

Date	Unit	Lesson Title	Start	End	Mode of Delivery		
C1: AI AND SOFTWARE ENGINEERING FUNDAMENTALS		Key Topics: Week 1: Welcome, AI Fundamentals Week 2: Product Management, SQL Fundamentals	Start	End	Mode of Delivery		
SAT	13 Jun-26	1.1	Welcome + Introduction & Setup		09:00	12:00	NTU@One-north
SUN	14 Jun-26						
MON	15 Jun-26	1.2	AI Fundamentals I		19:00	22:00	Online Zoom
TUE	16 Jun-26						
WED	17 Jun-26	1.3	AI Fundamentals II		19:00	22:00	Online Zoom
THU	18 Jun-26						
FRI	19 Jun-26						
SAT	20 Jun-26	1.4	Product Management in Tech and AI I		09:00	12:00	NTU@One-north
SUN	21 Jun-26						
MON	22 Jun-26	1.5	Relational Databases and SQL Fundamentals		19:00	22:00	Online Zoom
TUE	23 Jun-26						
WED	24 Jun-26	1.6	Product Management in Tech and AI II		19:00	21:30	Online Zoom
THU	25 Jun-26		Module Quiz		20:00	20:30	Self study
FRI	26 Jun-26						
C2: FRONT END DEVELOPMENT		Key Topics: Week 1: Foundation of ReactJS, Data Flow and Conditional Rendering Week 2: States and Events Week 3: Routing, Hooks Week 4: Forms, Intro to Next.js Week 5: Cross-Platform Mobile Application Development Week 6: Application Flow Control & Native Device Capability Integration	Start	End	Mode of Delivery		
SAT	27 Jun-26	CW	Career Workshop #1 - Uncover Your Next Path: Career Discovery for Mid-Career Changers		09:00	12:00	NTU@One-north
SUN	28 Jun-26						
MON	29 Jun-26	2.1	Foundations of Component-Based UI Development with React		19:00	22:00	Online Zoom
TUE	30 Jun-26						
WED	1 Jul-26	2.2	Unidirectional Data Flow and Conditional Rendering		19:00	22:00	Online Zoom
THU	2 Jul-26		Assignment + Self Study		19:00	22:00	Self study
FRI	3 Jul-26	2.3	State Management and Event Handling in React		19:00	22:00	Online Zoom
SAT	4 Jul-26	2.4	Coaching - Intro to Coding wth GenAI		09:00	12:00	NTU@One-north
SUN	5 Jul-26						
MON	6 Jul-26	2.5	Lists, Asynchronous Programming, and Side Effects		19:00	22:00	Online Zoom
TUE	7 Jul-26						
WED	8 Jul-26	2.6	Advanced State Management: Context API and Reducers		19:00	22:00	Online Zoom
THU	9 Jul-26		Assignment + Self Study		19:00	22:00	Self study
FRI	10 Jul-26						
SAT	11 Jul-26	2.7	Coaching - Simple CRM + AI Tools		09:00	12:00	NTU@One-north
SUN	12 Jul-26						
MON	13 Jul-26	2.8	Routing and Navigation with React Router		19:00	22:00	Online Zoom
TUE	14 Jul-26	CW	Career Workshop #2 - Stand Out: Building a Powerful Professional Brand		19:00	22:00	Online Zoom
WED	15 Jul-26	2.9	Testing, Performance Optimization, and Custom Hooks		19:00	22:00	Online Zoom
THU	16 Jul-26		Assignment + Self Study		19:00	22:00	Self study
FRI	17 Jul-26						
SAT	18 Jul-26	2.10	Coaching - Hooks practical		09:00	12:00	NTU@One-north
SUN	19 Jul-26						
MON	20 Jul-26	2.11	Form Handling, Validation, and Deployment		19:00	22:00	Online Zoom
TUE	21 Jul-26						
WED	22 Jul-26	2.12	Introduction to Next.js		19:00	22:00	Online Zoom
THU	23 Jul-26		Assignment + Self Study		19:00	22:00	Self study
FRI	24 Jul-26						
SAT	25 Jul-26	2.13	Coaching - React router and Formik practicals		09:00	12:00	NTU@One-north
SUN	26 Jul-26						
MON	27 Jul-26	2.14	Introduction to Cross-Platform Mobile Application Development		19:00	22:00	Online Zoom
TUE	28 Jul-26						
WED	29 Jul-26	2.15	UI Composition and Layout Management in Mobile Applications		19:00	22:00	Online Zoom
THU	30 Jul-26		Assignment + Self Study		19:00	22:00	Self study
FRI	31 Jul-26						
SAT	1 Aug-26	2.16	Coaching - Building a Sample App I		09:00	12:00	NTU@One-north

