Electrical Equipment in Hazardous Areas

(course title)

COURSE SYLLABUS ABSTRACT

Specialty 6-05-0713-04 “Automation of technological processes and production”

(speciality code and name)

Profiling "Automated electric drives"

(concentration)

	STUDY MODE		
	full-time	part-time	part-time (shortenedprogram)
Year	2	2	3
Semester	4	3	6
Lectures, hours	34	6	6
Laboratory classes, hours	34	6	6
In-class test (semester, hours)	4	3/(2 hours)	6/(2 hours)
Exam, semester	4	3	6
Contact hours	68	14	14
Independent study, hours	76	130	130
Total course duration in hours / credit units	144 / 4		

1. Course outline

The purpose of the academic discipline “Electrical installations in hazardous areas” is to train students in the maintenance of electrical installations in explosive areas

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- regulatory framework in force in the Republic of Belarus for the maintenance of electrical installations in hazardous areas;
- classification of explosive mixtures;
- classification of hazardous areas;
- classification and marking of explosion-proof electrical equipment;
- methods of selection, installation, operation and repair of electrical equipment for use in hazardous areas.

be able to:

- choose explosion-proof electrical equipment and be able to operate it;
- organize training of personnel servicing explosion-proof electrical equipment in the rules of technical operation and safety precautions.

to possess a skill:

- for the implementation of modern energy-efficient and resource-saving electric drive and automation systems;
- to be able to monitor compliance with labor protection, safety, and environmental safety standards when working with explosion-proof electrical equipment, electric drive and automation systems;
- to carry out commissioning and maintenance of explosion-proof electrical equipment, electric drive and automation systems, and carry out the necessary diagnostic, adjustment and repair work for this.

3. Competencies

Know the basics of operating electrical installations in hazardous areas.

4. Requirements and forms of midcourse evaluation and summative assessment

Certification in the form of defense of laboratory work, exam.