Discipline	DISCRETE STRUCTURES	code: *13*	**winter semester**
Specialty	Computer Systems and Technologies		
ECTS credits: **5**	Form of assessment: exam		
Lecturer	Assoc. Prof. Ivailo Penev, PhD Room 405 TB Phone: +359 52 383 407 E-mail: ivailo.penev@tu-varna.bg		
Department	Computer Science and Engineering		
Faculty	Faculty of Computing and Automation		

Learning objectives:

The content concerns tools for modeling the behavior of discrete systems. Theoretical statements and practical examples are presented, providing the students a suitable basis for presentation and modeling of discrete objects in the field of software. The program includes various language recognition tools such as finite automata, Petri nets, Turing machine. During the seminar exercises, basic tasks are solved to demonstrate the concepts set out.

<div align="center">CONTENTS:</div>

Training Area	Hours lectures	Hours seminar exercises
Sets and operations with sets. String sets. Regular sets and expressions.	10	10
Formal languages and grammars	10	10
Language recognition by Petri terminals and marked networks Turing machines	10	10
TOTAL: 60 h	**30**	**30**