

Construction Sustainability

Module Information

2022.01, Approved

Summary Information

Module Code	4534NCCG
Formal Module Title	Construction Sustainability
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

JMU Schools involved in Delivery	
JMU Partner Taught	

Partner Teaching Institution

Institution Name	
Nelson and Colne College Group	

Learning Methods

Learning Method Type	Hours
Lecture	48

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks
SEP-PAR	PAR	September	12 Weeks

SEP_NS-PAR	PAR	September (Non-standard start date)	12 Weeks
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Aims and Outcomes

Aims	This module looks at the importance of environmental assessment and monitoring in reducing the environmental impact of the built environment. Understanding of the types of environmental impact will be covered and also how this affects the environment. On successful completion of this module students will have the knowledge and skills to undertake an environmental assessment of a building, a refurbishment or an adaptation and compare the resulting performance to similar buildings.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Describe the meaning of sustainability in relation to the built environment
MLO2	2	Compare the ways sustainability in construction can be assessed and monitored
MLO3	3	Review the features of different environmental assessment methods
MLO4	4	Carry out an environmental assessment on a building, a refurbishment and/or an adaptation and compare the resulting performance to similar buildings

Module Content

Outline Syllabus	The meaning of sustainabilityCauses and consequences of the changes to the global environmentThe three pillars of sustainabilityThe reasons the built environmental is unsustainableThe importance of balancing the need for buildings with the impact on the environmentBarriers to sustainability within constructionSustainability issues within new builds, renovations, refurbishment (domestic, commercial, industrial, office), adaptations and demolitionQuantitative measures of sustainabilityQualitative measures of sustainabilityChange through regulationChange through the marketIndustry standard environmental impact assessment methods for buildingsIndustry standard environmental impact assessment methods for materials and componentsSelecting an environmental assessment method appropriate to a projectCarry out an environmental assessment of a projectIdentify ways projects can improve its environmental impactCosts and benefits of a project
Module Overview	
Additional Information	

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Case Study Analysis	50	0	MLO2
Portfolio	Assignment	50	0	MLO1, MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Fiona Borthwick	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings	