

Data Analytics for Workplace

Course Synopsis:

This course covers a concise introduction on business analytics and how it is applied in our workplace. In this course, participants will learn the concepts of data management, the common analytical techniques used in work environment, from descriptive and diagnostic analytics to predictive and prescriptive analytics as well as the presentation of analysis results using analytical software.

Learning Objectives:

Upon successful completion of this course, the learners will be able to:

1. Understand how analytics can be used by organisation to identify new business opportunities and for better decision
2. Use data preparation techniques such as extracting, cleaning and integrating to pre-process data prior to analysis
3. Apply common analytical technique in different work scenarios
4. Use appropriate data visualisation to communicate information to viewers
5. Appreciate how analytics software tools can be used to harness data to convert them into actionable information that benefits the organisations

Course Duration:

1 day

Analytical Software:

- KNIME and Microsoft PowerBI

Course Fee:

This is a course under the SkillsFuture Series. The course fee and subsidy table as follows (exclude GST):

Course Name	Total Programme Fee	Singapore Citizen < 40 yrs old and Permanent Residents	Singapore Citizens ≥ 40 yrs old	Singapore Citizens and Permanent Residents under PR
Data Analytics for Workplace	\$260.00	\$78.00	\$26.00	\$26.00

The course fee is inclusive of venue and course materials. Certificate of participation will be provided for participants who have attended 75% of the course.

Course Programme:

Time	Programme
0900 – 1000	Introduction to Business Analytics <ul style="list-style-type: none"> Overview of business analytics process and methodology Understand the phases of Data Analytics Lifecycle Discuss on the influence of data in our daily life and disciplines Data Preparation Techniques <ul style="list-style-type: none"> Understand the data extraction, transformation and loading (ETL) processes Handle different data types, missing values and converting between different formats
1000 – 1030	Break
1030 – 1130	Hands-on: Data Preparation <ul style="list-style-type: none"> Import of raw data, preparation of data for analysis using analytical software (missing value, converting between format)
1130 – 1200	Visualising data <ul style="list-style-type: none"> Overview of data visualisation Using the appropriate charts to present information
1200 – 1300	Lunch
1300 – 1400	Hands-on: Data Visualisation <ul style="list-style-type: none"> Create data visualisations using appropriate charts with the help of analytical software

Time	Programme
1400 – 1500	Application of Analytical Technique <ul style="list-style-type: none"> Explain the types of analytical techniques (descriptive, diagnostic, predictive, prescriptive, etc) Identify and discuss the use of analytical techniques in various business situations or subject areas Hands-on: Analytical Technique I <ul style="list-style-type: none"> Apply the analytical techniques for data analysis using analytical software
1500 – 1530	Break
1530 – 1630	Hands-on: Analytical Technique II <ul style="list-style-type: none"> Apply the analytical techniques for data analysis using analytical software
1630 – 1700	Closing and Feedback