



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Marketing and elements of managerial competence

### Course

Field of study

Year/Semester

Computing

2/3

Area of study (specialization)

Profile of study

Internet of Things

general academic

Level of study

Course offered in

Second-cycle studies

polish

Form of study

Requirements

full-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

30

Tutorials

Projects/seminars

15

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

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### Prerequisites

A student beginning this course should have basic knowledge of: modern ICT technologies, software engineering, web applications. The student should have the ability to solve basic problems concerning: project and team management, use of modern ICT technologies and the ability to obtain information from indicated sources. He or she should also understand the need to broaden his or her competences and be ready to start cooperation within the team. Moreover, in the scope of social competences the student must present such attitudes as honesty, responsibility, perseverance, cognitive curiosity, creativity, personal culture, respect for other people.



### Course objective

1. Providing students with basic knowledge about marketing in the ICT industry in terms of marketing fundamentals, consumer market analysis and customer behavior, systems for managing customer experience 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 in students the ability to solve problems related to the assessment of usefulness and possibility of using ICT solutions for marketing activities; the ability to develop effective interpersonal relations.
3. developing in students teamwork skills and self-development attitude.

### Course-related learning outcomes

#### Knowledge

Student has theoretically underpinned detailed knowledge related to selected IT issues, such as: IT in management, estimating the effectiveness of IT investments, IT in the product development process, the role of ICT in the implementation of individual elements of marketing strategies, information management and decision making. Student has knowledge about development trends and the most important new achievements in IT and selected related scientific disciplines, such as: analysis of business information systems, management, communication in business and has basic knowledge about management and running a business in the scope of analysis of consumer needs and buyer behaviour, use of modern tools for building a marketing strategy, process of experience management with a client, effective communication strategies.

#### Skills

Is able to integrate knowledge from different areas of computer science (and, if necessary, knowledge from other scientific disciplines, such as management) and apply a system approach that also takes into account non-technical aspects of marketing activities and managerial competence when formulating and solving engineering tasks. Is able to determine the directions of further learning and to implement self-development in the analysis of the impact of ICT solutions on marketing activities and on self-development in the field of behavioural adaptation and accommodation in order to improve the effectiveness of communication. Is able to integrate knowledge from different areas of IT (and, if necessary, knowledge from other scientific disciplines, such as management) and apply a system approach that also takes into account non-technical aspects of marketing activities when formulating and solving engineering tasks.

#### Social competences

Is able to think and act in an entrepreneurial way using ICT solutions as market opportunities and business opportunities.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

- a) for lectures: based on answers to questions about the material discussed in previous lectures,



b) for labs/exercises: based on the evaluation of the current progress of the tasks,

Overall assessment:

a) in the scope of lectures, the verification of the assumed educational results is carried out by: - assessment of the knowledge and skills shown in the problematic colloquium (the student can use any teaching materials) the colloquium lasts 1.5 h, consists of about 8 questions. Each of the questions is assigned a number of possible points. There is a possibility of obtaining additional points for the realization of control work. To pass the colloquium requires obtaining at least half of the points possible to obtain. Another form of conducting the colloquium is allowed (e.g. competitions, start-up idea, preparation of a business plan of your own venture and other previously agreed upon with students). - discussion of the examination results,

b) in the field of laboratories/exercises, verification of the assumed educational results is carried out by:

- assessment of the student's preparation for particular sessions of classes,
- Continuous assessment, during each class (oral answers) bonus the increase of skills in using the principles and methods learned,
- evaluation of the tasks prepared partly during and partly after the classes; this evaluation also includes teamwork skills,
- evaluation of knowledge and skills, increase of competences connected with preparation and realization and presentation of individual tasks,

Gaining additional points for activity during classes, especially for:

- discussing additional aspects of the issue,
- effectiveness of applying the acquired knowledge while solving a given problem,
- the ability to cooperate within a team practically carrying out a specific task during the exercises,
- remarks related to the improvement of didactic materials,
- indicating students' perception difficulties, enabling ongoing improvement of the didactic process.

### Programme content

The lecture program includes the following issues: Introduction to the issues of contemporary business model and related challenges for managers, new dimension of communication in marketing activities. Getting to know the basic rules, definitions related to marketing (product levels, marketing-mix, segmentation, target market, marketing strategies, product life cycle). Consumer market analysis and buyer behavior: analysis of decision making process, customer service, CRM systems for customer contact management, CEM customer experience management process, GIS geomarketing in analysis supporting marketing decisions, sales and customer service. Problems related to interpersonal relations, different management styles, methods and tools supporting competence development in the area of



personal development and team management. IT influence on the process of product development using modern IT technologies and changes in product management (e.g. TQM, CE, EDI, MIS, DSS, CIM, ERP). Using modern tools to reach the consumer, building marketing strategies with the use of Internet, mobile and website positioning marketing. Profile of IT implementation leaders. Determinants of enterprises' innovation. Estimating the effectiveness of IT investments: a review of methods allowing for the analysis of IT implementation effectiveness. Directions of development of current systems and tools.

Exercises are conducted in the form of three 4-hour exercises, held in the laboratory. The exercises are carried out both individually and in teams as well as in workshops conducted by the instructor. The program of classes includes the following issues: Selected problems of marketing activities: analysis of consumer market and buyer's behaviour, identification of factors influencing consumer's behaviour, analysis of decision making processes. Effective use of ICT for building marketing strategies, analysis of marketing tools. Analysis of selected business cases - case study. Self-development - extension of competences in the area of interpersonal relations, adaptation techniques at individual stages of sales, effective team work, ability to give feedback. Work on building one's own image - e.g. ability to perform in public (verbal and non-verbal communication).

### Teaching methods

- 1 Lecture: slides, multimedia presentation, presentation illustrated with examples, discussion using the whiteboard, solving tasks individually and in groups, multimedia presentation in the form of films
2. laboratory exercises: task solving, problem solving, individual and team work, participation in workshops.

### Bibliography

#### Basic

1. Marketing, Kotler P., Rebis, Poznań, 2020
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

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 Sroczań, 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 Sroczań, B Zgrzeba, Zaopatrzenie w wodę, jakość i ochrona wód, 2014; str. 1099-1121.

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	30	1,0

<sup>1</sup> delete or add other activities as appropriate