

Module Specification

Module Summary Information

1	Module Title	Medical Devices and Equipment Life Cycle
2	Module Credits	20
3	Module Level	6
4	Module Code	ENG6086

5	Module Overview
<p>Rationale:</p> <p>This module will build upon the knowledge and skills that you have developed earlier as part of this programme. It is intended that by engaging in this module, you will be able to develop a sound understanding of; the working principle, operation and troubleshooting procedures of various lower order and higher order medical devices used for medical applications within a health care setting. This involves being able to:</p> <ul style="list-style-type: none"> • Apply the fundamental characteristics of electronic components and semiconductor devices • Demonstrate an understanding of fundamental troubleshooting procedures • Justify any technical decisions related to your application of knowledge • Adopt and apply appropriate health and safety procedures and • Handle the medical devices efficiently based on their life cycle. <p>Alignment with Programme Philosophy and Aims</p> <p>This programme aims to enrich your problem-solving skills to address the upcoming challenges in the delivery of healthcare. Therefore, undertaking this module will allow you to apply your theoretical knowledge in solving various real-life problems associated with the functioning of medical devices. This module will enable you to develop your skills and knowledge required to; diagnose a faulty medical device, identify the underpinning problem and troubleshoot the same by uniting product information with the processes and the technology. You may also find an opportunity to work alongside multi-professional teams to effectively and economically assure the quality of the medical devices used for various applications. This module has been carefully designed to allow you to enhance your technical skills and prepare yourself to meet such demands in a work setting in a global market.</p> <p>Despite being a specialised module, the module will facilitate inter-professional teaching and specialist or guest lectures from potential employers on various occasions to enhance you knowledge and to enable you apply your problem-solving skills which will certainly be a part of your profession in your near future.</p> <p>Learning and Teaching Strategy</p> <p>Medical Devices and Equipment Life Cycle module will have its own Moodle page. This page will contain resources that are specific to the module such as the key note lectures, supporting materials and activities, assessment details and important notices. It is important that you access the site regularly as part of your learning will be to undertake sessional preparatory activities for each session, followed by</p>	

attempting short online formative activities to help with your learning. As part of this module, various workshops will be facilitated to encourage peer-learning or group activities and case-studies pertaining to your assessment will be used during these sessions.

Assessment Strategy

Assessment will be via a case study based technical report for 3000 words.

6	Indicative Content
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This section covers indicative subject matter only.

7	Module Learning Outcomes
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On successful completion of the module, students will be able to:

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| 1 | Explain the principle, operation and technical aspects of various medical devices used within a clinical / non-clinical setting. |
| 2 | Evaluate the requirements for effective functioning of medical devices and apply appropriate protocol to inspect / analyse / repair / calibrate and maintain medical devices. |
| 3 | Appraise and apply appropriate risk assessment and health and safety practice as per the regulatory requirements. |

8	Module Assessment		
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Learning Outcome			
	Coursework	Exam	In-Person
1,2,3,4	X		

9	Breakdown Learning and Teaching Activities	
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Learning Activities	Hours
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	26
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	n/a
Private Study (PS) includes preparation for exams	174
Total Study Hours:	200