

KS5 Curriculum Overview: A-Level Computer Science



	Autumn Term	Spring Term	Summer Term
Year 12	Curriculum and Skills: <u>Theory:</u> <ul style="list-style-type: none"> ✓ Number systems and binary ✓ Data representation ✓ Boolean ✓ Assembly language <u>Programming:</u> <ul style="list-style-type: none"> ✓ Review GCSE skills ✓ GUI ✓ Visualisation ✓ Server-side scripting 	Curriculum and Skills: <u>Theory:</u> <ul style="list-style-type: none"> ✓ Algorithms ✓ Architecture ✓ Communication and Networking <u>Programming:</u> <ul style="list-style-type: none"> ✓ Networking ✓ Web frameworks ✓ Modular programming 	Curriculum and Skills: <u>Theory:</u> <ul style="list-style-type: none"> ✓ Abstraction ✓ Hardware and software ✓ Computing and Society <u>Programming:</u> <ul style="list-style-type: none"> ✓ Computing Project
	Assessment: <ul style="list-style-type: none"> ✓ Baseline programming assessment ✓ October Half Term assessment 	Assessment: <ul style="list-style-type: none"> ✓ January Mock exams 	Assessment: <ul style="list-style-type: none"> ✓ Summer Mock exams
Year 13	Curriculum and Skills: <u>Theory:</u> <ul style="list-style-type: none"> ✓ Floating Point Numbers ✓ Databases ✓ Abstract datatypes ✓ Algorithm Classification ✓ Turing machines <u>Programming:</u> <ul style="list-style-type: none"> ✓ Object oriented programming ✓ Computing Project ✓ Functional Programming 	Curriculum and Skills: <u>Theory:</u> <ul style="list-style-type: none"> ✓ Internet ✓ Big data ✓ Regular Expressions <u>Programming:</u> <ul style="list-style-type: none"> ✓ Stack Frames ✓ Computing Project ✓ Preparation of preliminary material for AQA Paper 1 	Curriculum and Skills: <u>Theory:</u> <ul style="list-style-type: none"> ✓ Revision and Review ✓ Exam question practice <u>Programming:</u> <ul style="list-style-type: none"> ✓ Preparation of preliminary material for AQA Paper 1
	Assessment: October half term assessment End of term assessment	Assessment: March Mock exams	Assessment: Summer Exams Paper 1 and Paper 2