ES1A2-15 Introduction to Business Management

22/23

Department

School of Engineering

Level

Undergraduate Level 1

Module leader

Alireza Rezaei

Credit value

15

Module duration

24 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

ES1A2 -15 Introduction to Business Management

Module web page

Module aims

The aim of this module is to provide the students, with an appreciation of some of the practical problems and issues involved in competitively managing an engineering business. The module presents a systems view of the firm or business, consistent with many engineering models, where a collection of inputs are transformed into outputs which are valued by the customer. For the purposes of this module an engineering business is simply defined as a business that employs at least one engineer. The business could deliver a product or a service, it could be any size from a single consulting engineer to a global corporation and it can take a variety of legal forms from sole trader to public limited company.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Economics:

Development of economies; agriculture based; manufacturing based, service and knowledge based.

External economic influences on competitiveness including:

- Macroeconomics and its impact on business economic activity, inflation, exchange rates and interest rates.
- Markets nature & structure, perfect competition, imperfect competition, monopoly.
- Government regulation / legislation, taxes / subsidies, industrial policy.
- Infrastructure finance, transport network, business network (clusters), university-industry links.
- Internal competitiveness of the business in terms of price factors and non-price factors.
 Structure of Industry;

Types of industry in terms of product, size, ownership, technology.

The changing face of industry - globalisation, consolidation; the knowledge base; information systems; e-commerce; regeneration; infrastructure.

The changing nature of business-to-business relationships and the impact of these on the nature of competition; joint ventures; partnering; alliances, supply chains and networks.

Different forms of business - sole trader, partnership, limited company, public limited company.

Introduction to business strategy and the role of functional strategies.

Ethics - an understanding of ethics associated with business and management activity.

Understanding organisations – organisation structure and theory; organisational differences between consulting engineers; contractors; subcontractors and suppliers.

Marketing;

Buyer behaviour - from that of the consumer/customer to the organisational purchasing role within the contractor or supplier.

The marketing mix - Product, Price, Place, Packaging and Promotion.

Marketing research and multi-media marketing. Sales forecasting techniques. Defining problems, collection of data, and analysis of findings. Development of e-commerce, electronic transference and its uses.

Marketing segmentation. Targeting and positioning. How can /should Contractors diversify? Whole Life Cycle and the importance to a company of having a balanced portfolio of activities/services.

Introduction to Management Accounting and Costing;

Sources of finance for business and projects. Capital investment appraisal techniques. Estimating costs and profits for one-off projects such as new products; civil projects; constructions; engineering services. Estimation techniques. Sources of data. Break-even analysis.

Life cycle costing;

Estimating costs and profits in business. Costs for decision-making; nature of costs; marginal costing; throughput accounting. Allocation of overheads; standard costing, absorption costing; activity-based costing.

Managing costs – budgets and variance analysis.

Learning outcomes

By the end of the module, students should be able to:

- Appreciate the impact of economic factors on the competitive performance of a business.
- Evaluate the positioning of a business within its market and economic environment and construct recommendations for its strategic development.
- Understand the process and importance of management accounting and costing.
- Appreciate the importance to a company of having a balanced portfolio of products.
- Identify and apply knowledge to demonstrate an understanding of the context of own work/practice.
- Demonstrate written, graphical and oral communication skills for identified work/practice and/or academic audiences.
- Understand the process and importance of strategic marketing.

Indicative reading list

The Business Environment, 7th Edition by Palmer, Publ. McGraw Hill 2011
Principles and Practice of Marketing, 8th Edition by Jobber, Publ. McGraw Hill, 2016
Foundations of Economics, 5th Edition by Begg, Publ. McGraw Hill 2013
Operations and Supply Chain Management, 15th Edition by Jacobs, Chase, Publ. McGraw Hill 2017

Accounting: Understanding and Practice, 4th Edition by Perks, Leiwy Publ. McGraw Hill 2013 (Chapters taken from all above texts constitute the custom core text book compiled for this course).

Subject specific skills

- 1. Knowledge and understanding of the need for a high level of professional and ethical conduct in engineering and the use of technical literature, other information sources including appropriate codes of practice and industry standards
- 2. Knowledge and understanding of risk issues, including health & safety, environmental and commercial risk, risk assessment and risk management techniques and an ability to evaluate commercial risk
- 3. Knowledge of professional codes of conduct, how ethical dilemmas can arise, relevant legal and contractual issues.

Transferable skills

- 1. Communicate (written and oral; to technical and non-technical audiences) and work with others
- 2. Awareness of the nature of business and enterprise in the creation of economic and social value
- 3. Overcome difficulties by employing skills, knowledge and understanding in a flexible manner
- 4. Ability to formulate and operate within appropriate codes of conduct, when faced with an

- ethical issue
- 5. Appreciation of the global dimensions of engineering, commerce and communication
- 6. Be professional in their outlook, be capable of team working, be effective communicators, and be able to exercise responsibility and sound management approaches.
- 7. Exercise initiative and personal responsibility, including time management, which may be as a team member or leader

Study

Study time

Type Require	a
rype Require	u

Lectures 21 sessions of 1 hour (14%)
Tutorials 2 sessions of 1 hour (1%)
External visits 3 sessions of 1 hour (2%)

Other activity 10 hours (7%)
Private study 114 hours (76%)

Total 150 hours

Private study description

114 hours of guided independent learning (including VLE use and support from Employer)

Other activity description

2 hours revision lectures3x2 hours of examples class1x2 hours computer-based test

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A3

Weighting Study time Eligible for self-certification **Assessment component** 20% No Computer-based test In class test, multiple choice The test duration is 20 minutes Reassessment component is the same Assessment component Written report 60% Yes (extension) Work-based analysis report (max. 12 pages) Reassessment component is the same Assessment component Work-based oral presentation 20% No

Feedback on assessment

Reassessment component is the same

Work-based analysis oral presentation

- Cohort-level feedback on computer-based test.
- Feedback on work-based analysis, for report and presentation.
- Support through advice and feedback hours.

Availability

Courses

This module is Core for:

 Year 1 of DESA-H221 Undergraduate Civil and Infrastructure Engineering (Non-integrated Degree Apprenticeship)