



INTERNATIONAL SCHOOL OF SOUTH AFRICA

FORM LOWER – UPPER 6 YEARLY OVERVIEW

COMPUTER SCIENCE

RATIONALE

- The aim of Computer Science is to set out progression through the syllabus content.
- It follows the 2019 syllabus, but the order in which topics are covered has been adjusted to give a coherent flow to the course.
- The progression through these topics has been designed to build on students' own experiences, and to ensure that students have sufficient basic knowledge and understanding to tackle the more challenging issues.
- Continuous Assessment of Lower 6th work is to be carried out through into Upper 6th as these topics cover the basic building blocks of a full A Level Computer Science Course.
- There are twelve topics in the Scheme of Work divided into two parts to cover AS level work as students prepare for AS Level external examinations. Within each topic there are several units.
- There are ten topics in the Scheme of Work divided into two parts to cover A level work as students prepare for A Level external examinations. Within each topic there are several units.
- A separate schedule of tests is produced at the beginning of each Term taking into account the deadlines set for Mark Orders.



OUTLINE OF AS LEVEL

Term 1			
Paper 1		Paper 2	
Information representation	1.1	Algorithm design	2.1
Hardware	1.3	Data representation	2.2
Processor fundamentals	1.4		
Database and data modelling	1.8		
Term 2			
Paper 1		Paper 2	
System software	1.5	Programming	2.3
Communication and internet technologies	1.2	Software development	2.4
Security, privacy and data integrity	1.6	Pre-Released Material	
Ethics and ownership	1.7		
Term 3			
Paper 1		Paper 2	
Information representation	Revision	Algorithm design	Revision
Hardware	Revision	Data representation	Revision
Processor fundamentals	Revision	Programming	Revision
Database and data modelling	Revision	Software development	Revision
System software	Revision	Pre-Released Material	
Communication and internet technologies	Revision		
Security, privacy and data integrity	Revision		
Ethics and ownership	Revision		



OUTLINE OF A LEVEL

Term 1			
Data representation	3.1	Computational thinking and problem-solving	4.1
Communication and internet technologies	3.2	Algorithm design methods	4.2
System software	3.4		
Term 2			
Hardware	3.3	Further programming	4.3
Security	3.5	Software development	4.3
Monitoring and control systems	3.6	Pre-released Material	
Term 3			
Data representation	Rev	Computational thinking and problem-solving	Rev
Communication and internet technologies	Rev	Algorithm design methods	Rev
System software	Rev	Further programming	Rev
Hardware	Rev	Software development	Rev
Security	Rev	Pre-released Material	Rev
Monitoring and control systems	Rev		