F21EC e-Commerce Technology

COURSE DETAILS
Course Code: F21EC
Full Course Title: e-Commerce Technology
SCQF Level: 11
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.
F21EC e-Commerce Technology

LEARNING OUTCOMES – PERSONAL ABILITIES

• Can deal with complex issues and make informed judgements about the use of web based technologies in e-Commerce;
• 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.

• 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);

SYLLABUS

- 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></td>
<td>Examination</td>
<td>60</td>
<td></td>
<td>Assessment</td>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coursework</td>
<td>40</td>
<td></td>
<td>Assessment</td>
<td>Semester 2</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>100</td>
<td>120</td>
<td>Reassessment</td>
<td>Semester 3</td>
<td></td>
</tr>
</tbody>
</table>