



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Matematica e Informatica		
ACADEMIC YEAR	2023/2024		
BACHELOR'S DEGREE (BSC)	ARTIFICIAL INTELLIGENCE		
INTEGRATED COURSE	ETHICAL AND JURIDICAL ASPECTS OF ARTIFICIAL INTELLIGENCE		
CODE	22982		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	IUS/20, IUS/02		
HEAD PROFESSOR(S)	BRIGAGLIA MARCO	Professore Ordinario	Univ. di PALERMO
OTHER PROFESSOR(S)	PETRUSO ROSARIO	Professore Associato	Univ. di PALERMO
	BRIGAGLIA MARCO	Professore Ordinario	Univ. di PALERMO
CREDITS	6		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	2		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>BRIGAGLIA MARCO</p> <p>Friday 11:00 13:00 Il ricevimento avverrà, dietro prenotazione, presso Piazza Bologni 8, piano 2, stanza 11. Su richiesta, si potrà concordare anche un ricevimento su Teams e, in caso di disponibilità del docente, in orari diversi da quelli su indicati.</p> <p>PETRUSO ROSARIO</p> <p>Monday 09:00 11:00 Dipartimento di Giurisprudenza, via Maqueda 172, piano ammezzato, stanza del docente.</p> <p>Tuesday 11:00 13:00 Polo Territoriale Universitario di Trapani, Lungomare Dante Alighieri, 2 - 4, previo appuntamento o su richiesta via Teams.</p> <p>Thursday 12:15 13:15 Durante il periodo delle lezioni presso il Polo Territoriale Universitario di Trapani, Lungomare Dante Alighieri, 2 - 4.</p>		

DOCENTE: Prof. MARCO BRIGAGLIA

PREREQUISITES	Basics of normative language (rights, obligations, etc.) and the articulation of sources of law (national, supranational, etc.).
LEARNING OUTCOMES	Knowledge and understanding: students must know and understand the main ethical and legal problems posed by artificial intelligence. Applying knowledge and understanding: students must have the ability to apply the acquired ethical and legal knowledge by making it interact with their own technical knowledge and skills. Making judgments: students must show the ability to form an autonomous judgment regarding solutions to the main ethical and legal problems posed by artificial intelligence. Communication: students must be able to set out and communicate the knowledge acquired in a clear and exhaustive manner, and must be able to argue in defense of their hypotheses for the solution of the problems discussed. Lifelong learning skills: students must develop skills in the critical analysis of regulatory issues underlying technological development.
ASSESSMENT METHODS	Final exam. Exam type: oral exam; minimum number of questions: 2. Evaluation: Grades on a scale between 18 and 30 cum laude. Evaluation Grid: - Excellent: 30-30 cum laude. Excellent knowledge and understanding, excellent communication and argumentative skills, proper use of technical language. - Very good: 26-29. Good knowledge and understanding, good communication and argumentative skills, proper use of technical language. - Good: 24-25. Basic knowledge and understanding, average communication skills, limited argumentative skills. - Average: 21-23. Limited basic knowledge and understanding, sufficient communication skills, poor argumentative skills. - Fair: 18-20. Minimal basic knowledge and understanding, poor communication skills, poor argumentative skills. - Poor. Non-sufficient knowledge and understanding.
TEACHING METHODS	Lectures

**MODULE
ETHICAL ASPECTS OF ARTIFICIAL INTELLIGENCE**

Prof. MARCO BRIGAGLIA

SUGGESTED BIBLIOGRAPHY

L. Floridi. Etica dell'intelligenza artificiale. Sviluppi, opportunità, sfide. Raffaello Cortina, capp. 4, 5, 6, 7, 8, 9.

AMBIT	10701-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	51
COURSE ACTIVITY (Hrs)	24

EDUCATIONAL OBJECTIVES OF THE MODULE

The course aims to guide students in their reflection on the main ethical problems posed by the programming and use of artificial intelligence systems. Particular emphasis will be placed on those aspects of moral cognition that pose the greatest challenges for mechanical normative decision-making - emotions, the particularistic nature of moral reasoning, the relevance of the body and of the context. The effects of artificial intelligence on the representation of the moral self, the distribution of power and responsibility, and the reasons for distrust or mistrust in mechanical decision-making will also be explored. Finally, two case studies will be addressed: autonomous weapons and predictive justice.

SYLLABUS

Hrs	Frontal teaching
3	Introduction: normativity, law, morality
6	What is the structure of moral reasoning, and what are the most problematic aspects for its implementation by artificial intelligence systems (particularism, role of emotions, role of context, embodiment)
3	The moral self and the machine mirror: what artificial intelligence makes us understand about ourselves, and how to manage this understanding (determinism, predictability, freedom; memory and manipulation; unity and fragmentation)
3	Artificial intelligence, power, responsibility: ethics of machines and their use
3	Why should I trust you: To trust or not to trust artificial intelligence
6	Case studies: ethical implications of autonomous weapons; ethical implications of predictive justice

MODULE
JURIDICAL ASPECTS OF ARTIFICIAL INTELLIGENCE

Prof. ROSARIO PETRUSO

SUGGESTED BIBLIOGRAPHY

-Guido Alpa, Quale modello normativo europeo per l'intelligenza artificiale?, in *Contratto e impresa*, 2021, 1003 ss.;
 -Raffaele Caterina, GDPR tra novità e discontinuità, in *Giurisprudenza Italiana*, n. 12, 2019, p. 2777;
 -Silvia Signorato, Giustizia penale e intelligenza artificiale. Considerazioni in tema di algoritmo predittivo, in *Rivista di Diritto Processuale*, n. 2, 2020, p. 605;
 -Marta Infantino, La responsabilità per danni algoritmici: prospettive europeo-continentali, in *Responsabilità Civile e Previdenza*, fasc.5, 2019, pag. 1762;
 -Andrea Amidei, Intelligenza Artificiale e product liability: sviluppi del diritto dell'Unione Europea, in *Giurisprudenza Italiana*, n. 7, 1 luglio 2019, p. 1657, Commento alla normativa;
 -Giovanni Votano, Intelligenza artificiale in ambito sanitario: il problema della responsabilità civile, in *Danno e responsabilità*, 2022, 669 ss.;
 - M. C. Cavallaro, G. Smorto, Decisione pubblica e responsabilità dell'amministrazione nella società dell'algoritmo, in *Federalismi.it*, n.16/2019;
 - Gherardo Carullo, Decisione amministrativa e intelligenza artificiale, *Diritto dell'Informazione e dell'Informatica (II)*, fasc.3, 2021, pag. 431;
 - Testo di legge: Proposta di regolamento del Parlamento europeo e del Consiglio che stabilisce regole armonizzate sull'intelligenza artificiale (legge sull'intelligenza artificiale)

AMBIT	10701-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	51
COURSE ACTIVITY (Hrs)	24

EDUCATIONAL OBJECTIVES OF THE MODULE

The course aims at introducing students to the understanding and analysis of the European approach to artificial intelligence, by providing technical and linguistic tools suitable for this purpose. Besides, it aims to critically examine some specific problems posed by the use of AI, such as data protection, civil liability (product liability; 'algorithmic liability' and liability in health care) and the risks associated with the use of AI systems in the realm of administrative proceedings and predictive justice.

SYLLABUS

Hrs	Frontal teaching
6	The EU's approach to artificial intelligence
6	AI and data privacy
6	AI and tortious liability (product liability, 'algorithmic liability' and liability in health care)
3	AI, citizens and public authorities
3	AI and predictive justice