

<b>Name of the subject:</b> <b>Embedded systems</b>	<b>NEPTUN code:</b> KMXBR5ABNE	<b>Weekly hours:</b> 4 2 lec+0 gs+ 2 lab	<b>Credit:</b> 5 <b>Req:</b> Examination
<b>Subject leader:</b>		<b>Prerequisites:</b>	
<b>Description of the subject:</b>			
<p>Basics of embedded systems and their applications field. Applications of microcontroller in embedded systems. Hardware questions and their development environments. Software questions and their development environments. Applications of programming logics CPLD, FPGA. Basics of computer networks. OSI and TCP-IP models. Protocols and their applications. Types of servers. Security of computer networks. Micro and board buses (RS232C, I2C, CAN, LIN Flexray).</p> <p>Laboratory exercises PIC microcontroller programming in assembly and C language. Linear circuit testing considering stability and other features. Switching power supply testing. Simulation of analogue and digital circuits.</p>			
<b>Literature:</b>			
<p>Jack Ganssle&gt; Embedded Systems ISBN/13&gt; 978-0-7506-8625-9, Google books  Michael Barr &amp; Anthony Massa:Programming Embedded Systems, ISBN-10: 0-596-00983-6, O'reilly  Tammy Noergaard: Embedded Systems Architecure ..., ISBN: 0-75067792-9,Newnes</p>			
Remarks:			