

UNIVERSITY OF ECONOMICS - VARNA
MASTER DEGREE CENTER
DEPARTMENT OF INFORMATICS

Adopted by the FC (record №8 / 05.03.2020)

Adopted by the DC (record №7 / 28.02.2020)

ACCEPTED BY:

Dean:

(prof. Vladimir Sulov, PhD)

SYLLABUS

SUBJECT: “.NET WEB DEVELOPMENT”;

DEGREE PROGRAMME: “Computer Science”; MASTER’S DEGREE

YEAR OF STUDY: 5 for same field graduates, 6 for other field graduates;

SEMESTER: 9 for same field graduates, 11 for other field graduates;

TOTAL STUDENT WORKLOAD: 240 hours; incl. curricular 75 hours

CREDITS: 8

DISTRIBUTION OF STUDENT WORKLOAD ACCORDING TO THE CURRICULUM

<i>TYPE OF STUDY HOURS</i>	WORKLOAD, hours	TEACHING HOURS PER WEEK, hours
CURRICULAR:		
incl.		
• LECTURES	30	2
• SEMINARS / LAB. EXERCISES	45	3
EXTRACURRICULAR	165	-

Prepared by:

1.
(prof. Vladimir Sulov, PhD)

2.
(chief assist. prof. Bonimir Penchev, PhD)

Head of department
of Informatics:
(prof. Julian Vasilev, PhD)

I. ANNOTATION

The course “.NET Web Development” covers Microsoft’s .NET framework, designed for development and implementation of applications and more specially its basic concepts, architecture, components, libraries, languages and development environment. The course provides theoretical knowledge and practical skills for creating web applications with the help of the .NET framework and the C# language, including the usage of a variety of Web controls, models and access to databases.

The application of the acquired knowledge and skills is in the field of software development with the help of .NET framework for creating web applications, including the usage of various controls, architectural models for design and access to databases.

The course allows students to expand their basic knowledge of programming and to form new skills for integration of the software tools and database technologies when creating web applications.

II. THEMATIC CONTENT

№	TITLE OF UNIT AND SUBTOPICS	NUMBER OF HOURS		
		L	S	L.E.
Theme 1. Introducing .NET technologies and advanced features of the C# language		10	15	
1.1	Microsoft’s .Net Framework	1		
1.2	Basic programming languages and development tools	1		
1.3	Visual Studio development environment	1	3	
1.4	C# object-oriented features	4	6	
1.5	Arrays and lists	3	6	
Theme 2. Web applications development		12	22	
2.1	Basic web controls, events and interactions	8	14	
2.2	Web Forms and session management	2	4	
2.3	Security	2	4	
Theme 3. Working with databases		8	8	
3.1	Basic concepts and supported technologies	3	2	
3.2	Controls and functions for database access	5	6	
Total:		30	45	

III. FORMS OF CONTROL:

№	TYPE AND FORM OF CONTROL	Number	extracurricular, hours
1.	Midterm control		
1.1.	Test	2	40
1.2.	Practical task	2	50
Total midterm control:		2	90
2.	Final term control		
2.1.	Test	1	30
2.2.	Practical task	1	45
Total final term control:		2	75
Total for all types of control:		6	165

IV. LITERATURE

REQUIRED (BASIC) LITERATURE:

1. Online lectures (<http://users.ue-varna.bg/vsulov> and <http://e-learn.ue-varna.bg>).
2. Penberthy, W. Beginning ASP.NET for Visual Studio 2015: Web Forms and MVC. Wrox, 2015.

RECOMMENDED (ADDITIONAL) LITERATURE:

1. Chowdhury, K. Mastering Visual Studio 2019: Become proficient in .NET Framework and .NET Core by using advanced coding techniques in Visual Studio. Packt Publishing, 2019.