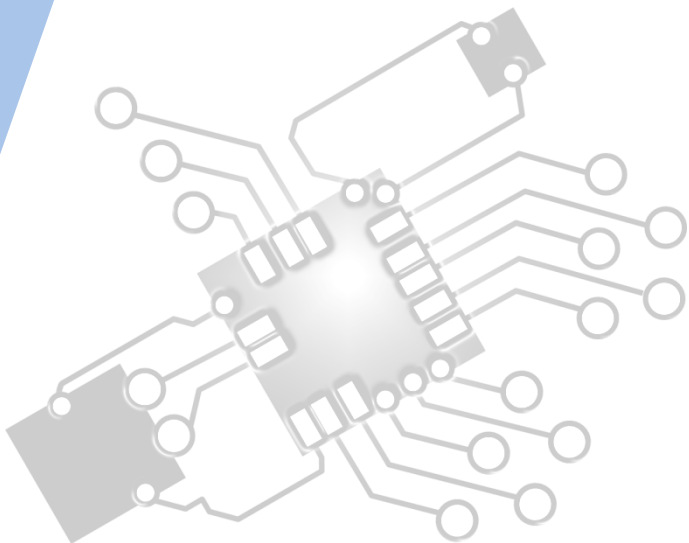# Planning & system installation
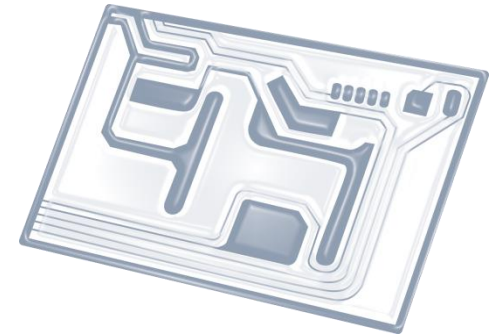
IB Computer Science

Content developed by
Dartford Grammar School
Computer Science Department

HL Topics 1-7, D1-4

1: System design

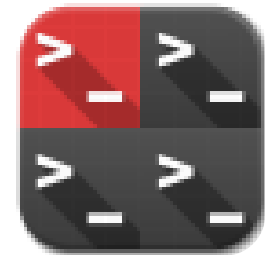2: Computer Organisation

3: Networks

4: Computational thinking

5: Abstract data structures

6: Resource management

7: Control

D: OOP

HL & SL 1.1 Overview

Planning and system installation

1.1.1 Identify the context for which a new system is planned.

1.1.2 Describe the need for change management

1.1.3 Outline compatibility issues resulting from situations including legacy systems or business mergers.

1.1.4 Compare the implementation of systems using a client's hardware with hosting systems remotely

1.1.5 Evaluate alternative installation processes

1.1.6 Discuss problems that may arise as a part of data migration

1.1.7 Suggest various types of testing

User focus

1.1.8 Describe the importance of user documentation

1.1.9 Evaluate different methods of providing user documentation

1.1.10 Evaluate different methods of delivering user training

System backup

1.1.11 Identify a range of causes of data loss

1.1.12 Outline the consequences of data loss in a specified situation

1.1.13 Describe a range of methods that can be used to prevent data loss

Software deployment

1.1.14 Describe strategies for managing releases and updates

1: System design

2: Computer Organisation

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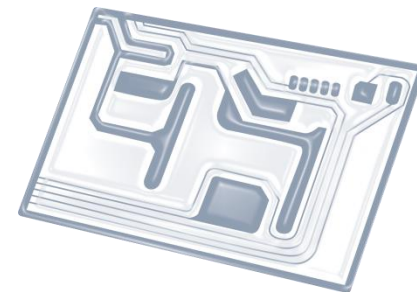4: Computational thinking

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Topic 1.1.1

Identify the **context** for which a **new system** is planned

Designing a new system

- Before a system is designed, what the new system should do needs to be identified.

Systems analyst

- Systems are designed and analysed by systems analysts.

- S/He looks at the existing system and tries document how it works through observation.

- This can be done using surveys, interviewing users, observing them or by tracing how information is handled by looking at the documents produced by it.

Evaluation

- Then the systems analyst must make an evaluation of the current system.

- What works fine, what doesn't?

- Based on this, he proposes a new system to be created that should work better than the old one, increasing productivity.

Factors

- For this, the systems analyst has to factor in a number of things:

- what existing infrastructure from the existing system can be used?

- What requirements on hardware and software will the new system have?

- Are there any ethical issues resulting, for example will the new system make people redundant, leading to loss of jobs? Will people need retraining?