

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Marketing and Elements of Management Competencies		Code 1010512331010510028
Field of study Computing	Profile of study (general academic, practical) general academic	Year /Semester 2 / 3
Elective path/specialty Software Engineering	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: 15 Laboratory: - Project/seminars: -		No. of credits 3
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art		ECTS distribution (number and %)
Responsible for subject / lecturer: dr inż. Rafał Klaus email: Rafal.Klaus@cs.put.poznan.pl tel. 616652574 Instytut Informatyki PP ul. Piotrowo 2, 60-965 Poznań		Responsible for subject / lecturer: mgr Magdalena Sroczan email: Magdalena.Sroczan@cs.put.poznan.pl tel. 616652922 Instytut Informatyki PP ul. Piotrowo 2, 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	A student starting this subject should have a basic knowledge of: - modern ICT technologies, - software engineering, - internet applications.
2	Skills	362/5000 The student should have the ability to solve basic problems related to: project and team management, using modern ICT technologies and the ability to acquire information from the indicated sources. He should also understand the necessity to broaden his competences and be ready to cooperate within the team.
3	Social competencies	In addition, in the field of social competence, the student must present such attitudes as honesty, responsibility, perseverance, cognitive curiosity, creativity, personal culture, respect for other people.
Assumptions and objectives of the course:		
The goal of the course: 1. Provide students with basic knowledge about marketing in the ICT industry in the basics of marketing, consumer market analysis and customer behavior, customer experience management systems in the network, the impact of ICT on the product development process, building marketing strategies, the use of modern marketing tools, business conditions and business management. 2. Developing students' skills in solving problems related to the assessment of suitability and the possibility of using ICT solutions for marketing activities; skills to develop effective interpersonal relationships. 3. Teaching students the skills of teamwork and creative thinking and the attitude of self-development.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. has theoretically well-founded knowledge related to selected IT issues, such as IT in management, estimation of IT investment effectiveness, IT in the product development process, role of ICT in the implementation of individual elements of marketing strategies, information management and decision making. - [K2st_W8] 2. has knowledge about development trends and the most important new achievements in computer science and in selected related scientific disciplines, such as: analysis of business information systems, management, communication in business - [K2st_W8] 3. has basic knowledge of management and conducting business in the field of analysis of consumer needs and behavior of the buyer, the use of modern marketing strategy building tools, customer experience management process, effective communication strategies. - [K2st_W9]		
Skills:		

1. Is able to obtain information from literature, databases and other sources (in mother tongue and English), integrate them, make their interpretation and critical evaluation, draw conclusions and formulate and fully justify opinions in the area of analyzed business cases - [K2st_U1]
2. is able to determine the directions of further learning and implement the process of self-education in the analysis of the impact of ICT solutions on marketing activities and on self-development in the field of adaptation and accommodation of behaviors in order to improve the efficiency of communication. - [K2st_U16]
3. He can - when formulating and solving engineering tasks - integrate knowledge from different areas of computer science (and if necessary also knowledge from other scientific disciplines, such as management) and apply a systemic approach, also taking into account non-technical aspects in the field of marketing activities. - [K2st_U16]

Social competencies:

1. He can think and act in an entrepreneurial way using ICT solutions as emerging market opportunities and their business use. - [K2st_K3]

Assessment methods of study outcomes

Forming rating:

- a) in the field of lectures: based on the answers to questions about the material discussed in previous lectures,
 - b) in the area of laboratories / exercises: on the basis of an assessment of the current progress of task implementation,
- Summary rating:

- a) in the field of lectures, verification of the assumed learning outcomes is carried out by:
 - assessment of knowledge and skills demonstrated on the colloquium of a problem nature (the student can use any teaching materials) - the test lasts for 1.5 hours, consists of about 8 questions. Each of the questions has a number of points to be scored. There is a possibility of obtaining additional points for carrying out the audit work. Passing the colloquium requires obtaining a minimum of half of the possible points. Another form of the colloquium is acceptable (eg competitions - an idea for a start-up, preparing a business plan for one's own venture and other previously agreed with students).

