Engineering Tripos Part IB, 2P8: The Engineer in Business (Compulsory), 2020-21

Lecturer and Course Leader
Professor Michael Pollitt [1]

Lecturer
Dr Lionel Paolella [2]

Lecturer
Dr Shasha Lu [3]

Timing and Structure
Weeks 1-8, Lent Term. 8 x 1-hour sessions including: 3 x 1-hour sessions on economics, 2 x 1-hour sessions on strategy, 3 x 1-hour sessions on marketing. The first three lectures will be delivered live on Zoom.

Aims
The aims of the course are to:

- provide students with a basic understanding of how businesses work, and to give them the language to work effectively with those who work in non-technical roles within a business.

Objectives
As specific objectives, by the end of the course students should be able to:

- gain a preliminary, concise and multi-faceted understanding of issues in running businesses.

Content
The module is structured around three major fields of studies that complement each other, namely economics, marketing, and strategy.

- The sessions on economics aim to introduce the economic nature of the firm, why and how firms grow or contract, and the nature of economic regulation facing firms.
- The sessions on strategy aim to examine how firms develop and maintain competitive advantage; and to help students to develop skills that will allow them to make robust strategic business decisions in the face of uncertainty and complexity.
- The sessions on marketing aim to help students understand core questions in marketing and how marketing contributes to business strategy and firm performance; and to help students to develop strategic and analytical skills in planning and evaluating marketing decisions in the business world.
The Engineer in Business

Sessions on economics (3 x 1-hour sessions):

The economic nature of the firm (1 session)

The theory of the firm (1 session)

The regulation of the firm (1 session)

Sessions on strategy (2 x 1-hour sessions):

What is strategy and how to analyse industries? (1 session)

Types of competitive advantage: Cost leadership and differentiation strategies (1 session)

Sessions on marketing (3 x 1-hour sessions):

Demystifying marketing (1 session)

Strategic brand management (1 session)

Marketing communication in the digital age (1 session)

Further notes

Assessment

A set of multiple-choice questions to be completed over 30 minutes of examination time. The 2019 paper is in proposed format.

Examples papers

Booklists

Please refer to the Booklist for Part IB Courses for complete references to this module, this can be found on the associated Moodle course.

Some helpful references on Economics Sessions:


Chapters 3 (Business Organisations), 13 (Alternative Theories of the Firm), 15 (Growth Strategy), 20 (Reasons for Government Intervention in the Market) and 21 (Government and the Firm).
Some helpful references on Strategy Sessions:

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Journal/Source</th>
<th>Access Information</th>
</tr>
</thead>
</table>

Some helpful references on Marketing Sessions:

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Journal/Source</th>
<th>Access Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'Introduction to Marketing.'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'The Changing Marketing.'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Managing digital technology in marketing.'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Digital and global brand management strategies.'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Examination Guidelines

Please refer to [Form & conduct of the examinations][11].

UK-SPEC

The [UK Standard for Professional Engineering Competence (UK-SPEC)][12] describes the requirements that have to be met in order to become a Chartered Engineer, and gives examples of ways of doing this.

UK-SPEC is published by the Engineering Council on behalf of the UK engineering profession. The standard has been developed, and is regularly updated, by panels representing professional engineering institutions, employers and engineering educators. Of particular relevance here is the [Accreditation of Higher Education Programmes (AHEP) document][13] which sets out the standard for degree accreditation.

The [Output Standards Matrices][14] indicate where each of the Output Criteria as specified in the AHEP 3rd edition document is addressed within the Engineering and Manufacturing Engineering Triposes.