COURSE DESCRIPTION CARD - SYLLABUS

Course name
German Course [S1MNT1>JNiem2]

Course

Field of study
Mathematics of Modern Technologies

Year/Semester
1/2

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
60

Projects/seminars
0

Number of credit points

3,00

Coordinators

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Lecturers

Prerequisites

Knowledge: The already acquired language competence compatible with level B1 (CEFR) -[PQF 4]. Skills: The ability to use vocabulary and grammatical structures required on the high school graduation exam regarding productive and receptive skills - [PQF 4]. Social competence: The ability to work individually and in a group; the ability to use various sources of information and reference works.

Course objective

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.

Course-related learning outcomes

Knowledge:
• knows and understands to an advanced degree terminology in the field of mathematics and selected issues in the field of engineering and technical sciences related to the field of study, also in a foreign language [K_W03(P6S_WG)];

• knows and understands the grammar and lexical rules of the German language and uses them effectively in various types of written and oral statements.

Skills:
• can use a foreign language to a sufficient extent to communicate, as well as to read and understand mathematical texts, technical documentation and similar documents [K_U15(P6S_UK)];
• give a talk on a field specific or popular science topic (in German), and discuss general and field specific issues using an appropriate linguistic and grammatical repertoire;
• express basic mathematical formulas and to interpret data presented on graphs/diagrams.

Social competences:
• the student is able to critically assess the level of his knowledge in relation to research in exact and natural sciences as well as engineering and technical sciences [K_K01(P6S_KK)];
• the student is able to recognize and understand cultural differences in a professional and private conversation, and in a different cultural environment.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Tutorials:
• formative assessment: assessment during language classes: oral performance, written assignements, speech/presentation, tests;
• summative assessment: final examination.

Programme content

Creating comunicational skills in academic, business and social situations
Academical, offer, report and buisness e-mails writing
Developing language competence concerning first of all specialistic vocabulary
Understanding grammatical issues on the B2 level

Course topics

Tutorials:
• electrical charge, voltage, current, operation of electrical current, resistance, measuring of electrical current;
• forms and carrier of electrical energy ;
• renewable energy: solar panels, geothermal energy, wind energy, water turbine;
• transformer, generator, electrical machines.

Teaching methods

Classroom activities guided by the communicative approach. Multimedia. Text analysis. Brainstorming, Mind Mapps.

Bibliography

Basic:
• Steinmetz,M. / Dintera, H.: Deutsch für Ingenieure, Ein DaF Lehrwerk fü r Studierende ingenieurwissenschaftlicher Fä cher, Springer Vieweg, Wiesbaden 2014.

Additional:
• Fearns, A./ Buhlmann, R.: Technisches Deutsch fü r Ausbildung und Beruf, Lehr- und Arbeitsbuch, Verlag Europa-Lehrmittel, Goethe Institut 2013.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	62	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	13	0,50