

<b>Óbudai University</b>			<b>Institute of Mechatronics and Vehicle Engineering</b>	
<b>Donát Bánki Faculty of Mechanical and Safety Engineering</b>			<b>Engineering</b>	
<b>Course name and Neptun-code: Informatics II. BMXI2EHBNE, BGRIA2ENND</b>			<b>Credits: 3</b>	
<i>Full time, 2<sup>nd</sup> Semester of the Academic year 2018/19.</i>				
Faculties in which the subject is taught: <b>BSc in Mechatronics</b>				
Supervised by: <b>Tóthné Dr. Laufer Edit</b>				
Prerequisites conditions: (Neptun Codes)			Informatics I. BMXI1EHBNE, BGRIA1ENND	
Lessons per week:	Theory: <b>2</b>	Practice (in Auditorium): <b>0</b>	Lab: <b>0</b>	Consultation:
Exam type (s,v,f):	<b>v</b>			
<b>The Syllabus</b>				
<b>Aim:</b> Developing algorithmic thinking, introducing the basic tools of programming, which are needed during engineering work. The acquisition of basic algorithms and data structures.				
<b>Schedule</b>				
Weeks	Topics			
1.	The aim and tools of computer programming. Structured programming. Event-driven programming.			
2.	Basic data structures and their operations. (integers, real, boolean). Conditional statement.			
3.	Loops. Array data structure. Graphics.			
4.	Elementary programming items. Sort and search algorithms.			
5.	Character and string type.			
6.	<b>Test I.</b>			
7.	File management.			
8.	Object oriented programming (inheritance, encapsulation)			
9.	Object oriented programming (polymorphism, static and virtual methods)			
10.	Holiday			
11.	Easter			
12.	Relational database management. SQL basics.			
13.	<b>Test II.</b>			
14.	<b>Test retake</b>			
<b>Requirements</b>				
Weeks	Test papers			
7	Test paper I.			
13	Test paper II.			
<i>The evaluation criterias</i>				
The participation is governed by TVSZ III.23.§ (1)-(4).				
All main areas of the course are evaluated by test papers. The course is to be considered successfully executed and a <b>signature</b> is obtained if and only if both test papers are written.				
Based on the Study Regulations III.6.(4), the student receive <b>offered grade</b> if he/she has written both test papers with grades higher than 3.				
All matters which are not covered in this document, the Study and Examination Rules and the provisions of the Study Regulations, valid at Óbuda University, prevails.				
The semester closing method (method of examination: written, oral, testing, etc.).				
Written exam				
<b>Literature:</b> Moodle				
<b>Quality Assurance:</b>				