

MIP|W

Birmingham

AS and A2 Level Course Outlines

ICT

The purpose of the course is to provide students with a concise revision of the ICT theory required to meet the demands of the A-level qualification, together with advice on examination technique specific to the ICT examinations.

The time allocated to a unit for content will involve revision of key points of each topic within that unit together with illustrations of how that subject matter may be examined in the unit examination.

The half day allocated for examination technique and practice will be used to look at identifying the requirements of questions; appropriate approaches to take; applying the theory learned to the questions; timing and pace and general technique in order to maximise marks.

Topic 1 (AS) - choosing input and output devices; choosing a storage devices; systems and applications software; choosing application software; health and safety of ICT systems..

Topic 2 (AS) - Analysis of problems and design solutions; test planning, planning for implementation; assessment of the effectiveness of solutions; ICT systems and their components: What is ICT? What is a system?

Topic 3 (AS) - Examination Technique and practice for AS level

Topic 4 (AS) - Data and information including coding and encoding, processing data; people and ICT systems, design and purpose, how users interact with ICT; Transfer of data in ICT systems; ICT networks, standards, protecting ICT; safety and security of ICT systems; the need to protect data, threats to ICT systems, legislation to protect ICT systems.

Topic 5 (AS) - Procedures for backup and recovery; uses of ICT system, types of processing that ICT can provide, factors that influence the use of ICT and consequences of the use of ICT .

Topic 6 (A2) - Information needs, different levels of task, exchange of information with external bodies, information flow; systems, role of ICT in organisations, types of ICT system and their use; management and strategies: ICT strategies and policies, factors influencing ICT strategy, corporate ICT strategies; policies and Legislation: ICT policies, impact of legislation on ICT policies

Topic 7 (A2) - Developing ICT solutions, system life cycle, success of ICT development, Project mgt, Development methodologies; systems development and techniques, investigating and recording techniques, data modelling tools, techniques for testing, business process modelling tools; introducing large scale systems, reliability and testing, installation, backup recovery.

Topic 8 (A2) - Examination Technique and practice (1 session)

Topic 9 (A2) - Training and supporting users, internal and external users, interfaces for customers; external and internal resources, ways of obtaining services, managing internal resources; future developments: emerging technologies, potential future use of ICT, implications of future developments.

Topic 10 (A2) - Policies and legislation, ICT policies, impact of legislation on ICT policies.