UNIVERSITY of BRADFORD

Module Descriptor

Materials, Resources, Energy and Competitiveness

Module Code:	OIM7019-A
Academic Year:	2018-19
Credit Rating:	10
School:	School of Management
Subject Area:	Operations and Information Management
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Tutorials	5
Directed Study	95

Availability Periods

Occurrence	Location/Period
DLB	University of Bradford / Semester 3 (June - Oct)
DLD	University of Bradford / Semester 3 (June - Oct)
DLC	University of Bradford / Semester 3 (June - Oct)
DLA	University of Bradford / Semester 3 (June - Oct)

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 sand 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

Module Learning Outcomes

On successful completion of this module, students will be able to...

1 Review and evaluate key concepts, principles and business issues around resources, energy and materials and competitive advantage at different scales

2 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

3 Critically appraise a circular economy case study from a resources, energy and materials perspective

4 Clearly communicate the findings from a circular economy a case study focussed on resources, materials and energy

Learning, Teaching and Assessment Strategy

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. LOs 1-4 are assessed by a single written assignment

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Coursework	One individual (up to 2000 words) written assignment relevant to your	0-2000 words	100%	Yes

professional
setting.

Legacy Code (if applicable)

MAN4332M

Reading List

To view Reading List, please go to **rebus:list**.