

# DESIGN AND APPLIED TECHNOLOGY

## INTRODUCTION

The public assessment of this subject is based on the Curriculum and Assessment Guide (Secondary 4–6) Design and Applied Technology (DAT), jointly prepared by the Curriculum Development Council and the Hong Kong Examinations and Assessment Authority. Candidates have to refer to the Guide for the knowledge, understanding and skills they are required to demonstrate in the assessment.

## ASSESSMENT OBJECTIVES

The objectives of this assessment are to evaluate candidates' abilities in the following:

- Application of research, graphical communication and information processing skills to the design process.
- Response to identified needs, wants and opportunities of technological products and processes, while being aware of the impacts of technology and design on society.
- Use of the design process to develop design solutions to student-generated design problems in a range of contexts.
- Selection and use of appropriate technology and relevant resources for designing, manufacturing and marketing a product.
- Evidence of appropriate design decisions based on knowledge and understanding of design practices and relevant technological systems and processes.

## MODE OF ASSESSMENT

The public assessment will consist of a public examination component and a school-based assessment component as outlined in the following table:

Component	Part	Weighting	Duration
Public Examination	Paper 1 Compulsory Part	30%	2 hours
	Paper 2 Elective Part – Each candidate is required to choose any two of the following five modules:  2A: Automation 2B: Creative Digital Media 2C: Design Implementation and Material Processing 2D: Electronics 2E: Visualisation and CAD Modelling	30%	2 hours
School-based Assessment (SBA)	Design Project A list of suggested project titles to be provided by the HKEAA	40%	

## PUBLIC EXAMINATION

The overall aim of the public examination is to assess candidates' abilities to demonstrate their knowledge and understanding in different areas of technology and to apply them to their daily living.

### **Paper 1** (2 hours)

This paper is compulsory with Sections A and B. This paper will carry 30% of the subject mark.

**Section A** Compulsory (60 marks)  
One major design question.

**Section B** Optional questions (40 marks)  
Three questions will be set and candidates are required to answer two questions.

### **Paper 2** (2 hours)

This paper consists of the following 5 elective modules. Candidates are required to choose two modules when they registered for the examination. This paper will carry 30% of the subject mark.

- 2A: Automation
- 2B: Creative Digital Media
- 2C: Design Implementation and Material Processing
- 2D: Electronics
- 2E: Visualisation and CAD Modelling

Three questions will be set for each of the five modules. Candidates are required to answer two questions in each of the two registered modules.

### **SCHOOL-BASED ASSESSMENT (SBA)**

SBA is compulsory for **all** school candidates. In the context of public assessment, SBA refers to assessments administered in schools and marked by the student's own teachers. The primary rationale for SBA in DAT is to enhance the validity of the overall assessment and extend it to include the assessment of students' skills in the following aspects:

- Identifying and investigating design opportunities
- Developing a design brief and specifications
- Generating design ideas
- Developing design ideas into a final solution
- Making the final prototype
- Testing and evaluating

### **Design Project** (25-35 hours)

Candidates are required to complete a design project in the SBA, which carries 40% of the subject mark. Depending on the nature of the project, items to be submitted by candidates will be:

- a working physical model/prototype, or a virtual 3D model plus a working partial physical model, and
- an A4 or A3 size portfolio.

Candidates are required to keep good custody of their work for inspection and authentication purposes until the release of the HKDSE results.

The detailed requirements, regulations, assessment criteria and guidelines will be provided in the SBA Handbook for HKDSE Design and Applied Technology (DAT) published by the Hong Kong Examinations and Assessment Authority.