

Module Code	Pre-requisite Module codes	Co-Requisite Modules code(s)	ISCED Code	Subject Code	ECTS Credits	NFQ Level (CPD)#
CMPU1013					10	6
Module Title	Interface Design and Web Development					

Interface Design and Web Development

School Responsible:	School of Computing
----------------------------	---------------------

Module Overview:

This module introduces the technologies and provides the student with the skills necessary for client side web development. The module develops in the student a theoretical understanding of the software development

lifecycle as an engineering discipline. The module also provides the theoretical knowledge and practical

experiences in the fundamental aspects of analysing, designing and evaluating user interfaces based on sound HCI principles.

The aims of this module are to:

- provide students with skills for client side web development
- introduce student to the software lifecycle
- provide students with a general knowledge of HCI principles

Learning Outcomes (LO):

On completion of this module, the learner will be able to

1	Describe the underlying architecture of both the World-Wide-Web and related Internet technologies.
2	Implement web pages using HTML and CSS.
3	Generate web content dynamically and interact with users of web resources using a client side scripting language.
4	Evaluate web sites according to well-known criteria for effective web design.
5	Express an understanding of the strengths and weaknesses of competing technologies and select the appropriate technology or technologies for a given task.
6	Demonstrate an understanding of the development process of software systems.
7	Describe the major application areas of HCI.

Module Code	Pre-requisite Module codes	Co-Requisite Modules code(s)	ISCED Code	Subject Code	ECTS Credits	NFQ Level (CPD)#
CMPU1013					10	6
Module Title	Interface Design and Web Development					

8	Apply basic psychological principles to the overall design of user interfaces
----------	---

Indicative Syllabus:

- World-Wide-Web: Relationship to the Internet and other Internet technologies and overview of the web technologies.
- Client Side Markup Languages. Introduction to HTML and HTML5.
- Separation of Style and Content: A stylesheet language, such as Cascading StyleSheets (CSS). Internal and external style sheets.
- Dynamic HTML: Introduction to a client-side scripting language, such as JavaScript. Basic scripting programming language structures.
- Software Development Processes: The software lifecycle, its phases and support activities.
- Fundamentals of Human Computer Interaction: Scope and interdisciplinary nature of HCI.
- Effective screen design: Screen layout. Effective web design.
- Usability issues and accessibility: Ease of use. Principles of universal design. Usability standards. HCI standards. Accessibility requirements. Implications for HCI.

Learning and Teaching Methods:

The course delivery involves a combination of lectures and labs which may incorporate the use of blended learning techniques as appropriate throughout the delivery.

Total Teaching Contact Hours	39
Total Self-Directed Learning Hours	148

Module Delivery Duration:

This module is delivered over one semester

Assessment

Assessment Type	Weighting (%)	LO Assessment (No.)
Final Exam	70%	1-8
In class examination	30%	1-8

Module Code	Pre-requisite Module codes	Co-Requisite Modules code(s)	ISCED Code	Subject Code	ECTS Credits	NFQ Level (CPD)#
CMPU1013					10	6
Module Title	Interface Design and Web Development					

Module Specific Assessment Arrangements (if applicable)	
(a) Derogations from General Assessment Regulations	
(b) Module Assessment Thresholds	
(c) Special Repeat Assessment Arrangements	

Essential Reading: (author, date, title, publisher)
Terry Felke-Morris, 2015, Web Development and Design Foundations with HTML5, 7/E, Pearson Higher Education
Terry Felke-Morris, 2016, Basics of Web Design: HTML5 & CSS3, 3/e, Addison-Wesley
Sebesta, R.W., 2015, Programming the World Wide Web. 8/Ed., Pearson
Jenny Preece, et al, 2015, Interaction Design: Beyond Human-Computer Interaction, 4/Ed, John Wiley & Sons
Supplemental Reading
Relevant supplemental references will be indicated during the teaching of the module.

Version No:		Amended By	
Commencement Date		Associated Programme Codes	

Modules that are to be offered as Stand-Alone CPD Programmes must have an NFQ level assigned

*Details of the assessment schedule should be contained in the student handbook for the programme stage.

Date of Academic Council approval

Module Code	Pre-requisite Module codes	Co-Requisite Modules code(s)	ISCED Code	Subject Code	ECTS Credits	NFQ Level (CPD)#
CMPU1013					10	6
Module Title	Interface Design and Web Development					