**Philip Feain –** Hello and welcome to the VCE Applied Computing Study Design 2025-2028 on-demand video. The purpose of this video is to support teachers with understanding Unit 3 Outcome 1 Data Analytics. The purpose of this presentation is to: provide an overview of Unit 3 Outcome 1 Data Analytics, discuss the major changes to Unit 3 Outcome 1, look at the software tools, look at the outcome statement, go through the key knowledge, look at the key skills and look at the assessment task.

In the following slides we'll have an overview of Unit 3 Outcome 1. There has been several major changes to Unit 3 Outcome 1 Data Analytics. Emerging trends in data analytics using artificial intelligence has been added. The use of SQL to generate queries and statistical analysis to identify trends, relationships and patterns has been added. The assessment task for the SAC has been updated. There have also been some other minor changes, edits and updates. There are a range of software tools that students are required to both study and use in this outcome. These are: database software, spreadsheet software, data visualisation software and an appropriate tool for running Structured Query Language queries.

The outcome statement for Unit 3 Outcome 1 has been updated. Students should be able to interpret teacher-provided solution requirements and designs, extract data from large repositories, manipulate and cleanse data, conduct statistical analysis and develop data visualisations to display findings. The key knowledge and the layout of the content has been updated to make more use of including and to list the items after the including in a vertical list. The key knowledge here includes emerging trends in data analytics, characteristics of functional and non-functional requirements, constraints and scope, and characteristics of data types. Structural characteristics of relational databases and design tools for representing databases and spreadsheets, techniques for identifying, selecting, extracting and validating authentic data and methods for representing data using the APA referencing system,

Techniques for effectively and efficiently manipulating and cleansing data and techniques to statistically analyse data to identify trends, relationships and patterns, purposes of data visualisations and types of data visualisations, design tools for representing data visualisations and formats and conventions applied to data visualisations, techniques for testing databases and spreadsheets and techniques for testing data visualisations. The key skills for Unit 3 Outcome 1 have been updated are map directly to the key knowledge. In terms of the contribution to final assessment, the SAC for Unit 3 Outcome 1 will contribute 10 per cent to the study score and the total number of marks for the SAC will be out of 100. The assessment task has been updated for Unit 3 Outcome 1 with some detail added for clarity.

In response to teacher-provided solution requirements and designs: extract and reference data from large repositories into a database, query data using databases and SQL, use spreadsheet functions to manipulate data, statistically analyse data in spreadsheets and develop data visualisations. The task time allocated should be at least 6-10 lessons.

Thank you for following this presentation. If you have any questions regarding this presentation or the VCAA Applied Computing Study Design you can contact Phil Feain, the Digital Technologies Curriculum Manager, at the contact details below.

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