Schedule for (SCTP) Advanced Professional Certificate in Data Science and Artificial Intelligence - Cohort 3F (Full Time)   Updated: 17 Nov 25

	Date	Unit	Lesson Title	Start	End	Mode of Delivery
C1: FOUNDATIONS OF DATA SCIENCE: PYTHON AND SQL			Key Topics: Week 1: Intro to Data Science and Databases Week 2: SQL Basics Week 3: SQL Advanced, Intro to Numpy Week 4: Intro to Pandas, EDA Basics Week 5: EDA Advanced, Data Visualization	Start	End	Mode of Delivery
MON	27 Apr-26		Welcome + Introduction + Onboarding	09:00	12:00	NTU@One-North
MON	27 Apr-26		Self Study	13:00	16:00	Self Study
TUE	28 Apr-26	1.1	Intro to Data Science	09:00	12:00	NTU@One-North
TUE	28 Apr-26		Quiz + Self Study	13:00	16:00	Self Study
WED	29 Apr-26	1.2	Introduction to Database	09:00	12:00	NTU@One-North
WED	29 Apr-26		Quiz + Self Study	13:00	16:00	Self Study
THU	30 Apr-26	1.3	SQL Basic - DDL	09:00	12:00	NTU@One-North
THU	30 Apr-26	C1.1	Coaching + Assignment	13:00	16:00	NTU@One-North
FRI	1 May-26	PH	Labour Day			
SAT	2 May-26					
SUN	3 May-26					
MON	4 May-26	1.4	SQL Basic - DML	09:00	12:00	NTU@One-North
MON	5 May-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	5 May-26	1.5	SQL Advanced	09:00	12:00	NTU@One-North
TUE	5 May-26		Quiz + Self Study	13:00	16:00	Self Study
WED	6 May-26	C1.2	Coaching + Assignment	09:00	12:00	NTU@One-North
WED	6 May-26		Assignment + Self Study	13:00	16:00	Self Study
THU	7 May-26	1.6	Introduction to Numpy	09:00	12:00	NTU@One-North
THU	7 May-26	1.7	Introduction to Pandas	13:00	16:00	NTU@One-North
FRI	8 May-26	CW	Career Workshop #1 - Uncover Your Next Path: Career Discovery for Mid-Career Changers	09:00	12:00	NTU@One-North
FRI	8 May-26					
SAT	9 May-26					
SUN	10 May-26					
MON	11 May-26	C1.3	Coaching + Assignment	09:00	12:00	NTU@One-North
MON	11 May-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	12 May-26	1.8	Exploratory Data Analysis (EDA) Basic	09:00	12:00	NTU@One-North
TUE	12 May-26		Quiz + Self Study	13:00	16:00	Self Study
WED	13 May-26	1.9	EDA Advanced	09:00	12:00	NTU@One-North
WED	13 May-26		Quiz + Self Study	13:00	16:00	Self Study
THU	14 May-26	1.10	Data Visualization	09:00	12:00	NTU@One-North
THU	14 May-26	C1.4	Coaching + Assignment	13:00	16:00	NTU@One-North
FRI	15 May-26		Module Quiz + Self Study	09:00	12:00	Self Study
SAT	16 May-26					
SUN	17 May-26					
C2: SCALABLE DATA SOLUTIONS: BIG DATA ENGINEERING ESSENTIALS			Key Topics: Week 1: Introduction Big Data, Data Engineering and Data Architecture Week 2: Data Encoding, Data Flow, Data Extraction and Web Scraping Week 3: Data Warehouse, Data Pipelines and Orchestration Week 4: Data Orchestration and Testing, Memory Processing Week 5: Data Transformation, Stream Processing and Analytics Week 6: Project creation	Start	End	Mode of Delivery
MON	18 May-26	2.1	Introduction to Big Data and Data Engineering	09:00	12:00	NTU@One-North
MON	18 May-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	19 May-26	2.2	Data Architecture	09:00	12:00	NTU@One-North
TUE	19 May-26		Quiz + Self Study	13:00	16:00	Self Study
WED	20 May-26	C2.1	Coaching + Assignment	09:00	12:00	NTU@One-North
WED	20 May-26		Quiz + Self Study	13:00	16:00	Self Study
THU	21 May-26	2.3	Data Encoding and Data Flow	09:00	12:00	NTU@One-North
