

Discipline	MICROPROCESSORS - PROJECT	code: 32b	winter semester
Specialty	Computer Systems and Technologies		
ECTS credits: 2	Form of assessment: ongoing assessment		
Lecturer	Assoc. Prof. Zheyno Zheyrov, PhD Room 407 TB Phone: +359 52 383 628 E-mail: zh_viv@tu-varna.bg		
Department	Computer Science and Engineering		
Faculty	Faculty of Computing and Automation		
<p>Learning objectives:</p> <p>The course project "Microprocessors" is provided as an individual form of training. Project assignments are either individual or group-specific and are aimed at creating software by means of the x86 assembly language, based on the resources and architecture of an Intel family microprocessor. The design of the project introduces the students to all stages of editing, compiling, linking, executing, and debugging user programs. Programming assembler language allows for achieving a better understanding of the specifics of using the interrupt system, the I / O system, and the memory system of the corresponding microprocessor. The purpose of design is to conceptually plan the application and acquire practical skills to manage the resources of a microprocessor system in order to implement the specific application.</p>			
<b>CONTENTS:</b>			
Training Area		Hours lectures	Hours seminar exercises
Algorithms for arithmetic processing			4
Data transfer algorithms			4
Bit-wise processing algorithms			4
Algorithms using transitions			4
Interruptions			4
Exploring new systems			4
Other applications			6
<b>TOTAL:</b>		<b>30 h</b>	<b>0</b>
			<b>30</b>