



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma thesis preparation

Course

Field of study

Civil 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

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

160

Projects/seminars

0

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

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Responsible for the course/lecturer:

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Prerequisites

Knowledge in the field of construction subjects at the level of a third-year student tailored to the type of pre-graduate practice (profile of interests or diploma) and the future specialization of the profession of a construction engineer related to the type of building objects

The ability to combine the knowledge acquired at the University with the practice of its application, including a critical look at the quality of project documentation as well as design and production processes on site in the context of continuous improvement of knowledge.

Social competences: Awareness of the role of a construction engineer in the field of designing facilities and managing construction works, maintaining the principles of professional ethics and respecting other participants in the work process and the environment (engineer as a profession of public trust).



Course objective

The main goal is to learn the specifics of a construction engineer's work in terms of performing independent technical functions, e.g. a designer or construction manager. An additional goal is to develop a critical view of the fields of improving one's own knowledge and the practice of its application. Undergraduate internship helps to define your professional interests, the necessary selection of the profession's specialization and the future path of self-improvement

Course-related learning outcomes

Knowledge

1. Knowledge of the technical conditions to be met by construction objects - types of objects compatible with the future specialization of the profession. - [K_W06]
2. Awareness of the key requirements for the building object, including the aesthetics of the building work (quality of the building structure). - [K_W15]
3. Knowledge about the impact of a building object on the surroundings and the environment on a building object, in accordance with the principles of sustainable development. - [K_W17]

Skills

1. Praca z dokumentacją projektową (budowlano-wykonawczą) w ramach oficjalnej specjalności zawodu (prawo) i ew. specjalizacji (zainteresowania zawodowe). - [K_U14]
2. Planowanie z dochowaniem zasad bezpieczeństwa, w tym projektowanie obiektów i realizacji procesów budowlanych (eliminacja potencjalnych zagrożeń). - [K_U16]
3. Organizowanie pracy zgodnie z zasadami technologii danego rodzaju prac oraz obowiązującymi przepisami prawa, także budowlanego. - [K_U21]

Social competences

1. Awareness of the responsibility of a construction engineer in designing and execution. - [K_K05]
2. The ability to form an opinion on the processes in construction in the context of their own knowledge. - [K_K07]
3. Compliance with the rules of professional ethics of a civil engineer and proper representation of the profession. - [K_K10]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The basis for the credit is the internship log, signed by an authorized representative of the organization enabling the internship (possibly also authorized to perform independent technical functions within the meaning of the law). The internship is subject to credit and the entry into the index is made by the appropriate internship tutor on behalf of the University.

The scope of the practice should include many different tasks, including :

1. Training in the field of health and safety.



2. Getting to know the general scope of activities and specificity of the functioning of a construction company or design office.

3. Acquainting the student with:

organization of the construction site, duties of the contract manager, construction manager, foreman, foreman, supervision inspector,

implementation of documentation and design work as well as the responsibilities of the design and administration team,

technology of construction works, cost estimation, schedules, organization of construction projects, construction, assembly and material solutions for the facilities being implemented,

payroll, billing and invoicing system,

current activity of the workplace (through active participation in the investment process, preferably acting as an assistant to the construction engineer: in preparatory, design, execution, marketing and other works).

It is advisable to familiarize the apprentice with the many different sentences implemented during the construction.

Taking into account the possibilities of the tutor on the part of the workplace during the internship, not all tasks from point 3 have to be completed.

During the internship, the student documents (daily) his activity in the internship diary. These entries require confirmation by the internship tutor on the part of the workplace (with the company stamp).

The internship is credited by the internship supervisor, appropriate for the diploma profile, appointed by the internship representative at the ILIT Faculty

Programme content

Practice takes place in construction companies (on a construction site) or in design offices, or in supervision and operation services or in research institutions, e.g. at the University, however, due to the importance of knowledge about workmanship in designing, practice on the construction site is preferred. From the formal point of view, the internship must take place through the Center for Practices and Careers of the Poznań University of Technology.

The internship takes into account the specialties of the civil engineering profession (general, bridge, road and railway construction) by taking into account the type of construction (buildings and overground structures; bridges and underground structures; roads, streets, airports; railway lines, junctions and stations).

Teaching methods



Construction site exercises / practice

Bibliography

Basic

Rozporządzenia wykonawcze prawa budowlanego o warunkach technicznych, jakim powinny odpowiadać obiekty budowlane i ich usytuowanie (rodzaje obiektów zależnie od przyszłej specjalności zawodu).

Rozporządzenie Ministra Infrastruktury w sprawie bezpieczeństwa i higieny pracy podczas wykonywania robót budowlanych.

Rozporządzenia wykonawcze prawa budowlanego o warunkach technicznych, jakim powinny odpowiadać obiekty budowlane i ich usytuowanie (rodzaje obiektów zależnie od przyszłej specjalności zawodu).

Additional

Wieczorek Z., Budownictwo. Wymagania bezpieczeństwa pracy. Państwowa Inspekcja Pracy, Warszawa 2011.

Strojna E., Piotrowicz J., Żywiec-Dąbrowska E., Klasyfikacja zawodów i specjalności na potrzeby rynku pracy. Ministerstwo Pracy i Polityki Społecznej, Warszawa 2010.

Gilewicz A., Gilewicz M., Poradnik BHP w projektowaniu, wykonawstwie i nadzorze robót budowlano-montażowych. Alfa-Wero, Warszawa 1997

Breakdown of average student's workload

	Hours	ECTS
Total workload	160	4,0
Classes requiring direct contact with the teacher	0	0,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	160	4,0

¹ delete or add other activities as appropriate