INDUSTRIAL TECHNOLOGY- ELECTRONICS

7 Content

7.1 Organisation of Content

Industrial Technology Years 7–10 is an elective course that builds on the knowledge, skills and experiences developed in the *Technology (Mandatory) Years 7–8 Syllabus*.

The major emphasis of the *Industrial Technology Years 7–10 Syllabus* is on students being actively involved in the planning, development and construction of quality practical projects. Students should be provided with a range of theoretical and practical experiences to develop knowledge and skills in a selected focus area.

A project report is required for each practical project completed and will form part of the overall assessment of each module.

**Focus areas and modules**

This syllabus covers a number of focus areas in the field of technology: Automotive, Building and Construction, Ceramics, **Electronics**, Engineering, Farm Maintenance, Leather, Metal, Multimedia/Photography, Polymers, and Timber.

Each focus area is divided into two compulsory core modules (50 hours each) that lead to a range of optional specialised modules to be studied for not less than 50 hours each. The core modules of each focus area include the design, production and evaluation of practical projects that develop basic understanding and skills. These are further enhanced through the specialised modules.

Individual modules (core and specialised) provide specific content related to the focus areas which will be developed in the key areas of:

* Occupational Health and Safety (OHS)
* Materials, Tools and Techniques
* Design
* Links to Industry
* Workplace Communication
* Societal and Environmental Impact.

Modules are structured in a sequential manner, with the knowledge and skills developed in one module applied and enhanced through subsequent modules within the focus area. Schools may deliver consecutive modules concurrently to maximise the use of resources.

For each module, additional content is provided that will enable students to explore focus areas to a greater depth and breadth. Additional content is designed to deepen and broaden students’ knowledge and skills in both practical and theoretical contexts.

Syllabus content is to be delivered in accordance with all policies and guidelines relating to the safe handling, use, storage and disposal of tools, equipment, materials and chemicals.

**Focus areas and modules**

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| **Focus Area** | Core Module  50 hours | Core Module  50 hours | Specialised Module  50 hours | Specialised Module  50 hours |
| Automotive | Automotive 1 | Automotive 2 | Automotive 3 | Automotive 4 |
| Building and Construction | Building and Construction 1 | Building and Construction 2 | Construction and Renovation 3 | Construction and Renovation 4 |
| Outdoor Structures and Landscaping 3 | Outdoor Structures and Landscaping 4 |
| Ceramics | Ceramics 1 | Ceramics 2 | Ceramics 3 | Ceramics 4 |
| Electronics | **Circuits and Components 1** | **Circuits and Components 2** | **Circuits and Components 3** | **Circuits and Components 4** |
| **Computer Repair and Construction 3** | **Computer Repair and Construction 4** |
| Engineering | Engineering 1 Structures | Engineering 2 Mechanisms | Engineering 3  Control Systems | Engineering 4  Alternative Energy |
| **Farm Maintenance** | Farm Maintenance 1 | Farm Maintenance 2 | Farm Maintenance 3 | Farm Maintenance 4 |
| Leather | Leatherwork 1 | Leatherwork 2 | Leatherwork 3 | Leatherwork 4 |
| Metal | General Metal 1 | General Metal 2 | Metal Machining 3 | Metal Machining 4 |
| Fabrication 3 | Fabrication 4 |
| Art Metal 1 | Art Metal 2 | Art Metal 3 | Art Metal 4 |
| Jewellery 3 | Jewellery 4 |
| Multimedia / Photography | Multimedia 1 | Multimedia 2 | Multimedia 3 | Multimedia 4 |
| Photography 1 | Photography 2 | Photography 3 | Photography 4 |
| Polymers | Polymers 1 | Polymers 2 | Polymers 3 | Polymers 4 |
| **Timber** | General Wood 1 | General Wood 2 | Cabinetwork 3 | Cabinetwork 4 |
| Wood Machining 3 | Wood Machining 4 |

Students may study up to 2 courses based on the Industrial Technology syllabus. Each course may comprise:

1 focus area studied for 100 hours (core modules only) **or**

1 focus area studied for 200 hours (core modules plus 2 specialised modules).

Course combinations in Industrial Technology Years 7–10 may include:

* 1 x 100-hour course
* 1 x 200-hour course
* 2 x 100-hour courses
* 2 x 200-hour courses
* 1 x 100-hour course and 1 x 200-hour course.

Each course must be based on the study of one focus area only. Where a student undertakes   
two courses in Industrial Technology, they must be from different focus areas.

For example:

Focus Area – Timber

A student may choose to study

100-hour course:

General Wood 2

Core Module

50 hours

General Wood 1

Core Module

50 hours

200-hour course:

Cabinetwork 4

Specialised Module

50 hours

Cabinetwork 3

Specialised Module

50 hours

General Wood 2

Core Module

50 hours

General Wood 1

Core Module

50 hours

**OR**

Cabinetwork 3

Specialised Module

50 hours

Wood Machining 3

Specialised Module

50 hours

General Wood 2

Core Module

50 hours

General Wood 1

Core Module

50 hours