

LITHAN

EDU **CLaaS**<sup>®</sup>  
digital skilling

# DATA ANALYTICS

Course Overview

## INDEX

1. Course Overview
2. Course Brief
3. Course KSA Summary
4. Course Details
  - 4.1 Module – Session Details
  - 4.2 Learning Mode & Duration
5. Module Details – Business Analytics
  - 5.1 Module Brief
  - 5.2 Module Sessions Plan
6. Module Details – Capstone Project -Business Analytics
  - 6.1 Module Brief
  - 6.2 Module Sessions Plan
7. Credentials

## 1. Course Overview

Headings	Details
Course Code	CCP-DAN
Product Title (Internal)	CCP-Data Analyst
Course Title (External)	NA
Learning Mode	Full-time/ Part-time
Delivery Mode	Synchronous & Asynchronous E-learning
Target Persona	<ul style="list-style-type: none"> <li>Enterprises who would like to send their employees to reskill/ re-deploy them into Data Analyst roles.</li> <li>Enterprises who would like to hire fresh candidates and send them for training to acquire Data Analytics skills</li> </ul>
Entry-Prerequisites	<ul style="list-style-type: none"> <li>Academic: Minimum one credit in N Level or its equivalent</li> <li>English Proficiency – Minimum IELTS 5.5 or its equivalent</li> <li>Age – Minimum 21 years</li> <li>Work Experience – Currently Employed</li> </ul>
SSG Course Reference No	NA
Course Validity Date	NA
Course Developer	Lithan Academy
Relevant Job roles after completion of the course	Data Analyst

## 2. Course Brief

Career Conversion Programs (CCPs) facilitate the skilling and placement of mid-career professionals by providing skills conversion training and employment opportunities with good prospects for progression. With funding support from WSG, employers can participate in CCPs, which can be stacked with the Jobs Growth incentive, benefiting both employers and mid-career individuals seeking career transitions.

CCP- Data Analyst is a comprehensive course designed to equip learners with the necessary skills and knowledge to excel in the field of data analysis. After completing this course, learners will have access to a wide range of job prospects and exciting opportunities in various industries. They will be prepared to take on key roles such as Data Analyst and Business Analyst where they can drive organizational success through effective data analytics practices.

The course comprises two modules, each focusing on essential aspects of business analytics. In Module 1, "Business Analytics," learners will gain a comprehensive understanding of data analytics and its application in real-world scenarios. They will explore the power of Power BI, a leading business analytics tool, and learn how to effectively prepare and transform data, create insightful visualizations and reports, and develop data models. By mastering these skills, learners will be able to deliver compelling and informative dashboards that drive data-based decision-making. Additionally, this module introduces learners to business simulation through MonsoonSIM, enabling them to enhance their problem-solving and collaboration skills in a simulated business environment.

The second module, "Capstone Project - Business Analytics," provides learners with a hands-on opportunity to apply their acquired knowledge in a practical setting. Through the stages of project proposal and planning, data acquisition and transformation, data modelling and analysis, dashboard preparation and filtering, and sharing, collaboration, and security, learners will work on a real-world business analytics project. This capstone project allows learners to showcase their ability to leverage data analytics techniques to extract valuable insights and create meaningful visualizations for decision-makers. The module emphasizes the importance of effective collaboration and data security in the process, preparing learners to work efficiently in team settings and adhere to industry standards and best practices.

Throughout the course, learners will acquire essential skills in data analytics and business intelligence, including data preparation, visualization, modelling, and collaboration. They will also develop a strong foundation in problem-solving and decision-making, enabling them to tackle complex business challenges using data-driven approaches. By combining theoretical knowledge with practical application through the capstone project, learners will gain the confidence and expertise to excel in the field of business analytics. Upon completion of this course, graduates will be well-prepared to leverage data effectively, drive informed decision-making, and contribute to the success and growth of organizations in today's data-driven business landscape.

### 3. Course KSA Summary

#### Knowledge Statements:

- Analyze data using Power BI tool to create insightful visualizations and reports.
- Explain the process of data preparation and transformation for effective analysis.
- Identify key principles and techniques for data modelling in business analytics.
- Recognize the role of business simulation in problem-solving and collaboration.
- Define the importance of data security and collaboration in business analytics projects.

#### Skills Statements:

- Apply data preparation and transformation techniques to optimize data quality and usability.
- Develop interactive dashboards and reports using Power BI for effective data communication.
- Utilize data modelling techniques to create structured and efficient data models.
- Collaborate effectively in a simulated business environment using MonsoonSIM.
- Employ data filtering and security measures to ensure the integrity and confidentiality of business analytics projects.

#### Ability Statement:

Apply data analytics tools and techniques to derive meaningful insights, make data-informed decisions, and drive business performance.

