

Obuda University John von Neumann Faculty of Informatics		Institute of Applied Informatics		
Name and code: <i>Advance Software Technology (NAIHSICANM)</i>		Credits: 2		
<i>MSc</i>		<i>2016/17 year I. semester</i>		
Subject lecturers: Dr. Róbert Lovas				
Prerequisites (with code):				
Weekly hours:	Lecture: 2	Seminar.: 0	Lab. hours: 0	Consultation: 0
Way of assessment:				
Course description:				
<i>Goal:</i> ..Students gain familiarity with the formal description, modeling and development of systems. They learn about model based development of complex systems, advanced principles and paradigms of software technology and their applicability.				
<i>Course description:</i> ..Formalisms for software systems; modelling, design and development of complex information systems; design based on formal methods; decomposition and integration strategies. Application of information technology based tools in development. Performance analysis of information systems, possibilities of simulation. Model based development methods, meta-model architectures and their applications during the course of development. Further possibilities of UML and its extensions for other fields (embedded systems and real-time systems)				

Lecture schedule	
<i>Education week</i>	<i>Topic</i>
1.	Description formalisms for information and software systems
2.	Modeling and development of complex systems
3.	Formal methods based design
4.	Case tools in development
5.	Performance analysis for information systems
6.	Exam I
7.	Holiday
8.	Model based development methods
9.	Meta-model architectures
10.	Advanced design patterns
11.	No lectures
12.	Exam II
13.	Further possibilities of UML
14.	Extensions of UML to other fields

Homework schedule	

Midterm requirements

The final grade is based on the two exams. For dates see above.

Final grade calculation methods

The final grade is formed from the points acquired on the two exams as a percentage:

Achieved result	Grade
90% <=	excellent (5)
80% <=	good (4)
65% <=	average (3)
50% <=	satisfactory (2)
50% or less	failed (1)

Type of exam

Exam I 6th week, Exam II 12th week

Type of replacement

If the sum of the two exams does not reach 100 points, the student can take an exam on the 14th week to replace the exam with fewer points. In this case, the final grade takes into account the result of the replacement exam. If the student has not received a “signature” but achieved at least 25%, then in the beginning of the exam period he/she can substitute the “signature” according to the rules of the TVSZ.

References

Required: Ian Sommerville: Software Engineering

Recommended:

Other materials: - Slides of the lectures are available in Moodle.