COURSE SYLLABUS

Data Mining A1N
Data Mining A1N
7.5 credits

1 Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Data Mining A1N. It comprises 7.5 credits and is on advanced level. The level of progression of the course is A1N.

2 Objectives
After completed course the student should be able to:

- critically reflect and describe utility, problems and limitations of data mining;
- critically reflect and describe data mining algorithms within classification, association analysis and cluster analysis, with respect to application and structure;
- implement and explain basic data mining algorithms;
- identify and describe problems where data mining is relevant, and select suitable data mining algorithms for solving such problems; and
- analyze, compare and evaluate results and usage of data mining algorithms.

3 Course Content
This course provides an introduction and specialization in data mining with focus on classification, association analysis and cluster analysis. The course aims to give students an understanding of the use, benefits and limitations of data mining and to give deeper knowledge so that students will be able to further develop and apply data mining algorithms to new problems. The course also aims to give students practical knowledge about data mining, and contains a number of labs and a smaller individual data mining project.

4 Forms of Teaching
The teaching comprises lectures, laboratory sessions and project work.

The teaching is conducted in English.

5 Examination
The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

Registration of examination results:

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervised examination</td>
<td>4.5 credits</td>
<td>A/B/C/D/E/F</td>
</tr>
<tr>
<td>Laboratory assignment</td>
<td>1.5 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Written assignment</td>
<td>1.5 credits</td>
<td>G/U</td>
</tr>
</tbody>
</table>

1 Determines the final grade of the course.

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.

6 Admission Requirements
A Bachelor degree of at least 180 higher education credits (equivalent to 180 ECTS) within the fields of informatics or computer science or similar.

A further requirement is proof of skills in English equi-
valent of studies at upper secondary level in Sweden, known as English course 6 / English course B. This is normally demonstrated by means of an internationally recognized test, e.g. IELTS, TOEFL or the equivalent

7 Subject, Main Field of Study and Disciplinary Domain

The course forms a part of the academic subject area of Informatics. The course is a part of the main field of study in Informatics at the University of Skövde. The disciplinary domain of the course is Technology.

Every course at the University of Skövde belongs to a subject. The division of subjects is used for follow-up and quality assurance. A main field of study is an area in which a degree can be awarded. Disciplinary domain is a division which is used by the government for the allocation of resources for studies at basic level and advanced level.

8 Approval of Course and Course Syllabus

The course was approved by the Curriculum Committee for Informatics on 8 February 2018. This course syllabus was approved by the Curriculum Committee for Informatics on 8 February 2018. It is valid from 1 July 2018.

9 Overlapping with Another Course

This course cannot constitute a part of a degree also containing a course the content of which is totally or partly equivalent to the content of this course.

10 Additional Information

Further information will be available on the university’s website before a course is given.

National and local regulations for higher education are available on the university’s website.

Upon completion of the course there will be a follow-up. The main purpose of this follow-up is to contribute to improvements of the course. The students’ experiences and views constitute one of the criteria for the follow-up and are gathered by means of course evaluations. The students will be informed of the results of the follow-up and any decisions regarding actions that are to be taken.

11 Course Literature and Other Educational Materials


Articles according to a reference list on the learning platform.