Schedule for SCTP Advanced Professional Certificaate (APC) in Data Analytics: 22 Sep 25 Intake

Course Code: TGS-XXXXXXXXXX

SN	Week	Module Name	Class Type	Online Type	Topics	Hours	Trainer	Date	Day	Time			Location	Remarks
		Data Management, Data Wrangling and Exploratory Data Analysis (EDA)		Synchronous and Asynchronous	**LEARNING OBJECTIVES**: **Week 1**: Introduction to Data Management and Wrangling and EDA concepts & Introduction to Relational Databases and SQL Statements **Week 2**: Understanding Data Model Documentation **Week 3**: Shaping Data with SQL	51	Kan Hwa Heng Francis Tay			Attendance Check-In times				Participants will be required to have SQLite and DB Browser for SQLite installed in their PC or Macbook.
1	Wk 1	Introduction to Data Management and Wrangling and EDA concepts	Check-in	Synchronous	Introduction to Programme, Data Wrangling, EDA	3	Francis Tay Kan Hwa Heng	22-Sep-25	Monday	7:00 pm	to	10:00 pm		Introductory Lecture
2		Introduction to Relational Databases and SQL statements	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Kan Hwa Heng	23-Sep-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
9			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Kan Hwa Heng	23-Sep-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
4			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Kan Hwa Heng	25-Sep-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
5			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Kan Hwa Heng	26-Sep-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
6			Lecture	F2F	Introduction to Relational Databases and SQL statements.	3	Kan Hwa Heng	27-Sep-25	Saturday	9:00 am	to	12:00 pm	LT702	Lecture and Group Work
7	Wk 2	Introduction to Data Model Documentation	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Kan Hwa Heng	29-Sep-25	Monday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
8			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Kan Hwa Heng	30-Sep-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
9			Lecture	Synchronous	SQL Statements. Data model documentation	3	Kan Hwa Heng	1-Oct-25	Wednesday	7:00 pm	to	10:00 pm		Lecture and Group Work
10			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Kan Hwa Heng	2-Oct-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
11			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Kan Hwa Heng	3-Oct-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
12			Lecture	F2F	SQL Statements. Data model documentation.	3	Kan Hwa Heng	4-Oct-25	Saturday	9:00 am	to	12:00 pm	LT702	Lecture and Group Work
13	Wk 4	Shaping data with SQL	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Kan Hwa Heng	6-Oct-25	Monday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
14			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Kan Hwa Heng	7-Oct-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
15			Lecture	Synchronous	Shaping Data with SQL.	3	Kan Hwa Heng	8-Oct-25	Wednesday	7:00 pm	to	10:00 pm		Lecture and Group Work
16			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Kan Hwa Heng	9-Oct-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
17			Assignment/Quiz	Asynchronous	Group Assignment Submission	3	Kan Hwa Heng	10-Oct-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
		Communicating Insights, Dashboarding and Data Storytelling		Synchronous and Asynchronous	**LEARNING OBJECTIVES**: **Week 4**: Introduction to Data Visualization and Data Storytelling; Basic chart creation in Tableau and Manage and Manipulate Data within Tableau; Exploring data using charts **Week 5**: Creating Dashboards and Telling Story **Week 6**: Basic Predictive Analytics	48	Khoo Seok Teng							Participants will be required to download FREE version of TABLEAU Public 2025 at https://public.tableau.com/en-us/s/download. Recommended System Requirements: • OS: Windows PC – Windows 8 or later, MacOS 10.14 or later. • RAM: Minimum 2 GB • Hard Disk Space: 2 GB Tableau Public Account Required: • Register link: https://public.tableau.com/en-us/s/ • Use "Sign up" button on top right of page
18	Wk 4	Introduction to Data Visualization and Data Storytelling. Basic chart creation in Tableau.	Lecture	Synchronous	Introduction to Module. Introduction to Data Visualization and Data Storytelling with Tableau. Familiarise with Tableau Interface and Basic Chart Creation.	3	Khoo Seok Teng	13-Oct-25	Monday	7:00 pm	to	10:00 pm		Lecture and Group Work
19		Manage and Manipulate data within Tableau; Exploring data using charts	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Khoo Seok Teng	14-Oct-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
20			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Khoo Seok Teng	15-Oct-25	Wednesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
21			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Khoo Seok Teng	16-Oct-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
22			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Khoo Seok Teng	17-Oct-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
23			Lecture	F2F	Data Manipulation in Tableau; Creating charts to explore data using charts	3	Khoo Seok Teng	18-Oct-25	Saturday	9:00 am	to	12:00 pm		Lecture and Group Work
24	Wk 5	Creating Dashboards and Telling Story using Tableau						20-Oct-25	Monday					Deepavali Holiday
25			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Khoo Seok Teng	21-Oct-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
26			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Khoo Seok Teng	22-Oct-25	Wednesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
27			Lecture	Synchronous	Creating Dashboards and Data Storytelling	3	Khoo Seok Teng	23-Oct-25	Thursday	7:00 pm	to	10:00 pm		Lecture and Group Work
28			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Khoo Seok Teng	24-Oct-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
29			Lecture	F2F	Creating dashboards with interactivity and telling story using Tableau	3	Khoo Seok Teng	25-Oct-25	Saturday	9:00 am	to	12:00 pm		Lecture and Group Work

