Kielce University of Technology

FACULTY OF MECHATRONICS AND MECHANICAL ENGINEERING

Annex 9
to the Rector's Ordinance No. 35/19
of 12 June 2019

COURSE SPECIFICATION

Course code	**M#1-S1-ME-108**
Course title in Polish	**Technologie Informacyjne**
Course title in English	**Information Technology**
Valid from (academic year)	**2019/2020**

GENERAL INFORMATION

Programme of study	**MECHANICAL ENGINEERING**
Level of qualification	**first-cycle**
Type of education	**academic**
Mode of study	**full-time**
Specialism	**all**
Department responsible	**Department of Applied Computer Science and Weapons Engineering**
Course leader	**Prof. dr. hab. inż. Zbigniew Koruba**
Approved by	

COURSE OVERVIEW

Course type	**basic**
Course status	**compulsory**
Language of instruction	English
Semester of delivery	**semester 2**
Pre-requisites	**None**
Examination required (YES/NO)	NO
ECTS value	**2**

Mode of instruction	**lecture**	**class**	**laboratory**	**project**	**seminar**
No. of hours per semester			**30**		

LEARNING OUTCOMES

Category of outcome	Out-come code	Course learning outcomes	Corresponding programme outcome code
Skills	U01	They will be able to format text, create simple drawings in a text editor. They will be capable of creating simple tables and formulas (equations) in a text editor. They will be able to select appropriate tools and functions to solve particular tasks in a spreadsheet.	MiBM_U01 MiBM_U04 MiBM_U05
	U02	They will be able to interpret the results obtained in spreadsheets and math packages.	MiBM_U03
Competence	K01	They will be able to work in a team.	MiBM_K04

COURSE CONTENT

Type of instruction*	Topics covered
laboratory	1. Text formatting, artistic text and drawing in a text editor of a selected office suite
	2. Inserting tables and formulas (equations) in the text editor of the selected office suite
	3. Adding automatic table of contents to a document
	4. Creating a presentation showing research results
	5. Principles of creating graphs and arithmetic expressions in the MathCAD math package.
	6. Principles of solving equations and inequalities in MathCAD mathematical packag-es.
	7. Optimization and operations on vectors and matrices in MathCAD.
	8. Solving equations and systems of differential equations in MathCAD.
	9. Symbolic expressions and programming elements in MathCAD.
	10. Addressing and formulas in a spreadsheet of the selected office suite.
	11. Data filtering and indirect sums in a spreadsheet.
	12. Creating graphs in a spreadsheet.

*) Please delete rows in the table above that are not applicable.

ASSESSMENT METHODS

Outcome code	Methods of assessment *(Mark with an X where applicable)*					
	Oral examination	Written examination	Test	Project	Report	Other
U01			X			
U02			X			
K01						X

ASSESSMENT TYPE AND CRITERIA

Mode of instruction*	Assessment type	Assessment criteria
laboratory	non-examination assessment	Regular class attendance. The pass mark is a minimum of 50% for each of the three computer-based in-class tests.

*) Please delete rows in the table above that are not applicable.

OVERALL STUDENT WORKLOAD

ECTS weighting								
	Activity type	**Student workload**					**Unit**
1.	Scheduled contact hours	L	C	Lab	P	S	h
				30			
2.	Other contact hours (office hours, examination)			**2**			h
3.	**Total number of contact hours**	**32**					h
4.	**Number of ECTS credits for contact hours**	**1.3**					ECTS
5.	**Number of independent study hours**	**18**					h
6.	**Number of ECTS credits for independent study hours**	**0.7**					ECTS
7.	**Number of practical hours**	**32**					h
8.	**Number of ECTS credits for practical hours**	**1.3**					ECTS
9.	**Total study time**	**50**					h
10.	**ECTS credits for the course** *1 ECTS credit = 25-30 hours of study time*	**2.0**					ECTS

READING LIST

1. Beskeen, David W. 2010. Microsoft Office 2007. Boston, Mass: Course Technology.
2. WPS Office Technical Support, on-line resource: https://help.wps.com/
3. LibreOffice Documentation, on-line resource: https://documentation.libreoffice.org/en/english-documentation/
4. MathCAD User Guide, on-line resource: https://neuron.eng.wayne.edu/auth/ece4340/mathcad/mathcad_user_guide.pdf
5. Maxfield, Brent. 2009. Essential Mathcad for engineering, science, and math ISE. Amsterdam: Elsevier. http://www.sciencedirect.com/science/book/9780123747839.