

**Department:** Mathematics and Computer Sciences

**Division:** Computer Sciences

**Level and Major:** Graduate

**Course Title:** Deep Learning

**Number of Credits:** 3

**Prerequisite:** Machine Learning

**Lecturer:**

**Course Description:**

**Course Goals and Objectives:**

**Course Topics:**

- Deep feedforward networks
- Regularization for Deep Learning
- Optimization for training deep models
- Convolutional networks Sequence
- Modelling: Recurrent and Recursive Nets
- Linear factor models
- Autoencoders Representation learning
- Probabilistic models
- Monte Carlo methods
- Deep generative models

**Reading Resources:**

**Evaluation:**