## 4. Course Summary

### 4.1 Module-Session Details

SI N o	Module Names	Mod ule Code	Learning Activity						Assessm ent (Sync)	Total Hours
			E- Learning (Async)	Flipped Class (Sync)	Mentoring Support					
					Assignm ent Sync	Project Planning Sync	Project Imple ASync			
1	WSQ Business Analytics (SF)	CCP-BAN	12	12	12	12	12	0.5	60.5	
2	WSQ Capstone Project -Business Analytics (SF)	CCP-BAC	0	12	0	24	24	0.5	60.5	
<b>TOTAL</b>			<b>12</b>	<b>24</b>	<b>12</b>	<b>36</b>	<b>36</b>	<b>1</b>	<b>121</b>	

### 4.2 Learning Mode & Duration

Learning Mode	Course Duration	Guided Learning Hours	Hours/Week	days/Week	Hours/Day
Full-time	4 weeks	120 hours	30 hours/week	4 days/week	8 hours/day
Part-time	16 weeks (6 weeks, 10 weeks)	120 hours	6 hours/week	3 days/week	2 hours/day

## 5. Module Details – Business Analytics

### 5.1 Module Brief

The "Business Analytics" module provides learners with the knowledge and skills necessary to excel in the field of data analysis. Through a series of learning units, learners will gain a solid foundation in various aspects of business analytics. They will be introduced to the fundamentals of data analytics and Power BI, learning how to effectively prepare and transform data, create insightful visualizations and reports, develop data models, and format and present information through interactive dashboards. Additionally, learners will explore the world of business simulation using MonsoonSIM, honing their decision-making abilities and problem-solving skills in a collaborative environment.

Building upon the knowledge and skills acquired from the learning units, learners will have the opportunity to apply their expertise in real-world scenarios through a comprehensive project. This project will allow them to implement a business analytics solution using Power BI and MonsoonSIM, integrating data analysis and simulation techniques. By leveraging these tools, learners will gain hands-on experience in analyzing and interpreting data, making data-informed decisions, and simulating business scenarios. Through this practical application, learners will develop the ability to derive meaningful insights, collaborate effectively, and contribute to business success.

Upon completion of the "Business Analytics" module, learners will emerge with a strong understanding of data analytics principles and techniques, along with proficiency in utilizing Power BI and MonsoonSIM. They will possess the necessary skills to prepare and transform data, create impactful visualizations and reports, develop data models, and design interactive dashboards. Furthermore, they will be equipped with the ability to apply their knowledge in a practical setting, leveraging data analysis and simulation to drive informed decision-making and solve complex business problems.

#### **Instructional Units:**

1. Introduction to Data Analytics and Power BI
2. Power BI Data Transformation
3. Power BI Data Modelling
4. Power BI Formatting, Reports and Dashboards
5. Introduction to Business Simulation and MonsoonSIM
6. Problem-Solving and Collaboration in Business Simulation

#### **Module Project:**

**Project Objective:** Implement a comprehensive business analytics project using Power BI and MonsoonSIM for data analysis and simulation.

## Project Tasks:

1. Create data preparation and transformation workflows in Power BI.
2. Design and develop interactive visualizations and reports in Power BI.
3. Build efficient and structured data models using Power BI.
4. Develop formatted dashboards in Power BI for data-driven decision-making.
5. Utilize MonsoonSIM for business simulation, decision-making, and collaborative problem-solving.

## 5.2 Module Session Plan

Session No#	Session Type	Day no#	Duration Hrs
1	E-Learning on IU 1	1	2
2	Flipped Class on IU 1	1	2
3	Mentoring Support - Assignment on IU 1	2	2
4	E-Learning on IU 2	3	2
5	Flipped Class on IU 2	3	2
6	Mentoring Support - Assignment on IU 2	4	2
7	E-Learning on IU 3	5	2
8	Flipped Class on IU 3	5	2
9	Mentoring Support - Assignment on IU 3	6	2
10	E-Learning on IU 4	7	2
11	Flipped Class on IU 4	7	2
12	Mentoring Support - Assignment on IU 4	8	2
13	E-Learning on IU 5	9	2
14	Flipped Class on IU 5	9	2
15	Mentoring Support - Assignment on IU 5	10	2
16	E-Learning on IU 6	11	2
17	Flipped Class on IU 6	11	2
18	Mentoring Support - Assignment on IU 6	12	2
19	Mentoring Support - Project Planning -1	13	2
20	Mentoring Support - Projects Implementation 1	14	2
21	Mentoring Support - Project Planning -2	15	2
22	Mentoring Support - Projects Implementation 2	16	2
23	Mentoring Support - Project Planning -3	17	2
24	Mentoring Support - Projects Implementation 3	18	2
25	Mentoring Support - Project Planning -4	19	2
26	Mentoring Support - Projects Implementation 4	20	2
27	Mentoring Support - Project Planning -5	21	2
28	Mentoring Support - Projects Implementation 5	22	2
29	Mentoring Support - Project Planning -6	23	2
30	Mentoring Support - Projects Implementation 6	24	2
31	Summative Assessment (per learner)	25	30 min



## 6. Module Details – Capstone Project -Business Analytics

### 6.1 Module Brief

The "Capstone Project - Business Analytics" module serves as the culmination of the learners' knowledge and skills in the field of business analytics. Through a series of learning units, Learners will acquire the necessary expertise in various aspects of the project lifecycle. They will learn how to effectively propose and plan a business analytics project, acquire and transform relevant data, perform data modelling and analysis, prepare interactive dashboards with filtering capabilities, and ensure data sharing, collaboration, and security.

