



National College of Art and Design  
*A Recognised College of University College Dublin*

## MODULE DESCRIPTOR

Name of Module Design studio Collaborative Project 1  
(Module Code)

Credits	10	Programme	MSc Medical Device Design
Level (NQAI Framework)	9	School	Design
Stage	1	Module Coordinator	Enda O'Dowd
Semester	1 & 2	Module Team	Enda O'Dowd, Derek Vallence, Industry tutor

### Objectives of Module

This module introduces the students to collaborative industry projects. An industry partner is selected in accordance with the NCAD Medical Device Design collaborative project design guidelines. The industry partner is asked to interact with the project at 4 stages during the project as follows:

- 1. Delivering the brief.** The industry partner is requested to provide a brief which is open but has the usual constraints associated with working in the medical devices industry. They are asked to have at least one member of staff deliver the brief to the students. Briefs have to be human centred and are usually open for the students to interpret how they can tackle the problem or unmet clinical need. It is important at this stage that briefs are not incremental changes to a device or a procedure.
- 2. Research evaluation and feedback.** The industry partner is asked to be available for the students to present their research work. Feedback at this stage will give the students direction on their research insights.
- 3. Concept Presentation.** Each Student produces at least 3 concepts to answer the design brief. Feedback from the industry partner will be used to evaluate the concepts and decide on the direction for the final design.

**Final Presentations.** Each student produces a detailed final design presentation. This presentation consists of detailed designs complete with materials, manufacturing methods, product renderings and 3D models.

### What will I learn?

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

- Conduct in-depth research in collaboration with peers and industry partners
- Conduct human focused research using contextual research methods
- Use peer reviewed journals and other reputable sources to generate secondary research
- Present primary and secondary research in an engaging and visually appealing manner
- Generate design ideas based on insights from user focused contextual research
- Sketch and sketch model ideas in order to evaluate and communicate them

- Present design concepts in an open collaborative manner
- Use feedback from various stakeholders in order to hone ideas into a final design concept
- Produce a 3 dimensional computer model of their designs
- Specify materials and manufacturing processes in accordance with FDA and CE approvals
- Present final design concepts in a realistic and industry appropriate manner

<b>How will I learn?</b>		<b>Hours</b>
Lectures/Workshops/Tutorials		32
Specified Learning Activities		8
Autonomous Student Learning		160
<b>Total Workload</b>		<b>200</b>

<b>How will I be assessed?</b>		
	<b>% of Final Module Grade</b>	<b>Timing</b>
Group Research presentation	25	Research
Concept presentation	25	Concept
Final Presentation	50	Final Design
<b>Total</b>	<b>100</b>	

<b>What happens if I fail?</b>		
<b><u>Resit Opportunities</u></b> Subsequent industry/clinical 10 Credit project		
<b><u>Remediation</u></b>  If you fail this module it is necessary to take another 10 credit industry/clinical project		

<b>Am I eligible to take this module?</b>		
---	--	--

<b><u>Module Requisites and Incompatibles</u></b>  Pre-Requisite: none  Required :  Co-Requisite: none  Incompatibles:  <b><u>Prior Learning</u></b>  Requirements:  Excluded:  Recommended: Should be prepared to participate fully in all course activities including visits to clinical environments.
---

<b><u>When and where is this module offered?</u></b>	
Timetabling information is displayed only for guidance purposes, relates only to 2015/16 and is subject to change.	
Medical Device Design Studios	Semester 1 (October – January)

For further details on the content of your module and teaching arrangements consult your course handout