1. **Title of the module**

COMP8870 (CO887) - Web-based Information Systems Development

1. **School or partner institution which will be responsible for management of the module**

School of Computing

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 7

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Auturmn & Spring

1. **Prerequisite and co-requisite modules**

Co-requisite: COMP8820: Advanced Object-Oriented Programming

or COMP8710: Advanced Java for Programmers

1. **The programmes of study to which the module contributes**

Portfolio of Taught Postgraduate Programmes, School of Computing, Canterbury campus

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 Main types of e-business strategy supported by web-based systems

8.2 Design of dynamic web applications

8.3 HTML and CSS

8.4 Client-side programming

8.5 Server-side programming

8.6 Relational database systems and SQL

8.7 Key features in web-based design and implementation, including transactions and security issues

8.8 Key aspects of legal, ethical and professional issues affecting IS developers

And be able to:

8.9 Use appropriate methods to model the requirements and design of simple web-based systems

8.10 Choose an appropriate implementation model and apply it to build simple active web systems.

8.11 Evaluate and test small-scale, active web pages.

8.12 Use all of the above to build a complete system.

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**

9.1 Do self-directed background research

9.2 Discuss technical issues with professionals in the field

9.3 Identify information relevant to a project and discard irrelevancies

9.4 Synthesise information collected from a variety of sources, including other modules, to produce findings

9.5 Produce abstract models from concrete situations

9.6 Adjust the pace and goals of their work to meet deadlines.

And have developed the following transferable skills:

9.7 Self-management

9.8 Oral and written communication

9.9 Internet-based information retrieval

1. **A synopsis of the curriculum**

Web-based information systems form the heart of e-commerce. They are also increasingly the way businesses handle all their information needs. Building such systems requires an understanding of up-to-date tools and technologies such as web page creation, client side programing, server side programming and databases; it also calls for an understanding of how to design systems that genuinely meet user and business needs.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

JavaScript: The Definitive Guide (Definitive Guides) by David Flanagan. 2011

Programming PHP by Kevin Tatroe, Peter MacIntyre and Rasmus Lerdorf. 2013

The Definitive Guide to HTML5 by Adam Freeman. 2011

Learning PHP, MySQL, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites by Robin Nixon. 2012

1. **Learning and teaching methods**

Total contact hours: 28

Private study hours: 122

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Database programming (20%)

Web Development (30%)

Examination (50%)

13.2 Reassessment methods

Like-for-like.

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *8.7* | *8.8* | *8.9* | *8.10* | *8.11* | *8.12* | *9.1* | *9.2* | *9.3* | *9.4* | 9.5 | 9.6 | 9.7 | 9.8 | 9.9 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Private Study | x | x | x | x | x | x | x | x | x | x | x | x | x |  |  | x |  | x | x |  | x |
| Contact Hours | x | x | x | x | x | x | x | x | x | x | x | x |  | x | x |  | x |  |  | x |  |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Database programming |  |  |  |  |  | x |  | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Web Development |  | x | x | x | x |  |  |  |  |  |  |  | x | x | x | x | x | x | x | x | x |
| Examination | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

The topics addressed by this module relate to a field which is of international importance, given the global role of computers in today's technological innovation. The topics covered by this module are international in nature, being identical worldwide and independent of traditional spoken language.

**DIVISIONAL USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

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| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 04/12/2020 | Minor | September 2021 | 5 | No |
|  |  |  |  |  |