STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Technologies in Internet**		Code **1010342641010321878**
Field of study **Mathematics**	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: **Second-cycle studies**	Form of study (full-time,part-time) **full-time**	
No. of hours Lecture: **15** Classes: **-** Laboratory: **15** Project/seminars: **-**		No. of credits **3**
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 %) **3 100%** **3 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge of computer science, construction of static web pages and programming in high level languages.
2	**Skills**	Support browsers. The use of communication protocols. Algorithmic thinking. Collaboration in a team (group of laboratory).
3	**Social competencies**	Recognizes the importance of working tools in electrical engineering, the ability to expand their competences.

Assumptions and objectives of the course:

Familiar with the technology of construction of dynamic web sites running on the server side (ASP.NET). Practical skills related to the creation of modern websites work with relational databases. Sample Implementation of the project web page containing a relational database (MS SQL Server).

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

Knowledge:

1. Choose appropriate numerical methods and technologies to the set of issues contained in the various fields of science, using the website - [K_W10+++]

Skills:

1. It can present with a web site problem solving results in various fields of mathematics and practical tasks, using a mathematical method - [K_U10++]
2. Can using computer-aided design methods to verify the logical operation of tools - [K_U21++]

Social competencies:

1. Is aware of his own limitations of knowledge and the need for further education - [K_K01+]
2. It can work as a team, understands the need to work systematically on all projects that are long-term in nature - [K_K03++]
3. Can independently search the literature and electronic sources, including foreign languages - [K_K06+]

Assessment methods of study outcomes

Lecture

- assess the knowledge and skills demonstrated by the successful completion of a written test and problematic,

Laboratory classes:

- assess the knowledge and skills related to the implementation of an IT project (project website made ??in ASP.NET technology and works with relational database).
- checking and rewarding knowledge and skills for the implementation issues of problem (homework)

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

- activity classes in any attempt solutions to problems,
- ability to work as a team.

Course description

Characteristics. NET Framework and Visual Web Developer. Using the built-in controls support centralized management of the logical structure of the site and control access to the site. The use of master pages and AJAX (Asynchronous JavaScript and XML). Building websites with access to relational databases (MS SQL Server, SQL and Transact-SQL). Software created pages in ASP.NET using C#.

Basic bibliography:

1. Connolly R.: ASP.NET 2.0. Projektowanie aplikacji internetowych&, Helion, Gliwice 2008.
2. Liberty J., Maharry D., Hurwitz D.: ASP.NET 3.5. Programowanie, Helion, Gliwice 2010.
3. Jahołkowski T., Matulewski J.: ASP.NET w Visual Web Developer 2008. Ćwiczenia, Helion, Gliwice 2008.
4. Matulewski J.: Technologie ASP.NET i ADO.NET w Visual Web Developer, Helion, Gliwice 2007.

Additional bibliography:

1. Schafer S. M.: HTML, XHTML i CSS. Biblia, Helion, Gliwice 2012.
2. McLaughlin B.D., Edelson J.: Java i XML, Helion, Gliwice 2007.
3. Mendrala D., Potasiński P., Szeliga M., Widera D.: Serwer SQL 2008. Administracja i programowanie, Helion, Gliwice 2009.
4. Szeliga M.: Transact-SQL. Czarna księga, Helion, Gliwice 2003.

Result of average student's workload

Activity	Time (working hours)
1. Participation in class lectures	15
2. Participation in laboratory classes	15
3. Participate in the consultations on the lecture	6
4. Participate in the consultations on the lab	10
5. Preparation for lecture classes	6
6. Preparation laboratory	12
7. Development project	15
8. Preparation for the exam	10
9. Participation in the exam	4

Student’s workload

Source of workload	hours	ECTS
Total workload	93	3
Contact hours	50	2
Practical activities	42	2