

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Specialist English		Code 1010702211010701730
Field of study Chemical Technology	Profile of study (general academic, practical) general academic	Year /Semester 1 / 1
Elective path/specialty Industrial Electrochemistry	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: 60 Laboratory: - Project/seminars: -		No. of credits 2
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 2 100% 2 100%
Responsible for subject / lecturer: mgr Urszula Pawalowska email: urszula.pawalowska@put.poznan.pl tel. 061 665 24 91 SJO PP ul. Piotrowo 3a, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The already acquired language competence compatible with level B2 (CEFR)
2	Skills	The ability to use general and field specific vocabulary, and grammatical structures required on the first level of studies
3	Social competencies	The ability to work individually and in a group; the ability to use various sources of information and reference works.
Assumptions and objectives of the course: 1. Advancing students' language competence towards the level at least B2+ (CEFR). 2. Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. 3. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). 4. Improving the ability to function effectively on an international market and on a daily basis.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
Skills: 1. Give a talk on field specific or popular science topic (in English), and discuss general and field specific issues using an appropriate linguistic and grammatical repertoire - [K_U01, K_U04, K_U06] 2. Express basic mathematical formulas and to interpret data presented on graphs/diagrams - [K_U02, K_U06] 3. Conduct business correspondence in English - [K_U03, K_U04] 4. Understand and analyze international, field specific literature - [K_U02, K_U03] 5. The student is able to communicate effectively in a field specific/professional area, and to give a successful presentation in English. - [K_U01]		
Social competencies: 1. The student is able to recognize and understand cultural differences in a professional and private conversation, and in a different cultural environment. - [K_K05] 2. Student understand the need for further education and improving the personal competence - [K_K01]		

Assessment methods of study outcomes		
-Formative assessment: tests during academic year (written and oral), presentations		
-Summative assessment: credit		
Course description		
1.Comparison of properties of glass and plastics 2.Metals ? metallic bond, properties of metals, alloys, ways of hardening metals 3. Colloids ? definition, phases, examples, emulsifiers, suspensions, solutions 4.Cells, batteries, kinds of electrodes and electrolytes, rechargeable batteries, fuel cells 5.Conductors and insulators ? testing electrical conductivity of different substances 6.Properties of solids - the structure of diamond and graphite, allotropic forms 7.Measurement of heat energy (combustion of ethanol and butane) 8.Properties of ethanol, comparison of a structure of methanol, propanol, butane, ways of manufacturing ethanol ? comparison of the methods 9.Kinds of radiation, radioactive decay of elements, making use of radioactivity		
Basic bibliography:		
1. Rose Marie Gallagher, Paul Ingram Complete Chemistry Oxford University Press 2000 2. Maria Charmas English for Students of Chemistry M. C.Skłodowska University Press Lublin 2008		
Additional bibliography:		
1. Monika Korpak ??From Alchemy to Nanotechnology? Politechnika Krakowska 2008 2. Piotr Domański English in Science and Technology Wydawnictwa Naukowo-Techniczne Warszawa 1993		
Result of average student's workload		
Activity	Time (working hours)	
1. Udział w ćwiczeniach	60	
2. Konsultacje do ćwiczeń	15	
3. Przygotowanie do ćwiczeń	45	
Student's workload		
Source of workload	hours	ECTS
Total workload	120	2
Contact hours	75	0
Practical activities	60	0