

Summary Information

Module Code	5504ICBTME
Formal Module Title	Heat Transfer and Combustion
Owning School	Engineering
Career	Undergraduate
Credits	15
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
International College of Business and Technology

Learning Methods

Learning Method Type	Hours
Lecture	45
Practical	3
Tutorial	15

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-PAR	PAR	April	12 Weeks

JAN-PAR	PAR	January	12 Weeks
SEP_NS-PAR	PAR	September (Non-standard start date)	12 Weeks

Aims and Outcomes

Aims	This unit will develop understanding of heat transfer principles and empirical relationships enabling them to solve practical problems involving heat transfer, combustion and the specification of practical engineering equipment.
------	--

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Understand the governing concepts of heat transfer and combustion systems.
MLO2	2	Analyse the basic principles and mechanisms of heat transfer and combustion process and carry out problem solving tasks on simple and real systems.
MLO3	3	Relate the theoretical concepts to practical scenarios.
MLO4	4	Design/evaluate the performance of a heat transfer/combustion system.

Module Content

Outline Syllabus	Laws of thermodynamics and applications for heat transfer systems Heat transfer mechanisms and coefficients Conduction analysis Convection analysis Boiling and condensation Thermal radiation Heat exchangers Combustion chemistry, energy and products of combustion
Module Overview	
Additional Information	

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Exam	Examination	60	2	MLO1, MLO2
Essay	Assignment	40	0	MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Karl Jones	Yes	N/A

Partner Module Team

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