Description: This course explores the use of data-mining techniques in different settings, including business and scientific domains. The emphasis will be on using techniques, instead of developing new techniques or algorithms. Students will select, prepare, visualize, analyze, and present data that leads to the discovery of novel and actionable information.

Objectives:
1. Learn to handle and understand large data sets
2. Learn to pre-process data before mining
3. Learn to choose appropriate data mining method for the data being analyzed
4. Learn to build computational models using state-of-the-art data mining methods
5. Learn to evaluate the performance of computational models used in data mining

Selected Topics: Decision trees, classification rules and association rules, neural networks, SVM, clustering and deep learning