Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF444	Artificial Intelligence	7	3	0	0	3	5

Prerequisites	INF224
Admission Requirements	INF224

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	This course is an introduction to artificial intelligence and its applications. The objective of the course is to introduce the fundamental methods and approaches to define, formularize and solve AI problems through simple examples and applications.
Content	1. Intro to AI 2. Intelligents agents and environments 3. Problem formularization 4. Introduction to search algorithms 5. Uninformed search algorithms 6. Informed search algorithms 7. Adverserial search and game theory 8. Constraint satisfaction problems 9. Intro to knowledge, reasoning and planning 10. Propositional logic, first-order logic 11. Neurons and artificial neural networks 12. Uncertainty and probabilistic approaches 13. Intro to machine learning 14. Reinforcement learning
References	Artificial Intelligence: A Modern Approach, 4th edition, Stuart Russel & Peter Norvig, Pearson, 2020. Intelligence artificielle et informatique théorique, 2ème édition, J-M.Alliot & T.Schiex, Cépaduès, 2002.

Theory Topics

Week	Weekly Contents
1	Intro to AI
2	Intelligents agents and environments
3	Problem formularization
4	Introduction to search algorithms
5	Uninformed search algorithms
6	Informed search algorithms
7	Adverserial search and game theory
8	Constraint satisfaction problems
9	Intro to knowledge, reasoning and planning
10	Propositional logic, first-order logic
11	Neurons and artificial neural networks
12	Uncertainty and probabilistic approaches
13	Introduction to machine learning
14	Reinforcement learning