National University of Engineering (UNI)
School of Computer Science
Syllabus 2027-I

1. COURSE

AI162. AI Policy and Governance (Elective)

2. GENERAL INFORMATION

2.1 Course	:	AI162. AI Policy and Governance
2.2 Cycle	:	CS300 Cycle.
2.3 Credits	:	3
2.4 Hours	:	2 HT; 2 HP;
2.5 Duration of the period	:	16 weeks
2.6 Type of course	:	Elective
2.7 Learning modality	:	Face to face
2.8 Prerrequisites	:	None

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

This course examines the impact of Artificial Intelligence on society, public policy, and regulatory frameworks. It explores the ethical, legal, and social challenges associated with AI deployment, preparing students to participate in creating responsible policies.

5. GOALS

- Analyze the socioeconomic impact of AI across global contexts
- Critically evaluate existing and proposed regulatory frameworks for AI
- Develop public policy proposals for ethical AI use

6. COMPETENCES

AG-C01) The Professional and the World: Analyzes and evaluates the impact of solutions to complex computing problems on the sustainable development of society. (Usage)

AG-C02) Ethics: Applies ethical principles and commits to professional ethics and the standards of professional computing practice. (Usage)

7. TOPICS

Unit 1: Fundamentals of AI Policy (12 hours)	
Competences Expected: AG-C01,AG-C02	
Topics	**Learning Outcomes**
• History of technology regulation • Key concepts: transparency, accountability, fairness • Case studies: GDPR (EU), AI Act (Spain), approaches in US and Asia	• Explain basic principles of AI governance [Familiarizarse] • Compare international regulatory frameworks [Usar]
Readings : [Cat+20], [Fje+20]	

Unit 2: Social and Economic Impact (12 hours)	
Competences Expected: AG-C01,AG-C02	
Topics	**Learning Outcomes**
• Algorithmic bias and systemic discrimination • Automation and the future of work • Digital divides and access to AI technologies	• Assess how AI amplifies social inequalities [Evaluar] • Propose solutions to mitigate negative impacts [Usar]
Readings : [Zub19], [Eub18]	

Unit 3: Public Policy Design (18 hours)	
Competences Expected: AG-C01,AG-C02	
Topics	**Learning Outcomes**
• Risk assessment methodologies for AI systems • Multi-stakeholder participation: governments, corporations, civil society • Tools for algorithmic auditing	• Design a policy framework for a real-world case [Evaluar] • Justify proposals with technical and ethical evidence [Usar]
Readings : [Cra21], [Job+19]	

Unit 4: Ethics and Human Rights (18 hours)	
Competences Expected: AG-C01,AG-C02	
Topics	**Learning Outcomes**
• Digital rights and data protection • Military AI and ethical dilemmas • UNESCO recommendations on AI ethics	• Analyze conflicts between innovation and human rights [Familiarizarse] • Draft an ethics code for AI projects [Evaluar]
Readings : [Bin18], [UNE21]	

8. WORKPLAN

8.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

8.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

8.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

9. EVALUATION SYSTEM

Theory Sessions:
The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

Lab Sessions:
In order to verify their competences, several activities including active learning and roleplay will be developed during lab sessions.

Oral Presentations:
Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

Reading:
Throughout the course different readings are provided, which are evaluated. The average of the notes in the readings is

considered as the mark of a qualified practice. The use of our virtual campus allows each student to access the course information, and interact outside the classroom with the teacher and with the other students.

The final grade NF depends on the following grades:

- PE: Partial Exam.
- FE: Final Exam.
- P: Permanent Evaluation (Average of practical work and graded assignments).

The final grade NF is calculated as follows:

$$NF = \frac{PE + FE + P}{3}$$

10. BASIC BIBLIOGRAPHY

[Bin18] Reuben Binns. *Algorithmic Accountability and Public Reason*. Springer, 2018.

[Eub18] Virginia Eubanks. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. St. Martin's Press, 2018.

[Job+19] Anna Jobin et al. "The Global Landscape of AI Ethics Guidelines". In: *Nature Machine Intelligence* 1 (2019), pp. 389–399.

[Zub19] Shoshana Zuboff. *The Age of Surveillance Capitalism*. PublicAffairs, 2019.

[Cat+20] Corinne Cath et al. *Governing Artificial Intelligence: Ethical, Legal, and Technical Opportunities and Challenges*. Oxford University Press, 2020.

[Fje+20] Jessica Fjeld et al. *Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-Based Approaches*. Tech. rep. Harvard Berkman Klein Center, 2020. URL: `https://cyber.harvard.edu/publication/2020/principled-ai`.

[Cra21] Kate Crawford. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press, 2021.

[UNE21] UNESCO. *Recommendation on the Ethics of Artificial Intelligence*. Tech. rep. 2021. URL: `https://unesdoc.unesco.org/ark:/48223/pf0000379922`.