



## 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

Polish

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,

Responsible for the course/lecturer:

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

### 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

Has basic knowledge of office software life cycle [P6S\_WG\_13]

Has basic knowledge necessary to understand the non-technical conditions of engineering activities; knows the basic principles of health and safety at work when using office software [P6S\_WG\_18]

#### Skills

Is able to use office software, basic theoretical knowledge and obtain data to analyze specific processes and social phenomena (cultural, political, legal, economic) in the field of management [P6S\_UW\_01]

Is able to forecast social processes and phenomena (cultural, political, legal, economic) using standard methods and office software [P6S\_UW\_02]

Is able to plan and carry out experiments, including computer measurements and simulations, interpret obtained results and draw conclusions using office software [P6S\_UW\_09]

Is able to use office software to formulate and solve engineering tasks analytical, simulation and experimental methods [P6S\_UW\_10]

#### Social competences

Is able to make substantive input in the preparation of social projects using office software, taking into account legal, economic and organizational aspects [P6S\_KO\_01]

Is able to prepare and implement business ventures using, among others, office software [P6S\_KO\_03]

### 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