	Date	Unit	Lesson Title	Start	End	Mode of Delivery
SUN	2 Aug-26					
MON	3 Aug-26	2.17	Application Flow Control with Navigation Frameworks	19:00	22:00	Online Zoom
TUE	4 Aug-26					
WED	5 Aug-26	2.18	Integration of Native Device Capabilities in Cross-Platform Applications	19:00	22:00	Online Zoom
THU	6 Aug-26		Assignment + Module Quiz + Self Study	19:00	22:00	Self study
FRI	7 Aug-26					
SAT	8 Aug-26	2.19	Coaching - Building a Sample App II	09:00	12:00	NTU@One-north
SUN	9 Aug-26	PH	National Day			
		C3: BACK END DEVELOPMENT: SERVER-SIDE PROGRAMMING	Key Topics: Week 1: Programming Fundamentals & Control Structures Week 2: Data Structures and Algorithms Week 3: OOP, Stream processing, Data pipelines Week 4: Concurrent Programming, RESTful APIs development Week 5: API Design, Dependency Mgt, Application layering Week 6: ORM, Persistent Data Mgt, Unit Testing	Start	End	Mode of Delivery
MON	10 Aug-26			PH	National Day Holiday	
TUE	11 Aug-26	3.1	Programming Fundamentals and Control Structures I	19:00	22:00	Online Zoom
WED	12 Aug-26	3.2	Programming Fundamentals and Control Structures II	19:00	22:00	Online Zoom
THU	13 Aug-26					
FRI	14 Aug-26					
SAT	15 Aug-26	3.3	Coaching - Boosting Productivity with GitHub Copilot in VS Code	09:00	12:00	NTU@One-north
SUN	16 Aug-26					
MON	17 Aug-26	3.4	Data Structures and Algorithms I	19:00	22:00	Online Zoom
TUE	18 Aug-26	CW	Career Workshop #3 - Connecting with Purpose: Networking for Career Transitions	19:00	22:00	Online Zoom
WED	19 Aug-26	3.5	Data Structures and Algorithms II	19:00	22:00	Online Zoom
THU	20 Aug-26		Assignment + Self Study	19:00	22:00	Self study
FRI	21 Aug-26					
SAT	22 Aug-26	3.6	Coaching - Recap + Object-Oriented Design and Encapsulation	09:00	12:00	NTU@One-north
SUN	23 Aug-26					
MON	24 Aug-26	3.7	Principles of Object-Oriented Programming	19:00	22:00	Online Zoom
TUE	25 Aug-26					
WED	26 Aug-26	3.8	Functional programming, stream processing, Data pipelines	19:00	22:00	Online Zoom
THU	27 Aug-26		Assignment + Self Study	19:00	22:00	Self study
FRI	28 Aug-26					
SAT	29 Aug-26	3.9	Coaching : Recap + Error Handling and Logging Practices	09:00	12:00	NTU@One-north
SUN	30 Aug-26					
MON	31 Aug-26	3.10	Concurrent Programming Fundamentals	19:00	22:00	Online Zoom
TUE	1 Sep-26					
WED	2 Sep-26	3.11	Web Application Development with RESTful APIs	19:00	22:00	Online Zoom
THU	3 Sep-26		Assignment + Self Study	19:00	22:00	Self study
FRI	4 Sep-26					
SAT	5 Sep-26	3.12	Coaching: Recap + Intro to Spring AI	09:00	12:00	NTU@One-north
SUN	6 Sep-26					
MON	7 Sep-26	3.13	Web Service Development and API Design	19:00	22:00	Online Zoom
TUE	8 Sep-26					
WED	9 Sep-26	3.14	Frameworks, Dependency Management, and Application Layering	19:00	22:00	Online Zoom
THU	10 Sep-26		Assignment + Self Study	19:00	22:00	Self study
FRI	11 Sep-26					
SAT	12 Sep-26	3.15	Coaching: Recap + Spring AI Part 2	09:00	12:00	NTU@One-north
SUN	13 Sep-26					
MON	14 Sep-26	3.16	Object-Relational Mapping with JPA	19:00	22:00	Online Zoom
TUE	15 Sep-26					
WED	16 Sep-26	3.17	Persistent Data Management and Robust API Design	19:00	22:00	Online Zoom
THU	17 Sep-26		Assignment + Self Study	19:00	22:00	Self study
FRI	18 Sep-26					
SAT	19 Sep-26	3.18	Coaching: Recap + Spring AI Part 3	09:00	12:00	NTU@One-north
SUN	20 Sep-26					
MON	21 Sep-26	3.19	Software Testing: Unit and Integration Testing	19:00	22:00	Online Zoom
TUE	22 Sep-26		Assignment + Module Quiz + Self Study	19:00	22:00	Self study

