Discipline	Electronic Components	code: 5037	Semester – /summer/	
Specialty	Electronics			
ECTS credits: 7	Form of assessment: Evaluation during semester			
Lecturer	Associate Professor, PhD Emilian Bekov Room: 602E Phone: +359 52 383 340 E-mail: emilian.bekov@tu-varna.bg			
Department	Department of Electronics and Microelectronics			
Faculty	Faculty of Computer Sciences and Automation			

## Learning objectives

The course in "Electronics" covers the basic electronic components, their properties and uses. It introduces students to the passive elements, semiconductor components and basic integral circuits used in contemporary electronic devices, their main characteristics and properties. The discipline also presents the application of the examined components in some fundamental and widely used applications such as amplifiers, filters, current rectifiers and others.

## **CONTENTS:**

Training Area		Hours seminar exercises
Basic definitions and classifications of electronic elements. Passive components.		2
Measurements in electronic circuits.	2	2
Semiconductor devices. Diodes		4
Transistors. Classification and types of transistors.		6
Amplifiers. Classification and applications.		6
Filters. Classification and types of filters. Application.		4
Current rectifiers. Design and applications.		2
Integral circuits.	2	4
TOTAL: 60 h	30	30