



## Course Syllabus

<b>Course Code</b>	<b>Course Title</b>	<b>ECTS Credits</b>
COMP-412	Internet Programming	6
<b>Prerequisites</b>	<b>Department</b>	<b>Semester</b>
Any programming language	Computer Science	Fall, Spring
<b>Type of Course</b>	<b>Field</b>	<b>Language of Instruction</b>
Elective	Computer Science	English
<b>Level of Course</b>	<b>Lecturer(s)</b>	<b>Year of Study</b>
1 <sup>st</sup> Cycle	Dr. Dmitry Apraksin	3 <sup>rd</sup>
<b>Mode of Delivery</b>	<b>Work Placement</b>	<b>Corequisites</b>
Face-to-face	N/A	None

### Course Objectives:

The main objectives of the course are to:

- Introduce the concept of WWW and the Internet
- Introduce the Domain Name System
- Introduce and use name server configuration
- Introduce and use IIS and Apache WEB servers
- Introduce and use Microsoft WEB development platform
- Introduce cloud computing (Microsoft Azure)
- Obtain knowledge and practical experience of ASP.NET programming
- Obtain knowledge and practical experience of database (ADO.NET) programming

### Learning Outcomes:

After completion of the course students are expected to be able to:

1. Register an internet domain and manage domain name server
2. Configure and manage IIS and Apache WEB servers.
3. Develop ASP.NET data driven applications.
4. Apply (ADO.NET) database programming skills.

**Course Content:**

1. Introduction to the Internet.
2. Domain Name system. Domain registration procedure. Domain name servers. Domain name server configuration (Microsoft DNS and BIND).
3. HTTP and WEB servers. Basic configuration tasks (IIS and Apache).
4. HTTPS and SSL. Configuring secure communication.
5. Microsoft WEB development platform. Components. Development tools.
6. ASP.NET single page application. Client and server side scripting. Testing ASP.NET applications.
7. Using simple server controls (textbox, button, link button, etc.)
8. Using validation controls.
9. Using navigation controls.
10. Using login controls and Web site management.
11. Database programming. ADO.NET. Data controls (SqlDataSource, Gridview, Detailsview, Formview, Repeater).
12. Microsoft Azure. Deploying ASP.NET application into a cloud.

**Learning Activities and Teaching Methods:**

Lectures, Lab Presentations, Lab Tutorials, Practical Exercises and Assignments.

**Assessment Methods:**

Homework, Project, Midterm and Final examination

**Required Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN
Murach's ASP.NET 3.5 Web Programming	Anne Boehm	Mike Murach & Associates Inc.	2008	978-1-890774-9

**Recommended Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN