Supply Chain Analytics & Technology Management

Module Code: OIM7504-B
Academic Year: 2019-20
Credit Rating: 20
School: School of Management
Subject Area: Operations and Information Management
FHEQ Level: FHEQ Level 7 (Masters)
Module Leader: Dr Sankar Sivarajah

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>24</td>
</tr>
<tr>
<td>Tutorials</td>
<td>6</td>
</tr>
<tr>
<td>Laboratory</td>
<td>12</td>
</tr>
<tr>
<td>Directed Study</td>
<td>158</td>
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Availability Periods

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Location/Period</th>
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<tbody>
<tr>
<td>BDA</td>
<td>University of Bradford / Semester 2 (Feb - May)</td>
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Module Aims

To critically evaluate supply chain analytics tools. The increasing role of information technologies in the design and operation of modern supply chains will be analysed. You will be equipped with practical knowledge of using different open source analytical software, such as 'R'. 
Outline Syllabus

The module will cover topics such as:
* Emerging Technologies (such as Blockchain, 3D Printing)
* Digital Supply Chains
* Supply Chain Optimization Technology Applications
* Predictive Analytics in Supply Chains
* Logistics Planning and Modelling
* Inventory management, warehousing, storage and intelligent systems
* Future of Fleet Management (autonomous vehicle)
* Use of R programming for Supply Chain

Module Learning Outcomes

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

1. Critically appraise different analytics tools;
2. Critically evaluate innovation in supply chains;
3. To achieve competence in using supply chain analytics software;
4. To achieve competence in IT and writing reports.

Learning, Teaching and Assessment Strategy

Learning will be directed, supported and reinforced through a combination of lectures, computer labs and tutorials, discussion groups, directed and self-directed study.

Formative assessment will be provided throughout the course. To assess against the Learning Outcomes, varied assessment methods will be used such as network design using analytics software; and reports as described in the assessment section.

Summative Assessment -

MCQ tests will be done every alternate week during laboratory session and will account for 30% of the overall mark.

A case study will be given to you for which you need to design the supply network and produce a report. This will count for 70% of your overall mark.

Mode of Assessment

<table>
<thead>
<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
<th>Final Assess'</th>
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<tbody>
<tr>
<td>Formative</td>
<td>Coursework</td>
<td>Formative feedback will be provided on the draft outline of coursework based summative assessments.</td>
<td>-300 words</td>
<td>%</td>
<td>No</td>
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Summative Coursework Case study: design the supply network and produce a report. -2500 words 70% Yes

Summative Classroom test Classroom based MCQ tests 10 minutes 30% No

Legacy Code (if applicable)
OIM7036-B

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