### Altis' Data Literacy Training Program: Creating Data-Driven Organisations

50% of organisations lack the data literacy skills to achieve success. Our Data Literacy Program is your pathway to becoming a data-driven organisation.

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## Why is Data Literacy important?

When we consider how to utilise data available to us, we must ask - do our staff have the necessary skills to derive meaningful insights from data and convert this to actions? The answer to this is often no.

In our increasingly data-driven society, data literacy is becoming even more important. It is important to be aware of data literacy terminology and approaches, how to use data for insights and opportunities, and how to put data to work.

The first step in data literacy is the ability to communicate, write and read about data in context. This way, all staff, not just data analysts, are able to critically assess the data, find meaning in the numbers and create actionable business insights from it. Employees with expertise in a business area are going to be the ones that are best able to act on data insights to create results. Therefore it is critical for everyone in your organisation, not just data analysts, to have access to data and a basic ability to read and use data.

For data literacy to be taken seriously, it must be conveyed to all employees just how important it is, including those in traditionally non-data roles. According to a McKinsey survey, the percentage of executives at high-performing organisations who understand data concepts is 44% higher than their counterparts in lower performing organisations, the share of managers who understand data is 39% higher and the number of frontline employees who understand data is 12% higher. Data literacy has demonstrated impact on the success and profitability of organisations.



Our Data Literacy Training Program is your pathway to becoming a data-driven organisation.

All our courses are customisable and can be tailored to your specific requirements. Choose the courses that you need or follow one of our recommended pathways.

We offer flexible delivery methods - courses can be delivered onsite or remotely.

### What are our pathways?

Our training pathways each begin with foundational courses (dark grey – 100 level code), before participants are given a choice between two conceptual courses (medium grey – 200 level code) that are aimed at further expanding on the foundational knowledge learnt and heading towards gaining certification. From here participants can specialise in specific skills in targeted courses (light grey – 300 or 400 level code) where participants will be hands-on, requiring a laptop or specific software.

Foundational courses are an entry point specifically designed to provide baseline understanding across an area. The 100 level course code indicates a participant will be engaging with discipline knowledge and skills at a foundational level, with all participants speaking the same language prior to progressing through the pathway.

Conceptual courses are the next step in the course pathway where a participant can decide on a certification path. A 200 level course code indicates that the course will expand on the introductory knowledge and skills a participant has previously learnt in a 100 level course.

Targeted courses allow participants to specialise their skills in a particular area(s). A 300 or 400 level course indicates participants will be developing coherence and breadth/depth of knowledge and skills in a particular area of learning.



Data Visualisation Certificate given for completion of four (4) Data Literacy and Data Storytelling course options.

Data Governance Certificate given for completion of four (4) Data Literacy and Governance course options.

Data Architecture Certificate given for completion of four (4) Data Platform and Data Architecture course options.

AI & ML Certificate given for completion of four (4) Data Platform and AI & ML course options.

# **Comprehensive Course List**

Data Literacy – DL-100 Our Data Literacy course will have your organisation speaking the same language and fully data-literate. We cover the fundamentals of 'speaking data', right through to advanced statistical concepts such as percentiles, means and correlations to treating outliers, 'de-averaging' and handling seasonal effects.

Data Storytelling – DLV-200 Our Data Storytelling course will help your team learn how to understand and speak data and be able to visualise data to tell a meaningful and impactful story. Learning how to create effective visualisations and understanding best practice can influence performance and business outcomes through real-time strategy and data-driven decisions. It's not just about learning how to visualise data, but also understand the results and tell a story to drive business outcomes and optimise strategy.

Power BI Data Vis & Dashboards – DLPD-300 This course will help you learn how to connect to and extract data, transform the data so you can create powerful reports and dashboards in Power BI, and publish the results. The hands-on session allows for attendees to learn; functionality and appearance, interactivity and navigation, data acquisition modes, creating an app, creating a dashboard, shared workspaces and more.

Power BI Ingestion & Modelling – DLPM-400 This course will help you learn advanced Power BI topics for ingesting data and modelling your data for visualisations/dashboards in Power BI, including best practice methods, as well as how to troubleshoot issues. The hands-on session is focused on report developers and allows for attendees to learn about; creating and sharing data models, advanced DAX concepts, row level security, data refreshes and more.

Qlik Dashboards & Stories – DLQD-300 This course will help you learn how to connect to and extract data, transform the data so you can create powerful reports and dashboards in Qlik, and publish the results. The hands-on session allows for attendees to learn; functionality and appearance, interactivity and navigation, data acquisition modes, creating an app, creating a dashboard, shared workspaces and more.

Qlik Ingestion & Modelling – DLQM-400 This course covers advanced Qlik topics and troubleshooting for ingesting data and modelling your data for visualisations/dashboards in Qlik, including best practice methods. The hands-on sessions are focused on report developers and allows for attendees to learn about; creating and sharing data models, advanced DAX concepts, row level security, data refreshes and more.

Tableau Dashboards – DLTD-300 This course will help participants learn the basic functions and capabilities of Tableau Desktop; from designing and developing analyses through to Dashboard creation and sharing outputs. This course also introduces aspects of data visualisation as they apply within Tableau. **Tableau Ingestion & Modelling – DLTM-400** This course will teach participants advanced Tableau topics and troubleshooting for ingesting data and modelling your data for visualisations/dashboards in Tableau, including best practice methods.

