



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pre-graduate practice

Course

Field of study

Mechanical and Automotive Engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/6

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)
practice

Tutorials

Projects/seminars

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

dr inż. Wojciech Cieślik

email: wojciech.cieslik@put.poznan.pl

tel. +48 61 224 45 02

Institute of Internal Combustion Engines and
Drives

ul. Piotrowo 3, 60-965 Poznań

Responsible for the course/lecturer:

dr inż. Kasper Górny

email: kasper.gorny@put.poznan.pl

tel. +48 61 665-22-35

Institute of Working Machines and Motor
Vehicles

ul. Piotrowo 3, 60-965 Poznań

Prerequisites



KNOWLEDGE: The student has knowledge of the applicable rules for the implementation of internships. He knows the regulations of internships and the conditions for passing them. Has basic knowledge of issues covered by the study program. Has knowledge related to the basic issues of mechanics and machine construction, in particular: designing structures, designing technological processes, research and operation of machines and vehicles, manufacturing processes, assembly and supervision of the operation of machines, diagnosing the technical condition of machines and devices and repair technology.

SKILLS: The student has the ability to creatively use the knowledge acquired during the first degree studies.

SOCIAL COMPETENCES: The student is able to work in a working group. Is able to transparently distribute tasks in a group. Is able to interpret and perform received tasks correctly and is able to make a verbal presentation of the results of his work.

Course objective

Verification of the theoretical knowledge possessed by the student with reality, gaining new professional experience in real working conditions. Practical application of knowledge and skills acquired during studies in practice. Familiarizing the student with the realities of the functioning of the workplace against the background of applicable law, business hierarchy, secrets, interpersonal relations, learning to analyze and choose good practices (especially duty, loyalty to the parent company, responsibility, sense of identity, self-esteem, etc.) useful in the next life, especially in the professional sphere. An attempt to assess the role and importance of the workplace in the economy and life of the local community, and the student to gain experience in the labor market.

Course-related learning outcomes

Knowledge

Has extended basic knowledge necessary to understand specialist subjects and specialist knowledge about the construction, construction methods, manufacturing and operation of a selected group of working, transport, thermal and flow machines covered by the diploma path.

Has elementary knowledge of the life cycle of machinery, recycling of machine elements and construction and consumables.

Has elementary knowledge of law, in particular security, copyright and security law industrial property and its influence on the development of technology.

Skills

Can use the experience gained in an environment professionally involved in engineering activities related to the maintenance of devices, facilities and systems typical for the field of study.

Can interact with other people as part of teamwork (also of an interdisciplinary nature).

Has the ability to self-educate with the use of modern teaching tools, such as remote lectures, websites and databases, teaching programs, e-books.



Social competences

Is ready to fulfill social obligations and co-organize activities for the benefit of the social environment.

Is willing to think and act in an entrepreneurial manner.

is ready to fulfill professional roles responsibly, including:

- observing the rules of professional ethics and requiring this from others,
- caring for the achievements and traditions of the profession.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Credit for internships based on the internship report, certified by the enterprise, assessment of the internship tutor by the enterprise. Possibility of crediting professional work towards professional practice (condition of program compliance)

Programme content

Familiarization with the functioning of manufacturing, commercial or service enterprises related to the general construction of machines, companies employing mechanics or maintenance specialists, companies giving the opportunity to learn the basic issues of mechanics and machine construction, such as:

- structure design (including: selection of engineering materials used as elements of machines and devices as well as methods and techniques of computer aided design of machines),
- design of technological processes,
- research and operation of machines and vehicles (including management elements)
- processes for the production, assembly and supervision of the operation of machines (including, among others: basic workshop work: locksmith and assembly work, machine tools, machine tools, welding devices, technological measuring and diagnostic equipment used in the manufacture, assembly and repair of machines, devices or vehicles)
- diagnosing the technical condition of machines and devices and repair technology (including: technologies used in machine repairs, machine operation and repair systems, regeneration technologies of machine and device parts, organization of production processes and supervision over the operation of machines, applicable OHS regulations in maintenance, designing regeneration processes for machine parts, techniques for diagnosing the technical condition of machines and devices).
- and other related.

Teaching methods



Presentation of the requirements for the implementation of pre-graduate practice at an organized meeting with students. Electronic transmission of information. Verification of the completeness and correctness of documentation related to the implementation of pre-graduate practice.

Bibliography

Basic

Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	120	4,0
Classes requiring direct contact with the teacher	0	0,0
Student's own work (literature studies, preparation for tutorials, preparation for tests) ¹	120	4,0

¹ delete or add other activities as appropriate