COURSE SPECIFICATION

Course code	full-time programme:	**M#2-S2-ME-303**
	part-time programme:	
Course title in Polish	**Praca dyplomowa**	
Course title in English	**Thesis**	
Valid from (academic year)	**2024/2025**	

GENERAL INFORMATION

Programme of study	**MECHANICAL ENGINEERING**
Level of qualification	**second-cycle**
Type of education	**academic**
Mode of study	**full-time programme**
Specialism	**all**
Department responsible	**Department of Machine Design and Machining**
Course leader	**dr hab. inż. Sławomir Błasiak, prof. PŚk**
Approved by	**dr hab. Jakub Takosoglu, prof. PŚk, Dean of the Faculty of Mechatronics and Mechanical Engineering**

COURSE OVERVIEW

Course type		**programme-specific**
Course status		**compulsory**
Language of instruction		**English**
Semester of delivery	full-time programme	**Semester III**
	part-time programme	**Semester III**
Pre-requisites		
Examination required (YES/NO)		**NO**
ECTS value		**20**

Mode of instruction		**lecture**	**class**	**laboratory**	**project**	**seminar**
No. of hours per semester	full-time programme					
	part-time programme					

LEARNING OUTCOMES

Category of outcome	Outcome code	Course learning outcomes	Corresponding programme outcome code
Knowledge	W1	He/she has detailed and in-depth knowledge, which he/she will use during the development of the project within the thesis. This knowledge is related to topics concerning the manufacturing and processing of machine parts, including cavity and non-lacquard techniques, material bonding methods, taking into account incremental technologies, laser technologies, rapid prototyping issues and reverse engineering, as well as a structured and in-depth knowledge of the construction of various types of systems for the processing and shaping of materials. He has an in-depth and advanced knowledge of how to design the right device variant, depending on the manufacturing techniques used.	MiBM2_W05
	W2	Has in-depth knowledge necessary for the development of the Master's thesis in the creation and analysis of technical documentation with elements of engineering design and simulation using graphical and computational programmes as well as standard planning and design methods.	MiBM2_W06
	W3	He knows the principles for the creation and development of various forms of individual entrepreneurship. Has a structured knowledge of project management.	MiBM2_W15
Skills	U1	Can apply knowledge from the area of basic sciences, to formulate and solve complex engineering tasks in different areas of mechanics and mechanical engineering both at the stage of design, construction, material selection, manufacturing, prototyping, testing. He/she is able to evaluate, critically analyse and synthesise the obtained results, as well as express his/her opinions and comments related to the development of the master's thesis.	MiBM2_U01
	U2	Can fluently use information and communication tools appropriate for complex engineering tasks in the field of mechanics and mechanical engineering, including the ability to efficiently prepare and present a presentation on the results of a completed engineering task, can debate and communicate on specialised topics especially in relation to the master's thesis under development.	MiBM2_U05
Competence	K1	He/she is ready to fulfil the professional roles related to the field of study of mechanics and mechanical engineering in a responsible manner, to observe ethical principles and to act in order to comply with these principles, taking into account the changing social needs; he/she cares for the achievements, ethos and traditions of the profession. Adheres to the principles of professional ethics and takes action to uphold them.	MiBM2_K05

COURSE CONTENT

Mode of instruction	Topics covered
project	In preparing the thesis, the student applies the knowledge acquired during the first and second degree studies, carrying out the tasks in accordance with the thesis plan. The number of hours of work with a supervisor or consultant, in relation to the student's independent work, depends on the topic and the nature of the thesis. Research topics, especially those requiring laboratory research, involve greater involvement of the supervisor. The completion of the thesis requires the student to expand his or her knowledge in selected areas of the study programme. In meetings with the thesis supervisor, the student goes through the stages of analysis of the topic, from the development of the tasks, through the theoretical or practical implementation, to the written description of the results. In the course of the thesis, the student learns how to search for information in various sources such as the library, the Internet or equipment specifications. He or she also learns a variety of ways to solve problems related to the thesis topic. The thesis develops the ability to formulate solutions logically and concisely and to describe them. The competences acquired enable the student to develop the topic into a research paper of several dozen pages. This process prepares the diploma student to develop scientific issues independently and professionally.

ASSESSMENT METHODS

Outcome code	Methods of assessment					
	Oral examination	Written examination	Test	Project	Report	Other
W1						X
W2						X
W3						X
U1						X
U2						X
K1						X

ASSESSMENT TYPE AND CRITERIA

Mode of instruction	Assessment type	Assessment criteria
project	non-examination assessment	Writing of the final thesis and its evaluation by the supervisor.

OVERALL STUDENT WORKLOAD

ECTS weighting												
No.	Activity type	Student workload										Unit
		full-time programme					part-time programme					
		L	C	Lb	P	S	L	C	Lb	P	S	
1.	Scheduled contact hours											h
2.	Other contact hours (office hours, examination)				16							h
3.	**Total number of contact hours**	**16**										h
4.	**Number of ECTS credits for contact hours**	**0,6**										ECTS

5.	**Number of independent study hours**	**181**		h
6.	**Number of ECTS credits for independent study hours**	**19,4**		ECTS
7.	**Number of practical hours**	**0**		h
8.	**Number of ECTS credits for practical hours**	**0**		ECTS
9.	**Total study time**	**500**		h
10.	**ECTS credits for the course** *1 ECTS credit = 25-30 hours of study time*	**20**		ECTS

READING LIST

1. Kwaśniewska K., Jak pisać prace dyplomowe. Wskazówki praktyczne, Kujawsko-Pomorska Wyższa Szkoła w Bydgoszczy, Bydgoszcz 2017.
2. Boć J., Jak pisać pracę magisterską, Kolonia Limited, Wrocław 1995.
3. Polańska A., Praca dyplomowa nauką i sztuką, Wyższa Szkoła Administracji i Biznesu im. Eugeniusza Kwiatkowskiego w Gdyni, Gdynia 2012.
4. Węglińska M., Jak pisać pracę magisterską, Impuls, Kraków 2013.
5. Wójcik K., Piszę pracę promocyjną – licencjacką, magisterską, doktorską, Wolters Kluwer Polska, Warszawa 2015.
6. Zaczyński W.P., Poradnik autora prac seminaryjnych, dyplomowych i magisterskich, Wydawnictwo Żak, Warszawa 1995.
7. Zajączkowski M., Podstawowe wskazówki dla piszących prace magisterskie i dyplomowe. Wydawnictwo Uniwersytetu Szczecińskiego, Szczecin 1986.
8. Zenderowski R., Technika pisania prac magisterskich i licencjackich. Poradnik, CeDeWu, Warszawa 2020.
9. Umberto Eco, How to Write a Thesis, Mit Press