Bialystok University of Technology									
Field of study	**Computer Science**							**Degree level and programme type**	**Engineer's degree full-time programme**
Specialization/ diploma path	**---**							**Study profile**	academic
Course name	**Information Technologies**							**Course code**	**FCS-00061**
								Course type	obligatory
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	**Semester**	3
					30			**No. of ECTS credits**	**6**
Entry requirements									
Course objectives	The aim of the course is to prepare students to work with software applications supporting document creation and edition (e.g. articles). A student will be able to prepare efficiently a document containing text and graphics and to format it properly. She/he will be able to use a spreadsheet to perform calculations. She/he will know how to prepare graphics to place it in a document or in a presentation as well as a presentation itself.								
Course content	Special workshop: Tags language LaTeX: template usage, insertion of formulae, tables and graphics, structure document creation, automatic numeration, page formatting, presentation creation, use of additional packages. Office software package LibreOffice (or MS Office). Text processor LibreOffice Writer (or MS Office Word): basic edition commands, formatting, paragraph styles, character styles, automation. Spreadsheet LibreOffice Calc (or MS Office Excel): formulae creation, built-in functions usage, graphs creation. Presentation graphic program LibreOffice Impress (lub MS Office PowerPoint): preparation of a presentation and its formatting, animation.								
Teaching methods	lecture problem, programming, subject exercises,								
Assessment method	Evaluation of tasks realization during classes in a computer workshop. Final evaluation: preparation of a text document, a graphics and a presentation according to the list of requirements.								

Symbol of learning outcome	**Learning outcomes**	**Reference to the learning outcomes for the field of study**
LO1	knows the tags language LaTeX on the basic level	K_W10 K_U14
LO2	knows software packages to text and graphics processing and a spreadsheet program on the basic level	K_W10 K_U14
LO3	knows how to prepare a document, a presentation, a graphics and a spreadsheet with usage of proper software application	K_W10 K_U14
LO4	knows how to use information and communications techniques	K_W10 K_U14

Symbol of learning outcome	**Methods of assessing the learning outcomes**	**Type of tuition during which the outcome is assessed**
LO1	evaluation of exercises completion, final evaluation	Sw
LO2	evaluation of exercises completion, final evaluation	Sw
LO3	evaluation of exercises completion, final evaluation	Sw
LO4	evaluation of exercises completion, final evaluation	Sw

Student workload (in hours)	**No. of hours**
1 - Attendance at specialistic workshop -	30
2 - Preparation for specialistic workshop -	40
3 - Participation in student-teacher sessions -	10
4 - Project tasks realization (including preparation of a presentation) -	70
TOTAL:	**150**

Quantitative indicators	**HOURS**	**No. of ECTS credits**
Student workload – activities that require direct teacher participation	40 (1)+(3)	1.6
Student workload – practical activities	150 (1)+(2)+(3)+(4)	6.0

Basic references	1. M. Goossens, F. Mittelbach, A. Samarin, The LaTeX companion, 1993. 2. G. Grätzer, Math into LaTeX : an introduction to LaTex and AMS-LaTeX, 1996. 3. L. Lamport, LaTeX: A Document Preparation System (2nd Edition), Addison-Wesley Professional, 1994.
Supplementary references	1. https://en.libreoffice.org/ 2. http://www.miktex.org/
Organisational unit conducting the course	Department of Mathematics — **Date of issuing the programme**
Author of the programme	dr Krzysztof Piekarski — Feb. 17, 2022

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW – field work,S – seminar