_
_
α
7
_
Ø
N
0
٥
4
_
_
d
ď
₹
₹
>
$\overline{}$
$\overline{}$
Ω
-
-
4

Name of the module/subject (-) Field of study Civil Engineering First-cycle Studies Code 1010101131010910493 Profile of study (general academic, practical) (brak) Year /Semester 2 / 3			STUDY MODULE D	ESCRIPTION FORM		
Field of study Civil Engineering First-cycle Studies Elective path/specialty -	Name of the module/subject			Code		
Civil Engineering First-cycle Studies Elective path/specialty - Subject offered in: Polish First-cycle studies First-cycle studies First-cycle studies Form of study (full-time, part-time) First-cycle studies First-cycle studies Form of study (full-time, part-time) Form of study (full-time, part-time) Form of study (full-time, part-time) Full-time No. of credits Status of the course in the study program (Basic, major, other) (brak) Education areas and fields of science and art Education areas and fields of science and ar						
Elective path/specialty Cycle of study: First-cycle studies First-cycle studies First-cycle studies Form of study (full-time, part-time) Full-time No. of credits Course (computsory, elective elective elective) Form of study (full-time, part-time) Full-time No. of credits (brak) (brak) ECTS distribution (number and %) Form of study (full-time, part-time) Full-time No. of credits ECTS distribution (number and %) Form of study (full-time, part-time) Form of study (full-time, part-time) Full distribution (number and %) ECTS di	Field of	study				
Cycle of study: First-cycle studies Cycle of study (full-time,part-time) First-cycle studies First-cycle studies First-cycle studies Cycle of study (full-time,part-time) Form of study (full-time) (university-wide, from another field (brak) (brak) ECTS distribution (number and %) Form of study (full-time,part-time) Form of study (Civil	Engineering Fire	st-cycle Studies		2/3	
First-cycle studies First-cycle studies First-cycle studies Form of study (full-time,part-time) Form of study (full-time) For a furth study (full-time) Form of study (full-time) Form of study (full-time) For a furth study (furth	Elective	path/specialty		Subject offered in:	Course (compulsory, elective)	
No. of hours Lecture: O Classes: 60 Laboratory: - Project/seminars: - 5			-	Polish	elective	
No. of hours Lecture: 0 Classes: 60 Laboratory: - Project/seminars: - 5 Status of the course in the study program (Basic, major, other) (brak) Education areas and fields of science and art Responsible for subject / lecturer: Małgorzata Bączyńska email: malgorzata.baczynska@put.poznan.pl tel. 061 665 24 91 Inter-Faculty Units ul. Piotrowo 3a Prerequisites in terms of knowledge, skills and social competencies: 1 Knowledge Skills The already acquired language competence compatible with level B1 (CEFR) Skills Social competencies The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills Social competencies Assumptions and objectives of the course: 1. Advancing students? language competence towards at least level B2 (CEFR). 2. Development of the ability to use academic and field specific language effectively in both receptive and productive languages skills. 3. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). 4. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques).	Cycle o	f study:		Form of study (full-time,part-time))	
Lecture: 0 Classes: 60 Laboratory: - Project/seminars: - 5 Status of the course in the study program (Basic, major, other) (brak) Education areas and fields of science and art Responsible for subject / lecturer: Małgorzata Bączyńska email: malgorzata baczyńska@put.poznan.pl tel. 061 665 24 91 Inter-Faculty Units ul. Piotrowo 3a Prerequisites in terms of knowledge, skills and social competencies: Knowledge The already acquired language competence compatible with level B1 (CEFR) Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills Social competencies Assumptions and objectives of the course: 1. Advancing students? language competence towards at least level 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 unction effectively on an international market and on a daily basis.		First-cyc	cle studies	full-time		
Lecture: 0 Classes: 60 Laboratory: - Project/seminars: - S Status of the course in the study program (Basic, major, other) (brak) Education areas and fields of science and art County	No. of h	iours			No. of credits	
Status of the course in the study program (Basic, major, other) (brak) Education areas and fields of science and art Responsible for subject / lecturer: Malgorzata Bączyńska email: malgorzata.baczynska@put.poznan.pl tel. 061 665 24 91 Inter-Faculty Units ul. Piotrowo 3a Prerequisites in terms of knowledge, skills and social competencies: Knowledge Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 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 at least level 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.	Lectu	re: 0 Classes	s: 60 Laboratory: -	Project/seminars:		
Competencies Competencies		Oldoood	c. <u>Laboratory</u> .	•		
ECTS distribution (number and %) Responsible for subject / lecturer: Małgorzata Bączyńska email: malgorzata.baczynska@put.poznan.pl tel. 061 665 24 91 Inter-Faculty Units ul. Piotrowo 3a Prerequisites in terms of knowledge, skills and social competencies: 1 Knowledge Skills The already acquired language competence compatible with level B1 (CEFR) Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 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 at least level 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.				(, ,	,	
Małgorzata Bączyńska email: malgorzata.baczynska@put.poznan.pl tel. 061 665 24 91 Inter-Faculty Units ul. Piotrowo 3a Prerequisites in terms of knowledge, skills and social competencies: 1 Knowledge The already acquired language competence compatible with level B1 (CEFR) 2 Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 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 at least level 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.	` '				ECTS distribution (number	
Małgorzata Bączyńska email: malgorzata.baczynska@put.poznan.pl tel. 061 665 24 91 Inter-Faculty Units ul. Piotrowo 3a Prerequisites in terms of knowledge, skills and social competencies: 1 Knowledge The already acquired language competence compatible with level B1 (CEFR) 2 Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 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 at least level 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.						
Prerequisites in terms of knowledge, skills and social competencies: 1 Knowledge The already acquired language competence compatible with level B1 (CEFR) Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 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 at least level 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.	tel. Inte	061 665 24 91 r-Faculty Units	ska@put.poznan.pl			
Skills The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 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 at least level 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.			s of knowledge, skills an	d social competencies	:	
Skills graduation exam with regard to productive and receptive skills 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 at least level 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.	1	Knowledge	The already acquired language	The already acquired language competence compatible with level B1 (CEFR)		
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 at least level 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.	2	Skills				
 Advancing students? language competence towards at least level B2 (CEFR). Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). Improving the ability to function effectively on an international market and on a daily basis. 		competencies	and reference works.	nd in a group; the ability to use	e various sources of information	
 Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). Improving the ability to function effectively on an international market and on a daily basis. 	Assu	mptions and obj	ectives of the course:			
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.	1. Adv	ancing students? lang	guage competence towards at leas	st level B2 (CEFR).		
4. Improving the ability to function effectively on an international market and on a daily basis.			to use academic and field specific	c language effectively in both r	receptive and productive	
	3. Imp	roving the ability to und	derstand field specific texts (famili	arizing students with basic tran	nslation techniques).	
Study outcomes and reference to the educational results for a field of study	4. Imp					
		Study outco	mes and reference to the	educational results for	r a field of study	

