

Algorithm and Data Structure					
Course Code CIS61008	Student Workload 90 hours	Credits (according to ECTS) 4.5	Semester 2	Frequency each even-semester	Duration 16 meetings
1	Types of courses <i>Compulsory (study programme level)</i>	contact hours 63 hours	independent study 27 hours	class size 20-40 students	
2	Prerequisites for participation Have completed Advanced Programming course				
3	Learning outcomes IS-ILO-4 Graduates can develop professional careers in computer science based on quality aspects, data-driven decision making, be responsible, and make continuous improvements.				
4	Subject aims <ul style="list-style-type: none"> • Students are able to understand the concept of algorithms and data structures fundamentally. • Students are able to analyze data structures and appropriate algorithms for solving a particular problem. • Students are able to implement data structures and algorithms designed in programming languages. • Students are able to implement sorting and searching algorithms. 				
5	Teaching methods lectures, case study, class discussion, presentation, practice				
6	Assessment methods assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment				
7	This module is used in the following degree programs as well				
8	Responsibility for module				
9	Other information <ol style="list-style-type: none"> 1. Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser, "Data Structures and Algorithms Using Java 6 edition", Wiley, USA, 2014. 2. John R. Hubbard, "Scaum's Outline of Data Structures With Java second Edition", McGraw-Hill, New york, 2007. 				

	3. Robert Lafore, "Data Structures and Algorithm in Java second Edition", Sams Publishing, Indiana, 2003
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