

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Technical and Scientific Writing		Code 1010512311010917861
Field of study Computing	Profile of study (general academic, practical) general academic	Year /Semester 1 / 1
Elective path/specialty Internet of Things	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: - Classes: 30 Laboratory: - Project/seminars: -		No. of credits 2
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) from field
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 2 100%
Responsible for subject / lecturer: L. Anioła-Jędrzejek, Ph.D. email: Centre of Languages and Communication, PUT tel. 61 6652491 Centre of Languages and Communication, PUT Piotrowo 3a Str., 60-965 Poznan		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Learning objectives of the first cycle studies defined in the resolution of the PUT Academic Senate, especially K_W1-2, K_W4, K_W6-15 that are verified in the admission process to the second cycle studies ? the learning objectives are available at the website of the faculty www.fc.put.poznan.pl He should also have basic knowledge regarding grammatical structure and general and technical vocabulary, required at first-cycle studies.
2	Skills	Learning objectives of the first cycle studies defined in the resolution of the PUT Academic Senate, especially K_U1-2, K_U4, K_U7-8, K_U14-20, K_U22-23, K_U26 that are verified in the admission process to the second cycle studies ? the learning objectives are available at the website of the faculty www.fc.put.poznan.pl Student should have language skills at B2+ level in accordance with the requirements set out for level B2+ Common European Framework of Reference for Languages. Should also have skills that are necessary to acquire information from given sources of information and should understand the need to extend his/her competences.
3	Social competencies	Learning objectives of the first cycle studies defined in the resolution of the PUT Academic Senate, especially K_K1-9 that are verified in the admission process to the second cycle studies ? the learning objectives are available at the website of the faculty www.fc.put.poznan.pl Should be able to work individually and in a team. In addition, in respect to the social skills the student should show attitudes as honesty, responsibility, perseverance, curiosity, creativity, manners, and respect for other people.
Assumptions and objectives of the course:		
<ol style="list-style-type: none"> 1. Provide students with knowledge regarding academic written language. 2. Develop students? skills of effective academic and ESP language usage, within the scope of four language skills, with an emphasis on writing and speaking. 3. Develop students? skills of adapting primary sources for scientific papers. 4. Develops students? teamwork skills by preparing a joint project. 		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
<ol style="list-style-type: none"> 1. acquire formal academic language vocabulary - [K_W3] 2. acquire field-specific vocabulary - [K_W3] 3. comprehend the principles of longer written utterances - [K_W3] 		
Skills:		

<p>1. is able to acquire, combine, interpret and evaluate information from literature, databases and other information sources (in mother tongue and English); draw conclusions, and formulate opinions based on it. - [K_U1]</p> <p>2. is able to prepare a short report in English, based on a technical text on cutting-edge technology in the field of computer sciences. - [K_U3]</p> <p>3. is able to prepare and present cutting-edge technology in the field of computer sciences, based on research papers. - [K_U2]</p> <p>4. is able to create Thesis Statement, paragraph, summary. - [K_U3]</p> <p>5. has language skills at B2+ level in accordance with the requirements set out for level B2+ Common European Framework of Reference for Languages. - [K_U6]</p> <p>6. is able to formulate and test hypotheses regarding engineering problems and basic research problems. - [K_U12]</p> <p>7. Is able to formulate formal business correspondence, such as conference invitations, meeting reports. - [K_U4]</p>
<p>Social competencies:</p> <p>1. is able to work in a team, accepting different roles - [K_K5]</p> <p>2. displays creativity and initiative in work and thinking - [K_K8]</p> <p>3. is able to recognize and understand cultural differences in formal and informal environment in English and in different cultural settings - [-]</p>

<p>Assessment methods of study outcomes</p>
<p>Formative assessment:</p> <ul style="list-style-type: none"> - based on continuous progress assessment, <p>Summative assessment:</p> <ul style="list-style-type: none"> - continuous assessment during every class (oral utterances), - partial marking during every class, including teamwork, - final mark, <p>Additional activity marks for classwork, and in particular for::</p> <ul style="list-style-type: none"> - discussing extended aspects of a problem, - applying effectively new knowledge, - umiejętność współpracy w ramach zespołu praktycznie realizującego zadanie szczegółowe w laboratorium, - suggesting improvement of didactic material.
<p>Course description</p>
<p>Curriculum comprises of the following topics:</p> <p>Presenting students? scientific career and interests. The writing process: text organisation. Presenting Thesis statement. Elements of a formal definition. Elements and types of paragraphs (process, comparison/contrast). Forms of scientific expression: reporting results of research, a review of a selected article on newest developments in computer science. Differences between summary and paraphrase. The issue of plagiarism in scientific papers. Summarising: main structural elements, including relevant information in a logical order. Summary and abstract. Editing and proofreading scientific papers. Main features of scientific articles. Quoting.</p> <p>Curriculum contains the following grammar and vocabulary areas:</p> <p>Articles. Cohesion and coherence. Logical linking in sentences. Coordinating and subordinating conjunctions. Formal and informal language. Nominalisations. Argumentation and expressing opinion.</p> <p>The form of the class is following: 2-hour class, once a week.</p> <p>Learning methods:</p> <ol style="list-style-type: none"> 1. multimedia presentation, 2. practical exercises, discussion, teamwork, case studies, 3. student?s individual work.
<p>Basic bibliography:</p> <ol style="list-style-type: none"> 1. Cargill, M., O?Connor, P. 2011. Writing Scientific Research articles. Strategy and steps. Wiley-Blackwell. 2. Hewings, M. 2012. Cambridge Academic English. Intermediate - Advanced. Cambridge University Press. 3. Hogue A., Oshima A. 2006. Writing academic English. Pearson/Longman. 4. Jordan. R.R. 2008. Academic Writing Course. Longman. 5. McCarthy, M., O?Dell, F. 2008. Academic vocabulary in use. Cambridge University Press.
<p>Additional bibliography:</p> <ol style="list-style-type: none"> 1. Finkelstein, L., Jr. Pocket book of Technical Writing. McGraw-Hill 2. Writing Guidelines for Engineering and Science Students http://www.writing.engr.psu.edu/ 3. Writing in Science http://www.monash.edu.au/lis/llonline/writing/science/index.xml
<p>Result of average student's workload</p>

Activity		Time (working hours)
1. participating in classes		30
2. preparing for classes		15
3. preparing written assignments		5
4. consulting issues related to the subject of the course; especially related to classes and projects,		2
5. studying literature / learning aids (10 pages = 1 hour), 30 pages		3
6. discussing the results of students? individual work		2
Student's workload		
Source of workload	hours	ECTS
Total workload	57	2
Contact hours	33	1
Practical activities	35	1