Deira International School

IB DP IB1 CS_KAA HL (IB1)

📖 Summary

Unit 7 Control `Current`

1 of 8 weeks

Subject	Year	Start date	Duration
Computer Science	IB1	Week 2, May	`8 weeks` 14 hours

Course Part

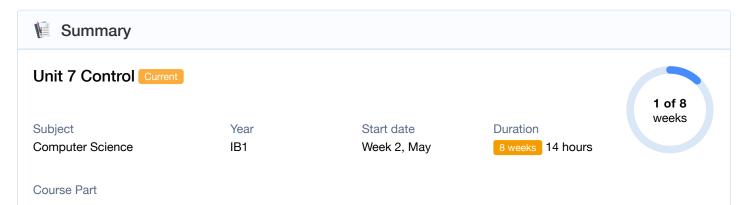
🔍 Curriculum

⊕ Aims

Enable students to apply and use a body of knowledge, methods and techniques that characterize computer science

Develop an appreciation of the possibilities and limitations associated with continued developments in IT systems and computer science

Encourage an understanding of the relationships between scientific disciplines and the overarching nature of the scientific method

◇ Objectives

Know and understand

computer science terminology

methods of presenting information

Apply and use

relevant facts and concepts

relevant design methods and techniques

terminology to communicate effectively

appropriate communication methods to present information

📑 Syllabus Content

Additional higher level

Topic 7 - Control

7.1 Control

Centralized control systems

7.1.1 Discuss a range of control systems.

7.1.2 Outline the uses of microprocessors and sensor input in control systems.

Deira International School

IB DP IB1 CS_KAA HL (IB1)

7.1.3 Evaluate different input devices for the collection of data in specified situations.

7.1.4 Explain the relationship between a sensor, the processor and an output transducer.

7.1.5 Describe the role of feedback in a control system.

7.1.6 Discuss the social impacts and ethical considerations associated with the use of embedded systems.

Distributed systems

7.1.7 Compare a centrally controlled system with a distributed system.

7.1.8 Outline the role of autonomous agents acting within a larger system.

📝 ATL Skills

🫳 Approaches to Learning

⚙️ **Thinking**

- In this unit, we will

  ask students to formulate a reasoned argument to support their opinion or conclusion

  reward a new personal understanding, solution or approach to an issue

  ask open questions

  ask questions that required the use of knowledge from a different subject from the one you are teaching

  make a link to TOK

📖 **Research**

- In this unit, we will

  require students to practise effective online search skills (for example, use of Booleans and search limiters)

  require students to record their search for sources in steps (types of search engines, search terms, and so on)

👨‍💼 Developing IB Learners

⭐ Learner Profile

📚 Knowledgeable

💡 Thinkers

🖼️ Open-minded

Deira International School

IB DP IB1 CS_KAA HL (IB1)

Assessment

Assessment criteria

External Assessment

Paper 1

A: Short answer questions

B: Structured questions

Description