

# BASICS OF ENGINEERING DESIGN IN SPECIALTY

## COURSE SYLLABUS ABSTRACT

Specialty 1-53 01 05 "Automated electric drives"

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	3	4	3
Semester	6	7	6
Lectures, hours	34	8	8
Laboratory classes, hours	50	8	14
In-class test (semester, hours)	-	7, 2	-
Course project, semester	6	7	6
Exam, semester	6	7	6
Contact hours	84(6)	18	22
Independent study, hours	96	164	158
Total course duration in hours / credit units	180 / 5 z.u.		

### 1. Course outline

The purpose of teaching the discipline “Fundamentals of Engineering Design in the Specialty” is the development of students of the general methodology of project analysis, effective procedures and methods of solutions to design and inventive problems that arise both in the study of special disciplines and in independent design activities of a specialist in the field of electrical equipment, as well as Identification of general concepts for the design of electromechanical systems.

### 2. Course learning outcomes

As a result of the development of academic discipline, the student should know the basic requirements, purpose, sequence and procedure for the development of design documents.

As a result of the development of academic discipline, the student should be able to read and develop the main types of design documents in an automated way using specialized software products.

As a result of the development of academic discipline, the student must have questions about the current state and prospects for the development of engineering design methods in the field of electromechanical systems.

### 3. Competencies

SK-19 – Know the basics of engineering design in the specialty

### 4. Requirements and forms of midcourse evaluation and summative assessment

Current certification - an oral exam using personal computers to complete an individual task.

Interim certification - passing testing with an assessment of the obtained practical skills on the development of design documents.