



INTERNATIONAL SCHOOL OF SOUTH AFRICA

FORM 1 – UPPER 6 YEARLY OVERVIEW

DESIGN AND TECHNOLOGY

RATIONALE

Our aim is to establish and maintain a stimulating, supportive and disciplined environment that will promote the development of creative and innovative skills enabling a systematic approach to problems of a technological, graphical or theoretical nature to be applied. We focus on five main skill areas namely:

- problem solving,
- graphic communication,
- resistant materials,
- manufacturing and
- technology

We believe that the above components will stimulate and encourage technological development and prepare students for IGCSE, and ultimately AS and A Level study in this subject.



OUTLINE OF FORM 1

TERM 1

Introduction to Design and Technology,
Workshop rules,
Materials and processes.

TERM 2

Basic graphics

Timber

Metals

Plastics

TERM 3

Simple basic project making

Adhesives

Abrasives

Finishes



OUTLINE OF FORM 2

TERM 1

Project design drawings

Working with materials

Workshop tools.

TERM 2

Manufactured boards

Adhesives

Fixings

TERM 3

Fittings

Wasting materials

Project making



OUTLINE OF FORM 3

TERM 1

Design Structures

Forces

Mechanisms

TERM 2

Making Structures

Graphic design

Orthographic drawing

TERM 3

Orthographic drawing

Bridge design

Bridge making



OUTLINE OF FORM 4

TERM 1

Design and Technology

Design process

Manufacturing processes

Graphic Design drawings

Design and market influence

Creative approach

Design influence

TERM 2

Health and safety

Tools and equipment

Techniques and processes

Systems and control.

Types of materials

TERM 3

Investigating the design task

Development

Making

Testing and evaluation



OUTLINE OF FORM 5

TERM 1

Design Process

Folio work

Situation

Problem

Design brief

Research into brief

Specifications

Possible Ideas

Chosen idea

TERM 2

Development

Production Plan

Realisation

Testing

TERM 3

Evaluation

Theory revision exercises

Examination techniques



OUTLINE OF AS LEVEL

TERM 1

Observe need/requirement design and technology

Problem and design brief,

Research and analysis of ideas.

Materials and processes.

Ergonomics and anthropometrics

Effects of design on society

Exploration and analysis of ideas

Product analysis

TERM 2

Design folio

Modelling

TERM 3

Theory revision exercises

Examination techniques



OUTLINE OF A LEVEL

TERM 1

Model Analysis

Chosen Idea

Production Plan

TERM 2

Product Realisation

Testing

TERM 3

Evaluation

Theory revision exercises

Examination techniques