1. **Title of the module**

EENG8820 (EL882) - iPhone Application Design

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

Engineering and Digital Arts

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)**

Autumn

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

Co-requisite:

EENG8800 - HCI for Mobiles

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

MSc Mobile Application Design

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
2. Have an understanding of the iPhone development life-cycle.
3. Be familiar with the different User Interface elements (views and controls) that can be used to construct the application interface.
4. Be able to develop application functionality with Objective-C.

These outcomes are related to the programme learning outcomes in the appropriate curriculum

maps as follows: A1, A2, A4, A6, B2 – B6, C1 – C6.

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

Have further enhanced their computing, design, time-management and communication skills.

These outcomes are related to the learning outcomes in the appropriate curriculum maps as

follows: D1-D2, D4 – D7.

1. **A synopsis of the curriculum**

This module is concerned with the design, implementation and testing of applications for the iPhone. Students will work at all stages of the development life-cycle from inception to testing, whilst considering usability and device capabilities for a mobile application capable of meeting a functional specification. Key topics include:

Objective-C and Cocoa: frameworks, classes and design patterns. MVC.

IPhone SDK: XCode IDE, iPhone simulator, Interface builder, Welcome App.

User interface elements: views, scrolling, labels, alerts, toolbars, text, web views. Example apps.

View controllers, navigation controller, tab bar controller, table views.

Dealing with Data: CoreData.

Gesture and Touches.

Audio, video and the MediaKit.

Device APIs: location, accelerometer, compass, battery life.

E-commerce with the iPhone.

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

Recommended Reading:

* Dave Mark (2009), Beginning iPhone 3 Development: Exploring the iPhone SDK, APRESS, ISBN: 1430224592

Background Reading:

* Paul Deitel, Harvey Deitel, Abbey Deitel, Eric Kern and Michael Morgano (2009), iPhone for Programmers: An App-Driven Approach, Prentice Hall, ISBN: 013705842X
* Duncan Campbell (2009), iPhone SDK 3: Visual QuickStart Guide, Peachpit Press, ISBN: 0321669533
* Stephen Kochan (2009), Programming in Objective-C 2.0, Addison Wesley, ISBN 0321566157

1. **Learning and teaching methods**

Total contact hours: 36

Private study hours: 114

Total study hours: 150

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

Project (100%)

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)**

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| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *9.1* | *9.2* | *9.3* | *9.4* |  |  |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Private Study** |  |  |  |  |  |  |  |  |  |  |  |  |
| *e.g. workshop* |  |  |  |  |  |  |  |  |  |  |  |  |
| *e.g. laboratory* |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |
| *e.g. MCQ test* |  |  |  |  |  |  |  |  |  |  |  |  |
| *e.g. Presentation* |  |  |  |  |  |  |  |  |  |  |  |  |
| *e.g. Essay – including word length* |  |  |  |  |  |  |  |  |  |  |  |  |
| *e.g. Examination* |  |  |  |  |  |  |  |  |  |  |  |  |
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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**

Please highlight aspects of this module where internationalisation is actively incorporated or intended. Refer to any relevant internationally-focused learning outcomes and, where possible, identify internationalisation in any of the following: subject content, assessment tasks, teaching methods/activities and support activity.

*Support and explanation will be provided via a separate curriculum internationalisation toolkit, available from the Dean for Internationalisation. For further guidance contact Anthony Manning or see* [*https://www.kent.ac.uk/global/curriculum.html*](https://www.kent.ac.uk/global/curriculum.html)*.*

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**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) |
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Revised FSO Jan 2018