

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Information Technology in Management		Code 1011101231011103576
Field of study Engineering Management - Full-time studies -	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: - Laboratory: 45 Project/seminars: -		No. of credits 4
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:		
dr inż. Aleksander Jurga email: aleksander.jurga@put.poznan.pl tel. 616653388 Faculty of Engineering Management ul. Strzelecka 11 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge from the computer science on the level of the first semester of studies on technical field
2	Skills	Ability of the efficient service of the computer and using the MS Office package in management processes
3	Social competencies	Ability to work in a design project team
Assumptions and objectives of the course:		
The aim of the course is to provide students with knowledge in the field of database design of information management systems, including the basics of programming.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. The student knows methods and instruments for data collecting, processing and selecting, as well as methods for distributing information - [S1A_W06, K1A_W11]		
2. The student knows basic methods, techniques and instruments and materials used for solving simple engineer tasks from the area of the construction and exploitation of machines - [K04-InzA_W02, K1A_W24]		
Skills:		
1. The student is able to plan and realize experiments, including measurements, computer simulations, and interpret obtained results and draw conclusions of them - [K01-InzA_U1, K1A_U12]		
2. The student is able to use methods of analysis, simulations and experiments for formulation and creation of engineer solutions - [K01-InzA_U2, K1A_U13]		
Social competencies:		
1. Is aware of the importance of IT knowledge used in engineering. - [K1A_K01, K1A_K08]		
2. Is aware and considers IT issues as support in creating products. - [InzA_K02, K1A_K09]		
Assessment methods of study outcomes		

<p>Forming assessment: - Lectures: on basis of questions asked during the lecture, which refer to previous Formative assessment: a) in the field of lectures: written test at the end of the lecture cycle. b) in the field of laboratory classes: implementation of exercises, practical test on a komputer.</p> <p>Summary: a) in the field of lectures: score based on scores for each question. b) in the field of laboratory classes: the total score of the exercises and the result of the test.</p>		
Course description		
<p>Lectures: IT tasks in management. Structure of the information system in management. Database systems, type of databases. Relational database management system. Architecture of BD systems. Distributed systems. Basics of programming in VB (Visual Studio environment).</p> <p>Laboratories: Graphical user interface objects. Introduction to object-oriented programming with the help of tools for rapid application generation (Visual Studio). Introduction to databases, creating a database structure in a selected environment. Basics of data management.</p> <p>Didactic methods: -Information lecture. -Work with a book. -Demonstration method. -Laboratory method.</p>		
<p>Basic bibliography:</p> <ol style="list-style-type: none"> 1. Jurga A., Rozwój systemów informatycznych. [w]: Adamczyk M. i inni, Projektowanie systemów informacyjnych zarządzania, Wyd. Politechniki Poznańskiej, Poznań, 2010. 2. Ragin-Skorecka K., Włodarczak Z., Gry kierownicze, Wydawnictwo Politechniki Poznańskiej, Poznań 2011. 3. Connoly T., Begg C., Systemy baz danych, praktyczne metody projektowania, implementacji i zarządzania, Wyd. RM, 2006. 4. Kopertowska M., Sikorski W., Bazy danych. Poziom zaawansowany, PWN, Warszawa, 2006 5. Mendrala D., Szeliga M., Access 2013 PL: bazy danych? Z programem MS Access to nic trudnego!, Wydawnictwo, Helion, Gliwice 2013. 6. Rogulski M., Bazy danych dla studentów : [podstawy projektowania i języka SQL], WITKOM (Salma Press), Warszawa 2012. 		
<p>Additional bibliography:</p> <ol style="list-style-type: none"> 1. Wilton P., Colby J., SQL. Od podstaw., Helion, 2005. 2. Hernande M.J., Projektowanie baz danych dla każdego : przewodnik krok po kroku; [tł. Żarnowska K., i inni, Wyd. Helion, Gliwice 2014. 		
Result of average student's workload		
Activity		Time (working hours)
1. Lectures		15
2. Laboratory classes		30
3. Preparation for laboratory classes		16
4. Consultation		5
5. Preparation for passing lectures		10
6. Passing lectures		2
7. passing laboratory classes.		2
Student's workload		
Source of workload	hours	ECTS
Total workload	80	3
Contact hours	54	2
Practical activities	30	1