

Module Specification

Module Summary Information

1	Module Title	Advanced Dynamics
2	Module Credits	20
3	Module Level	7
4	Module Code	ENG7150

5	Module Overview
<p>The Automotive and Mechanical Engineering programmes share the common philosophy of one which aims to provide engineers with a rigorous grounding in industrial standard design, analysis and simulation capability. This module is consistent with this approach since it directly includes content and resources that specifically help you meet these needs.</p> <p>A principal aim of both programmes is to respond to the market need for engineers who are competent and skilled in the use of advanced computer modelling and simulation techniques. This module delivers against this aim, providing you with a thorough technology grounding supported by directly relevant design, simulation and analysis experiences.</p>	

6	Indicative Content																								
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7		Module Learning Outcomes
On successful completion of the module, students will be able to:		
	1	Critically appraise the use of new and emerging technologies and their impact on the design and manufacture of components.
	2	Model and analyse vibrations in solids and develop simulation models for the purposes of the control of dynamic systems.
	3	Develop and evaluate linear dynamic models of automotive and mechanical components.

8		Module Assessment		
Learning Outcome		Coursework	Exam	In-Person
1 – 3			X	

9		Breakdown Learning and Teaching Activities	
Learning Activities		Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable		36	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE		0	
Private Study (PS) includes preparation for exams		164	
Total Study Hours:		200	