



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Advanced Functions of MS Office

### Course

Field of study

Engineering Management

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

1/1

Profile of study

general academic

Course offered in

English

Requirements

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

30

Tutorials

Projects/seminars

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

Ph.D., Eng. Zbigniew Włodarczak,

Mail to: [zbigniew.wlodarczak@put.poznan.pl](mailto:zbigniew.wlodarczak@put.poznan.pl)

Phone: +48 61 665 33 87

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:

### Prerequisites

Knowledge from high school in the field of computer science and science. Basic computer skills and office packages. Ability to work in a laboratory group.



## Course objective

Students should acquire proficiency in using a spreadsheet in the field of engineering calculations, including selected optimization issues. They should also acquire the ability to freely and efficiently use a text editor to edit documents.

### Course-related

### learning

### outcomes

Knowledge

The student describes and recalls basic methods and tools for data collection in a spreadsheet [P6S\_WG\_08].

The student identifies the life cycle of socio-technical systems [P6S\_WG\_13].

The student explains the basic principles of occupational safety and health related to working in MS Office applications [P6S\_WG\_18].

Skills

The student uses theoretical knowledge to analyze specific processes and social phenomena in management, including the use of a spreadsheet for economic data analysis [P6S\_UW\_01].

The student plans and conducts experiments, including measurements and computer simulations, to interpret results and draw conclusions about management [P6S\_UW\_09].

The student applies basic analytical, simulation, and experimental methods to solve engineering tasks in the context of MS Office applications [P6S\_UW\_10].

Social competences

The student prepares and implements business ventures using MS Office tools, such as spreadsheets and databases [P6S\_KO\_03].

The student contributes substantively to the preparation of social and business projects, taking into account legal, economic, and organizational aspects [P6S\_KO\_01].

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The grade from the laboratory is given as an average of the grades of individual tasks performed during classes. The assessment takes into account the correctness and completeness of the results obtained.

## Programme content

A series of calculation exercises in a spreadsheet with particular emphasis on conditional functions and databases. Transport task as an example of an optimization task using a solver. Using styles.

## Teaching methods

Laboratories: laboratory (experiment) method, workshop method.

## Bibliography



Basic

Kowalczyk G., Word 2016 PL. Ćwiczenia praktyczne, Helion 2016

Wrotek W., Excel 2019 PL. Kurs, Helion 2019 III, Helion, Gliwice 2014

Additional

Walkenbach J., Alexander M., Analiza i prezentacja danych w Microsoft Excel. Vademecum Walkenbacha. Wydanie II, Helion 2014

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes) <sup>1</sup>	45	2,0

---

<sup>1</sup> delete or add other activities as appropriate