



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pre-diploma Internship [S2MiBP1>PP]

### Course

Field of study

Mechanical and Automotive Engineering

Year/Semester

1/1

Area of study (specialization)

Railway Vehicles

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

120

Tutorials

0

Projects/seminars

0

### Number of credit points

4,00

### Coordinators

dr hab. inż. Wojciech Cieřlik

wojciech.cieslik@put.poznan.pl

### Lecturers

### 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 a general knowledge of the types of research and methods of testing working machines with the use of modern measurement techniques and data acquisition.

Is aware of the civilization effects of technology.

Has in-depth knowledge of entrepreneurship and business economics.

Skills:

Can conduct a debate.

Can use the international language in contacts with specialists in his field of study at the B2 + level.

Can interact with other people as part of teamwork and take a leading role in teams.

Social competences:

It is ready to fulfill social obligations, inspire and organize activities for the benefit of the social environment.

It is ready to initiate actions for the public interest. Is ready to fulfill professional roles responsibly, taking into account changing social needs, including:

- developing the professional achievements,
- maintaining the ethos of the profession,
- observing and developing the rules of professional ethics and acting towards the observance of these rules.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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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.

### Course topics

The specific issues of pre-graduate practice are determined by the company where the practice is carried out based on the practice program.

### 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	4,00
Classes requiring direct contact with the teacher	0	0,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	120	4,00