

ECTS Syllabus

Course Title	The 5th Industrial Revolution: Ethics and Governance of AI				
Course Code	PGT-408				
Course Type	Core				
Level	1 st Cycle				
Year / Semester	3 rd Year/ Fall				
Teacher's Name	Dr. Themis Tzimas				
ECTS	6	Lectures / week	1 or 2 (3 hours per week)	Laboratories / week	N/A
Course Purpose and Objectives	This course introduces students to the social, philosophical and political implications of AI deployment, and the broader context of digital technologies and the state of the 5th Industrial Revolution in the early 21st century. More specifically, its objectives are to: 1. Explore the role of AI in the technological advancements of the 5th Industrial Revolution. 2. Analyze ethical theories and theoretical frameworks related to AI deployment. 3. Examine global governance models and regulatory challenges concerning AI. 4. Critically evaluate new ideas and 'ideologies' that have emerged around AI and how politics and AI technologies interact. 5. Assess the societal impacts and responsibilities arising from AI technologies.				
	After completion of the course students are expected to be able to: 1. Understand the basics of AI technologies and their applications in				

	various sectors. 2. Critically evaluate ethical dilemmas and challenges related to AI technologies. 3. Analyze existing and proposed policies governing AI development and deployment. 4. Map and understand politics and activism in AI. 5. Assess the impact of AI on employment, privacy and societal norms. 6. Assess the implications of data mining, policy algorithms, and predictive risk models on society.		
Prerequisites	PGT- 102	Required	Introduction to Political Science
Course Content	Unit 1: Introduction to the 5th Industrial Revolution Unit 2: AI: Key parameters Unit 3: Foundations of AI Ethics Unit 4: Governance Models of AI Unit 5: Politics and Activism in AI Unit 6: Privacy and Security Unit 7: Employment and AI Unit 8: Case Studies in AI Governance Unit 9: Future directions		
Teaching Methodology	Lectures, Discussions, Assignments, Classrooms debates, Guest speakers		
Bibliography	1. Russell, S. and Norvig, P. (2022). Artificial intelligence: A Modern Approach. Pearson Education Ltd. 2. Jobin, A., Ienca, M., & Vayena, E. (2019). Artificial Intelligence: The Global Landscape of AI Ethics Guidelines. Nature Machine Intelligence, 1. 3. Eubanks, V. (2018). Automating Inequality: How High-Tech Tools Profile Police and Punish the Poor. St Martin's Press. 4. Lindgren, S. (2021). Handbook of Critical Studies of Artificial Intelligence. Elgar Press.		

	5. Baum, E. B. (2004). What is Thought? MIT Press. 6. <u>Bhaso Ndzendze</u>, B. and <u>Marwala</u>, T. (2022) Artificial Intelligence and International Relations Theories. Palgrave. 7. Liao, S. M. (ed.) (2020), <i>Ethics of Artificial Intelligence</i>. Oxford University Press. 8. Bostrom, N. (2014). Super intelligence: Paths, Dangers, Strategies. Oxford University Press. *Specific journal articles, infographics, short videos and data illustrations will be systematically provided on the Moodle platform of the course.
Assessment	Mid-term, Final Exam, Research Paper (ethics), Research Paper (governance), Participation.
Language	English