	Introduction to AI and Machine Learning
Description	● Knowledge representation (propositional logic, first-order logic, semantic networks, etc.). ● Inference mechanisms, knowledge bases. ● Machine learning problems as optimization problems ● Goals and applications of machine learning ● Machine learning algorithms for natural language processing ● Multi-criteria optimization approaches (common optimization) and dealing with overfitting (overfitting) ● Overview of basic supervised learning methods, regression and classification models ● Unsupervised learning models, clustering, matrix factorization and latent semantic indexing algorithms ● Deep learning neural network methodologies and architectures ● Examples and applications in the humanities.
Learning Outcomes	After the course the student will be able to ● To understand the basic methods of knowledge representation and inference ● Be able to formulate machine learning problems as optimization problems and be familiar with basic multicriteria optimization approaches for machine learning ● To apply in Python programming language basic machine learning algorithms in text processing and analysis.