

MODULE DESCRIPTOR

Name of Module Design [Fundamentals of Medical Device Design 2](#)
(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, visiting lecturers from TCD, UCD and RCSI

Objectives of Module

This module introduces students to the basics of biomechanics, regulatory affairs, intellectual property along with the history and culture of medical device design.

What will I learn?

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

- Be aware of the basic principles of biomechanics
- Be aware of the main technologies involved in reconstruction and restoration of physical function through bioengineering
- Analyse a biomechanical system in order to determine design requirements
- Be capable of choosing appropriate technologies to fulfil functional requirements
- Describe the international regulatory landscape in the medical devices industry
- Analyse the regulatory implications related to the introduction of a medical device to the EU and US markets
- Describe the history of medicine in a variety of cultures.
- Identify the social and cultural drivers of the development of medicine and medical devices.
- Identify the important developments in medicine and medical devices.
- Describe the intellectual property landscape in the medical devices industry
- Understand how to read the salient information and claims of a patent

How will I learn?

	Hours
Lectures/Workshops/Tutorials	24
Specified Learning Activities	6
Autonomous Student Learning	70
Total Workload	100

How will I be assessed?		
	% of Final Module Grade	Timing
Biomechanics Assignment	40	Semester 2
Medical History Assignment	40	Semester 2
Regulatory Affairs Assignment	20	Semester 2
Total	100	
What happens if I fail?		
<p>Resit Opportunities Pass in this module is a requirement for progression. This module must be repeated next year if failed on first occasion.</p> <p>Remediation</p>		
Am I eligible to take this module?		
<p>Module Requisites and Incompatibles</p> <p>Pre-Requisite: none</p> <p>Required :</p> <p>Co-Requisite: none</p> <p>Incompatibles:</p> <p>Prior Learning</p> <p>Requirements:</p> <p>Excluded:</p> <p>Recommended:</p>		
When and where is this module offered?		
<p>Timetabling information is displayed only for guidance purposes, relates only to 2015/16 and is subject to change.</p>		
Product Design Studio Room	Semester 2 (January – May)	

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