

Module Proforma

Approved, 2022.02

Summary Information

Module Code	4561NCCG
Formal Module Title	Sustainability in Transport
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Graham Sherwood	Yes	N/A

Module Team Member

Contact Name Applies to all offerings Offerings	
---	--

Partner Module Team

ct Name Applies to all offerings Offerings	
--	--

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name

Nelson and Colne College Group

Learning Methods

Learning Method Type	Hours
Lecture	48

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	28 Weeks

Aims and Outcomes

Aims

This module aims to explain the existing transport strategies and to present the need to further sustainable transport technologies and planning. The module will clarify the current fuel types used to power the transportation sector, the infrastructure planning, the transportation policies, the fuel refining, and the impact of transport on environment. Case studies will be discussed where relevant sustainable practice is implemented and the impact of this on the environment and the society will be recognised.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Review the fuel types and infrastructure planning used for the current transport systems
MLO2	Appreciate the need for current transport systems to be more efficient and sustainable
MLO3	Investigate different sustainable transport practices
MLO4	Recognise the impact of sustainable transport practice on the environment and society

Module Content

Outline Syllabus

Current fuel types used for different transport methods. The effect of transportation infrastructure and policies on sustainability (social, economic and environmental). The sustainable transport concept and their impact on society and environment. Introduction to autonomous vehicles and the use of artificial intelligence in transport systems. Case studies to highlight the impact of sustainable transport practice such as clean air zones and promoting public transport.

Module Overview

Additional Information

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Individual Report	50	0	MLO2, MLO1
Presentation	Group Presentation	50	0	MLO4, MLO3