



Data Analyst Incubation Programme

Core Competencies



Core Competencies of a Data Analyst

Soft Skills:

- S1. I adopted an inquisitive approach to studying a problem and improved my domain knowledge of a business scenario and associated data set.
- S2. I sought creative solutions to the business problem I encountered and demonstrated openness to alternative solutions.
- S3. I demonstrated empathy and a collaborative attitude towards my colleagues and considered the impact of my work on key stakeholders including customers, and colleagues.
- S4. I considered ethics, diversity, sustainability, and data governance in my work. I ensured inclusivity and considered potential biases in my data or interpretation.
- S5. I am committed to staying up to date with advances in data techniques and technologies.
- S6. I advised on potential future data projects and the art of the possible relevant to the business needs.
- S7. I participated in peer reviews as a way of giving and obtaining constructive feedback.

Technical Skills:

- T1. I identified and critiqued the relevant tech stack and available data for a business goal, which included reviewing or developing documentation.
- T2. I followed and demonstrated all stages of the analytical project lifecycle while adhering to Agile principles.
- T3. I have scoped a project from the high-level requirements provided, reframed those requirements as business question(s), assessed the available data and weighed up whether a data solution is appropriate to the business needs.
- T4. I identified governance risks, including legal, compliance, and ethical concerns, at an early stage of development. I documented and reported on my modelling and analytical work throughout the project so that my work could be accountable to governance oversight.
- T5. I identified key stakeholders that will be impacted by my piece of work, and I know how to keep them informed and engaged.
- T6. I took steps to mitigate siloisation and created transparency with my development.
- T7. I planned, prepared, and merged data sources to create new opportunities for analytical insights.
- T8. I tested my data source to ensure the data was complete, accurate and

relevant, improving the quality when possible.

- T9. I queried a database with relevant SQL to answer business questions and I leveraged SQL queries in an efficient manner to prepare data for further analysis.
- T9. I conducted a comprehensive data analysis of a data set to produce summary statistics that could be used for decision making:
- T10. I have loaded and queried data inside the Google Cloud Platform using Big Query.
- T11. I have leveraged the capabilities of GCP Vertex AI to deploy and improve a machine learning model in the Cloud. Including the hosting of notebooks within Google Cloud
- T12. I reviewed and responded appropriately to feedback on data products I had built from end users or key stakeholders. I used the feedback to improve the data products.
- T13. I designed and built an interactive Dashboard with Tableau.
- T14. I designed and built an end user report which assembled multiple chart components with Power BI.
- T15. I built and evaluated a supervised machine learning model using Python.
- T16. I modelled and analysed a time-series and its forecast to summarise the prospects for future growth within a business scenario.
- T17. I prepared qualitative data using natural language processing techniques and trained a sentiment analysis model.
- T18. I produced, communicated, and presented documentation for end users and technical users to help them understand and use the data products I developed.
- T19. I have prepared presentations to a variety of stakeholders, and I am able to summarise complex results into concise/ non-technical output, and communicate these clearly to technical and non-technical audiences.
- T20. I have evaluated Analytical tools and programming techniques widely adopted in Data Analytics, demonstrating an understanding of the advantages and disadvantages of each.

