

Discipline	SEMANTICS OF PROGRAMMING LANGUAGES summer semester		code: 46/47/48 - 6
Specialty	Computer Science and Technologies		
ECTS credits: 6	Form of assessment: exam		
Lecturer	Assoc. Prof. Ivailo Penev, PhD Room 205 TB Phone: +359 52 383 409 E-mail: ivailo.penev@tu-varna.bg		
Department	Computer Science and Engineering		
Faculty	Faculty of Computing and Automation		
Learning objectives:			
<p>The course "Semantics of programming languages" aims to give knowledge about the role of the semantic description in the programming language specification and translation as well as in the program verification stage. The main types of formal grammars are discussed. Special attention is focused on solving semantic problems in modern programming languages: data types, language constructs, virtual machines.</p> <p>The discipline is based on the preceding disciplines: "Basic Programming", "Synthesis and Analysis of Algorithms", "Operating Systems", "Object-Oriented Programming - I and II part", "Compilers and Interpreters".</p> <p>The course provides the students with a part of the theoretical and practical basis for development of diploma thesis.</p>			
CONTENTS:			
	Training Area	Hours lectures	Hours seminar exercises
	Formal grammars	6	6
	Operational, denotational, axiomatic semantics	6	6
	Definition of programming languages	6	6
	Object and data types	6	6
	Verification of programs and verification methods	6	6
	TOTAL: 60 h	<b>30</b>	<b>30</b>