

Holy Family Catholic School Curriculum Overview Year 12 – Computer Science (A-Level)



	Curriculum Content	Suggested Reading or Extension Activities
Half Term 1 (Sept-Oct)	- Structure and Function of Processor - Types of Processor - Thinking Ahead	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 2 (Nov-Dec)	- Input, Output and storage - Thinking Abstractly	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 3 (Jan-Feb)	- Operating Systems - Applications Generation - Thinking Procedurally - Thinking Logically	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 4 (Feb-Mar)	- Introduction to Programing - Databases - Networks - Web Technologies	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 5 (Apr-May)	- Data Types - Data Structures - Boolean Algebra - Thinking Logically - Programming Techniques	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 6 (Jun-Jul)	- Computing Related Legislation - Ethic, moral and cultural issues - Software Development - Algorithms	Completing homework assignments via Isaac Computer Science and on Google Classroom

Examples of Home Learning Tasks	https://Knowitallninja.com , https://issacomputerscience.com , https://edpuzzle.com , https://quizziz.com , https://bbc.co.uk/bitesize , https://senecalearning.com , https://smartrevise.online/
Assessment Tasks, Methods & Frequency	End of topic assessment, extensive use of formative assessments. Mock Exams
Equipment that Students Need	None needed. All provided within the department.

Parent / Carers can help their child by:	Signing up to Google Guardian and checking their Google Guardian account and reminding their child with any upcoming homework deadlines.
Useful Websites	https://Knowitallninja.com , https://issacomputerscience.com , https://edpuzzle.com , https://quizziz.com , https://bbc.co.uk/bitesize , https://senecalearning.com , https://smartrevise.online/
Extra-Curricular Activities & Career Opportunities	Coding club offered to the year group and STEM club opportunity. Trips to Computing Museum/Bletchley Park

Who Can I Contact?	Head of Computing & IT	Mrs Belgrave
	Teachers of Year 12 Computing	Mr Wynter

Holy Family Catholic School Curriculum Overview Year 13 – Computer Science (A-Level)



	Curriculum Content	Suggested Reading or Extension Activities
Half Term 1 (Sept-Oct)	- Software Development - Types of Programming Language - Compression, Encryption and Hashing - Databases	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 2 (Nov-Dec)	- Networks - Web Technologies - Data Types - Data Structures	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 3 (Jan-Feb)	- Boolean Algebra - Computing Related Legislation - Ethic, moral and cultural issues Programming Project: - Analysis of the problem (10 marks) - Problem identification - Stakeholders - Research the problem - Specify the proposed solution - Design of the solution (15 marks) - Decompose the problem - Describe the solution - Describe the approach to testing - Developing the solution (25 marks)	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 4 (Feb-Mar)	Programming Project: - Iterative development process - Testing to inform development - Evaluation (20 marks) - Testing to inform evaluation - Success of the solution - Describe the final product - Maintenance and development	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 5 (Apr-May)	- Revision - Interventions	Completing homework assignments via Isaac Computer Science and on Google Classroom
Half Term 6 (Jun-Jul)	Public Exams	Completing homework assignments via Isaac Computer Science and on Google Classroom

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Assessment Tasks, Methods & Frequency	End of topic assessment, extensive use of formative assessments. Mock Exams

Equipment that Students Need	None needed. All provided within the department.
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Extra-Curricular Activities & Career Opportunities	Coding club offered to the year group and STEM club opportunity. Trips to Computing Museum/Bletchley Park

Who Can I Contact?	Head of Computing & IT	Mrs Belgrave
	Teachers of Year 13 Computing	Mr Wynter