Subject programme

1. Subject name / subject module: **Specialist IT systems**
2. Lecture language: **English**
3. The location of the subject in study plans:
   - Area or areas of the studies: **Computer Control Systems Engineering**
   - Degree of the studies: **2nd degree studies**
   - Field or fields (implementation of effects standard): **Mechatronics**
4. Supervision of subject implementation:
   - The Institute / Another unit: **The Institute of Informatics and Mechatronics**
   - The person responsible for the subject: **Kashuba Svietlana, dr**
   - People cooperating in the development of the programme of the subject:
5. The number of hours and forms of teaching for individual study system and the evaluation method

Teaching activities with the tutor																						Total
Form of classes / Mode of study		SOW	ECTS	Laboratory work	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	ECTS
Full-time studies				14	11	1																1
Part-time studies																						
Credit rigor	...			pass/fail grading																		

6. Student workload – ECTS credits balance
   1 ECTS credit corresponds to 25-30 hours of student work needed to achieve the expected learning outcomes including the student's own work

Activity (please specify relevant work for the subject)	**Hourly student workload (full-time studies/part-time studies)**
Participation in laboratory classes	**14**
Preparing reports	**6**
Preparing homeworks	**5**
Participation in an exam / graded assignment / final grading	**2**
Total student workload	**25**
ECTS credits	**1**
* Student's workload related to practical forms	**25**
Student's workload in classes requiring direct participation of academic teachers	**14**

7. Implementation notes: recommended duration (semesters), recommended admission requirements, relations between the forms of classes:

   None

   Recommended duration of the subject is taken from the course plan.

8. Specific learning outcomes – knowledge, skills and social competence

Specific learning outcomes for the subject		Form	Teaching method	Methods for testing of (checking, assessing) learning outcomes
Outcome symbol	Outcome description			
Skills				
K_U02	**Student is able to use information and communication technologies (ICT) with particular emphasis on the development of project documentation and the use of engineering graphics for the implementation of projects and tasks in the field of mechatronics.**	**Laboratory work**	**Inquiry methods**	**Student learning activities**

9. Assessment rules / criteria for each form of education and individual grades

Activity	Grades	Calculation	To Final
Reports	**bdb (5) 5**	**5*50%**	**2,5**
Activites during classes	**Example: db, dst, bdb (4,3,5)**	**Avg.: (4+3+5)/3=4 -> 4*20%**	**0,8**
Homeworks	**Example: ndst, db, dst (2,4,3)**	**Avg.: (2+3+4)/3=3 -> 3*20%**	**0,6**
Attendance	**Min. 6**	**6/8=0,75 ->0,75*10%**	**0,075**

10. The learning contents with the form of the class activities on which they are carried out

(Laboratory work)

1. Working with Microsfot Visio: Creating UML diagrams using Visio; Application of templates; Connecting to data sources; Advanced Visio features;

2. Microsoft Project: Organization of work in MS Project; Creating teamwork schedules in MS Project; Advanced schedule formatting;

11. Required teaching aids

Laboratory classes - specialist laboratory

12. Literature:

a. Basic literature:

Eric Frick: "Information Technology Essentials: Basic Foundations for Information Technology Professionals", 2017

Richard T. Watson (editor): "Information Systems", University of Georgia, 2007

a. Supplementary literature:

National Learning Corporation: "Management Information Systems Specialist", National LEARNING Corporation, 2019

b. Internet sources:

13. Available educational materials divided into forms of class activities (Author's compilation of didactic materials, e-learning materials, etc.)

14. Teachers implementing particular forms of education

Form of education	Name and surname
1. Laboratory classes	Kashuba Svietlana, dr