- discussion of the results of the exam,

- b) in the field of laboratories / exercises, verification of the assumed learning outcomes is carried out by:

- assessment of the student's preparation for particular classes,
- continuous evaluation, on each class (oral answers) - rewarding the increase in the ability to use the principles and methods learned,
- evaluation of tasks prepared partly during the course and partly after their completion; this assessment also includes team work skills,
- assessment of knowledge and skills, increase of competences related to the preparation and implementation and presentation of individual tasks,

Obtaining additional points for activity during classes, and especially for:

- discuss additional aspects of the issue,
- effectiveness of applying the acquired knowledge while solving a given problem,
- ability to cooperate within a team practically implementing a detailed task during the exercises,
- remarks related to the improvement of didactic materials,
- indicating the perceptual difficulties of students enabling ongoing improvement of the didactic proces.

Course description

The lecture program includes the following topics:

Introduction to the issues of the modern business model and related challenges to the managerial staff, a new dimension of communication in marketing activities. Understanding the basic rules, definitions related to marketing (product levels, marketing mix, segmentation, target market, marketing strategies, product life cycle). Analysis of the consumer market and the behavior of the buyer: analysis of the decision-making process, customer service, CRM customer relationship management systems, experience management process with CEM clients, geomarketing - GIS in analysis supporting marketing decisions, sales and customer service. Problems related to interpersonal relationships, various management styles, methods and tools supporting the development of competences in the area of personal development and team management.

The impact of IT on the product development process - the use of modern information technologies and changes in product management (including TQM, CE, EDI, MIS, DSS, CIM, ERP). The use of modern tools to reach the consumer, building marketing strategies with the use of internet marketing, mobile and website positioning. Profile of IT implementation leaders. Determinants of enterprise innovation. Estimating the effectiveness of IT investments: an overview of methods allowing to analyze the effectiveness of IT implementations. Directions of development of current systems and tools.

Exercises are conducted in the form of seven 2-hour exercises held in the laboratory. Exercises are carried out both individually and in teams and in the workshop mode led by the teacher. The program of classes includes the following topics:

Selected problems of marketing activities: analysis of the consumer market and the behavior of the buyer - identification of factors affecting consumer behavior, analysis of decision-making processes. Effective use of ICT to build marketing strategies, analysis of marketing tools. Analysis of selected business cases - case study. Self-development - broadening competence in the area of interpersonal relations, adaptation techniques at particular stages of sales, effective team work, ability to provide feedback. Work on building your own image - the ability to perform public performances (verbal and non-verbal communication).

Basic bibliography:		
1. Marketing, Kotler P., Rebis, Poznań, 2018		
2. W kierunku rozszerzonego przedsiębiorstwa ? analiza sektorowa rozwoju ICT w Polsce, Kasprzak T. (red), Difin, Warszawa, 2006		
3. E-biznes ? innowacje w usługach. Teoria, praktyka, przykłady, Pod red. Olszański M., Piech K., PARP, Warszawa, 2012		
Additional bibliography:		
1. Information Technology Strategies ? How leading firms use IT to gain an advantage, Rapp V. W., Oxford University press, 2002		
2. Uwarunkowania sprawności innowacyjnej przedsiębiorstw, Mruk H., Nestorowicz R, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań, 2011		
3. Marketing 4.0, Kotler P., Kartajaya H., Setiawan I., MT Biznes, Warszawa, 2017		
4. Internetowy wizerunek miejskich przedsiębiorstw wodociągowych w Polsce - badania doświadczeń użytkowników, E Łukasik, M Sroczan, B Zgrzeba, Zaopatrzenie w wodę, jakość i ochrona wód, 2014, str.1071-1097.		
5. Testowanie aspektów technicznych witryn internetowych miejskich przedsiębiorstw wodociągowych w Polsce; E Łukasik, M Sroczan, B Zgrzeba, Zaopatrzenie w wodę, jakość i ochrona wód, 2014; str. 1099-1121.		
Result of average student's workload		
Activity	Time (working hours)	
1. participation in laboratory classes / exercises	15	
2. preparation for exercises	7	
3. analysis and development of the decision-making process, work related to the development of interpersonal competences - training of public speaking skills, implementation of tasks:	10	
4. participation in consultations related to the implementation of the education process, in particular laboratory exercises / project, implemented tasks (including electronically)	7	
5. participation in lectures	30	
6. familiarization with the indicated literature / didactic materials (10 pages of scientific text = 1 hour), 100 pages	8	
7. preparation for passing the lectures and participation in the final test 2 hours. + 2 hours	8	
Student's workload		
Source of workload	hours	ECTS
Total workload	75	3
Contact hours	47	2
Practical activities	30	1