THU	21 May-26	2.4	Data Extraction and Web Scraping	13:00	16:00	NTU@One-North
FRI	22 May-26	C2.2	Coaching + Assignment	09:00	12:00	NTU@One-North
FRI	22 May-26		Quiz + Self Study	13:00	16:00	Self Study
SAT	23 May-26					
SUN	24 May-26					

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	Date	Unit	Lesson Title	Start	End	Mode of Delivery
MON	25 May-26	2.5	Data Warehouse	09:00	12:00	NTU@One-North
MON	25 May-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	26 May-26	2.6	Data Pipelines	09:00	12:00	NTU@One-North
TUE	26 May-26		Quiz + Self Study	13:00	16:00	Self Study
WED	27 May-26	PH	Hari Raya Haji			
THU	28 May-26	C2.3	Coaching + Assignment	09:00	12:00	NTU@One-North
THU	28 May-26	2.7	Data Orchestration and Testing	13:00	16:00	NTU@One-North
FRI	29 May-26	CW	Career Workshop #2 - Stand Out: Building a Powerful Professional Brand	09:00	12:00	NTU@One-North
FRI	29 May-26		Quiz + Self Study	13:00	16:00	Self Study
SAT	30 May-26					
SUN	31 May-26	PH	Vesak Day			
MON	1 Jun-26	PH	Vesak Day Holiday			
TUE	2 Jun-26	2.8	Out of Core/Memory Processing	09:00	12:00	NTU@One-North
TUE	2 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
WED	3 Jun-26	C2.4	Coaching + Assignment	09:00	12:00	NTU@One-North
WED	3 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
THU	4 Jun-26	2.9	Distributed Batch Processing and Transformation	09:00	12:00	NTU@One-North
THU	4 Jun-26	2.10	Stream Processing and Analytics	13:00	16:00	NTU@One-North
FRI	5 Jun-26	C2.5	Coaching + Assignment	09:00	12:00	NTU@One-North
FRI	5 Jun-26		Module Quiz + Self Study	13:00	16:00	Self Study
SAT	6 Jun-26					
SUN	7 Jun-26					
MON	8 Jun-26		Project	09:00	12:00	Self Study
TUE	9 Jun-26		Project	09:00	12:00	Self Study
WED	10 Jun-26		Project	09:00	12:00	Self Study
THU	11 Jun-26		Project	09:00	12:00	Self Study
FRI	12 Jun-26	PP	**Project Presentation**	09:00	12:00	NTU@One-North
SAT	13 Jun-26					
SUN	14 Jun-26					
C3: BUILDING INTELLIGENT SYSTEMS: MACHINE LEARNING AND GENERATIVE AI			Key Topics: Week 1: Introduction to Machine Learning Week 2: Supervised Learning Week 3: Unsupervised Learning Week 4: Neural Network, Deep Learning and Computer Vision Week 5: Natural Language Processing	Start	End	Mode of Delivery
MON	15 Jun-26	3.1	Probability and Statistics for ML	09:00	12:00	NTU@One-North
MON	15 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	16 Jun-26	3.2	Introduction to Machine Learning	09:00	12:00	NTU@One-North
TUE	16 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
WED	17 Jun-26	C3.1	Coaching + Assignment	09:00	12:00	NTU@One-North
WED	17 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
THU	18 Jun-26	3.3	Supervised Learning	09:00	12:00	NTU@One-North
THU	18 Jun-26	3.4	Supervised Learning - Advanced	13:00	16:00	NTU@One-North
FRI	19 Jun-26		Quiz + Self Study	09:00	12:00	Self Study
SAT	20 Jun-26					
SUN	21 Jun-26					
MON	22 Jun-26	C3.2	Coaching + Assignment	09:00	12:00	NTU@One-North
MON	22 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	23 Jun-26	3.5	Unsupervised Learning	09:00	12:00	NTU@One-North
TUE	23 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
WED	24 Jun-26	3.6	Time Series Data and Forecasting	09:00	12:00	NTU@One-North
