

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, formalize and solve AI problems through simple examples and applications.
Content	<ol style="list-style-type: none">1. Intro to AI2. Intelligent agents and environments3. Problem formalization4. Introduction to search algorithms5. Uninformed search algorithms6. Informed search algorithms7. Adversarial search and game theory8. Constraint satisfaction problems9. Intro to knowledge, reasoning and planning10. Propositional logic11. First-order logic12. Neurons and artificial neural networks13. Uncertainty and probabilistic approaches14. Project presentations
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	Intelligent agents and environments
3	Problem formalization
4	Introduction to search algorithms
5	Uninformed search algorithms
6	Informed search algorithms
7	Adversarial search and game theory
8	Constraint satisfaction problems
9	Intro to knowledge, reasoning and planning
10	Propositional logic
11	First-order logic
12	Neurons and artificial neural networks

Week	Weekly Contents
13	Uncertainty and probabilistic approaches
14	Project presentations