

Subject programme

1. Subject name / subject module: **Master's seminar and preparation for the diploma exam**
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: **Szychta Elżbieta, prof. dr hab. inż.**
 - 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

Form of classes Mode of study	Teaching activities with the tutor																		Total
	SOW	ECTS	Classes	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	...	SOW	ECTS	ECTS	
Full-time studies			18	107	5													5	
Part-time studies																			
Credit rigor	...		Graded assignment																

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 classes	18
Preparing homework	40
Preparing reports	40
Independent study of the subject	25
Participation in an exam / graded assignment / final grading	2
Total student workload	125
ECTS credits	5
* Student's workload related to practical forms	125
Student's workload in classes requiring direct participation of academic teachers	18

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

Knowledge of the field of study

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			
K_U04	Student is able to prepare a scientific study in Polish or English, e.g. a brief report in Polish and English or a short paper presenting the results of experimental research obtained by him.	Classes	Inquiry methods	Student learning activities
K_U06	Student has communication skills on specialist topics in English and in a foreign language, in accordance with the requirements specified for the B2 + level of the Common European Framework of Reference for Languages.			

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K_U07	Student has language skills allowing for oral presentations, conducting debates in Polish or English, on technical issues, in particular in the field of mechatronics.			
Social competence				
K_K01	Student is ready to critically assess the acquired knowledge and received content, understands the need for continuous improvement of the substantive workshop, can set directions and areas of personal professional self-improvement, and inspire and organize the learning process of other people.	Classes	Inquiry methods	Student learning activities
K_K02	Student is ready to recognize knowledge in solving cognitive and practical problems and to consult experts in case of difficulties with solving the problem on their own.			

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

0% - 50%	ndst	81% - 90%	db
51% - 70%	dst	91% - 93%	db+
71% - 80%	dst+	94% - 100%	bdb

Activity	Grades	Calculation	To Final
Reports	bdb(5)	$5 \cdot 50\%$	2,5
Classes activities	Example: db, dst, bdb (4, 3, 5)	Avg.: $(4+3+5)/3=4$ $4 \cdot 20\%=0,8$	0,8
Homeworks	Example: ndst, db, dst (2, 4, 3)	Avg.: $(2+4+3)/3=3$ $3 \cdot 20\%=0,6$	0,6
Attendance	on 80%	$0,8 \cdot 5=4$ $4 \cdot 10\%=0,4$	0,4
Final result			4,3

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

(Classes)

Creating a presentation on the results of own thesis in Polish and English. The principles of public intervention and presentation of achievements from his own master's career. Review the contents of the Diploma Exam.

11. Required teaching aids

Exercises - a room adapted for conducting classes in the form of exercises / workshops, multimedia projector

12. Literature:

a. Basic literature:

- Sowińska B., graduate's guidebook, Bydgoszcz, 2012, ISBN 978-83-61036-62-3.
- Sowińska B., Rules for making footnotes, references and bibliography attached, Ed. 2 supplements and amendments, Bydgoszcz, 2012, ISBN 978-83-61036-548.

a. Supplementary literature:

- PN-ISO 690: 2012 Information and documentation. Guidelines for the preparation of footnotes bibliographic references and information resources.
- Węglińska M., How to write a master's thesis? Krakow, 2004, ISBN 83-7308-328-6.
- Zaczyński W., A guide for the author of seminar, diploma and master theses, Warsaw, 1995, ISBN 83-903103-7-6.
- Kaczmarek T. T., A guide for students writing a bachelor's or master's thesis [online] 2009 [access: August 30, 2011], Available on the World Wide Web:

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5. Kawczyński S., The problem of plagiarism in higher education. Characteristic electronic anti-plagiarism system, "E-mentor" [online], No. 2 (19) / 2007 [access: 26 July 2011], Available on the World Wide Web:, ISSN 1731-7428.

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. Classes	Szychta Elżbieta, prof. dr hab. inż.