COURSE DETAILS
Course Code: B30UB
Full Course Title: 4th Year Project 1
SCQF Level: 10
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes  Postgraduate Taught: No  Postgraduate Research: No

COURSE AIMS
To provide a means of developing independent innovative ideas based on knowledge gained during lectures.

To allow students the freedom to implement their own designs ideas.

To give students experience of critically evaluating their designs and presenting their designs and conclusions.

To give the students experience of writing a technical report that presents their work in a concise critical manner

LEARNING OUTCOMES – SUBJECT MASTERY
Collect and assimilate advanced information and ideas.

Method and approach to project planning.

Demonstrate originality in engineering design and development.

Produce technical reports and present project results in a manner to demonstrate critical awareness of the work that has been undertaken

Ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques.

LEARNING OUTCOMES – PERSONAL ABILITIES
Ability to tackle real-world problems using advanced techniques.

Ability to undertake critical evaluations of a wide range of work and designs.

Ability to manage design projects and critically analyse over performance of the final work.

Understanding of contexts in which engineering knowledge can be applied (e.g. operations and management, technology development, etc).

SYLLABUS

Individual projects are carried out to simulate the practices experienced in industry where students are given a brief synopsis of aims and specification of a project and asked to fulfil these criteria. Students will need to complete an adequate volume of background reading against the aims and objectives of the project before starting the design process. A continuation of the design and construction of the hardware/software to meet the aims and objectives of the project. To demonstrate appreciation of practical problem solving skills and to make practical engineering decisions. To write a technical report bringing together all aspects of the project in a concise manner. To simulate industrial practice of critically evaluating their chosen design and giving a presentation to fellow engineers.

COURSE RELATIONSHIPS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Level</th>
<th>Title</th>
<th>School</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>B30UC</td>
<td>10</td>
<td>4th Year Project II</td>
<td>School of Eng &amp; Physical Sci</td>
<td>Taught Synoptic</td>
</tr>
</tbody>
</table>

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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coursework</td>
<td>100</td>
<td>Assessment</td>
<td>Semester 1</td>
<td>B30UC</td>
<td></td>
</tr>
</tbody>
</table>