STUDY MODULE D	ESCRIPTION FORM	
Name of the module/subject Diploma Seminar		Code 1010641271010640467
Field of study  Mechanical Engineering	Profile of study (general academic, practical) (brak)	Year /Semester 4 / 7
Elective path/specialty  Mechatronics	Subject offered in: Polish	Course (compulsory, elective)  obligatory
Cycle of study:	Form of study (full-time,part-time)	
First-cycle studies	full-time	
No. of hours		No. of credits
Lecture: - Classes: - Laboratory: -	Project/seminars:	1 15
Status of the course in the study program (Basic, major, other)	(university-wide, from another f	ield)
(brak)		(brak)
Education areas and fields of science and art		ECTS distribution (number and %)
technical sciences		15 100%
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Responsible for subject / lecturer:	Responsible for subject / lecturer:	

# ul. Piotrowo 3, 60-965 Poznań ul. Piotrowo 3, 60-965 Poznań Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Basic general knowledge, and knowledge and skills in the field of studying.
2	Skills	Basic computer skills and MS Office.
3	Social competencies	Student understands the need to broaden their competence, willingness to work together as a team

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Faculty of Working Machines and Transportation

## Assumptions and objectives of the course:

To familiarize students with the basic principles of the methodology of science. Preparing to execute the thesis. Completing the knowledge and skills in the field to conduct research and present their results.

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

### Knowledge:

dr inż. Krzysztof Talaśka

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email: krzysztof.talaska@put.poznan.pl

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- 1. Has an elementary knowledge of the law, particularly concerning safety, protection of copyright and industrial property and its impact on the development of technology. [[K1A\_W22]]
- 2. Has an expanded knowledge necessary for understanding specialized subjects and expertise in construction, design and manufacturing methods and operation of a selected group of machines. [[K1A\_W22]]

#### Skills:

- 1. Is able to obtain information from the literature, internet, databases and other sources. Can integrate the information to interpret and learn from them, create and justify opinions. [[K1A\_U03]]
- 2. able to prepare and submit a short, verbal and multimedia presentation dedicated to the results of an engineering task. [[K1A\_U05]]
- 3. able to browse catalogs and webpages of machine elements producers for ready parts to use in own projects. [[K1A\_U15]]

### Social competencies:

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- 1. Understands the need and knows the possibilities of lifelong learning. [[K1A\_K01]]
- 2. 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. [[K1A\_K02]]
- 3. Is aware of the importance of behavior in a professional manner, compliance with the rules of professional ethics and respect for cultural diversity. [[K1A\_K03]]
- 4. Has a sense of responsibility for one?s own work and is willing to comply with the principles of teamwork and taking responsibility for collaborative tasks. [[K1A\_K04]]

#### Assessment methods of study outcomes

Assessment based on their activity.

#### Course description

Genesis of thesis topics, the role of the promoter. Sources of information science and technology and how to use them. Formulating hypotheses. Models and modeling. Elements of science: accuracy, laws, theories, principles. Structure of the thesis. Technique writing research papers, editorial rules. Preparation for the final exam.

#### Basic bibliography:

- 1. Boć J., Jak pisać prace magisterską, Wyd. Kolonia, Wrocław 2003
- 2. Dietrich J., System i konstrukcja, WNT, Warszawa 1978
- 3. Oliver P., Jak pisać prace uniwersyteckie, Wyd. Literackie, Kraków 1999
- 4. Orczyk J., Zarys metodyki pracy umysłowej, PWN, Warszawa 1988
- 5. Pieter J., Ogólna metodologia pracy naukowej, Ossolineum, Wrocław 1967
- 6. Szkutnik Z., Metodyka pisania pracy dyplomowej, Wyd. Poznańskie, Poznań 2005
- 7. Tarnowski W., Podstawy projektowania technicznego, WNT, Warszawa 1997
- 8. Żółtowski B., Seminarium dyplomowe; zasady pisania prac dyplomowych, Wyd. ATR, Bydgoszcz 1997

#### Additional bibliography:

1. Literature in the field of specialization and thesis topics

### Result of average student's workload

Activity	Time (working hours)
1. Preparation for classes	130
2. Participation in the classes	15
3. Preparation of the project	200
4. Consultations	15
5. Preparation to pass the classes	10
6. Participation in the exam	2

#### Student's workload

Source of workload	hours	ECTS
Total workload	372	15
Contact hours	32	1
Practical activities	372	15