

Year 11: Revision -Computer Science



Michaelmas 1	<p>1.1 -Systems architecture & 2.1 – Algorithms</p> <ul style="list-style-type: none"> • Architecture of the CPU • " The purpose of the CPU: • The fetch-execute cycle • " Common CPU components and their function: <p>1.2.1 Primary storage (memory)</p> <ul style="list-style-type: none"> • Searching and sorting algorithms • Standard sorting algorithms: Bubble sort, Merge sort, Insertion sort • Sequence, Selection, Iteration (count- and condition-controlled loops) • Create, interpret, correct, complete, and refine algorithms using: • Pseudocode, Flowcharts, o Reference language/high-level programming language <p>1.2– Memory and storage & 2.2 – Programming fundamentals</p> <ul style="list-style-type: none"> • The use of data types: • The advantages and disadvantages of different storage devices and storage media relating to these characteristics: Capacity, Speed, Portability, Durability, Reliability, Cost
Michaelmas 2	<p>1.3 – Computer networks, connections and protocols & 2.2.2 Data types -</p> <p>2.2.3 Additional programming techniques</p> <ul style="list-style-type: none"> • Networks and topologies • The Internet as a worldwide collection of computer networks <p>1.4 -Network security & 2.3 – Producing robust programs</p> <ul style="list-style-type: none"> • Threats to computer systems and networks • Identifying and preventing vulnerabilities
Lent 1	<p>1.5 – Systems software & 2.4 – Boolean logic</p> <ul style="list-style-type: none"> • Operating systems, The purpose and functionality of operating systems: • User interface, Memory management and multitasking <p>1.6 – Ethical, legal, cultural and environmental impacts of digital technology</p> <p>2.5 – Programming languages and Integrated Development Environments</p> <ul style="list-style-type: none"> • Ethical, legal, cultural and environmental impact
Lent 2	Exam Practice
Trinity 1	Exam Practice
Trinity 2	Exam practice