COURSE DETAIL

DATA MINING
Country Netherlands
Host Institution Maastricht University – University College Maastricht
Program(s) University College Maastricht
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Statistics Computer Science
UCEAP Course Number 102
UCEAP Course Suffix
UCEAP Official Title DATA MINING
UCEAP Transcript Title DATA MINING
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
Data mining is a relatively new scientific field that enables finding interesting knowledge from (very large) data. In practice it is often a mixed-initiative process that has the potential to predict events or to analyze them in retrospect. Data mining has elements of artificial intelligence, machine learning, and statistics. A typical database contains data, information, or even knowledge if the appropriate queries are submitted and answered. The situation changes if you have to analyze large databases with many variables. Elementary database queries and standard statistical analysis are not sufficient to answer your information need. Data mining can assist in acquiring this knowledge. In this course students learn new techniques, new methods, and tools of data mining. The course focuses on techniques with a direct practical use. A step-by-step introduction to powerful (free ware) data-mining tools enables students to achieve specific skills, autonomy, and hands-on experience. A number of real data sets are analyzed and discussed. In the end of the course, students are able to apply data-mining techniques for research and business purposes. The following points are addressed during the course: data mining and knowledge discovery; data preparation; basic techniques for data mining; decision-tree induction; rule induction; instance-based learning; Bayesian learning; ensemble techniques; clustering; association rules; tools for data mining; how to interpret and evaluate data mining results.

Language(s) of Instruction
English

Host Institution Course Number
SCI2033

Host Institution Course Title
DATAMINING

Host Institution Course Details
https://www.maastrichtuniversity.nl/sites/default/files/2024-05/UCM%20Course%20...

Host Institution Campus

University College Maastricht

Host Institution Faculty
Sciences

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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