

<b>Module Title:</b>	UI/UX Design and Development
<b>Language of Instruction:</b>	English
<b>Credits:</b>	5
<b>NFQ Level:</b>	8
<b>Module Delivered In</b>	<a href="#">4 programme(s)</a>
<b>Teaching &amp; Learning Strategies:</b>	This module is delivered as a mix of traditional lectures and practical sessions within a laboratory setting with a blend of interactive lectures and practical work. Learners are actively participating in class work throughout each scheduled session.
<b>Module Aim:</b>	To provide practical experience in designing, developing and evaluating user interfaces and user experience.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Elicit and describe a set of user needs
LO2	Use design principles to develop low fidelity prototypes, high fidelity prototypes, and code-based prototypes
LO3	Design, run, and report on experiments to evaluate user experience
<b>Pre-requisite learning</b>	
<b>Module Recommendations</b>	
<i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
<b>Incompatible Modules</b>	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b>	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

## Module Content & Assessment

### Indicative Content

#### Design process

Needfinding. User modelling: personas and goals. Defining a problem. The purpose of prototyping. Evaluating user experience.

#### Prototyping

Storyboards. Paper prototyping. Low fidelity prototypes. High fidelity prototypes. UI Components. Visual design (colour palettes, typography, alignment). Animation. Code based prototypes.

#### Evaluating UI and UX

Mental models. Key measures (e.g. usability, accuracy, task completion time, learnability, emotional response). Experiment design. A-B testing. Comparative experiments. Surveys. Interviewing and participant observation. Creating a test plan. Recruiting participants.

#### Analysis of data

Visualizing data. Distributions. Statistical significance. Effect size. Introductory qualitative analysis. Drawing conclusions. Determining an action plan. Writing up a report.

### Assessment Breakdown

	%
Project	50.00%
Practical	20.00%
End of Module Formal Examination	30.00%

No Continuous Assessment

### Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Design, develop, and evaluate a high fidelity prototype.	1,2,3	20.00	Week 7
Project	Design, develop, and evaluate a code-based prototype and report the results of the evaluation.	1,2,3	30.00	End-of-Semester

### Practical

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	A series of practical labs to develop and practise the skills required in the projects.	1,2,3	20.00	n/a

### End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	Final written exam	1,2,3	30.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

**Module Workload**

<b>Workload: Full Time</b>		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	12 Weeks per Stage	2.00
Laboratory	12 Weeks per Stage	2.00
Independent Learning	15 Weeks per Stage	5.13
Total Hours		125.00

**Module Delivered In**

Programme Code	Programme	Semester	Delivery
CW_KCCGD_B	<a href="#">Bachelor of Science (Honours) in Computer Games Development</a>	8	Group Elective 1
CW_KCCYB_B	<a href="#">Bachelor of Science (Honours) in Cyber Crime and IT Security</a>	8	Elective
CW_KCCIT_B	<a href="#">Bachelor of Science (Honours) in Information Technology Management</a>	8	Group Elective 1
CW_KCSOF_B	<a href="#">Bachelor of Science (Honours) in Software Development</a>	8	Group Elective 1