

Óbuda University John von Neumann Faculty of Informatics				Institute of Software Engineering			
Name and code: Software design and Development II. (Exam) (NIXSF2EBNE)				Credits: 6			
Computer Science BSc				Daytime 2021/22 year II. semester			
Subject lecturers: Dr. László Csink							
Prerequisites: (with code)		Software design and development I (NIXSF1EBNE)					
Weekly hours:		Lecture: 0	Seminar: 0	Lab. hours: 0	Consultation: 0		
Way of assessment:		Examination					
Course description							
Goal: Based on SWDD I, the goal is to deepen theoretical and practical knowledge in software design and development.							
Course description: Programming paradigms. Inheritance. Method hiding. Polymorphism. Abstract classes and interfaces. Iterators. Components. Operator overloading. Exceptions. Generic classes. Advanced sorting. Dynamic arrays. Lists. Queue and stack. Binary search tree. Red and black tree. B-tree. Heaps. Directed and undirected graphs. Trees. Spanning trees. Kruskal and Prim algorithm. Connected components. Search for a path in the graph. Hashing. Maximal flow.							

Lecture schedule			
Education week	Topic		
Midterm requirements			
Midterm Test Scheduling			
Education week	Topic		
Midterm grade calculation methods			
Method of replacement			
Type of exam			
Online or written exam, depending on the pandemic situation.			
The material of the exam coincides with that of the actual running course.			
Exam grade calculation methods			
	Achieved result	Grade	
	89-100%	excellent (5)	
	76-88%	good (4)	
	63-75%	average (3)	
	51-62%	satisfactory (2)	
	0-50%	failed (1)	
References			
Obligatory:			
Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein: Introduction to Algorithms, The MIT Press (downloadable)			
Recommended:			
Others:			