

Óbudai Egyetem Bánki Donát Gépész és Biztonságtechnikai Mérnöki Kar		Mechatronikai és Autótechnikai Intézet		
Tantárgy címe és kódja: Introduction to the Mechatronics				Credits: 4
<i>Nappali tagozat 1. tanév 1. félév</i>				
Szakok melyeken a tárgyat oktatják: Mechatronika				
Tantárgyfelelős oktató:	dr. Nagy István	Oktatók:	dr. Nagy István,	
Előtanulmányi feltételek (kóddal)				
Heti óraszámok:2	Előadás: 2	Tantermi gyak.:	Laborgyakorlat:	Konzultáció:
Félévzárás módja: (követelmény)	semestral mark			
A tananyag				
Aims: <i>The aim of education is to give the students general information about MECHATRONIC system's classifications, basic definitions, key elements of mechatronic systems, basic calculations related to the key elements. Presumably, at the end of semester Student's micro-conference about mechatronics. The aim of (on-line) conference is get experience in conference paper writing and presentation's taking.</i>				
Scheduling				
Weeks	class		practice	
1. week, Sept.. 9. (Mo)	On-line class, (BBB) The mechatronics classification, history, definitions			
2.	On-line class (BBB) Thursday - consultation – class (106) regarding managing the semester, Semestral requirements , grading			
3.	On-line class, Basics of Bio-, micro-, and nano-mechatronics, examples			
4.	On-line class, Mechatronic systems interfacing, signals used in mechatronic systems			
5. week, oct 7.	On-line class, Sensors and actuators used in mechatronic systems			
6. week oct. 14.	Consultation – class (106) – surveying and summarizing the previous on-line classes – 1st Test Paper Presumable Thursday (oct.15), in 106 room			
7.	On-line class System modelling – electrical-, mechanical, electro-mechanical models used in mechatronic systems			
8.	On-line class, Sensor modelling in mechatronic systems, model analogies			
9. week, nov.4.	Consultation – class (106) – surveying and summarizing the previous on-line classes			
10.	On-line class, Control system used in mechatronic systems			
11.	holiday			
12.	On-line class, Block diagrams, flow charts, block diagram simplifications (maths)			
13. week, dec. 2.	Consultation – class (106) – 2nd Test paper presumable Thursday (dec.3) – in 106 room			
14.	Semestral works submitting		Remarks: under COVID provisions the IMSmC 2020 predictably will be at 15 th of Dec. Otherwise – will be held on-line	
Semestral requirements <i>(feladat, zh. dolgozat, esszé, stb)</i>				
Oktatási hét (konzultáció)	submitted Semestral works - each Semestral works are marked passed tests from theory			
Final mark creation				
Final mark% = Theory tests% + semestral work mark (in %)				
Final evaluation				

<i>if final mark % is:</i> <ul style="list-style-type: none"> - <i>between 50 % - 64% - recommended "2"</i> - <i>between 65% - 75% - recommended "3"</i> - <i>between 76% - 89% - recommended "4"</i> - <i>between 90% - 100% - recommended "5"</i>
Literature: see moodle
Presentations: see: moodle
Egyéb segédletek:
A tárgy minőségbiztosítási módszerei:

.....dr. Nagy István.....
 tantárgyfelelős

.....
 főigazgató