Date	Unit	Lesson Title	Start	End	Mode of Delivery		
C4: DEVOPS: AUTOMATING INTEGRATION AND DEPLOYMENT		Key Topics: Week 1: Security & Authentication Week 2 & 3: Intro to DevOps, Containerization Week 4: Continuous Integration Week 5: Continuous Deployment Week 6: Microservices Architecture	Start	End	Mode of Delivery		
WED	23 Sep-26	4.1	Secure Software Development and Authentication I		19:00	22:00	Online Zoom
THU	24 Sep-26						
FRI	25 Sep-26						
SAT	26 Sep-26	4.2	Coaching - recap + Secure Software Development and Authentication II		09:00	12:00	Online Zoom
SUN	27 Sep-26						
MON	28 Sep-26	4.3	Introduction to DevOps		19:00	22:00	Online Zoom
TUE	29 Sep-26	CW	Career Workshop #4 - Crafting the Perfect Resume: Telling Your Unique Story		19:00	22:00	Online Zoom
WED	30 Sep-26	4.4	Cloud Native Application - Local Containerization		19:00	22:00	Online Zoom
THU	1 Oct-26		Assignment + Self Study		19:00	22:00	Self study
FRI	2 Oct-26						
SAT	3 Oct-26	4.5	Coaching- recap + Cloud Native Application - Remote Containerization		09:00	12:00	NTU@One-north
SUN	4 Oct-26						
MON	5 Oct-26	4.6	Cloud Native Application - Docker Compose		19:00	22:00	Online Zoom
TUE	6 Oct-26						
WED	7 Oct-26	4.7	Continuous Integration		19:00	22:00	Online Zoom
THU	8 Oct-26						
FRI	9 Oct-26						
SAT	10 Oct-26	4.8	Coaching - recap + Container Practicals		09:00	12:00	NTU@One-north
SUN	11 Oct-26						
MON	12 Oct-26	4.9	Tool Exploration		19:00	22:00	Online Zoom
TUE	13 Oct-26						
WED	14 Oct-26	4.10	Hosting		19:00	22:00	Online Zoom
THU	15 Oct-26		Assignment + Self Study		19:00	22:00	Self study
FRI	16 Oct-26						
SAT	17 Oct-26	4.11	Coaching - recap + CI Practicals		09:00	12:00	NTU@One-north
SUN	18 Oct-26						
MON	19 Oct-26	4.12	Continuous Deployment		19:00	22:00	Online Zoom
TUE	20 Oct-26						
WED	21 Oct-26	4.13	DevSecOps Foundations		19:00	22:00	Online Zoom
THU	22 Oct-26		Assignment + Self Study		19:00	22:00	Self study
FRI	23 Oct-26						
SAT	24 Oct-26	4.14	Coaching - recap + DevSecOps Practicals		09:00	12:00	NTU@One-north
SUN	25 Oct-26						
MON	26 Oct-26	4.15	Microservices Architecture I		19:00	22:00	Online Zoom
TUE	27 Oct-26	CW	Career Workshop #5 - Ace the Interview and Beyond: From Preparation to Next Steps		19:00	22:00	Online Zoom
WED	28 Oct-26	4.16	Microservices Architecture II		19:00	22:00	Online Zoom
THU	29 Oct-26		Assignment + Module Quiz + Self Study		19:00	22:00	Self study
FRI	30 Oct-26						
C5: GENAI DEPLOYMENT AND CAPSTONE		Key Topics: Week 1: RAG Systems Fundamentals Week 2: Agentic AI & AI Frameworks Week 3: Capstone Project Final Sprint	Start	End	Mode of Delivery		
SAT	31 Oct-26	5.1	LLMs, RAG Basics Capstone Briefing + Project Planning		09:00	12:00	NTU@One-north
SUN	1 Nov-26						
MON	2 Nov-26	5.2	RAG Systems Fundamentals I		19:00	22:00	Online Zoom
TUE	3 Nov-26		Project Sprint		19:00	22:00	Self study
WED	4 Nov-26	5.3	RAG Systems Fundamentals II		19:00	22:00	Online Zoom
THU	5 Nov-26		Project Sprint		19:00	22:00	Self study
FRI	6 Nov-26						
SAT	7 Nov-26	5.4	Guest speaker - SW and AI in Industry topics		09:00	12:00	NTU@One-north
SUN	8 Nov-26	PH	Deepavali				
MON	9 Nov-26	PH	Deepavali Public Holiday				
TUE	10 Nov-26	5.5	Agentic AI		19:00	22:00	Online Zoom

