Course Descriptions None 2024-2025

Course Title	Artificial Intelligence
Course Code	BENC2020
ECTS Credits	5,0
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
2	28-10-2024	15-12-2024		X		X	L

Level	no level
Coordinator	Stelios Asteriadis For more information:stelios.asteriadis@maastrichtuniversity.nl
Language of instruction	English
Goals	* To convey the ideas that have emerged over the past fifty years of Artificial Intelligence research, and about two millennia of related work. * To discuss the possibility of machines that think. * To show how algorithms can be used to enable systems to think or act intelligently and to discuss state-of-the-art advances in the Artificial Intelligence community.
Description	The course starts with an introduction to artificial intelligence and an explanation of algorithms that allow agents to search for optimal solutions in complicated environments. Also, algorithms and problems related to artificial intelligence and games, neural networks basics, but also the emerging field of computer vision are introduced and discussed. Towards the end of the course, a lecture regarding artificial intelligence and related ethics takes place, allowing students to see how computational techniques relate to handling biases and misconceptions. The main part of the course explores the metaphor of an intelligent agent by introducing a number of state-of-the-art concepts, algorithms, and methods which enable computers (i.e., software and robots) to solve problems in a way which deserves to be called intelligent. Covered topics are explored and applied in exercises and tasks (mainly in-class, but also as homework).
Literature	Russell, S., & Norvig, P. (2009, Third Edition). Artificial Intelligence. A modern approach. Prentice-Hall.
Prerequisites	BENC1002 Calculus BENC2001 Multivariable Calculus BENC1004 Linear Algebra
Keywords	
Teaching methods	Lecture
Assessment methods	Attendance / Assignment
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

Bachelor Business Engineering	Year 3 Elective Course(s)