



Subject card

Subject name and code	Professional practice, PG_00039894						
Field of study	Mechanical Engineering, Mechanical Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2023/2024		
Education level	first-cycle studies	Subject group			Optional subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	4	Language of instruction			Polish		
Semester of study	7	ECTS credits			6.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Zakład Mechaniki Stosowanej i Biomechaniki -> Institute of Mechanics and Machine Design -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Grzegorz Banaszek					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	0.0	0
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	0		10.0		150.0	160
Subject objectives	The student undergoes professional practice in order to develop skills in to practical usage of the knowledge obtained during education at the Faculty of Mechanical and Shipbuilding Engineering. The student becomes familiar with the functioning of the company, the structure of processes, and the forms of process organization. The student learns about direct work and how it is organized at selected positions in the company. The student analyzes document circulation and information flow in the company.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U03] is able to identify, formulate and develop the documentation of a simple design or technological task, including the description of the results of this task in Polish or in a foreign language and to present the results using computer software or other aiding tools	The student is able to identify and formulate a constructional or technological task in Polish and a foreign language and has the ability to present results using computer programs and other supporting tools.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task
	[K6_U08] is able to design a technological manufacturing process for typical elements of machines or devices, using analytical and numerical calculating tools	The student has knowledge and is able to design technological processes for the production of typical parts of machines and mechanical devices. The student is able to use analytical and numerical computational tools to perform and implement design tasks.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools
	[K6_U05] is able to plant an experiment within the range of measuring the basic operating parameters of mechanical devices using a specialized equipment, interpret the results and reach the correct conclusions	The student is able to use knowledge to plan and measure the operating parameters of mechanical devices. The student is able to use specialized measuring equipment and analyzes the obtained results.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools
	[K6_K01] is aware of the need for complementing the knowledge throughout the whole life, is able to select proper methods of teaching and learning, critically assesses the possessed knowledge; is aware of the importance of professional conduct and following the rules of professional ethics; is able to show resourcefulness and innovation in the realisation of professional projects	The student understands the need for lifelong learning and updating of knowledge. The student complies with the principles of professional ethics and demonstrates entrepreneurship and professionalism in the performance of duties.	[SK3] Assessment of ability to organize work [SK4] Assessment of communication skills, including language correctness [SK5] Assessment of ability to solve problems that arise in practice [SK2] Assessment of progress of work

Subject contents

Professional practice should cover selected issues from the internship framework plan:

I. Internship plan must contain at least **three selected tasks** from the block of technical-engineering skills specified below:

1. Research, design, construction and operation of machines and their elements.
2. Research, design, construction and operation of machines and stationary objects.
3. Research, design, construction and operation of machines and moving objects (airborne, land-based, water-bases and off-shore).
4. Research, design, construction and operation of machines and mechanical systems: rotating (e.g. manipulators), gyrating, hydraulic, pneumatic, electric, based on bio-mechanical technologies, etc.
5. Research, design, construction and operation of machines and mechanical systems on mini- and micro-scale.
6. Research and development works associated with the design and simulation of machine operation, including production lines, in conditions approximating the reality.
7. Research and development works associated with the operation of machines, including production lines, in conditions approximating the reality.
8. Design and operation of machines and mechanical systems, including production and maintenance systems, etc.
9. Design and operation of machines and mechanical systems aided by IT systems (mechatronic systems).
10. Design and operation of semi-automatic, automatic or autonomous machines and mechanical systems.
11. Application of machines and mechanical systems for transmission (transport) of fluid, energy, power, etc.
12. Design and operation of machines in systems for renewable energy sources.
13. Design and operation of machines in environmental protection.
14. Design and operation of machines in agriculture, forestry, mining industry, defence industry, etc.
15. Application of mechanical solutions in the measurement systems.
16. Diagnostics and maintenance of machines and mechanical systems.
17. Design and production documentation (calculations, CAD, CFD, CAM, CAE and others) operational procedures, delivery tests, certification of machines and mechanical systems.

Other tasks require the approval of the Deans Proxy for Internship.

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II. Regardless of the technical and engineering skills specified above, a student is required to obtain the

	<p>ability of working in a team, planning and realization of individual and team tasks, efficient communication, adhering to values and principles of cooperation in a team and also obtain specific social competences:</p> <p>1. Readiness to cultivate and disseminate the standards of proper behaviour at work and beyond, unassisted decision taking, critical assessment of ones own actions, team actions and organization, assuming the responsibility for the effects of these actions, responsible fulfilment of professional roles including:</p> <ul style="list-style-type: none"> - following the rules of professional ethics and requiring others to do so, - taking care for the output and traditions of the profession. <p>2. Readiness to critically assess the possessed knowledge and recognizing the meaning of knowledge in solving cognitive and practical problems.</p> <p>3. Readiness to fulfil social duties, co-organize activities benefiting the society, initiate activities benefiting public interest, think and act in a resourceful way.</p>		
Prerequisites and co-requisites	Knowledge of issues related to the field of study: technical and non-technical.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Report on the realization of thr internship	100.0%	15.0%
	Internship sheet	100.0%	15.0%
	Professional training information card	100.0%	70.0%
Recommended reading	Basic literature	Materials provided by the company at the place of internship and individually recommended by the internship representative.	
	Supplementary literature	Materials provided by the company at the place of internship and individually recommended by the internship representative.	
	eResources addresses	Adresy na platformie eNauczanie: Praktyka zawodowa, P, MiBM, sem.07, zimowy 23/24 (PG_00039894) - Moodle ID: 31154 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=31154	
Example issues/ example questions/ tasks being completed	<p>Document to be read by the student:</p> <ul style="list-style-type: none"> • Framework internship program - (.pdf) <p>Documents to be completed before work experience:</p> <ul style="list-style-type: none"> • Referral for the practice (.doc) - download Individual • Internship program (.doc) - downloadable • Declaration of a student carrying out an internship on dates other than June 28-September 09, 2023 <p>Documents required to settle professional practice:</p> <ul style="list-style-type: none"> • Information about completed professional practice (English) - (.doc) • Information about completed professional practice (Polish) - (.doc) • Professional practice card - (.doc) • Internship report template - (.doc) 		
Work placement	Not applicable		