

# St John's Senior School



**Subject: Computer Science**  
**Teacher: Mr. Zampekos**

**Form: 5<sup>th</sup>**  
**Term: Autumn**

WEEK	WEEK BEGINNING	TOPIC
1	2 <sup>nd</sup> September	Fundamentals of computer networks: Computer networks – types, Network protocols
2	9 <sup>th</sup> September	Fundamentals of computer networks: Network security Programming recap: Python – IDLE – variables – operations- Boolean logic
3	16 <sup>th</sup> September	Fundamentals of computer networks: TCP/IP model Programming recap: Programming structures – Data structures – Subroutines (procedures and functions) – Random number generation
4	23 <sup>rd</sup> September	Fundamentals of cyber security: Security threats, Social engineering, Malicious code Programming recap: Programming languages – translators
5	30 <sup>th</sup> September	Programming- Structured programming recap: File handling, Robust and secure programming (data validation, authentication, test data)
6	7 <sup>th</sup> October	<b>MINI – TEST</b>
7	14 <sup>th</sup> October	Aspects of software development: Design, implementation, testing, evaluation
<b>HALF – TERM</b>		
8	28 <sup>th</sup> October	Fundamentals of data representation recap: Numeric systems (decimal, binary, hexadecimal). Converting between number bases
9	4 <sup>th</sup> November	Fundamentals of data representation recap: Binary arithmetic, Character encoding, Representing images-sound
10	11 <sup>th</sup> November	Computer systems recap: Hardware and software, Boolean logic + logic circuits
11	18 <sup>th</sup> November	NEA
12	25 <sup>th</sup> November	NEA
13	2 <sup>nd</sup> December	NEA
14	9 <sup>th</sup> December	NEA

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**Subject: Computer Science**  
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**Form: 5**  
**Term: Spring**

WEEK	WEEK BEGINNING	TOPIC
1	6 <sup>th</sup> January	<b>Mock Exam</b>
2	13 <sup>th</sup> January	NEA
3	20 <sup>st</sup> January	NEA
4	27 <sup>th</sup> January	Computer systems recap: Software classification, Systems architecture (CPU, memory, secondary storage, embedded systems)
5	3 <sup>rd</sup> February	<b>MINI - TEST</b>
6	10 <sup>th</sup> February	Computer systems recap: Hardware and software, Boolean logic + logic circuits
<b>HALF – TERM</b>		
7	24 <sup>th</sup> February	Computer systems: Software classification, Systems architecture (CPU, memory, secondary storage, embedded systems)
8	2 <sup>nd</sup> March	Computer systems recap: Systems architecture (CPU, memory, secondary storage, embedded systems)
9	9 <sup>th</sup> March	Fundamentals of computer networks recap: Computer networks – types, Network protocols, Network security
10	16 <sup>th</sup> March	Fundamentals of cyber security recap: TCP/IP model , Security threats, Social engineering, Malicious code How to detect and prevent cyber security threats
11	23 <sup>rd</sup> March	Ethical, legal and environmental impacts & issues of privacy recap: Ethical, legal and environmental impacts and risks of digital technology on society. Data privacy



**Subject: Computer Science**  
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**Form: 5<sup>th</sup>**  
**Term: Summer**

<b>WEEK</b>	<b>WEEK BEGINNING</b>	<b>TOPIC</b>
1	20 <sup>th</sup> April	Exam Revision / past papers
2	27 <sup>th</sup> April	Exam Revision / past papers
3	4 <sup>th</sup> May	Exam Revision / past papers
4	11 <sup>th</sup> May	GCSE EXAMS
5	18 <sup>th</sup> May	GCSE EXAMS
<b>HALF – TERM</b>		
6	1 <sup>st</sup> June	GCSE EXAMS
7	8 <sup>th</sup> June	GCSE EXAMS
8	15 <sup>th</sup> June	GCSE EXAMS
9	22 <sup>nd</sup> June	-
10	29 <sup>th</sup> June	-
11	6 <sup>th</sup> July	-