

**Hong Kong Diploma of Secondary Education Examination 2013**  
**DESIGN AND APPLIED TECHNOLOGY**  
**SBA Project List**

Candidates are required to choose ONE project only.

**Project 1: A Flying Machine/System**

Energy conservation can help to reduce a future shortage of oil in the world.

**Part 1: Research, Investigation and Data Collection**

- Investigate the development of flight technology and its impact (e.g. a hot air balloon).
- Explore the possibilities of air travel with different machines.
- Investigate new technology in the field of aeronautics and its application in the use of renewable energy.

**Part 2: Design and Make**

- Propose new ideas for flying machines/systems.
- Plan, specify and design a model or prototype for the new ideas proposed.
- Prepare a presentation on the design possibilities and collect feedback.

**Project 2: Furniture with Special Features**

Furniture can be designed specifically for people with individual needs by adding special features.

**Part 1: Research, Investigation and Data Collection**

- Investigate the current development of devices/furniture with special features.
- Analyse the use of modern materials in relation to product design.

**Part 2: Design and Make**

- Brainstorm ideas on furniture with special features.
- Design a piece of furniture with special features.
- Prepare a plan to promote the new product in the market.

### **Project 3: Strategic Landfills**

Every day, thousands of tones of garbage from businesses, industry and households need to be disposed of.

#### **Part 1: Research, Investigation and Data Collection**

- Investigate the future development of strategic landfills and its impact on society.
- Explore the special features of landfills such as the following:
  - (a) Environmental Performance, e.g. landfill liner system, leachate management system, landfill gas management system, surface water/ground water management system and environmental monitoring system;
  - (b) Landfill in operation.

#### **Part 2: Design and Make**

- Develop ideas on the new use of one selected landfills in Hong Kong.
- Plan and present the features of one new strategic landfill.
- Collect feedback on building landfills.

### **Project 4: A Topic of Your Choice**

This topic requires approval of your school teacher.

#### **Remarks :**

**The HKDSE Examination Regulations stipulate that a candidate may be liable to disqualification from part or the whole of the Examination or suffer a mark or grade penalty for breaching the regulations.**