Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
IT 532		3	4	0	0	3	8

Prerequisites	
Admission Requirements	

Language of Instruction	English
Course Type	Elective
Course Level	Masters Degree
Objective	This course aims to let students acquire the basic design techniques in the field of server side web programming by making use of the languages and software tools that are widely accepted in the professional domain.
Content	Web Technologies and Software Architectures Client side technologies: HTML and XHTML Separating document content from its presentation: CSS (Cascaded Style Sheets) Resolving conflicting styles in CSS and the box model Introduction to Javascript as a means to introduce dynamic content on the client side.Javascript variables and flow control statements Javascript functions and predefined classes DOM (Document Object Model) structure and the javascript events. Sample applications for client side data processing The general outlook on server side web programming alternatives. Introduction to PHP server scripting language PHP variables and flow control statements Arrays in PHP and their properties. String processing using PHP Regexp functions PHP and database connectivity: MySql MVC (Model View Controller) structure. Properties of the 3tiered and Ntiered applications Fast web application implementation using RoR (Ruby on Rails)
References	Deitel & Deitel “Internet & World Wide Web How to Program”, 4/e XAMPP, free portable WEB server software http://portableapps.com/apps/development/xampp David Turner and Jinseok Chae “Java Web Programming with Eclipse” , 2009 http://csci.csusb.edu/turner/java_web_programming/

Theory Topics

Week	Weekly Contents
1	Web Technologies and Software Architectures
2	Client side technologies: HTML and XHTML
3	Separating document content from its presentation: CSS (Cascaded Style Sheets)
4	Resolving conflicting styles in CSS and the box model
5	Introduction to Javascript as a means to introduce dynamic content on the client side.Javascript variables and flow control statements

Week	Weekly Contents
6	Javascript functions and predefined classes
7	DOM (Document Object Model) structure and the javascript events. Sample applications for client side data processing
8	The general outlook on server side web programming alternatives. Introduction to PHP server scripting language
9	PHP variables and flow control statements
10	Arrays in PHP and their properties.
11	String processing using PHP Regexp functions
12	PHP and database connectivity: MySql
13	MVC (Model View Controller) structure. Properties of the 3tiered and Ntiered applications
14	Fast web application implementation using RoR (Ruby on Rails)