

DESCRIPTION OF THE COURSE

Name of the course Electrical engineering and electronics 2	Code BIM16	Semester: IV
Type of teaching: Lectures and exercises	Lessons per week: L – 2 hours; E – 1,5 hours	Number of credits: 5

LECTURER: Assoc. Prof. Ph.D. Dimitar S. Alexiev
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COURSE STATUS IN THE CURRICULUM: Compulsory for the students' specialty "Industrial Management" at Department of economics at Technical University – Sofia for educational and background degree "Bachelor".

DESCRIPTION OF THE COURSE: Educational stuff enclose following topics: basic building components of electronics (diodes, thyristors, bipolar and field transistors, integrated circuits); analog electronic circuits (amplifiers, generators, functional transducers); pulse and digital circuits (flip-flops, monovibrators, logical circuits, decoders, registers, analog to digital and digital to analog converters); power supply devices (rectifiers, filters, stabilizers) and another fundamental electronic circuits and devices.

AIMS AND OBJECTIVES OF THE COURSE: **Electrical engineering and electronics 2 (electronics)** course aims to familiarize students with functional principles and analysis of fundamental electronic circuits and devices and simple methods for designing some of them also. Acquired knowledge will allow bachelors to take part in wide-outlined team at industrial equipment development.

TEACHING METHODS: Lectures carry out by traditional way with usage of some helpful technical tools for education. Exercises are carried out with laboratory kits for research of electronic circuits and respective measurement devices.

PREREQUISITES: The discipline is build by basic knowledge of Physics and Electrical Engineering.

AUXILIARY MEANS FOR TEACHING: Usage of textbooks and large count of accessory textbooks and educational stuff aid knowledge acquiring. Working on problems and practical researches at concrete circuits contributes for better educational process.

METHOD OF ASSESSMENT: At the end of term is held written examination.

ARRANGEMENT FOR EXAMINATION: Examination is held for all the students on fixed day by graph for examinations.