

|  |  |
|--|--|
| <b>Module Title:</b>   | Technical Communications   |
| <b>Language of Instruction:</b>  | English  |
| <b>Credits:</b>  | 5  |
| <b>NFQ Level:</b>  | 6  |
| <b>Module Delivered In</b>   | <a href="#">5 programme(s)</a>   |
| <b>Teaching &amp; Learning Strategies:</b>   | (a) Lectures & practicals (b) Assignments on the preparation of written documents (c) Assignments on the preparation of oral presentations.                                |
| <b>Module Aim:</b>   | 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. |
| <b>Learning Outcomes</b>   |  |
| <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.   |
| <b>Pre-requisite learning</b>  |  |
| <b>Module Recommendations</b><br><i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>         |  |
| No recommendations listed  |  |
| <b>Incompatible Modules</b><br><i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i> |  |
| No incompatible modules listed   |  |
| <b>Co-requisite Modules</b>  |  |
| No Co-requisite modules listed   |  |
| <b>Requirements</b><br><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

| Assessment Type | Assessment Description                                 | Outcome addressed | % of total | Assessment Date |
|-----------------|--|-------------------|------------|-----------------|
| 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**

| <b>Workload: Full Time</b> |                  |  |
|----------------------------|------------------|--|
| <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     | <a href="#"><u>Bachelor of Engineering (Honours) in Biomedical Electronics</u></a> | 2        | Mandatory |
| CW_EESYS_B     | <a href="#"><u>Bachelor of Engineering (Honours) in Electronic Engineering</u></a> | 2        | Mandatory |
| CW_EMMEC_B     | <a href="#"><u>Bachelor of Engineering (Honours) in Mechanical Engineering</u></a> | 1        | Mandatory |
| CW_EEBEE_D     | <a href="#"><u>Bachelor of Engineering in Biomedical Electronics</u></a>           | 2        | Mandatory |
| CW_EEMEC_D     | <a href="#"><u>Bachelor of Engineering in Mechanical Engineering</u></a>           | 1        | Mandatory |