

# Design Studio - Major Thesis Project

## MDD-10

### MODULE DESCRIPTOR

<b>ECTS credits<sup>1</sup></b>	30	<b>Programme</b>	MSc in Medical Device Design
<b>NQF level</b>	9	<b>School</b>	School of Design
<b>Stage</b>	1	<b>Module Co-ordinator</b>	Enda O'Dowd
<b>Trimester</b>	Summer trimester	<b>Module Team</b>	Enda O'Dowd, Derek Vallence, industry collaborator
<b>Contact</b>	Enda O'Dowd: <a href="mailto:odowde@staff.ncad.ie">odowde@staff.ncad.ie</a>		
<b>Responsibility</b>	The NCAD Academic Council and the School of Design Board have responsibility for this module.		

## 1. Introduction

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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 predefined stages during the project as follows:

- 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. Briefs have to be human centred and are usually open for the student to interpret how they can tackle the problem or unmet clinical need.
- Research evaluation and feedback:** The industry partner is asked to be available for the student to present their research work. Feedback at this stage will give the student direction on their research insights.
- Concept Presentation:** The 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:** The student produces a detailed final design presentation. This presentation may consist of detailed design drawings, service blueprints or other outcomes appropriate in accordance the project brief.

## 2. What will I learn?

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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.

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<sup>1</sup> European Credit Transfer and Accumulation System, where 60 ECTS credits equate to the workload of a full-time academic year

3. Use peer-reviewed journals and other reputable sources to generate secondary research.
4. Present primary and secondary research in an engaging and visually-appealing manner.
5. Generate design ideas based on insights from user-focused contextual research.
6. Sketch and sketch-model ideas in order to evaluate and communicate them.
7. Present design concepts in an open collaborative manner.
8. Use feedback from various stakeholders in order to hone ideas into a final design concept.
9. Ensure compliance of design with the relevant FDA and CE approvals.

### 3. How will I learn?

Learning tool	Hours
Lectures workshops and tutorials	66
Specified Learning Activities	14
Autonomous Student Learning	520
<b>Total Workload</b>	<b>600</b>

### 4. Am I eligible to take this module?

#### Module Requisites and Incompatibles

<b>Pre-requisites</b>	Before commencing on this module, students must have successfully completed all modules on the programme delivered in Trimester 1 and 2.
<b>Co-requisites</b>	None
<b>Incompatibles</b>	None
<b>Prior learning</b>	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.
<b>Recommended</b>	None

### 5. How will I be assessed?

Assessment tool	% of final grade	Timing
Final presentation	100%	At the end of the trimester
<b>Total</b>	<b>100%</b>	

Assessment tool	Learning outcomes assessed
Final presentation	All learning outcomes

## 6. Grading

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### Grading

Students' assessments will be graded using the [NCAD Grade Descriptors](#).

## 7. What happens if I fail?

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Students can resit or resubmit final projects if appropriate staff are available for supervision and assessment.

Resubmitted projects are subject to a pass/fail grade only.

If you fail this module, it is necessary to resit. Alternatively, students who have achieved 60 credits may exit with a Graduate Diploma in Medical Device Design.

## 8. When and where is this module offered?

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Delivered in the Medical Device Design studios in the Summer Trimester (May to August)

## 9. How will I have the chance to evaluate the module?

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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. Students are also encouraged to complete the Irish Student Survey of Engagement. 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 your 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**