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| Module Title: | Technical Communications |
| Language of Instruction: | English |
| Credits: | 5 |
| NFQ Level: | 6 |
| Module Delivered In | 5 programme(s) |
| Teaching & Learning Strategies: | (a) Lectures & practicals (b) Assignments on the preparation of written documents (c) Assignments on the preparation of oral presentations. |
| Module Aim: | The aim of this module is introduce the students to management fundamentals and to provide them with the communications skills required of an engineer to produce reports. |
| Learning Outcomes | |
| <i>On successful completion of this module the learner should be able to:</i> | |
| LO1 | Explain the role of the manager and the nature of management. |
| LO2 | Describe the context of management in business environments and apply this knowledge to business situations. |
| LO3 | Make ethical and informed decisions regarding the presentation of technical material. |
| LO4 | Prepare written documents in order to communicate technical information to a varied readership. |
| LO5 | Prepare oral presentations for the purposes of communicating technical information to a varied listenership. |
| Pre-requisite learning | |
| Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i> | |
| No recommendations listed | |
| Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i> | |
| No incompatible modules listed | |
| Co-requisite Modules | |
| No Co-requisite modules listed | |
| Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i> | |
| No requirements listed | |

Module Content & Assessment

Indicative Content

Introduction to management

Role and nature of management. Functions of management. Management skills

Management theory

Business environments and planning tools (Task Factors. Macro Factors. PESTEL framework. SWOT Analysis. 7S. BCG Matrix. GE Matrix. Porter's 5 Forces.) Product Life Cycle.

Introduction to communications

The role of communications in engineering.

Ethics

Ethical decisions in engineering. Case studies. Code of Ethics. Copyright. Referencing. Plagiarism.

Written communications

Effective technical writing. Forms of technical writing (e.g. memos, instructions, specifications, formal reports). Research & preparation. Effective use of word processing & graphing tools.

Presentations

Effective presentations.

Assessment Breakdown

%

Continuous Assessment

100.00%

Continuous Assessment

| <i>Assessment Type</i> | <i>Assessment Description</i> | <i>Outcome addressed</i> | <i>% of total</i> | <i>Assessment Date</i> |
|------------------------|--|--------------------------|-------------------|------------------------|
| Other | Students will submit written assignments. | 1,2,3,4,5 | 50.00 | n/a |
| Other | Students will research & deliver an oral presentation. | 3,5 | 30.00 | n/a |
| Other | Other forms of assessment include class tests. | 1,2,3,4 | 20.00 | n/a |

No Project

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

| Workload: Full Time | | |
|----------------------------|------------------|--|
| <i>Workload Type</i> | <i>Frequency</i> | <i>Average Weekly Learner Workload</i> |
| Lecture | Every Week | 1.00 |
| Practicals | Every Week | 1.00 |
| Estimated Learner Hours | Every Week | 2.00 |
| Total Hours | | 4.00 |

Module Delivered In

| Programme Code | Programme | Semester | Delivery |
|----------------|---|----------|-----------|
| CW_EEBEE_B | Bachelor of Engineering (Honours) in Biomedical Electronics | 2 | Mandatory |
| CW_EESYS_B | Bachelor of Engineering (Honours) in Electronic Engineering | 2 | Mandatory |
| CW_EMMEC_B | Bachelor of Engineering (Honours) in Mechanical Engineering | 1 | Mandatory |
| CW_EEBEE_D | Bachelor of Engineering in Biomedical Electronics | 2 | Mandatory |
| CW_EEMEC_D | Bachelor of Engineering in Mechanical Engineering | 1 | Mandatory |