

University of Patras
CEID
**MSc on DATA DRIVEN COMPUTING AND
DECISION MAKING (DDCDM)**



Special Topics of Artificial Intelligence

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Programme and requirements

Tuesday 16.00-18.00
Room Δ2

**Information and material on
eclass:**
<https://eclass.upatras.gr/courses/CEID1178/>

**Evaluation: assignments (20%),
two projects (40% + 40%)**



Course Contents

Contents

- Knowledge Representation and Reasoning on the Web
 - Introduction
 - Knowledge Representation with FOL with equality
 - Knowledge Representation with FRAMES
 - Knowledge Representation with Description Logics
 - Ontologies-Protégé tool
 - OWL Language
 - DL Reasoners



Course Contents

Contents

- Introduction to Deep Learning
 - Introduction to neural networks (Perceptron, MLP)
 - Recursive Neural Networks (RNN, LSTM, GRU)
 - Convolutional Neural Networks (CNN)
 - Autoencoders
 - TensorFlow tool