Module specification

1. Factual information

Module title	**TM356 - Interaction design and user experience**	**Level**	**3**
Module tutor	TBD	**Credit value**	**30**
Module type	Taught	**Notional learning hours**	**8**

2. Rationale for the module and its links with other modules

Interaction design and the user experience (TM356) – in this module the students will learn the importance of user-centred design, and acquire practical skills for designing the interactive products for everyday life.

From apps, phones and business systems to wearables, the web and the Internet of Things, interactive products are the stuff of everyday life. But how can interactions be designed to best meet their purposes, offer good user experiences, and be easy, satisfying and enjoyable to use? How can interactions be evaluated effectively when their users, purposes and contexts of use vary so widely? In this module we take a user-centred approach through which the student will learn about the factors, techniques, tools and theories that affect interaction design and acquire practical skills that will equip the student to analyse, design, and evaluate the interactive products of everyday life. Why are some interactive products so popular? How do you create products that everybody wants? One of the fundamental things the student will learn in this module is the importance of user-centred design. In this context, this module complements the rest of Web Development modules.

3. Aims of the module

The student will learn the value of moving away from his/her desk and 'stepping out into the world' to involve potential users in his/her early design ideas for interactive products. It is all too easy to assume that other people think, feel and behave in the same way as the designer or developer, do. It is essential to take into account the diversity among users and their different perspectives and getting their feedback will help to avoid any errors and misunderstandings that may not have thought of. Involving users in the process is vital to creating great products and makes good business sense.

Through hands-on activities the student will work through the design process on a topic chosen by himself/herself (with tutor's guidance). The student will develop skills that will be important to him/her in a variety of employment settings – whether working as a developer as part of a large software development team, as a partner in a small start-up, or in some other role involved in the managing of, or decision making around interactive products that will be used by people.

4. Pre-requisite modules or specified entry requirements

TT284.

5. Intended learning outcomes	
A. Knowledge and understanding	**Learning and teaching strategy**

After studying the module students will have knowledge and understanding of:
 	
A1. What interaction design is about and the importance of user centred design and methods that take into account activities and tasks, context of use and user experiences;
 	
A2. The sensory, cognitive and physical capabilities of users and how these inform the design of interactive products;
 	
A3. The process of interaction design including requirements elicitation, prototyping, evaluation and the need for iteration.
	• The different Learning outcomes are covered in the study materials which are covered during the face-to-face meetings.
	
	• The LOs will be assessed through a number of formative and summative assessments
	
	   o Formative assessments include activities within module components; Activities are designed to enable students to apply the concepts that have been taught, or to explore issues that extend students' knowledge and skills. These frequently involve reading parts of the module book or other documents. Some of the activities are done during the module meetings and others are done at students' own time and discussed with each other's and the module tutor during the module meetings. Formative assessments are also in the form of feedback on the tutor marked assignment (TMA) provided by the module tutor.
	
	   o Summative assessments in the form of continuous assessment provided by the midterm assessment (MTA) and the tutor marked assessment (TMA) and the final exam

B. Cognitive skills	**Learning and teaching strategy**
After studying the module students will be able to: **B1.** Analyse and critique the design of interactive products; **B2.** Select, adapt and apply suitable interaction design approaches and techniques towards the design of an interactive product;	The module blocks include a number of activities that provides students with the mentioned cognitive skills and at the same time constitute a formative assessment of these skills. In addition, the TMA assesses and validates the cognitive skills related learning outcomes (LOs). The other assessments (MTA and Final exam) are also means

B. Cognitive skills	Learning and teaching strategy
B3. Construct prototypes for diverse purposes using appropriate materials or tools; **B4.** Analyse and critique how interaction design activities have been conducted.	for validation of the LOs.

C. Practical and professional skills	Learning and teaching strategy
After studying the module students will be able to: **C1.** Define a suitable programme of user involvement that treats users ethically and fairly.	• The module material exposes students to examples and case studies of real world applications. These examples are analyzed and discussed as part of the module activities during the face-to-face meetings (some of them are done at student's own time but discussed during the tutorial sessions). • The practical and professional skills are mainly assessed in the TMA, where students apply the taught concepts.

D Key transferable skills	Learning and teaching strategy
After studying the module students will be able to: **D1.** Construct and convey an argument from a variety of sources to persuade a non-specialist audience of the importance of user-centred design when designing interactive products; **D2.** Communicate effectively about requirements, design, and evaluation activities relating to interactive products; **D3.** To progress your own learning independently using materials and publications from a wide variety of sources.	• Some of the module activities require students to do scientific search to collect, assess and synthesize information from various reliable resources (research articles, magazine articles, etc.). These activities are mainly done at student's own time but under the guidance of the module tutor. • The transferrable skills are mainly assessed in the TMA (formative and summative).

6. Indicative content.

The module is organised in four blocks:

Block 1 – Introduction and overview

What is interaction design? This block gets across the fundamental idea of what we mean by interaction design and the importance of it being user centred. The student will begin to reflect on what makes some designs usable and satisfying – and others not – and get hands-on experience of the process of designing. An important principle of our approach to interaction design is that there is diversity among users – not only in terms of their physical characteristics and capabilities, but also of their cognitive and sensory characteristics.

Block 2 – Requirements

Who are the users and what do they want? As part of the process of defining the requirements for an interactive product we need to know the user's characteristics but also need to be aware of the user's context – both in terms of their physical environment and in terms of the activity they are engaged in. This block studies a range of requirement gathering approaches including talking to users, observational methods including the use of technology probes, and more. The student will also learn to use tools and techniques such as developing personas and scenarios, which will help him/her share information with the stakeholders (the team, the users, the customer) and communicate effectively about the requirements for an interactive product.

Block 3 – Design

Designing is about balancing the requirements. It involves thinking through the underlying idea for the interactive product and also the more concrete, physical aspects. This block tackles all these things. The student will learn to use reflective tools to help him/her work out and communicate the main idea for a design, including what people will be able to do with it, and how they experience it. This block discusses a range of interface types, from more traditional screen-based forms of interaction to mobile, wearable, haptic and other interface types and the student will learn and use a range of prototyping methods and tools.

Block 4 – Evaluation

Block 4 presents the techniques and knowledge necessary to evaluate an interactive product. This includes the ethical considerations when evaluating with users; techniques and tips for observing users; asking experts and users; and considering when to carry out field studies and when to use lab studies. The student will learn how to present his/her findings and to reflect on the need for iteration of parts of the design life cycle.
The assessment for this module is structured so that he/she can work on a problem chosen by himself/herself, and work through the various processes and iterate through the design life cycle studied in the block as he/she progresses in the module.

7. Assessment strategy, assessment methods and their relative weightings

MTA 30%
TMA 20%
Final exam 50 %

8. Mapping of assessment tasks to learning outcomes

Assessment tasks	Learning outcomes										
	A1	**A2**	**A3**	**B1**	**B2**	**B3**	**B4**	**C1**	**D1**	**D2**	**D3**
TMA	X	X	X	X	X	X	X	X	X	X	X
MTA	X	X	X	X			X		X	X	
Final	X	X	X	X	X	X	X	X	X	X	

9. Teaching staff associated with the module

Name and contact details

TBD

10. Key reading list

Author	Year	Title	Publisher	Location
Jenny Preece, Helen Sharp, Yvonne Rogers	2015, 4th Edition	Interaction Design: Beyond Human-Computer Interaction	Wiley	USA

11. Other indicative text (e.g. websites)

http://arabou.edu.kw/