Schedule for (SCTP) Advanced Professional Certificate in AI Engineering - Cohort 1 (Part Time)

Updated: 15 Apr 26

	Date	Unit	Lesson Title	Start	End	Mode of Delivery
WED	11 Nov-26	5.6	AI Frameworks I	19:00	22:00	Online Zoom
THU	12 Nov-26		Assignment + Module Quiz + Self Study	20:00	21:00	Self study
FRI	13 Nov-26		Project Sprint	19:00	22:00	Self study
SAT	14 Nov-26	5.7	AI Frameworks II	09:00	12:00	NTU@One-north
SUN	15 Nov-26					
MON	16 Nov-26		Project Consult	20:00	21:00	Online Zoom
TUE	17 Nov-26		Project Consult	20:00	21:00	Online Zoom
WED	18 Nov-26		Project Consult	20:00	21:00	Online Zoom
THU	19 Nov-26		Project Consult	20:00	21:00	Online Zoom
FRI	20 Nov-26		Final Project Sprint	19:00	22:00	Self study
SAT	21 Nov-26	PP	Project Presentation	09:00	13:00	NTU@One-north
SUN	22 Nov-26					

- All lecture will be facilitated Virtually unless otherwise stated
- F2F lecture will be held at NTU@one-north campus (off North Buona Vista Road)
- NTU reserves the right to modify the date, revise the content, change the trainer, adjust the mode or venue of lessons, or cancel the class should unforeseen circumstances arise