Production Equipment Programming
(course title)

COURSE SYLLABUS ABSTRACT

6-05-0611-01 Information systems and technologies
(speciality code and name)

Information systems and technologies in designing and producing
(concentration)

	STUDY MODE	
	full-time	part-time (shortened program)
Year	4	3
Semester	8	6
Lectures, hours	24	6
Laboratory classes, hours	24	6
In-class test (semester, hours)		6 semester (2 hour)
Exam, semester	8	6
Contact hours	48	14
Independent study, hours	60	94
Total course duration in hours / credit units	108/3	

1. Course outline

Stages of preparation of the control program. Calculates part outline features. Calculates tool path elements. ECU structure and format. Recording, monitoring and editing of ECU. Features of manufacturing parts on CNC machines. Logical elements and number systems. Programming of parts machining on milling, turning, drilling, multi-purpose CNC machines. Programming features for PR and RTK. SAP for CNC machines.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know**:** methods of processing and implementation of control programs for processing typical parts on automated equipment;

be able to**:** use reference and source documentation when writing control programs; calculate the tool path and equidistants, their original points, coordinates of the datum points of the part outline; fill in supporting documentation forms; develop and implement control programs for the processing of simple parts on metalworking equipment;

to possess a skill: – modern SAP.

3. Competencies

Own the basis for the design of mechanisms, machines, technological equipment and technological processes of machine-building production.

4. Requirements and forms of midcourse evaluation and summative assessment

– verbal-written: laboratory protection, exam.