

<b>Óbuda University</b> Bánki Donát Faculty of Mechanical and Safety Engineering		Insitute of Mechatronics and Vehicle Engineering			
<b>Subject title and code:</b>		<b>Reliability of Mechatronic Constructions</b> <b>NMEI_MBE4_00_ANG</b>			<b>Credits:</b> 3
Full-time study		23/24 ac. 2 semester year			
<b>The course is available at:</b>		mechatronical engineering			
<b>Supervised by:</b>		László Pokorádi		<b>Instructors:</b> László Pokorádi	
<b>Prerequisite (neptun code):</b>					
<b>Weekly number of lessons</b>					
Lecture: 2		Group seminar:		Lab: Consultation:	
<b>Way of assessment:</b> Choose (Choose)					
<b>Online consultation (in case it's required):</b> ... (BBB link)					
<b>Educational goal:</b>					
<b>Schedule</b>					
Education week		Topics			
1.		Theoretical Background			
2.		Reliability of Units			
3.		System Reliability I. Systems with Simple Interconnections			
4.		Fault Tree Analysis			
5.		Event Tree Analysis			
6.		Bow-Tie Analysis			
7.		System Reliability II. Systems with Complex Interconnections			
8.		Failure Mode and Effect Analysis			
9.		Sensitivity Analysis of System Reliability			
10.		Ishikawa Analysis			
11.		Pareto Analysis			
12.		Test			
13.		Consultation			
14.		Retake			
<b>Mid-semester requirements</b>					
Test		Assignment to be submitted		Lab measurement	
amount	dates	amount	deadlines	amount	dates
1	12th week				
<i>According to the Study and Examination regulations of Óbuda University attendance of group seminars and lab exercises are mandatory.</i>					
Other requirements for participation in sessions not covered by the regulations and restrictions on substitutions:					
Test		Assignment to be submitted		Lab measurement	
maximum points available ...points	minimum score required to pass /test ...points	maximum points available ...points	minimum score required to pass / assignment ...points	maximum points available ...points	minimum score required to pass /lab ...points
<b>Total number of points achievable in semester:</b> ...points					

<b>Grading thresholds</b>	<b>satisfactory</b> ... choose	<b>average</b> ... choose	<b>good</b> ... choose	<b>excellent</b> ... choose
Other evaluation criteria:				
<b>Receive a signature denied entry:</b>	Who does not write the test.			
<b>Required references:</b>	Igor A. Ushakov, Handbook of Reliability Engineering, John Wiley & Sons, 1994. Eric Bauer, Xuemei Zhang, and Douglas A. Kimber, Practical System Reliability Institute of Electrical and Electronics Engineers, Inc., 2009			
<b>Recommended references:</b>	Moodle electronic materials			
<b>Quality assurance methods of the subject:</b>	Meeting after the semester, taking into account student feedback.			

Things, that are not included, can be found within the regulations of Óbuda University.