

Approved, 2022.02

Summary Information

Module Code	4559NCCG
Formal Module Title	Energy Supply Infrastructures
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			

Contact 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 The aim of this module is to provide students with an overview of energy supply generation and distribution. The module will allow students to understand issues related to energy supply by fossil fuels and the drive for the transition to renewable energy and how energy systems interact. On completion of the module, students will be able to assess different approaches to supply energy and understand the requirements for distribution and infrastructure in energy supply.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Demonstrate an understanding of the sustainability aspects of energy supply
MLO2	Assess the availability and impact of fossil fuels in the energy supply
MLO3	Assess the availability and impact of renewable energies in the energy supply
MLO4	Evaluate the interactions between different energy supplies and its distribution

Module Content

Outline Syllabus

Sustainability, global warming and energy supplyPrimary energy in heat and electricityEnergy distributionSolar energyWind energyBiomassWave and tidal energyHydroelectricFuel CellsThermal energy storage

Module Overview

Additional Information

Assessments

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