POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)
pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Advanced Spreadsheet Applications

Course

Field of study	Year/Semester
Management and Production Egineering	2/3
Area of study (specialization)	Profile of study
Computerisation in Production	general academic
Level of study	Course offered in
Second-cycle studies	Polish
Form of study	Requirements
full-time	elective

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
	30	
Tutorials	Projects/seminars	

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

Jacek Diakun, Ph.D.

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ph. 61 665 27 31

Faculty of Mechanical Engineering

3 Piotrowo Stree, 61-138 Poznań, room 121

Responsible for the course/lecturer:

Prerequisites

Principles spreadsheet.

Course objective

Familiarizing the students with spreadsheet applications for engineering purposes, with emphasis on implementation of managerial problems.

Course-related learning outcomes

Knowledge

Knows the areas of effective applications of spreadsheet in company. Is aware of advantages, , disadvantagesand limitations of spreadsheet as the tool supporting manager's work.

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Skills

Can implement complex spreadsheet of advanced structure and funcionality, getting data from various sources.

Social competences

Communication with specialists from the company in order to acquisition of data necessary for implementation of the problem.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Laboratory: assessments of part of the work according to the particular parts of issues.

Programme content

Laboratory: differences between versions of MS Excel spreadsheet. Array funkcions and formulas. Search and address, date, time and text functions. Dynamic and interactive diagrams. Getting data from various sources. Statistical calculations. Simumation and interactive elements in spreadsheet. Data analysis in spreadsheet. Implementation of selected operations research problems.

Teaching methods

Laboratory: implementation of issues from programme content in spreadsheet.

Bibliography

Basic

WALKENBACH J., Excel 2019. Biblia, Helion, Gliwice 2019.

WINSTON W., Microsoft Excel 2016. Analiza i modelowanie danych, Promise, Warszawa 2017.

BOURG J., Excel w nauce i technice. Receptury, O'Reilly/Helion, Gliwice 2006.

Additional

SZYMCZAK (red.), Decyzje logistyczne z Excelem, Difin, Warszawa 2011.

KOMOROWSKI, CYPRYJAŃSKA, BORAWSKI, Excel dla menedżera Casebook, PWN Warszawa 2015.

SZAPIRO (red.), Decyzje menedżerskie z Excelem, Polskie Wydawnictwo Ekonomiczne, Warszawa 2000.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)[1]	20	0,5

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[1] delete or add other activities as appropriate