Data Governance – DLG-200 This course helps participants understand the disciplines of governing data, covering the essential components of an organisation-wide program, and outline the steps involved to execute a successful data governance program. The course makes data governance real and tangible through concepts, principles and practices relatable to participants, something crucial as changes in data governance need to adapt to data developments such as agile development, big data, and self-service analytics.

Data Steward Training – DLDS-300 Data stewards are important leaders in any Data Governance implementation and this course teaches the concepts and practices of data stewardship, covering fundamental topics that include types of data stewards, terminology and definitions along with the implementation role and responsibilities.

Privacy and Compliance – DLPC-300 This course teaches participants data security and data privacy compliance obligations and how to address these through controls and activities within your organisation.

Data Governance & Quality – DLGQ-400 This course covers the essential and best practices for data governance, including data quality management principles to help shift the focus to prevention of data quality issues rather than correction, to improve the quality and value of your data. With new trends such as big data, cloud, self-service and agile principles comes an increase in the concerns around data privacy and security, increasing the importance for governance and for us to implement new governance techniques.

Data Management – DLDM-400 This course will teach participants data management principles and the main reasons for failure and how to combat them. Each of the topics will be unpacked through explanation and feedback, and participants will then learn techniques to tackle the problems.

Data Platform – DW-100 The course provides high level summary of dimensional modelling, and how to stay agile by setting up your Modern Data Platform to allow continuous improvements and integrations. Attendees will develop a clear picture of how data structures in different databases work together and how these can be made to interact in our Modern Data Platform to improve business outcomes. Participants will also learn about the common pitfalls, shortcuts to success, and solutions to the everyday requests that will no doubt arise. Data Architecture & Platforms – DWA-200 Data architecture is essential for every organisation aiming for successful data management and neglecting this prevents the effective use of your data and information. This course teaches participants about models and business rules or standards that govern what data is collected, how it is stored, arranged, integrated, and used in organisations.

Data Ops – DWDO-300 This course focuses on data quality and best practice for ETL processes, with cloud technologies making it easier to access data, while efficiently and effectively ingesting and preparing data from multiple sources. Participants learn how to set up a strong culture of data quality and reliability through setting your processes up for success, making continuous improvements and building in automated testing.

Dimensional Modelling – DWDM-300 Participants will learn the tried and tested Kimball approach to dimensional modelling to produce a working, problem specific bus matrix that enables prioritisation of data modelling, requirements gathering and ETL work, detailed design and effort estimation.

Azure Modern Architecture – DWAZ-400 This course provides participants with an overview and walk through of Modern Data Architecture using Microsoft Azure, learning everything from navigating the Azure Portal to building an end-to-end solution of a modern data warehouse using popular technologies such as SQL Database, Data Lake, Data Factory, Data Bricks, Azure Synapse Data Warehouse and Power BI.

AWS Modern Architecture – DWAW-400 To deliver insights, organisations are finding they need to implement a data storage and analytics solution that offers more agility and flexibility than traditional data management systems, allowing for timely action. Each organisation may have a different use case that requires a different tool. This course delves into the various options AWS provides for your needs from RDS, EMR and Redshift. Participants will learn about the different technologies available on AWS and its application.

Introduction to AI & ML – DWI-200 Participants will gain a high-level understanding of Artificial intelligence (AI) and Machine Learning (ML), learning the essential concepts of AI and ML and demonstrating some simple but powerful ways you can make predictions about people and programs. Participants will learn other exciting, complex topics such as neural networks, computer vision, deep learning, and unsupervised learning, including identifying possible use cases within your organisation and how AI and ML may be of benefit to your organisation.

Getting Started with R Programming – DWRB-300 This course provides participants with the knowledge to get the most out of R, learning how to use R efficiently & productively for data analysis, graphics & reporting.

**Intermediate R Programming – DWRI-300** The Intermediate R Course builds on the introductory course & includes the latest developments in R, including functions/packages for analysing big data & producing advanced visualisations.

Advanced R Programming – DWRA-400 This course will teach participants how to develop and maintain code, troubleshoot, and optimise R code. Participants will also learn how to analyse and visualise large datasets using the latest out-of-memory and big data graphics packages.

Al & ML on Azure – DWAI-400 Predictive analytics and machine learning techniques are revolutionising organisations. Predictive Analytics and Machine Learning in Azure teaches participants the mechanics behind the models and how these models are realistically applied in the business setting. In addition to covering advanced machine learning techniques in depth, the course covers the management of stakeholder expectations during predictive analytics projects and analytics project management.

Al & ML on AWS – DWML-400 Predictive analytics and machine learning techniques are revolutionising organisations. Predictive Analytics and Machine Learning in AWS teaches participants the mechanics behind the models and how these models are realistically applied in the business setting. In addition to covering advanced machine learning techniques in depth, the course covers the management of stakeholder expectations during predictive analytics projects and analytics project management. Advanced machine learning methods are also discussed in depth, including those used globally.

Python for Data Analysis – DLPD-300 The Python for Data Analysis course helps you take the first steps into data science and analyse data using Python. This course will take you from the basics of Python, to preparing data for analysis, performing simple statistical analysis, as well as creating predictions from data.

SQL Development – DLSD-300 This one-day course is designed to give you a primer in the fundamentals of SQL and working with data so that you can begin analysing it, and brings your team up to speed with the foundational elements of SQL development, learning how to communicate with relational databases through SQL.

### To find out more, contact Altis Consulting today at www.altisconsulting.com



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