#	Week	Topic	Activity	Mode	Description	Hrs	Instructor	Date	Day	Start	to	End		Notes
30	Wk 6	Apply basic predictive analytics using Clusters and Forecasting	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Khoo Seok Teng	27-Oct-25	Monday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
31			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Khoo Seok Teng	28-Oct-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
32			Lecture	Synchronous	Basic Predictive Analytics using Clusters and Forecasting	3	Khoo Seok Teng	29-Oct-25	Wednesday	7:00 pm	to	10:00 pm		Lecture and Group Work
33			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Khoo Seok Teng	30-Oct-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
34			Assignment/Quiz	Asynchronous	Assignment/Final Module Quiz	3	Khoo Seok Teng	31-Oct-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
		Analysing and Interpreting Data		Synchronous and Asynchronous	LEARNING OBJECTIVES: **Week 7**: Introduction to Business Analytics, Data Cleaning and Time Series Analysis **Week 8**: Time Series & Benchmarking **Week 9**: Forecasting, Scenarios **Week 10**: Scenarios, Correlations Analysis **Week 11:** Project Week, Presentations	82	Francis Tay							Participants will be required to have Microsoft Excel installed in their PC or Macbook. Preference is for participants to have Excel 365, Excel 2016 or later. For this course, it is preferable to have Windows PC as many applications operated best on PC. For Mac users, please refer to notes on how to run Windows on Mac.
35	Wk 7	Introduction to Data Analysis and Interpretation	Check-in	Synchronous	Introduction to Module and Data Cleaning	3	Francis Tay	3-Nov-25	Monday	7:00 pm	to	10:00 pm		Introduction and the use of Excel for data analysis, Excel Hands-on work.
36		Data Cleaning, Time Series	Lecture	Synchronous	Time Series Analysis & Benchmarking	3	Francis Tay	4-Nov-25	Tuesday	7:00 pm	to	10:00 pm		Use of Excel and hand-on work.
37			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	5-Nov-25	Wednesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
38			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Francis Tay	6-Nov-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
39			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Francis Tay	7-Nov-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
40	Wk8	Benchmarking, Project Part 1	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	10-Nov-25	Monday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
41			Lecture	Synchronous	Benchmarking	3	Francis Tay	11-Nov-25	Tuesday	7:00 pm	to	10:00 pm		Use of Excel and hand-on work.
42			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	12-Nov-25	Wednesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
43			Check-in	Asynchronous	Access to Materials, Self-Learning. Work on Assignment.	3	Francis Tay	13-Nov-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
44			Lecture	Synchronous	Project Part 1 - Intro, ACT 1, Week 1 Recap	3	Francis Tay	14-Nov-25	Friday	7:00 pm	to	10:00 pm		Use of Excel and hand-on work.
45			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Francis Tay	14-Nov-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
46	Wk 9	Forecasting Techniques	Lecture	Synchronous	Forecasting	3	Francis Tay	17-Nov-25	Monday	7:00 pm	to	10:00 pm		Use of Excel and hand-on work.
47			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	18-Nov-25	Tuesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
48			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	19-Nov-25	Wednesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
49			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	20-Nov-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
50			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Francis Tay	21-Nov-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
51			Lecture	F2F	Forecasting, Scenarios	2	Francis Tay	22-Nov-25	Saturday	2:00 pm	to	4:00 pm		Lecture and Group Work
52	Wk 10	Correlations Analysis	Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	24-Nov-25	Monday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
53			Lecture	Synchronous	Scenarios, Correlations Analysis	3	Francis Tay	25-Nov-25	Tuesday	7:00 pm	to	10:00 pm		Use of Excel and hand-on work.
54			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	26-Nov-25	Wednesday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
55			Check-in	Asynchronous	Access to Materials, Self-Learning.	3	Francis Tay	27-Nov-25	Thursday	10:00 am	to	10:00 pm		Check in anytime to get materials for self-learning in "Content" section.
56			Assignment/Quiz	Asynchronous	Assignment/Quiz	3	Francis Tay	28-Nov-25	Friday	10:00 am	to	10:00 pm		Assignment/Quiz due date
57			Lecture	F2F	Project Consult	2	Francis Tay	29-Nov-25	Saturday	2:00 pm	to	4:00 pm		Use of Excel and hand-on work.
58	Wk 11	PROJECT WEEK	Check-in	Asynchronous	Work on Excel Dashboard Project	3	Francis Tay	1-Dec-25	Monday	10:00 am	to	10:00 pm		Use of Excel and Work on project.
59			Check-in	Asynchronous	Work on Excel Dashboard Project	3	Francis Tay	2-Dec-25	Tuesday	10:00 am	to	10:00 pm		Practise
60			Check-in	Asynchronous	Work on Excel Dashboard Project	3	Francis Tay	3-Dec-25	Wednesday	10:00 am	to	10:00 pm		Use of Excel and Work on project.
61			Check-in	Asynchronous	Work on Excel Dashboard Project	3	Francis Tay	4-Dec-25	Thursday	10:00 am	to	10:00 pm		Use of Excel and Work on project.
62			Lecture	Synchronous	Project Presentations	3	Francis Tay	5-Dec-25	Friday	7:00 pm	to	10:00 pm		Presentations