STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Diploma Seminar**		Code **1010102131010100109**
Field of study **Civil Engineering Second-cycle Studies**	Profile of study (general academic, practical) **(brak)**	Year /Semester **2 / 3**
Elective path/specialty **Railways**	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 **3**
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		ECTS distribution (number and %)

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 about analysis of construction elements and complex construction systems, methods for solving tasks and undertake non-linear calculations of linear constructions;Knowledge of codes and norms for railroad design;Knowledge about design and construction of transport infrastructure; Knowledge and application of building code
2	**Skills**	Can fulfil a static analysis and a stability analysis of a railroad track construction;Uses specialised tools in a search for useful information;Can define a computer model of a rail track and undertake an advanced linear and non-linear analysis of the track;Can critically evaluate results of a numerical analysis;Can choose tools for solving engineering problems;Has an ability to use scientific instruments, according to scientific rules, to formulate and execute preliminary investigation work, aimed at solving engineering problems
3	**Social competencies**	Can work individually and in a group (also as a leader) on a given task;Is responsible for solidity of results acquired from own or subordinate team?s work;Individually supplements and enlarges knowledge about modern processes in rail transport;Is responsible for own and subordinate team?s safety; Is conscious about a need to improve own professional and personal skills

Assumptions and objectives of the course:

Teach rules and requirements connected to writing a master thesis. Teach to substantively formulate questions and prepare own descriptions on the undertaken work. Teach to substantively lead a discussion about topics investigated in the diploma work.

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

Knowledge:

1. Knows rules and requirements for a preparation of the master thesis - [K_W09]
2. Knows methods and ways for selection of sources necessary for writing the thesis - [K_W14]
3. Knows rules for substantive formulation of questions and for preparation of own work description - [K_W16]
4. Knows basis for substantive management of discussion about topics investigated in the diploma work - [K_W17]

Skills:

1. Can present topics investigated in the diploma work - [K_U05]
2. Can discuss problems and data analysed in the diploma work, also in topics investigated by other students - [K_U06]
3. Has the ability to eliminate mistakes made during diploma work and properly choose sources or reliable information, can critically evaluate a source of information - [K_U13]

Social competencies:

1. Is conscious about responsibility for solidity of acquired results and their interpretation - [K_K02]
2. Understands a need to present knowledge about railroad construction to modern society - [K_K08]
3. Is conscious about a need to improve own professional and personal skills - [K_K03]

Assessment methods of study outcomes
Knowledge evaluation: activity during classes and substantive presentation of topics from undertaken diploma work. Acquiring points for: - activity during lectures, - knowledge presented during seminars. Skill evaluation: activity during seminar classes; presentation of diploma work; substantive discussion on the presented topics and solutions used in the work. Acquiring points for: - activity during lectures, - knowledge of topics presented in the diploma work, - substantive quality of topics presented in the diploma work.
Course description
1. Presentation of the topics analysed in the diploma work. 2. Methods for selection of sources necessary to write the thesis. 3. Substantive formulation of questions and preparation of statements concerning the written thesis. 4. Leading a discussion about topics analysed in the diploma work. 5. Swift and punctual preparation of the thesis. 6. Substantive management of discussion about topics analysed in the diploma work.
Basic bibliography:
Additional bibliography:

Result of average student's workload

Activity	**Time (working hours)**
1. Attendance to seminars	30
2. Current preparation for the seminars (repetition of knowledge concerning given topic)	20
3. Preparation for final assessment and presence at the assessment	20

Student's workload

Source of workload	**hours**	**ECTS**
Total workload	75	3
Contact hours	30	1
Practical activities	15	1