

Module Details	
Module Title	Materials, Resources, Energy and Competitiveness
Module Code	OIM7019-A
Academic Year	2023/4
Credits	10
School	School of Management
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Online Lecture (Synchronous)	12.5
Online Seminar (Synchronous)	12
Groupwork	20.5
Interactive Learning Objects	5
Directed Study	50

Availability	
Occurrence	Location / Period
DLA	University of Bradford / Academic Year (Non-Standard)
DLA	University of Bradford / Semester 3

Module Aims
To develop understanding of the role of materials, resource and energy as a source of competitive advantage within the circular economy in relation to a range of settings and where relevant to your own professional roles and forward plans. To provide you with an opportunity to analyse and test resource, material or energy issues in support of business problem appraisal and decision making.

Outline Syllabus
The coupling of Resources, material and energy in the economy at Global, International, Regional, Local and business specific scale Commodity prices, volatility, hedging and scarcity Resource productivity versus efficiency Biological and technical resources (referenced as nutrients in a circular economy) Green chemistry, waste as resource and biorefinery concepts Developing renewable energy strategies at scale Cascading materials and energy Resource and material cycling strategies Renewable energy, energy systems and scale Cradle to cradle design Assessment tools and metrics

Learning Outcomes	
Outcome Number	Description
01	Review and evaluate key concepts, principles and business issues around resources, energy and materials and competitive advantage at different scales
02	Demonstrate the role and importance of concepts such as cascades, green chemistry, commodity prices, metrics on business case outcomes within the design process at different scales
03	Critically appraise a circular economy case study from a resources, energy and materials perspective
04	Clearly communicate the findings from a circular economy a case study focussed on resources, materials and energy

Learning, Teaching and Assessment Strategy
<p>You will engage in learning through a series of directed study activities and online tutorials. Study guide and textbook readings, supported by audio recordings and powerpoint slides will introduce important concepts. Structured tutorial exercises will provide you with the opportunity to develop your understanding of key concepts and ideas. Online tutorial sessions will enable you to engage in debate with your peers and tutor about important ideas and contemporary business problems.</p> <p>LOs 1-4 are assessed by a single written assignment</p>

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Coursework - Written	Individual written assignment 2000 words	100%

Reading List
To access the reading list for this module, please visit <a href="https://bradford.rl.talis.com/index.html">https://bradford.rl.talis.com/index.html</a>

*Please note:*

*This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.*

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