Building upon the knowledge and skills gained from the learning units, learners will have the opportunity to apply their expertise in a practical setting through a comprehensive Power BI project. This project will encompass the entire data analytics process, including data acquisition, preparation, visualization, modelling, and dashboard creation. By leveraging Power BI's capabilities, learners will demonstrate their ability to analyze data, transform it into meaningful insights, develop visually appealing reports and visualizations, create efficient data models, and design interactive dashboards that allow for data filtering. Additionally, the project will emphasize the importance of data sharing, collaboration, and security, ensuring that learners develop the necessary skills to handle sensitive data and work effectively in team settings.

Upon completion of the "Capstone Project - Business Analytics" module, learners will emerge with a deep understanding of the end-to-end project lifecycle in business analytics. They will possess the knowledge and skills required to successfully propose, plan, and execute a business analytics project using Power BI. Furthermore, learners will develop the ability to apply data analytics techniques, collaborate effectively, and ensure data security throughout the project. By demonstrating their proficiency in implementing a comprehensive Power BI project, learners will showcase their readiness to tackle real-world business challenges and contribute to data-driven decision-making processes.

#### **Instructional Units:**

1. Identify product, User Persona
2. User stories, product backlog
3. Sprint planning
4. User requirements
5. Project Design & Architecture
6. Project planning

## Module Project:

Implement a comprehensive Power BI project encompassing data analytics, preparation, visualization, modelling, and dashboard creation.

### Project Tasks:

1. Analyze and identify data sources for Power BI project implementation.
2. Prepare and transform data using Power Query in Power BI.
3. Create visually appealing and informative reports and visualizations in Power BI.
4. Design and develop efficient data models using Power BI for analysis.
5. Format and create interactive dashboards in Power BI for data-driven insight

## 6.2 Module Session Plan

Session No#	Session Type	Day no#	Duration Hrs
1	Flipped Class on IU 1	1	2
2	Flipped Class on IU 2	2	2
3	Flipped Class on IU 3	3	2
4	Flipped Class on IU 4	4	2
5	Flipped Class on IU 5	5	2
6	Flipped Class on IU 6	6	2
7	Mentoring Support – Project Planning -1	7	2
8	Mentoring Support – Projects Implementation 1	8	2
9	Mentoring Support – Project Planning -2	9	2
10	Mentoring Support – Projects Implementation 2	10	2
11	Mentoring Support – Project Planning -3	11	2
12	Mentoring Support – Projects Implementation 3	12	2
13	Mentoring Support – Project Planning -4	13	2
14	Mentoring Support – Projects Implementation 4	14	2
15	Mentoring Support – Project Planning -5	15	2
16	Mentoring Support – Projects Implementation 5	16	2
17	Mentoring Support – Project Planning -6	17	2
18	Mentoring Support – Projects Implementation 6	18	2
19	Mentoring Support – Project Planning -7	19	2
20	Mentoring Support – Projects Implementation 7	20	2
21	Mentoring Support – Project Planning -8	21	2
22	Mentoring Support – Projects Implementation 8	22	2
23	Mentoring Support – Project Planning -9	23	2
24	Mentoring Support – Projects Implementation 9	24	2
25	Mentoring Support – Project Planning -10	25	2
26	Mentoring Support – Projects Implementation 10	26	2
27	Mentoring Support – Project Planning -11	27	2
28	Mentoring Support – Projects Implementation 11	28	2
29	Mentoring Support – Project Planning -12	29	2
30	Mentoring Support – Projects Implementation 12	30	2
31	Summative Assessment (per learner)	31	30 min

## 7. Credentials & Price

Name of the Credentials	Details
Academic Qualification	NIL
EduCLaaS Job Role Certification	NIL
Industry Skills Certification	<p>Business Analytics</p> <ul style="list-style-type: none"><li>• Power BI Data Analyst Associate</li></ul> <p>Taking this certification is not mandatory. However, if the learner wishes to pursue it, they need to register for the examination directly with the vendor after paying the necessary fees.</p>
Statement of Attainment	<p>Business Analytics</p> <ul style="list-style-type: none"><li>• ICT-DIT-3006-1.1: Data Visualization</li></ul> <p>Capstone Project – Business Analytics</p> <ul style="list-style-type: none"><li>• ICT-DIT-3005-1.1: Data Engineering</li></ul>