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:

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.

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".

The course provides the students with a part of the theoretical and practical basis for development of diploma thesis.

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	**30**	**30**