.
- Anticipatory and Adaptive Governance Approaches**  
 Exploration of forward-looking governance strategies that account for technological uncertainty, policy lag, and long-term public value.
- Algorithmic Governance in the Public Sector**  
 Critical evaluation of the integration of AI in public services (e.g., healthcare, social welfare, urban planning), focusing on accountability, discretion, and trust.
- Transparency, Explainability, and Algorithmic Accountability**  
 Study of institutional and technical approaches to ensuring transparency and oversight in automated decision-making systems, including auditability and public redress mechanisms.
- Singapore's AI Governance Framework**  
 In-depth examination of Singapore's regulatory and institutional strategies, including AI Verify, cross-agency coordination, and public-private sandboxing initiatives.
- Ethics, Co-Regulation, and Innovation in Japan and South Korea**  
 Comparative study of East Asian approaches that emphasize ethical principles, voluntary frameworks, and co-regulatory ecosystems in the governance of AI.
- Scale, Sovereignty, and Surveillance in India and China**  
 Investigation of the governance dynamics in large-scale jurisdictions, highlighting the role of state-led digital infrastructure, data sovereignty, and surveillance technologies.
- Comparative Models: The EU Digital Services Act and AI Act**  
 Critical appraisal of the European Union's risk-based framework for AI and platform governance, and its influence on global regulatory discourse.
- Multilateral and Regional Governance Initiatives**  
 Analysis of cross-border governance efforts led by OECD, ASEAN, APEC, and the UN, focusing on norm diffusion, interoperability, and regional coordination.
- Algorithmic Harms, Social Justice, and Policy Redress**  
 Examination of structural harms such as bias and discrimination in algorithmic systems, and policy strategies to mitigate social and ethical risks through inclusive governance.

- **Reflections and Integration of Learning**

A culminating session that synthesizes key insights from across the course, encouraging students to draw connections between regional cases, normative frameworks, and governance strategies.

**Course Assessment**

Problem Set : 20%

Class Discussion : 20%

Group Tasks : 10%

Group Project : 35%

Case Presentation : 15%

**Total** -----  
**100%**