Year 11 Computing - Units 1 and 2

In Unit 1 students focus on how data, information and networked digital systems can be used to meet a range of users' current and future needs.

UNIT 1	
Outcome	**SAC/SAT**
AoS1 – Data and Graphic Solutions (SAT)	Students conduct an investigation into an issue, practice or event and through the systematic collection, interpretation and manipulation of primary data they create a graphic solution, such as an infographic, that represents their findings.
AoS2 – Networks (SAT)	Students investigate how networks with wireless capability allow data and information to be exchanged locally and within the global environment. Students focus on ways in which the security of exchanged and stored data and information can be compromised in wireless networks. Students also create the design for a network with wireless capability that meets a need or opportunity, identifying its components and how data and information are transmitted.
AoS3 – Collaboration and communication (SAT)	Working in virtual (local, national, international) or face-to-face teams, students use web authoring software to create a website, designed for viewing on a mobile device, which presents an overview of an issue associated with one field. Students then evaluate the merits of storing their website and its content in the cloud or on a private server.

In Unit 2 students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data.

UNIT 2	
Outcome	**SAC/SAT**
AoS1 – Programming (SAT)	Students focus on using a programming or scripting language that can support object-oriented programming to create working software modules. Students develop skills in interpreting teacher-provided solution requirements and in designing working modules. Students also apply computational and design thinking skills when preparing design specifications and transforming them into working modules through the use of programming or scripting languages.
AoS2 – Data analysis and visualization (SAT)	Students learn to use software tools to access, select and, where appropriate, manipulate authentic data from large data repositories, and to present the key aspects of the data in an appropriate visual form. Student's data visualization tools are to allow presentations to be dynamic and/or interactive. Appropriate visualization forms include graphs, charts, spatial relationships, maps, histograms and network diagrams.
AoS3 – Data Management (SAT)	Students develop an understanding of the purposes of databases by exploring the data and information they supply to and receive from systems such as banking, membership, online purchasing and voting systems. They apply systems thinking skills when considering the effects of their interactions with information systems that use databases.

http://www.vcaa.vic.edu.au/Documents/vce/computing/ComputingSD-2016.pdf