"INFORMATICS"

(name of the discipline)

OUTLINE

TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-36 01 06 "Equipment and technology of welding production".

		Form of higher education	
		Full-time	
Course		**2**	
Semester		**3**	
Lectures, hours		**34**	
Laboratory classes, hours		**34**	
Exam, semester		**3**	
Classroom hours in the educational discipline		**68**	
Independent work, hours		**130**	
Total hours of the discipline / credit units		**198/6**	

1.Summary of the content of the discipline

Study of the main modern operating systems and software environments, packages of applied programs for scientific and engineering calculations, computer design and construction, study of the basics of programming, methods of mathematical modeling, general questions of algorithmization and acquisition of skills of problem solving with the use of computer technology.

2. Learning objectives

As a result of studying the discipline, the student should

know:

- the device and technical means of a personal computer; - system and application software;
- basics of modern multimedia and networking technologies and their tools and capabilities;
- basics of algorithmization of engineering problems;
- at least one programming language and the basic techniques of its use;

be able to:

- work in the environment of the Microsoft Windows operating system;
- work with a word processor Microsoft Word in the Windows environment;
- to solve problems of the specialty with the use of a spreadsheet processor Microsoft Excel;
- solve the problems of the specialty with the MathCAD mathematical package;
- develop algorithms and programs in algorithmic language Visual Basic for Application.

know:

- methods of computer modeling of technical systems and technological processes;
- Programming methods, using standard programs for solving problems of professional activity.

3. competencies to be formed

AK-1, AK-4, AK-7, CLK-2 4.

4.Requirements and forms of current and intermediate attestation.

ZLR, TA, exam.