- 1. the student ought to acquire field specific vocabulary related to building constructions? hard rock tunneling -[T1A_W01 T1A_W02 T1A_W05]
- 2. the student ought to acquire field specific vocabulary related to building constructions? soft ground tunneling -[T1A_W01 T1A_W02 T1A_W05]
- 3. the student ought to acquire field specific vocabulary related to building structures ? fixed bridges -[T1A_W01 T1A_W02 T1A_W05]
- 4. the student ought to acquire field specific vocabulary related to building structures? movable bridges -[T1A_W01 T1A_W02 T1A_W05]
- 5. the student ought to acquire field specific vocabulary related to metals and alloys [T1A_W01 T1A_W02 T1A_W05]
- 6. the student ought to acquire field specific vocabulary related to building structures modern bridges and their evolution [T1A_W01 T1A_W02 T1A_W05]

Skills:

Faculty of Civil and Environmental Engineering

- 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 [T1A_U02 T1A_U03 T1A_U04 T1A_U06]
- 2. express basic mathematical formulas and to interpret data presented on graphs/diagrams [T1A_U02 T1A_U03 T1A_U04 T1A_U06]
- 3. conduct business correspondence in English [T1A_U02 T1A_U03 T1A_U04 T1A_U06]

Social competencies:

- 1. As a result of the course, the student is able to communicate effectively in a field specific/professional area, and to give a successful presentation in English. [T1A_K03 T1A_K04 T1A_K06]
- 2. The student is able to recognize and understand cultural differences in a professional and private conversation, and in a different cultural environment. [T1A_K03 T1A_K04 T1A_K06]

Assessment methods of study outcomes

- ? Formative assessment: continuous assessment during classes-presentations, tests, MT test.
- ? Summative assessment: final exam (written and oral)

Course description

- Tunnels and their types
- Hard-rock tunneling and soft-ground tunneling
- Bridges, their types and constructions methods
- Metals and alloys
- Guided writing
- Presentations

Basic bibliography:

- 1. Eliza Romaniuk, 2005. Reader Friendly Civil Engineering
- 2. Richard Harwood and Ian Lodge, 2014. Chemistry

Additional bibliography:

- 1. C.M. and D. Johnson, 1992. General Engineering
- 2. Virginia Evans, 2015. Career Paths, Constructoion II. Roads and Highways
- 3. Eliza Romaniuk, Joanna Wrana 2007. Modern Wonders for Civil Engineering

Result of average student's workload

Activity	Time (working hours)					
Student's workload						
Source of workload	hours	ECTS				
Total workload	120	5				
Contact hours	60	0				
Practical activities	60	0				