

| <b>Text Mining</b>             |   |  |                                      |                                       |                                |
|--------------------------------|---|--|--------------------------------------|---------------------------------------|--------------------------------|
| <b>Course code</b><br>CIF61049 | <b>student workload</b><br>90 hours   | <b>credits</b><br>(according to ECTS)<br>4.5 | <b>semester</b><br>Sem. 5/7          | <b>frequency</b><br>each odd-semester | <b>duration</b><br>16 meetings |
| <b>1</b>                       | <b>Types of courses</b><br>Elective   | <b>contact hours</b><br>63 hours             | <b>independent study</b><br>27 hours | <b>class size</b><br>40 students      |                                |
| <b>5</b>                       | <b>Prerequisites for participation</b><br>Must have taken Algorithms and Data Structures course.  |  |                                      |                                       |                                |
| <b>2</b>                       | <b>Learning outcomes</b><br>IF-ILO-3<br>Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements.<br>IF-ILO-10<br>Graduates are able to analyze, design, build and evaluate an intelligent system that has the ability to learn from the environment.<br>IF-ILO-12<br>Graduates are able to apply the principles of engineering to develop good quality software on top of various platforms. |  |                                      |                                       |                                |
| <b>3</b>                       | <b>Subject aims</b><br>1. Students are able to understand the basic concepts of Text Mining<br>2. Students are able to understand and apply the stages for the Text Mining process<br>3. Students are able to understand and apply the use of Text Mining   |  |                                      |                                       |                                |
| <b>4</b>                       | <b>Teaching methods</b><br>lectures, case study, class discussion, presentation   |  |                                      |                                       |                                |
| <b>6</b>                       | <b>Assessment methods</b><br>assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment   |  |                                      |                                       |                                |
| <b>8</b>                       | <b>This module is used in the following degree programmes as well</b>   |  |                                      |                                       |                                |
| <b>10</b>                      | <b>Responsibility for module</b>  |  |                                      |                                       |                                |
| <b>11</b>                      | <b>Other information</b><br>1. Konchady, M., (2006) Text Mining application programming. Charles River Media.<br>2. Aggarwal, C. C. (2018) Machine Learning for Text, Machine Learning for Text. doi: 10.1007/978-3-319-73531-3.<br>3. Marmanis, H., Babenko, D., "Algorithms of the intelligent web", Manning Publication Co,  |  |                                      |                                       |                                |

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4. Weiss, S. M., Indurkha, N., Zhang, T., Damerau, F. J., "Text Mining: Predictive methods for analyzing unstructured information", Springer, 2005.
5. Grossman, D.A., Frieder, O., "Information retrieval: Algorithms and Heuristics", 2nd edition, Springer, 2004.
6. Liu, B., "Web data mining: Exploring hyperlinks, contents, and usage data", Springer, 2007.
7. Wittern, I.H., Frank, E., "Data mining: Practical machine learning tools and techniques", Elsevier Inc, 2005.