

| <b>STUDY MODULE DESCRIPTION FORM</b>   |   |  |
|--|---|--|
| Name of the module/subject<br><b>Requirements Engineering</b>  |   | Code<br><b>1011105311011160345</b>                                 |
| Field of study<br><b>Engineering Management - Part-time studies -</b>  | Profile of study (general academic, practical)<br><b>general academic</b> | Year /Semester<br><b>1 / 1</b>                                     |
| Elective path/specialty<br><b>Quality Systems and Ergonomics</b>   | Subject offered in:<br><b>Polish</b>                                      | Course (compulsory, elective)<br><b>elective</b>                   |
| Cycle of study:<br><b>Second-cycle studies</b>   | Form of study (full-time, part-time)<br><b>part-time</b>                  |  |
| No. of hours<br>Lecture: <b>12</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>   |   | No. of credits<br><b>2</b>   |
| Status of the course in the study program (Basic, major, other)<br><b>other</b>  |   | (university-wide, from another field)<br><b>university-wide</b>    |
| Education areas and fields of science and art<br><b>technical sciences</b><br><b>Technical sciences</b>  |   | ECTS distribution (number and %)<br><b>2 100%</b><br><b>2 100%</b> |
| <b>Responsible for subject / lecturer:</b><br><br>dr inż. Katarzyna Ragin-Skorecka<br>email: katarzyna.ragin-skorecka@put.poznan.pl<br>tel. 616653389<br>Wydział Inżynierii Zarządzania<br>ul. Strzelecka 11, 60-965 Poznań  |   |  |
| <b>Prerequisites in terms of knowledge, skills and social competencies:</b>  |   |  |
| 1  | <b>Knowledge</b>  | Basic knowledge in the field of computer science and programming   |
| 2  | <b>Skills</b>   | The ability to use the terms of programming and computer science   |
| 3  | <b>Social competencies</b>  | Awareness of the need to broaden your knowledge                    |
| <b>Assumptions and objectives of the course:</b><br>The aim of the course is to present basic information about general requirements engineering   |   |  |
| <b>Study outcomes and reference to the educational results for a field of study</b>  |   |  |
| <b>Knowledge:</b>  |   |  |
| 1. has knowledge about the subject of contextual sciences in relation to management sciences and ergological sciences and applied research methods, as well as common and specific conceptual apparatus in relation to management sciences in relation to requirements engineering - [K2A_W01] |   |  |
| 2. knows deeply the methods and tools for modeling information processes in the aspect of requirements engineering - [K2A_W08]   |   |  |
| 3. knows and understands the basic concepts and principles in the field of protection of industrial property and copyright and the need to manage intellectual property resources - [K2A_W17]  |   |  |
| <b>Skills:</b>   |   |  |
| 1. has the ability to use the acquired knowledge in various fields and forms, extended by a critical analysis of the effectiveness and usefulness of the applied knowledge in requirements engineering - [K2A_U06]   |   |  |
| 2. is able to predict and model complex social processes involving phenomena from various areas of social life with the use of advanced methods and tools in the field of requirements engineering - [K2A_U04]   |   |  |
| <b>Social competencies:</b>  |   |  |
| 1. is able to see cause-and-effect relationships in achieving the set goals and to rank the importance of alternative or competitive tasks - [K2A_K03]   |   |  |
| 2. is aware of the interdisciplinary knowledge and skills needed to solve complex organizational problems and the need to create interdisciplinary teams - [S2A_K06]   |   |  |

| <b>Assessment methods of study outcomes</b>   |                      |      |
|---|----------------------|------|
| lecture: forming evaluation - activity cards, summary evaluation - written exam   |                      |      |
| exercises: formative assessment - current work on classes, summary evaluation - design of the requirements system   |                      |      |
| <b>Course description</b>   |                      |      |
| The subject includes the following topics: Introduction to the XPrinse methodology. Functional requirements and use cases. Non-functional requirements. Project initiation and planning. Acceptance tests and their automation. |                      |      |
| Teaching methods:   |                      |      |
| Lecture - informative and conversational lecture  |                      |      |
| Exercises - project method, case study, brainstorming, demonstration method   |                      |      |
| <b>Basic bibliography:</b>  |                      |      |
| 1. Ragin-Skorecka K. (2005). UML - język opisu wymagań klientów. Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie, nr 41, s. 83-91   |                      |      |
| 2. Chrabski B., Zmitrowicz K. (2015). Inżynieria wymagań w praktyce. Wydawnictwo Naukowe PWN.   |                      |      |
| 3. Wiegiers K.E., Beatty J. (2014). Specyfikacja oprogramowania: inżynieria wymagań. Helion.  |                      |      |
| 4. Zmitrowicz K. (2015). Analityk systemów: przygotowanie do egzaminu z inżynierii wymagań. Wydawnictwo Naukowe PWN   |                      |      |
| <b>Additional bibliography:</b>   |                      |      |
| 1. Ragin-Skorecka K., Nowak F. (2016). Information Is The Key In Optimization of Transport Processes. Information Systems In Management. Vol. 5, no. 2, p. 227-236  |                      |      |
| 2. <a href="http://itcareer.pl/images/inzynieriawymagan.pdf">http://itcareer.pl/images/inzynieriawymagan.pdf</a>  |                      |      |
| 3. <a href="http://www.ptzp.org.pl/files/konferencje/kzz/artyk_pdf_2016/T2/t2_0812.pdf">http://www.ptzp.org.pl/files/konferencje/kzz/artyk_pdf_2016/T2/t2_0812.pdf</a>  |                      |      |
| <b>Result of average student's workload</b>   |                      |      |
| Activity  | Time (working hours) |      |
| 1. lectures   | 12                   |      |
| 2. test   | 2                    |      |
| 3. preparation for passing  | 12                   |      |
| 4. consultations  | 10                   |      |
| <b>Student's workload</b>   |                      |      |
| Source of workload  | hours                | ECTS |
| Total workload  | 36                   | 2    |
| Contact hours   | 24                   | 1    |
| Practical activities  | 14                   | 1    |