STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Diploma Seminar**		Code **1010624281010620467**
Field of study **Transport**	Profile of study (general academic, practical) **(brak)**	Year /Semester **4 / 8**
Elective path/specialty **Railway Transport**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **First-cycle studies**	Form of study (full-time,part-time) **part-time**	

No. of hours				No. of credits
Lecture: **-** Classes: **-** Laboratory: **-** Project/seminars: **18**				**15**

Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**

Education areas and fields of science and art **technical sciences**	ECTS distribution (number and %**)** **100 15%**

Responsible for subject / lecturer:

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Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Knowledge of issues related to the topic of the diploma
2	**Skills**	Can apply the scientific method to solve problems
3	**Social competencies**	Knows the limits of their own knowledge and skills, able to clearly formulate questions, understands the need for further education

Assumptions and objectives of the course:

Deepening the knowledge and skills of the organization, and conduct scientific and technical presentation of the results of this work

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. He has in-depth knowledge of the organization and writing theses - [K2A_W21]

2. Able to adapt knowledge and methodology to related disciplines - [K2A_W24]

3. Can formulate and test hypotheses related to the problems of engineering and simple research questions - [K2A_W25]

Skills:

1. Is able to communicate using a variety of techniques in a professional environment and other environments using the formal record of the design, technical drawings, concepts and definitions in the scope of the study area. - [K2A_U02]

2. Is able to use one additional foreign language in everyday verbal communication, can describe in this language related to the field of study, is able to prepare technical documentation of an engineering, transport and/or logistics task. - [K2A_U04]

3. Has the preparation required in industrial environment, knows safety rules for the job, is able to use for technical standards on unification, safety and recycling of machinery and equipment. - [K2A_08]

4. Is able to use acquired mathematical theories to create and analyze simple models of transport and logistics systems. - [K2A_U18]

Social competencies:

1. Is aware of and understands the importance and impact of non-technical aspects of mechanical engineering activities and its impact on the environment and responsibility for own decisions in short and long-term aspect. - [K2A_K02]

2. Is able to define the tasks and priorities for their implementation for himself and the coworkers team. - [K2A_K05]

3. Is able to think and act in an entrepreneurial manner, make decisions, work for the development of the employer and the society. - [K2A_K07]

http://www.put.poznan.pl/

Assessment methods of study outcomes

Final test

Course description

General part: types of work eligibility, including graduate and rules for their implementation, requirements for graduation work. The formulation of a technical problem and also work, literature study, some methodological work, the presentation of research results, develop insights and conclusions. Rules editing work, assisted editing, graphics development, job preparation for printing and reproduction.

Some specialist: reporting to the ongoing work by the authors thesis and discussion of them.

Basic bibliography:

1. Bielecka E., Systemy Informacji Geograficznej ? teoria i zastosowania, Wydawnictwo PJWSTK, Warszawa 2006

2. Długosz J. : Nowoczesne technologie w logistyce. PWE, Warszawa 2009

3. Kubicki J., Kuriata A.: Problemy logistyczne w modelowaniu systemów transportowych, Wyd. WKŁ Warszawa 2000

4. Gołembska E., Szymczak M.: Informatyzacja w logistyce przedsiębiorstw, Wydawnictwo naukowe PWN, Warszawa, 1997

Additional bibliography:

1. Michalewicz Z.: Algorytmy genetyczne + struktury danych = programy ewolucyjne, Wyd. Naukowo-Techniczne Warszawa 1999

2. Leyland V.: EDI Elektroniczna wymiana dokumentacji, Wydawnictwa Naukowo-Techniczne, Warszawa 1995

3. Narkiewicz J. : GPS. Budowa, działanie , zastosowanie. WKŁ, Warszawa 200

Result of average student's workload	
Activity	**Time (working hours)**
1. Write paper work	350
2. Consultation	30

Student's workload		

Source of workload	hours	ECTS
Total workload	380	15
Contact hours	30	1
Practical activities	350	14