

# A-Level Computer Science: OCR (H446) Curriculum and Assessment Overview

# **Content Overview**

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data
- Data types, data structures and algorithms
- Legal, moral, cultural and ethical issues
- Elements of computational thinking
- Problem solving and programming
- Algorithms to solve problems and standard algorithms

The learner will choose a computing problem to work through according to the guidance in the specification.

- Analysis of the problem
- Design of the solution
- Developing the solution
- Evaluation

# **Assessment Overview**

Computer
systems
(01)
140 marks
2 hours and
30 minutes
written paper

(no calculators allowed)

Algorithms and programming (02\*)

140 marks
2 hours and
30 minutes
written paper
(no calculators allowed)

Programming project

03\* - Repository

or

04\* - Postal

or

80 - Carry forward

(2018 onwards)\*

70 marks Non-exam assessment **40%** of total

A level

40%

of total

A level

20%

of total

A level



# A-Level Computer Science: OCR (H446) Curriculum Delivery Plan

# **Year 12 (AS)**

#### Term 1

#### 1st Half Term

SLR 3 Input, output and storage SLR 19 Thinking ahead SLR 1 Structure and function of the processor SLR 2 Types of processor SLR 23 Programming techniques

#### 2nd Half Term

SLR 4 Operating systems
SLR 21 Thinking logically
SLR 8 Introduction to
programming
SLR 18 Thinking abstractly
SLR 20 Thinking procedurally
SLR 5 Application generation

## Term 2

#### 1st Half Term

SLR 13 Data types SLR 14 Data structures SLR 6 Software development

#### 2nd Half Term

SLR 15 Boolean algebra SLR 8 Introduction to programming

## Term 3

#### 1st Half Term

SLR 25 Algorithms SLR 11 Networks SLR10 Databases

#### 2nd Half Term

SLR 16 Computer-related legislation SLR 17 Ethical, moral and cultural issues What makes a computer

SLR 12 Web technologies

# Year 13 (A2)

## Term 1

#### 1st Half Term

SLR 13 RECAP + Year 13

SLR 2 RECAP

SLR 3 RECAP

SLR 15 RECAP + Year 13

SLR 25 RECAP

**SLR 7 00** 

**Project Support** 

#### 2nd Half Term

SLR 26 Algorithms

SLR 10 RECAP + Year 13

SLR 22 Thinking concurrently

SLR 24 Computational methods

SLR12 RECAP + Year 1

#### Term 2

#### 1st Half Term

SLR 4 RECAP + Year 13

SLR 9 Compression, encryption

and hashing

**Project Support** 

# **2nd Half Term**

SLR 24 Computational methods SLR5 – Application generation

**Project Support** 

## Term 3

#### 1st Half Term

**REVISION** 

# 2nd Half Term

**REVISION**