

Module Title:	User Interface Programming
Language of Instruction:	English
Credits:	10
NFQ Level:	6
Module Delivered In	3 programme(s)
Teaching & Learning Strategies:	A highly practical course - students will build their toolbox of elements for creating UIs through worked examples, short explanations, practical exercises, and each term applying all the skills they have learned on one large authentic project.
Module Aim:	Learn how to implement a broad range of easy to use, easy to learn user interfaces
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Implement standard and custom UI components
LO2	Create a fully operational interface from a mockup, video, or specification document
LO3	Test an interface with users and modify it to address issues that arise
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements <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
UI Components Standard components such as: alerts, buttons, button groups, carousel, date picker, dropdown, form, labels, list, modal, nav bars, pop over, progress bar, sortable list, tables, text box (with prediction); custom components; combining components into larger designs
Layout and style Layout: grid systems, the box model, positioning elements, margins, padding, borders, styles (e.g. rounded corners, drop shadows), typography
Animation Transforms, transitions (e.g. slide in, hinge in, scale in), easing, keyframes.
Different target platforms Designing and developing UIs for different target platforms web, mobile, and desktop
Audio Audio interfaces, playing sounds, voice input
interaction Implementing different interaction approaches using mouse, keyboard, touch, gestures, voice
UI frameworks Detailed analysis and comparison of the most used frameworks; the merits of not using a framework

Assessment Breakdown	%
Project	50.00%
Practical	50.00%

No Continuous Assessment

Project				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Project 1: an authentic UI project involving iterations of design, development, and user testing, applying most of the skills learned in the first term.	1,2,3	25.00	Week 8
Project	Project 2: an authentic UI project involving iterations of design, development, and user testing, applying most of the skills learned in the full course. This is a cross module project.	1,2,3	25.00	Week 13

Practical				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	Practical labs involving practising UI skills in preparation for the authentic projects	1,2,3	50.00	n/a

No End of Module Formal Examination

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

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Practicals	12 Weeks per Stage	6.00
Lecture	12 Weeks per Stage	1.00
Tutorial	12 Weeks per Stage	1.00
Estimated Learner Hours	15 Weeks per Stage	10.27
Total Hours		250.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_KCCGD_B	<u>Bachelor of Science (Honours) in Computer Games Development</u>	3	Mandatory
CW_KCIAD_B	<u>Bachelor of Science (Honours) in Computing in Interactive Digital Art and Design</u>	3	Mandatory
CW_KCIAD_D	<u>Bachelor of Science in Computing in Interactive Digital Art and Design</u>	3	Mandatory