

<b>Course unit title:</b>	Web Engineering
<b>Course unit code:</b>	CSW441
<b>Type of course unit:</b> (Compulsory/optional)	Optional
<b>Level of course unit:</b> (First, second or third cycle)	Bachelor (1 <sup>st</sup> cycle)
<b>Year of study:</b>	4
<b>Semester when the unit is delivered:</b>	8
<b>Number of ECTS credits allocated:</b>	6
<b>Name of lecturer(s):</b>	TBA
<b>Learning outcomes of the course unit:</b>	
<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Recall and explain the Web engineering process</li> <li>• Gain experience in how to gather requirements for the design of WebApps</li> <li>• Describe the modeling activity</li> <li>• Explain and exemplify the importance of design elements and quality of WebApps</li> <li>• Explore various technologies and tools for developing WebApps</li> </ul>	
<b>Mode of delivery:</b>	Face-to-face
<b>Prerequisites and co-requisites:</b>	CSC331
<b>Recommended optional program components:</b>	None

**Course contents:****Objective:**

To provide students with an understanding of an agile and adaptable approach to the development of next generation WebApps—systems that are more complex, more functional, and more significant than any that exist today

**Description:****Web Engineering**

An introduction to Web Engineering process

**Web-Based Systems**

Discussion and contextualizing web-based systems in an ever evolving Web

**Modeling**

Process and progressive steps for modeling various aspects of Web-based systems

**Design**

Understanding Web application design, conceptualizing interaction design, organizing information and structure design and identifying and proposing requirements for functional design.

**Design Patterns**

Identifying and recommending patterns for designing Web-based systems.

**Construction and Deployment**

Constructing activities for Web-based systems based on functional requirements and design. Identifying the steps required for deployment and effective use of Web-based systems.

**Technologies and Tools**

Familiarization with the availability of a variety of tools (proprietary and/or open source) that are used in the industry for the development and implementation of Web-based systems.

**Testing WebApps**

Standard and practical methods and steps in ensuring the correctness of operation and adherence to specification requirements.

**Change and Content Management**

Managing and manipulating information and its change after the deployment and utilization of the system.

**Future Directions**

Discussion of future trends in Web engineering, technologies and tools and how they affect already existing systems

<p><b>Recommended or required reading:</b></p>	<p>R. Pressman &amp; D. Lowe, Web Engineering: A Practitioner's Approach R. S. Pressman &amp; Associates, Inc., 2008</p> <p>G. Kappel B. Prýýll, S.Reich and W. Retschitzegger (eds) Web Engineering: The Discipline of Systematic Development of Web Applications, Wiley, 2006</p> <p>E. Mendes &amp; N. Mosley (eds), Web Engineering, Springer, 2010</p>						
<p><b>Planned learning activities and teaching methods:</b></p>	<table border="0"> <tr> <td data-bbox="574 779 1024 821">Class Instruction:</td> <td data-bbox="1024 779 1261 831" style="border: 1px solid black; text-align: center;">42 Hours</td> </tr> <tr> <td data-bbox="574 831 1024 884">Consultation:</td> <td data-bbox="1024 831 1261 894" style="border: 1px solid black; text-align: center;">30 Hours</td> </tr> </table>	Class Instruction:	42 Hours	Consultation:	30 Hours		
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Consultation:	30 Hours						
<p><b>Assessment methods and criteria:</b></p>	<table border="0"> <tr> <td data-bbox="574 1005 1073 1047">Examinations</td> <td data-bbox="1073 1005 1261 1047" style="border: 1px solid black; text-align: center;">75%</td> </tr> <tr> <td data-bbox="574 1047 1073 1089">Class Participation/Assignments</td> <td data-bbox="1073 1047 1261 1089" style="border: 1px solid black; text-align: center;">25%</td> </tr> <tr> <td></td> <td data-bbox="1073 1089 1261 1131" style="border: 1px solid black; text-align: center;">100%</td> </tr> </table>	Examinations	75%	Class Participation/Assignments	25%		100%
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	100%						
<p><b>Language of instruction:</b></p>	<p>English</p>						
<p><b>Work placement(s):</b></p>	<p>No</p>						
<p><b>Place of Teaching:</b></p>	<p>Regular Classroom European University Cyprus, Nicosia</p> <p>Computer Laboratory European University Cyprus, Nicosia</p>						