

Grade 12 IB DT SL/HL 2 2026-2027

COURSE DESCRIPTION: IB Design Technology is a practical, inquiry-based course that develops students' ability to solve real-world problems through human-centred design. Students apply the iterative design process by conducting research, generating and developing ideas, creating prototypes, and testing and evaluating solutions while considering user needs, sustainability, and the social, ethical, and environmental impact of design. Both Standard Level (SL) and Higher Level (HL) students complete the same Internal Assessment, in which they identify a design opportunity and develop a solution through an evidence-based design process. Higher Level students extend their learning through additional units on structural systems, mechanical systems, electrical systems, and manufacturing techniques, providing a deeper understanding of how products are engineered and manufactured. The course develops creativity, critical thinking, communication, and practical problem-solving skills, preparing students for further study in engineering, architecture, product design, industrial design, and other technology-related disciplines.

RESOURCES AND MATERIALS

- Google Classroom
- Design, CAD, Project booklets/PowerPoints
- Tools/equipment in the workshop
- Online tutorials

COURSE CONTENT

IB DT DP follows the assessment objectives listed in the official IB course guide.

Semester 1

Unit 1: Criterion C Ideation and modelling

- Present feasible redesign ideas
- Identify the redesign ideas

Assessment: Type (IA Project, etc.) - Date September 2026

Unit 2: Criterion D Designing a solution

- Develop fidelity models
- Design drawings of the intended solution

Assessment: Type (Test, Project, etc.) - Date December 2026

Unit 3: Theory Units

- A3.1 Material classification and properties
- B3.1 Material selection
- C3.1 Product analysis and evaluation
- A3.2 Introduction to structural systems (HL only)
- A3.3 Introduction to mechanical systems (HL only)
- A3.4 Introduction to electronic systems (HL only)
- B3.1 Material selection
- B3.2 Structural systems application and selection (HL only)

Assessment: Type (Test, Project, etc.) - Date

Semester 2

Unit 4: Criterion E Presenting a solution

- Present the intended redesign solution
- Present how the intended redesign solution improves on the existing product

Assessment: Type (Project) - Date Feb 2027

Unit 5: Theory Units

- B3.2 Structural systems application and selection (HL only)
- B3.3 Mechanical systems application and selection (HL only)
- B3.4 Electronic systems application and selection (HL only)

Assessment: Type (Test) - Date TBC

Unit 6: Theory Units

- C3.1 Product analysis and evaluation
- C3.2 Life-cycle analysis (HL only)
- A4.1 Manufacturing techniques (HL only)
- B4.1 Production systems (HL only)
- C4.1 Design for manufacture strategies (HL only)

Assessment: Type (Test) - Date TBC

ASSESSMENTS AND WEIGHTINGS

Assessments Overview

Semester 1			Semester 2		
Assessment	Date	Weighting	Assessment	Date	Weighting
Assessment #1			Assessment #1		
Assessment #2			Assessment #2		
Assessment #3			Assessment #3		
Assessment #4 or Semester / Mock Exam			Assessment #4 or Semester / Mock Exam		

*** Please note that the assessment dates are subject to change at the teacher's discretion. Refer to the [DAA High School Assessment Calendar](#) for current assessment dates.**

LATE & MISSED ASSESSMENTS

- Students and parents must be contacted (in person, via email, and/or via PowerSchool) regarding late work.
- Students who require an extension for an assessment should speak with their teacher well **in advance of** the due date.
- Students who have a sick leave certificate or approval from the High School Administration will be allowed to submit or make up the assessment without penalty, as scheduled and confirmed by the teacher.
- Students who do not have a valid reason will be allowed to submit or make up the assessment, however late work penalties will apply as outlined in the [DAA High School Assessment Policy](#).

ATTENDANCE REQUIREMENTS

Students are expected to attend school every day unless they have a valid excuse. The KHDA Parent Contract stipulates that 25 non-consecutive or 20 consecutive absences in any course within the school year may result in disciplinary action and/or a loss of academic credit. Dubai American Academy High School awards academic credit each semester and, as such, students who exceed 12 absences in any one of their academic subjects within a single semester will be given opportunities for credit recovery. In these instances, students who decline or neglect to complete credit recovery will not receive academic credit, and a grade of F will be reflected on their transcript.

Students absent on the day of a major assessment in any of their classes must present the documentation

Contact Information

Head of Department	Email Address	Room Number
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