THE CURRENT STATE AND PROMISING AREAS OF DEVELOPMENT OF WELDING TECHNOLOGIES IN MECHANICAL ENGINEERING

COURSE SYLLABUS ABSTRACT

7-06-0714-02 Innovative technologies in mechanical engineering (speciality code and name)

Welding technologies (concentration)

Advanced higher education

	STUDY MODE	
	full-time	part-time
Year	**1,2**	**2**
Semester	**2,3**	**3,4**
Lectures, hours	**32**	**8**
Pass/fail, semester	**2,3**	**3,4**
Contact hours	**32**	**8**
Independent study, hours	**176**	**200**
Total course duration in hours / credit units	**208/6**	

1. Course outline

The purpose of the discipline "Current state and promising areas of development of welding technologies in mechanical engineering" is to deepen the fundamental training of engineers in the field of development and improvement of welding technologies in mechanical engineering.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- production group of mechanical engineering: production of metal products; metalworking; repair of machinery and equipment, nomenclature, basic properties and areas of use of structural engineering materials;
- modern methods of analyzing the state and prospects of development of a machine-building enterprise, taking into account the current requirements for welding production.

be able to:

- to carry out theoretical and experimental research in the field of processing of structural materials, to process and analyze the results taking into account modern requirements;
- to choose optimal methods for improving the quality and competitiveness of products, taking into account current trends in the development of welding technologies with reference to specific production conditions.

to possess a skill:

- methods of developing new technological processes for obtaining welded joints, taking into account new technologies and welding methods;
- development of plans and programs for the organization of innovative activities, feasibility study of innovative projects using modern welding technologies in professional activities.

3. Competencies

SK-4 - Be able to analyze the prospects and directions of development of welding production, master the achievements of science in the field of welding

4. Requirements and forms of midcourse evaluation and summative assessment: test.