| STUDY MODULE DESCRIPTION FORM  |  |   |  |   |  |  |
|--|--|---|--|---|--|--|
|  | of the module/subject<br><b>m Project</b>  |   | Code<br>1011101271011103582                            |   |  |  |
| Field of   | study  |   | Profile of study<br>(general academic, practical)      | Year /Semester                              |  |  |
| Engineering Management - Full-time studies -   |  |   | (brak)   | 4/7   |  |  |
| Elective path/specialty  |  |   | Subject offered in:<br>Polish                          | Course (compulsory, elective)<br>obligatory |  |  |
| Cycle c  | f study:   |   | Form of study (full-time,part-time)                    |   |  |  |
| First-cycle studies  |  |   | full-time  |   |  |  |
| No. of hours   |  |   | No. of credits   |   |  |  |
| Lecture: - Classes: - Laboratory: -  |  |   | Project/seminars: 60                                   | 15  |  |  |
| Status   | of the course in the study   | program (Basic, major, other)   | (university-wide, from another field)<br><b>(brak)</b> |   |  |  |
| Educati  |  | (brak)  | (bi  |   |  |  |
| Educat   | ion areas and fields of sci  | ence and art  |  | ECTS distribution (number<br>and %)         |  |  |
| ema<br>tel.<br>Enç<br>ul. s  | moter<br>ail: office_demf@put.p<br>61 665 33 74<br>gineering Managemen<br><u>Strzelecka 11, 60-965</u>                             | t<br>Poznań   |  |   |  |  |
| Prerequisites in terms of knowledge, skills and social competencies:   |  |   |  |   |  |  |
| 1  | Knowledge  | The student has knowledge of subjects covered by the education standards at the first cycle of studies in the field of Management,                    |  |   |  |  |
|  |  | the student knows the basic principles of editing scientific papers and the use of selected research methods and techniques                           |  |   |  |  |
| 2  | Skills   | The student has the ability to see, associate and interpret phenomena occurring in organizations and their use in order to write an engineering paper |  |   |  |  |
| 3  | Social competencies  | The student follows the principles of the correct use of the Polish language and cares for the improvement of language skills                         |  |   |  |  |
| Assu   | imptions and obj   | ectives of the course:  |  |   |  |  |
| Familiarizing with the methodology and help in the preparation / writing of an engineering work  |  |   |  |   |  |  |
| Study outcomes and reference to the educational results for a field of study   |  |   |  |   |  |  |
| Knowledge:   |  |   |  |   |  |  |
| 1. Has basic knowledge about the life cycle of the company and technical systems - [K1A_W23]   |  |   |  |   |  |  |
| 2. Knows basic methods, techniques, tools and materials used in solving simple engineering problems in the field of machine construction and operation - [K1A_W24] |  |   |  |   |  |  |
| 3. Has the knowledge necessary to understand non-technical conditions of engineering activities - [K1A_W25]  |  |   |  |   |  |  |
|  | 4. Has basic knowledge in the field of management, including quality management and in the field of running a business - [K1A_W26] |   |  |   |  |  |
| Skills:  |  |   |  |   |  |  |

1. Is able to correctly interpret social phenomena in the field of management discipline - [K1A\_U01]

2. Can analyze source data - [K1A\_U02]

3. Can use the acquired skills in practice - [K1A\_U02]

4. Is able to correctly analyze the causes and course of processes and phenomena in the field of management sciences - [K1A\_U03]

5. Can see systemic, socio-technical, organizational and non-technical aspects in solving engineering problems and problems - [K1A\_U14]

6. Can make a preliminary technical and economic analysis of engineering activities - [K1A\_U15]

7. Can analyze technological processes in the organization of production systems - [K1A\_U16]

8. Identifies and solves simple engineering tasks in engineering - [K1A\_U17]

9. Can use typical methods to solve simple engineering problems - [K1A\_U18]

10. Can design the construction and technology of simple machine parts and design the organization of production units of the first degree of complexity - [K1A\_U19]

11. Has the ability to prepare oral presentations, in Polish and in a foreign language, in the field of economic sciences and the discipline of management sciences, management or management engineering relevant to the subject, with the use of basic theoretical approaches, as well as various sources - [K1A\_U10]

12. Has the ability to prepare typical written works in Polish and a foreign language, considered to be basic for the fields of science and scientific disciplines, relevant to the field of management or management engineering, concerning specific issues, using the basic theoretical approaches, as well as various sources - [K1A\_U09]

#### Social competencies:

1. Is aware of the need to solve selected tasks with the help of teamwork - [K1A\_K02]

2. Recognizes causal relationships in the implementation of objectives related to the preparation of engineering work - [K1A\_K03]

3. Is prepared for the implementation of business ventures - [K1A\_K07]

4. Is aware and understands the non-technical aspects and effects of engineering - [K1A\_K08]

5. Is aware of the use of a system approach in creating products - [K1A\_K09]

## Assessment methods of study outcomes

Forming rating:

- on the basis of current progress in the formulation of the research problem and work objectives, as well as methods for solving problems and work documentation

Summary rating:

- thesis card confirmed by the supervisor (form)

Summary:

- presentation of the list of literature and other sources

- evaluation of the presentation prepared by the diploma, the state of advancement of the diploma thesis and its discussion

### **Course description**

Preparation of the work plan, setting the goals of the subject and material scope of the work, analysis of the literature on the subject, conducting own research, formulating conclusions

### Basic bibliography:

1. consistent with the topic of work

## Additional bibliography:

1. consistent with the topic of work

# Result of average student's workload

Activity

Time (working hours)

| 1. Analysis of the literature on the subject for the needs of the work | 50    |      |  |  |
|--|-------|------|--|--|
| 2. Conducting research for the needs of the work                       | 50    |      |  |  |
| 3. Editorial office  | 100   |      |  |  |
| 4. Consultations with the promoter                                     | 23    |      |  |  |
| 5. Preparation for the diploma exam                                    | 75    |      |  |  |
| 6. Exam  | 2     |      |  |  |
| Student's workload   |       |      |  |  |
| Source of workload   | hours | ECTS |  |  |
| Total workload   | 300   | 15   |  |  |
| Contact hours  | 25    | 1    |  |  |
| Practical activities   | 275   | 14   |  |  |