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Title: ENGINEERING MANAGEMENT
Status: Definitive
Code: **6505ICBTBE** (129111)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: ICBT, Colombo

Team	Leader
Katie Evans	Y

Academic Level: FHEQ6 **Credit Value:** 10 **Total Delivered Hours:** 41
Total Learning Hours: 100 **Private Study:** 59

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	30
Tutorial	9

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Examination	70	2
Report	Report	Coursework Assignment	30	

Aims

The Module aim is to master the application of theories, frameworks and concepts of management relevant to various industry/ engineering management problems and project management.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critical understanding of management and business practices.
- 2 Critical understanding of tools and systems used to control and manage finance within an operations environment.
- 3 Ability to apply theoretical concepts to practical managerial situations.
- 4 Ability to apply a range of financial tools that can be used to control cost and manage a business.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Examination	1	2	3
Coursework Assignment	4		

Outline Syllabus

The module introduces business practices and topics related to engineering management. It covers relevant aspects of human resource management, operations, marketing, finance, personal development and project management.
Health & safety

How to develop appropriate systems and procedures in the workplace. More specifically, it covers risk assessment and risk mitigation at the same time discussing hazard spotting, safety management systems and strategies.

Team work

Additional managerial topics are introduced which embrace team-working, appraisal systems and ethical behavior. Team roles and team-problem solving techniques are presented, at the same time clarifying the use of enabling methods such as are reviewed and the use of qualitative versus quantitative approaches debated.

Engineering ethics

Students are encouraged to reflect on ethics in engineering and the ethical principles outlined in the codes and practices stipulated by professional bodies. Case studies underpin the concepts and cause the participants to question beliefs and behaviors.

Business awareness

The module examines the roles of other key functions providing wider business awareness. These functions include quality, marketing and finance. Commencing with quality, the total quality management (TQM) process and the concepts of quality and zero defects are discussed.

Operational finance

Operational finance topics are covered. These include product costing: direct, marginal, standard, profit and loss accounts (P & I), cash flow, break-even analysis, managing and controlling budgets.

Project management

The student is systematically taken through the full project life cycle including project planning, feasibility, evaluation and control. As part of this delivery, all of the relevant

project management techniques are covered.

Learning Activities

Students will be supported in their learning, to achieve the above learning outcomes, in the following ways:

The learning on this module will be through lectures and seminars. This will be supplemented by workshops using adult learning principles and small-group project work for presentation by students to whole class.

Notes

This module is part of the Level 6 of the BEng(Hons) in Biomedical Engineering