STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Information technology and communication systems in power**	Code **1010311441010325642**

Field of study **Power Engineering**	Profile of study (general academic, practical) **(brak)**	Year /Semester **2 / 4**

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: **45** Classes: **-** Laboratory: **30** Project/seminars: **-**	No. of credits **5**

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 **technical sciences** **Technical sciences**	ECTS distribution (number and %**)** **5 100%** **5 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge of computer and programming in high level languages??.
2	**Skills**	Support browsers. Algorithmic thinking.
3	**Social competencies**	Awareness of the need to broaden their competence.

Assumptions and objectives of the course:

Practical skills involved in creating interactive websites, using the latest technology, enabling access to databases. The acquisition of basic skills on MS Visual Studio environment and - in the most basic level - computer networks.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. Knows the rules for creating interactive websites. - [K_W10++, K_W15+]

2. Has expertise in creating websites for accessing databases. - [K_W10++, K_W15++]

3. Has knowledge of the basic issues of local and wide area computer networks and database systems. - [K_W15+]

Skills:

1. Can use tools for creating websites, as well as design and create an interactive website. - [K_U01+, K_U21+]

2. Knows the structure of local area networks. - [K_U21+]

3. Can use network resources in order to gain knowledge. - [K_U01+]

Social competencies:

1. Can think and act in a creative way. - [K_K05+]

Assessment methods of study outcomes

Lecture:

- Assess the knowledge and skills listed on the completion of a written,

- Continuous evaluation for each course (rewarding activity).

Laboratory:

- The final test and favoring knowledge necessary for the accomplishment of problems in the area of laboratory tasks,

- Continuous evaluation for each course - rewarding gain skills they met the principles and methods,

- Assessment of knowledge and skills related to the implementation of the tasks your practice.

Get extra points for the activity in the classroom, and in particular for:

- A discussion of additional aspects of the processed issues,

- The effectiveness of the application of the knowledge gained during solving the given problem,

- Ability to work within a team practice performing the task detailed in the laboratory,

- Comments related to the improvement of teaching materials,

- Developed aesthetic care tasks.

Course description

Essential issues concerning creating websites, applications being used to create websites.

Language of flags (HTML), cascading style sheet (CSS), expansible tongues XML. connecting the technology the HTML and CSS. script language Java Script. Join of web pages with documents the XML and the Java Script . Publishing the website online.

Bases of the ASP.NET technology. Environment Web Express Edition Developer, creating websites with applying the ASP.NET technology. Cooperation of web pages with databases.

Bases of computer networks - topologies, technologies, plug-in devices, communication protocols, IP addressing.

Basic bibliography:

1. Schafer S. HTML, XHTML i CSS. Biblia, Wydanie V, Helion, 2012

2. Moncur M. JavaScript dla każdego, Wydanie IV, Helion, 2007

3. Connolly R. ASP.NET 2.0. Projektowanie aplikacji internetowych, Helion, Gliwice, 2008

Additional bibliography:

1. Comer D. Computer networks

2. Comer D. TCP/IP Computer networks

3. Internet

Result of average student's workload

Activity	Time (working hours)
1. lectures	45
2. laboratories	30
3. participate in the consultations on the lecture	5
4. participate in the consultations on the laboratories	5
5. preparation for laboratory	15
6. homeworks preparation	20
7. prepare for a evaluation	15

Student's workload

Source of workload	hours	ECTS
Total workload	135	5
Contact hours	85	3
Practical activities	70	3