Sir William Ramsay School

EMPOWERING EVERYONE TO ACHIEVE

Curriculum Map For ICT Year 13

YEAR 13	Autumn 1 & 2
Topics	**Unit 6 - Developing a Website** **Learning Aim A: Understand The Principles of Website Development** **Learning Aim B: Design a Website To Meet Client Requirements**
Substantive Knowledge – The Knowledge Taught By The Teacher	Students will learn about the: • Purpose and principles of website products. • Factors affecting website performance. • Website design. • Common tools and techniques used to produce website.
Disciplinary Knowledge – How The Knowledge Will Be Applied	• Students will understand the suitability of website for their audience and purpose. • Students will develop high performance websites to meet clients' requirements. • Students will devise design documentation arising from the identification of client requirements demonstrating their creative flair and individuality. • Students will undergo practical tasks that ask them to produce different designs to solve a range of problems. • Students will investigate these problems and develop appropriate designs.
Skills	• Prior knowledge of Unit 1 and Unit 3.
Links To Prior Learning	• Analytical skills. • Creative assessment. • Researching/investigative skills. • Cognitive and problem-solving skills. • Interpersonal skills. • Select, interact with and use ICT systems independently for a complex task to meet a variety of needs by researching organisations and their technologies.
Literacy/ Numeracy	• Creating reports. • Evaluating a scenario for additional technology. • Evaluating forms. • Accuracy of sourced information. • Mathematical principles used in website development.
Cross Curricular	• The knowledge of the effect of technology on people lives. • Awareness of the legal, ethical and moral issues with technology. • Knowing the appropriate use of computing and understanding Netiquette. • Cross Curricular: Use of Information Technology across subjects, e.g., creating presentations in PowerPoint or using Excel for mathematical or scientific functions.
Assessment	• Ongoing Feedback • Internal Written Assessment

YEAR 12	Spring 1 & 2
Topics	**Unit 6 Developing a Website** **Learning Aim C: Develop a Website to Meet Client Requirements**
Substantive Knowledge – The Knowledge Taught By The Teacher	Students will learn about: • Client-side scripting languages. • Website development. • Website review. • Website optimisation. • Skills, knowledge and behaviours.
Disciplinary Knowledge – How The Knowledge Will Be Applied	• Students will embed original client-side scripts into web pages to provide more interactivity and improve the usability of the website. • Students will become familiar with the types of web-scripting languages such as Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript® and a simple text editor or rapid application development tools. • Students will understand the effective use of tools and techniques and be able to upload files to a web server or host computer/device. • Students will test and evaluate their website and understand how to improve and optimised existing websites. Students will review and respond to outcomes, including the use of feedback from others, e.g. IT professionals and users who can provide feedback on the quality of the website and their suitability against the original requirements. • Students will demonstrate their own behaviours and their impact on outcomes to include professionalism, etiquette, supporting others, timely and appropriate leadership, accountability and individual responsibility. • Students will evaluate outcomes to help inform high-quality, justified recommendations and decisions. • Students will evaluate the design and the website against the client requirements.
Skills	• Analytical skills. • Creative assessment. • Researching/investigative skills. • Cognitive and problem-solving skills. • Interpersonal skills. • Select, interact with and use ICT systems independently for a complex task to meet a variety of needs by researching organisations and their technologies.
Links To Prior Learning	• Knowledge of Unit 1 and Unit 3.
Literacy/ Numeracy	• Creating reports. • Evaluating a scenario for additional technology. • Evaluating forms. • Accuracy of sourced information. • Mathematical principles used in website development.
Cross Curricular	• The knowledge of the effect of technology on people lives. • Awareness of the legal, ethical and moral issues with technology. • Knowing the appropriate use of computing and understanding Netiquette. • Cross Curricular: Use of Information Technology across subjects, e.g., creating presentations in PowerPoint or using Excel for mathematical or scientific functions.

Assessment	• Ongoing Feedback • Internal Written Assessment

YEAR 12	**Summer 1**
Topics	**Revision of:** **Unit 1 - Information Technology System** **Unit 2 - Creating Systems to Manage Information**
Substantive Knowledge – The Knowledge Taught By The Teacher	Unit 1 Review: • Digital Devices in IT Systems • Transmitting Data • Issues Relating to Transmission of Data • Operating Online • Protecting Data and Information • Impact of IT Systems • Issues Unit 2 Review: • The Purpose and Structure of Relational Database Management Systems • Standard Methods and Techniques to Design Relational Database Solutions • Creating a Relation Database Structure • Evaluating a Database Development Project
Disciplinary Knowledge – How The Knowledge Will Be Applied	Unit 1 Review: • Students show their understanding of the relationships between IT systems' hardware and software, the way systems work individually and together, the relationship between the user and the system, use of IT systems' issues and their impact on organisations and individuals. Unit 2 Review: • Students will demonstrate knowledge of database development terminology, standards, concepts and processes. • Students will apply knowledge and understanding of database development terminology, standards, concepts and processes to create a software product to meet a client brief. • Students will analyse information about database problems and data from test results to optimise the performance of a database solution. • Students will evaluate evidence to make informed judgements about the success of a database's design and performance. • Students will be able to develop a database solution to meet a client brief with appropriate justification.
Skills	• Analytical skills. • Creative assessment. • Researching/investigative skills. • Cognitive and problem-solving skills. • Interpersonal skills. • Select, interact with and use ICT systems independently for a complex task to meet a variety of needs by researching organisations and their technologies.

Links To Prior Learning	• This is a revision of Units 1 and 2.
Literacy/ Numeracy	• Creating reports. • Evaluating a scenario for additional technology. • Evaluating forms. • Accuracy of sourced information. • Mathematical principles used in website development.
Cross Curricular	• The knowledge of the effect of technology on people lives. • Awareness of the legal, ethical, and moral issues with technology. • Knowing the appropriate use of computing and understanding Netiquette. • Cross Curricular: Use of Information Technology across subjects, e.g., creating presentations in PowerPoint or using Excel for mathematical or scientific functions.
Assessment	• Resitting Unit 1 External Assessment • Resitting Unit 2 External Assessment