WED	24 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
THU	25 Jun-26	C3.3	Coaching + Assignment	09:00	12:00	NTU@One-North
THU	25 Jun-26	3.7	Neural Network & Deep Learning	13:00	16:00	NTU@One-North
FRI	26 Jun-26	CW	Career Workshop #3 - Connecting with Purpose: Networking for Career Transitions	09:00	12:00	NTU@One-North
SAT	27 Jun-26					
SUN	28 Jun-26					
MON	29 Jun-26	3.8	Computer Vision (CV)	09:00	12:00	NTU@One-North

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	Date	Unit	Lesson Title	Start	End	Mode of Delivery
MON	29 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
TUE	30 Jun-26	C3.4	Coaching + Assignment	09:00	12:00	NTU@One-North
TUE	30 Jun-26		Quiz + Self Study	13:00	16:00	Self Study
WED	**1 Jul-26**	3.9	Natural Language Processing (NLP)	09:00	12:00	NTU@One-North
THU	2 Jul-26	3.10	NLP - Advanced	09:00	12:00	NTU@One-North
THU	2 Jul-26	C3.5	Coaching + Assignment	13:00	16:00	NTU@One-North
FRI	3 Jul-26		Module Quiz + Self Study	09:00	12:00	Self Study
SAT	4 Jul-26					
SUN	5 Jul-26					
C4: AWS CERTIFIED AI PRACTITIONER				**Start**	**End**	**Mode of Delivery**
MON	6 Jul-26		AWS Certified AI Practitioner	09:00	16:00	NTU@One-North
TUE	7 Jul-26		AWS Certified AI Practitioner	09:00	16:00	NTU@One-North
WED	8 Jul-26		AWS Certified AI Practitioner	09:00	12:00	NTU@One-North
THU	9 Jul-26					
FRI	10 Jul-26	CW	Career Workshop #4 - Crafting the Perfect Resume: Telling Your Unique Story	09:00	12:00	NTU@One-North
SAT	11 Jul-26					
SUN	12 Jul-26					
C5: TRANSFORMING BUSINESS WITH GPT: HANDS-ON GENERATIVE AI APPLICATIONS				**Start**	**End**	**Mode of Delivery**
MON	13 Jul-26		Generative AI	09:00	16:00	NTU@One-North
TUE	14 Jul-26		Generative AI	09:00	16:00	NTU@One-North
WED	15 Jul-26		Generative AI	09:00	12:00	NTU@One-North
C6: FULL STACK PROGRAMMING AND DEPLOYMENT OF AI SOLUTIONS				**Start**	**End**	**Mode of Delivery**
THU	16 Jul-26		Deployment I: Python Flask, SQLite and HTML, CSS	09:00	12:00	NTU@One-North
THU	16 Jul-26		Deployment I: API Progrmming (replicate, google suite, openAI)	13:00	16:00	NTU@One-North
FRI	17 Jul-26		Deployment I: Cloud AWS / Render / Google Clab / React / UI UX	09:00	12:00	NTU@One-North
FRI	17 Jul-26					
SAT	18 Jul-26					
SUN	19 Jul-26					
MON	20 Jul-26		Deploement I: Project Management/Agile/Scrum/Monday.com & Web3 Solidity/Remix/Infura/Etherscan	09:00	16:00	NTU@One-North
TUE	21 Jul-26		Deployment II: Python Flask, SQLite and HTML, CSS	09:00	12:00	NTU@One-North
TUE	21 Jul-26		Deployent II: API Progrmming (replicate, google suite, openAI)	13:00	16:00	NTU@One-North
WED	22 Jul-26		Deployment II: Cloud AWS / Render / Google Clab / React / UI UX	09:00	12:00	NTU@One-North
WED	22 Jul-26	CW	Career Workshop #5 - Ace the Interview and Beyond: From Preparation to Next Steps	13:00	16:00	NTU@One-North
THU	23 Jul-26		Deployement II : Project Management/Agile/Scrum/Monday.com & Capstone	09:00	16:00	NTU@One-North
FRI	24 Jul-26					
SAT	25 Jul-26					
SUN	26 Jul-26					

- All lecture will be in person unless otherwise stated
- F2F lecture will be held at NTU@one-north campus (off North Buona Vista Road)
- NTU reserves the right to change the date, mode/venue of lesson or cancel class due to unforseen circumstances