

<b>Óbuda University</b> Bánki Donát Faculty of Mechanical and Safety Engineering		Institute of Mechatronics and Vehicle Engineering			
<b>Subject title and code:</b> Full-time study		<b>Electrical Engineering, BMXETE2BNF</b> 1 ac. 2 semester year			
<b>The course is available at:</b>		mechatronical engineering			
<b>Supervised by:</b>		István Nagy			
<b>Instructors:</b>		István Nagy, Ingrid Langer			
<b>Prerequisite (neptun code):</b>					
<b>Weekly number of lessons</b>					
Lecture: 1	Group seminar: 2	Lab: 0	Consultation: see on institute WEB-link		
<b>Way of assessment:</b> Exam (Written and oral)					
<b>Online consultation (in case it's required):</b> ... (BBB link)					
<b>Edu. goal:</b> Fundamental calculations regarding AC/DC electrical circuits. Introduction to the electric machines operations and basic power calculations					
<b>Schedule</b>					
Education week	Topics				
1.	basic definitions of <b>current/voltage/resistance/impedance</b> , beginning from atomic level, basic electrical laws KCL, KVL, Ohm, in <i>DC</i> resp. in <i>AC</i> ,				
2.					
3.	<b>Impedance/reactance/susceptance</b> of Resistor/Coil/capacitor. <i>U-I</i> characteristics: coil/condenser – in case of unit step inputs				
4.					
5.	<b>RLC circuits calculations</b> - frequency depending behaviour of conductive wire/coil/capacitor. Power calculations in AC circuits. 3 phase systems calculations;				
6.					
7.	Rect Holyday				
8.					
9.	Electric <b>machines (AC/DC), transformers, multi-phase system's</b> architecture, operations, <b>Characteristics:</b> ( <i>U-I / RPM-torque / I-torque</i> ) calculations				
10.					
11.	<b>multi-phase system's</b> architecture, operations, <b>Universal Machines, SRM, and Stepper,</b> motors and its features				
12.					
13.	Theory Test Paper				
14.	<b>Only in Case – Retake theory TP</b>				
<b>Mid-semester requirements</b>					
Test		Assignment to be submitted		Szöveg beírásához kattintson vagy koppintson ide.	
amount	dates	amount	deadlines	amount	dates
1	13 week				
<i>According to the HKR 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: The lectures are <b>mandatory</b> , 30% absence allowed, see “ <b>Study and Exam regulations</b> ”. <b>It is possible to get recommended exam mark:</b> condition: if the average final (sum) percent is over 64 % at the end of semester. ( <i>sum aver calculation=theory test + practice tests average / 2 ]≥64% = mark “average”</i> )					
Test		Assignment to be submitted		Szöveg beírásához kattintson vagy koppintson ide.	

maximum points available 100%points	minimum score required to pass /test 50%points	maximum points available ...points	minimum score required to pass / assignment ...points	maximum points available ...points	minimum score required to pass /lab ...points
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<b>Total number of points achievable in semester:</b> 100%points				
<b>Grading thresholds</b>	<b>satisfactory</b> 50 % and above	<b>average</b> 64 % and above	<b>good</b> 75 % and above	<b>excellent</b> 90 % and above
Other evaluation criteria:				
<b>Receive a signature denied entry:</b> over 30% absence;				
<b>Required references:</b>				
<b>Recommended references:</b>				
<b>Quality assurance methods of the subject:</b>				

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