PRIFYSGOL
glyndŵr
UNIVERSITY

MODULE SPECIFICATION FORM

Module Title:	**Business Management**		Level:	**5**	Cedit Value:	**10**

Module code: **ENG501** (if known)	Cost Centre:	**GAME**	JACS2 code:	**N200**

Semester(s) in which to be offered:	**1**	With effect from:	**July 2015**

Existing/New:	**Existing**	Title of module being replaced (if any):	N/A

Originating Academic area:	**Engineering and Applied Physics**	Module Leader:	**A. Osanlou**

Module duration (total hours)	100	Status: core/option/elective (identify programme where appropriate):	**Free-standing 10-credit component comprising 'Business' half of ENG536 (Business and Research Development).**
Scheduled learning and teaching hours	36		
Independent study hours	64		
Placement hours	0		

Percentage taught by Subjects other than originating Subject (please name other Subjects):	**0%**

Programme(s) in which to be offered: **Enginering European Programme** (Non Award Bearing)	Pre-requisites per programme (between levels):	**None**

Module Aims:
To develop and enhance the student's awareness of himself/herself as an engineer within the wider context in which an engineer must work, with specific emphasis on the development and operation of small, medium and large enterprises; hence, to be able to evaluate his/her own development needs as part of professional and personal development planning.

Expected Learning Outcomes

Knowledge and Understanding:
At the completion of this module, the student should be able to:

1. Evaluate business practices within a company and the roles of engineers as team members contributing to the success and further development of that company; *(KS 2)*
2. Incorporate social, economic, ethical, environmental and sustainability considerations in development work relating to engineering within the fields of business and research. *(KS 7, 8)*

Key skills for employability
1. Written, oral and media communication skills,
2. Leadership, team working and networking skills
3. Opportunity, creativity and problem solving skills
4. Information technology skills and digital literacy
5. Information management skills
6. Research skills
7. Intercultural and sustainability skills
8. Career management skills
9. Learning to learn (managing personal and professional development, self management)
10. Numeracy

Assessment: *Please indicate the type(s) of assessment (eg examination, oral, coursework, project) and the weighting of each (%).* **Details of indicative assessment should also be included**.

Assessment is 100% in-course. It is by means of a team-based mini-project (report and presentation) simulating the management team of small/medium company (typically 5 members) for the development of a product, project or service; roles relate (as examples) to marketing, finance, product R & D and production, record-keeping, team co-ordination and formal processes including reporting and presentation of outcomes. Individual assessment of own contribution and team performance will be an integral element of this. Overall grading is based on a combination of individual report/log and team performance. It covers outcomes 1 and 2.
 (This corresponds to 'Assessment 2' of ENG536.)

Assessment number (use as appropriate)	Learning Outcomes met	Type of assessment	Weighting	Duration (if exam)	Word count (if coursework)
Assessment One:	1, 2	Portfolio	100%		2000

Learning and Teaching Strategies:

This section will use key-note lectures (large groups) with small-group tutorials in the first part of the module followed by team-work activities. The team-work will be largely self-organised outside class times but will also be observed during programmed tutorial sessions. Access to specialist facilities, such as IT labs, will be arranged as required.

There will be the common theme of 'self-evaluation of personal development' running throughout. This will be formatively supported on an individual basis via maintenance of a PDP (Personal Development and Planning) log.

Syllabus outline:

Development Considerations (to be embedded into Business Management studies detailed below)

> **Company development:** Small, medium, large-scale enterprises; analysis of growth (case study). Case for rationalisation. **Research development:** the role of 'research and development' in company growth; role of research in academic contribution to 'body of knowledge'. **Personal development:** relevance of research and industrial context to personal studies, especially individual project, group project and work placement (as applicable). **Wider considerations:** social, economic, ethical, environmental and sustainability considerations in development decisions for business and research.

People in Organisations: Relationship between own job role and that of others at work; legal framework (Health and Safety, etc); authority/delegation; leadership and motivation; setting/ achieving realistic goals/targets; human resource management; operation of personnel activities. Role of professional engineer.
> Assess individual role within an enterprise; formal/informal structures and relationships within organisations; achieve work-related goals through a group/team, exercising communication and other skills and techniques appropriate to a supervisory role;

Customer/Client Relationship: identification of market; customer satisfaction; changes in customers, e.g. social, demographic and economic changes; new product development, patent protection; cost-effectiveness and pricing; communication skills.
> Define customer/client relationships: specify product, customer needs (organisational/ environmental constraints); effect of changes in customer/client attitudes, expectations and needs on the organisation and workers within it.

Control/Management Activities: Planning, organising/control techniques; management of projects and continuous operations; obtaining finance; budgetary control, cost effectiveness; cost-benefit analysis, budget proposals.
> Management of others: employer/employee relations; human resource issues;
> Engineering management: professional status; formal/informal/contractual relationship between customer/client and the organisation; plan/cost/schedule work related activities, selecting and applying appropriate planning/control techniques; evaluate outcomes.

Use of information technology: for sourcing and production of realistic and relevant material.

*Throughout this module the student will be encouraged and guided in maintaining a PDP (Personal Development Plan) log started in Level 4. This considered as good practice for the student's professional development following completion of his/her studies. However, it is a formative activity and is not formally assessed as part of this module.

Bibliography

Essential reading:

Mullins, L.J. (2010) *Management and Organisational Behaviour*, 9th Edn., Financial Times/Prentice-Hall.

Nicholas, J.M. & Steyn, H. (2011) *Project Management for Engineering, Business, and Technology*, 4th Edn., Butterworth-Heinemann.

Recommended reading:

Whitcomb, C. (2013) *Effective Interpersonal and Team Communications Skills for Engineers*, Wiley-Blackwell.
Chelsom, J.V. et al. (2005) *Management for Engineers, Scientists, and Technologists*, 2nd Edn., John Wiley and Sons Ltd.
Dhillon, B.S. (2002) *Engineering and Technology Management Tools and Applications, Artech House, Inc.*
Freeman-Bell, G & Balkwill, J. (1996) *Management in Engineering: Principles and Practice*, 2nd Edn., Prentice-Hall.

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