NATIONAL COLLEGE OF ART &DESIGN

Programming Interactions
PGDES1015

MODULE DESCRIPTOR

ECTS credits[1]	10	**Programme**	MA in Interaction Design
NQF level	9	**School**	School of Design
Stage	1	**Module Co-ordinator**	Emma Creighton
Trimester	1	**Module Team**	Emma Creighton, Tara Whelan, Saoirse Higgins
Contact	Emma Creighton creightone@staff.ncad.ie		
Responsibility	The NCAD Academic Council and the School of Design Board have responsibility for this module.		

1. Introduction

This module introduces students to the concepts, principles and practices of computer programming within the context of the discipline of Interaction Design. Through a series of hands-on demos and workshops students will learn to utilise code as a medium for prototyping experiences and interactions. Throughout the module, students are introduced to various open source creative coding platforms and are encouraged to be playful, experimental and take risks.

The aims of this module are to:

- Introduce the concepts, principles and practices of computer programming.
- Support the development of interactive prototypes using open source creative coding platforms.

2. What will I learn?

On successful completion of this module students will be able to:

1. INITIATE: Initiate a range of original and creative concepts in response to a thematic project brief, drawing upon primarily theoretical research.
2. MATERIALISE: Develop functioning interactive prototypes by writing and manipulating code.
3. EVALUATE: Deploy and evaluate functional interactive prototypes.
4. RESOLVE: Develop a project through a transparent iterative process leading to a resolved outcome.
5. PROJECT MANAGE: Work cooperatively and independently planning and managing time and deliverables.

[1] European Credit Transfer and Accumulation System, where 60 ECTS credits equate to the workload of a full-time academic year

Module content

Over the course of this module students will be introduced to the concepts, principles and practices of creative coding with open source platforms and tools. Delivery of this module is embedded in a studio-based learning context with students learning key theory and skills through a series of demos and workshops. These practical hands-on sessions will introduce students to the following content: Integrated Development Environment (IDE), Variables, Conditionals, Functions, Loops, Object-oriented Programming, and Interactivity.

Following this, students will develop and advance their skills by responding to a thematic brief. Throughout the module students experience working in a fast-paced environment and gain experience of working both in a self-directed and collaborative manner.

3. How will I learn?

Students learn through a combination of lectures, workshops, tutorials and shared presentations to support peer learning. Taught components are delivered through lecture-based and seminar sessions with a focus on group discussion and lively, informed debate. Students learn technical and practical skills through demonstration and workshop sessions and they are expected to engage in self-directed and independent study throughout the module. Students are supported in their project work through tutorials and receive ongoing feedback through one on one and group crits.

Learning tool	**Hours**
Lectures and Workshops	25
Tutorials	15
Specified Learning Activities	20
Autonomous Student Learning	140
Total Workload	**200**

4. What learning supports are provided?

Delivery of this module is supported with Google Classroom. Throughout the semester readings, case studies and reference material are posted to support students in their studio work. Off-campus learning and tutor-student communication is facilitated through the use of Google Classroom, Google Meet, Zoom and Miro. Additional module specific material is posted on the module Google Classroom throughout the semester.

5. Am I eligible to take this module?

Module Requisites and Incompatibles

Pre-requisites	None
Co-requisites	None
Incompatibles	None
Prior learning	Where a student can demonstrate that they have achieved at least 80% of the learning outcomes of this module, by academic certified achievement, or through quantifiable and documented experience, they can apply to the

	School for that prior learning to be recognised. Applications must be received prior to the commencement of delivery of the module.
Recommended	None

6. How will I be assessed?

Assessment tool	% of final grade	Timing
Thematic Project	80%	Week 12
Online Documentation of Learning	10%	Week 12
Critical Reflection	10%	Week 12
Total	**100%**	

Assessment tool	Learning outcomes assessed
Thematic Project	1 - 5
Online Documentation of Learning	1 - 5
Critical Reflection	3 & 5

7. Feedback, results and grading

All module learning outcomes will be demonstrated and assessed through the submission of project work as detailed above. Students are expected to submit a series of deliverables during the module. These are submitted in either physical form to the module tutor or to Google Classroom.

Students receive formative feedback regarding stage submissions during tutorials and crits in the module. Individual assessment sheets are generated for each project detailing the student's formative grades and feedback. Summative module feedback is issued after grades have been formalised through the relevant Exam board.

Submissions are assessed using the NCAD Assessment Criteria *(See NCAD Academic Regulations for further detail).*

8. What happens if I fail?

Resit Opportunities

Opportunities are provided during or at the end of the Trimester to students who do not complete all assessments in this timeframe. Students will not be able to progress to the next stage of the programme until they have successfully completed all Trimester 1 and 2 modules, equivalent to 60 credits.

9. When and where is this module offered?

Trimester 1 (September to December)MA Interaction Design Studio

10. How will I have the chance to evaluate the module?

It is important to NCAD that students inform the development of teaching and learning at NCAD. We encourage all students to communicate their concerns and their observations about their study to members of staff so that any changes can be made in a timely manner.

About two-thirds of the way through the year, a student forum will be convened to gather students' comments about their study and the delivery of the programme. In addition, at the end of Trimester 2, students have the opportunity to complete an online evaluation of their study and experience at NCAD. These evaluation events are important to current and future students, to ensure we can enhance the delivery of programmes at NCAD.

In addition, students are invited to discuss their experience on the module with their lecturers at any point during the year. Students can also relay their comments to the class student representative who will communicate their comments to the staff.

For further details on the content of your module and teaching arrangements, consult your Programme or Module Handbook