**COURSE DETAILS**

**Course Code:** F20EC  
**Full Course Title:** e-Commerce Technology  
**SCQF Level:** 10  
**SCAF Credits:** 15  
**Available as Elective:** No

**DELIVERY LEVEL**

| Undergraduate: | Yes | Postgraduate Taught: | Yes | Postgraduate Research: | No |

Additional Information:

**COURSE AIMS**

- To impart an understanding of e-Commerce technology and of how Information Systems play a fundamental role in shaping e-Commerce;  
- To provide technical know-how for developing, managing and evaluating the different types of e-Commerce;  
- To provide analytical skills to examine and optimise the technical aspects of e-Commerce;  
- To equip students with skills for the effective implementation of cyber-security measures to protect e-commerce platforms, following industry standards;  
- To enable students to acquire knowledge in using data analytics to support the e-marketing and CRM components of e-Commerce;  
- To provide a description of technological challenges and innovations in e-Commerce;  
- To impart an understanding of the integration and the interoperability aspects of e-Commerce in the whole business system.

**LEARNING OUTCOMES – SUBJECT MASTERY**

- Critical understanding of the different types of business models, revenue models and business systems used in e-Commerce;  
- In-depth and practical knowledge of the use of web related technologies that enable e-Commerce applications;  
- Insights into the implementation of strategic and standard security measures to protect e-Commerce platforms;  
- Demonstrate comprehension and practice in the application of data analytics to enable rich customer experience.

**LEARNING OUTCOMES – PERSONAL ABILITIES**

- Can deal with complex issues and make informed judgements about the use of web based technologies in e-Commerce;  
- Exercise substantial autonomy, initiative and creativity in the application of technologies for the development of e-Commerce applications;  
- Can communicate and work with peers, more senior colleagues and specialists and demonstrate critical reflection (PDP);  
- Can independently carry out research based on literatures in the field of e-Commerce technology;  
- Can evaluate real-world e-Commerce and propose technical solutions to different business scenarios.

**SYLLABUS**
F20EC e-Commerce Technology

- Introduction to e-Commerce and overview of its technology

- E-Commerce technologies:
  - Web architectures and Infrastructures (e.g. web services and cloud computing)
  - Enterprise Data Management (e.g. centralised and distributed databases)
  - Data Analysis and Modelling in E-Commerce
  - Machine Learning, Recommender Systems and Personalisation
  - E-Marketing Strategies
  - Security risks in e-Commerce processes. Implementation of security industry standards

- E-Commerce management:
  - Business Process Modelling Languages
  - Types of E-Commerce and Revenue models
  - E-Commerce workflow, merchant transactions and order fulfilment
  - Supply Chain Management and Demand Chain Management
  - Crypto-currency and Digital Payment Systems
  - Legal, Ethical and Tax Issues in E-Commerce

COURSE RELATIONSHIPS
N/A

LOCATION AND ASSESSMENT METHODS

<table>
<thead>
<tr>
<th>Edi</th>
<th>SBC</th>
<th>Ork</th>
<th>Dub</th>
<th>Malay</th>
<th>IDL</th>
<th>COLL</th>
<th>ALP</th>
<th>OTH</th>
<th>Method</th>
<th>Weight</th>
<th>Exam Mins</th>
<th>Type</th>
<th>Diet</th>
<th>Synoptic Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OTH</td>
<td>Examination</td>
<td>60</td>
<td>120</td>
<td>Assessment</td>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OTH</td>
<td>Coursework</td>
<td>40</td>
<td></td>
<td>Assessment</td>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OTH</td>
<td>Examination</td>
<td>100</td>
<td>120</td>
<td>Reassessment</td>
<td>Semester 3</td>
<td></td>
</tr>
</tbody>
</table>

Re-assessment is for PGT students only