MEC 3102: Engineering Management

Hours per semester				Weighted total mark	Weighted exam mark	Weighted continuous assessment mark	Credit unit
LH	PH	TH	CH				CU
60	00	60	60	100	60	40	4

Course description

Engineering management is a fundamental subject within modern managerial education. The course introduces students to various approaches of managing an organization and teaches the students used to complete macro- and micro-analysis of organizations in the context of their development and interaction with the environment.

Objectives of the Course:

The objectives of this course are:

- To present the fundamental concepts of the engineering management.
- To create modern outlook that could be a basis for practical work in any management position.

Expected Outcomes:

On completing the unit the student should be able to:

- Describe the essential features of organizations.
- Understand the factors shaping these features.
- Appreciate the evolution of different organizational designs/types.
- Understand how managers may build and change organizations.
- Understand how different organizational forms impact on the individual within organizations. ***Course Content***
- Managers and managing 4 hours
- Evolution of management theories 6 hours
- The organisation environment 2 hours
- The global environment 2 hours
- Ethics ,social responsibility and diversity 4 hours
- The manager as a decision maker 2 hours

- The manager as a planner and strategist4 hours
- Organisational structure 4 hours
- Organisational control and culture 2 hours
- Human resource management 4 hours
- The manager as a person 2 hours
- Motivation 2 hours
- Leadership 2 hours
- Groups and teams 2 hours
- Communication2 hours
- Organisation conflicts, politics and change 4 hours
- Management of information systems and technology 4 hours
- Operations management 4 hours
- Management of new product development 4 hours

Delivery Methods:

The course will be taught by using lectures and tutorials

Assessment Methods:

Course work (assignments and tests) and final examination and their relative contributions to final grade are shown as follows:

Requirement Percentage contribution

Course work 40%

Final examination 60%

Total 100%

References

1. James Arthur Finch Stoner, R. Edward Freeman, Daniel R., Jr. Gilbert (2004). Management.

2. Bartol, Martin, Tein & Matthews 2004, Management: a Pacific Rim focus, 4th edn, McGraw-Hill.

3. James H. Donnelly, Jr., James L. Gibson, John M. Ivancevich. (1990). Fundamental of Management. 7th Ed. ISBN 0-256-07846-7. Richard D. Irwin Inc.

4. Johnston, Gostelow & Jones 1999, Engineering and society: an Australian perspective, 2nd Ed., Longman.

5. Samson, D 2003, Management for engineers, 3rd Ed, Pub Longman, Cheshire.

6. Davidson, P and Griffin, R. 2006, Management, 3rd Ed, John Wiley.

7. C.B. Chapman, D.F. Cooper, M.J. Page 1994, Management for engineers, John Wiley & Sons.

8. H. Weihrich, H. Koonzt, 2006. Management: A global perspective. Tata 6th Ed. McGraw-Hill

9. Richard Burton, and BDrge Obel (2006) Organization Design. Springer. ISBN 0-387-341722.