# TEMASEK POLYTECHNIC SCHOOL OF INFORMATICS & IT

# DIPLOMA IN INFORMATION TECHNOLOGY

### DIPLOMA IN APPLIED ARTIFICIAL INTELLIGENCE AY2025/2026 APRIL SEMESTER (LEVEL 2)

## TEACHING PLAN FOR MOBILE APPLICATION DEVELOPMENT (CIT2C18)

Wk	Commenci	Contact Hours		Non-Contact Hours	ILO		Remarks
	ng Workshop (2 x 2hrs)		E-Learning/Independent Learning				
		Session #1	Session #2		Contact Hours	Non-Contact Hours	
1 (1)	21 Apr 25	Getting Started with Flutter for Mobile Application Development	Introduction to Dart Programming	Choosing a Cross Platform Development Tool	ILO 1 (2) ILO 2 (2)	ILO 1 (2)	Project Release
2 (2)	28 Apr 25	Mini-Project #1: Introduction to Widgets	Mini-Project #1: Introduction to Widgets		ILO 2 (4)		1 May (Thu): Labor Day
3 (3)	5 May 25	Mini-Project #2: Working with ListView and GridView	Mini-Project #3: Working with Navigation		ILO 2 (4)		6 May (Tue): Graduation Ceremonies for IIT Project Part 1 – Project Proposal (20%)
4 (4)	12 May 25	FLEX WEEK					
5 (5)	19 May 25	Mini-Project #4: Travel Expenses Tracker App	Mini-Project #5: Working with Forms		ILO 2 (4)		CCN Day 17 May (Fri, pm) (TBC)
6 (6)	26 May 25	Project Consultation	Mini-Project #6: Setting up a Firebase Service		ILO 2 (4)		

7 (7)	2 Jun 25	Project Demonstration	Mini-Project #7: Implementing Firebase Authentication	Google Sign-In for Flutter	ILO 2 (4)	ILO 3 (2)	7 June (Sat): Hari Raya Haji  Project Part 2: Basic Application – Program Code (20%) Demonstration (5%)
8 (8)	9 Jun 25		TEF	RM TEST			
9 (9)	16 Jun 25		TER	M BREAK			
10 (10)	23 Jun 25		TER	M BREAK			
11 (11)	30 Jun 25	Mini-Project #8: Implementing Firebase Cloud Firestore	Mini-Project #9: Working with Camera and Image Gallery	Perform simple and compound queries in Cloud Firestore	ILO 2 (2) ILO 3 (2)	ILO 2 (2)	4 Jul (Fri): Mid-Semester CCM (TBC)
12 (12)	7 Jul 25	Mini-Project #10: Consuming RESTful Web APIs – Part 1	Mini-Project #11: Themes and SharedPreferences	Get started with Cloud Firestore Security Rules Consuming RESTful Web APIs – Part 2	ILO 3 (4)	ILO 3 (4)	
13 (13)	14 Jul 25	Project Demonstration	Mini-Project #12: Adding Application Icon and Splash Screen	Build and release an Android application	ILO 2 (2) ILO 3 (2)	ILO 3 (2)	Project Part 3: Authentication – Program Code (20%) Demonstration (5%)
14 (14)	21 Jul 25						
15 (15)	28 Jul 25	Mini-Project #13: Implementing Responsive User Interface	Project Consultation		ILO 2 (2) ILO 3 (2)		

16 (16)	4 Aug 25	Project Consultation	Project Consultation		ILO 2 (4)	9 Aug (Sat): National Day
17 (17)	11 Aug 25	Project Demonstration	Project Demonstration		ILO 3 (2)	Project Part 4: Database Operations and Additional Features – Program Code (25%) Presentation & Demonstration (5%)
18 (18)	18 Aug 25		STU	DY WEEK		
			VA	- 5 Sep 2025) CATION		
	<u> </u>		(6 Sep -	- 19 Oct 2025)		

Remark- For the Wk (Week) column, the first number in a row indicated the "physical" week number based on FAST workflow. The second number in bracket is the "logical" week number used within a semester.

# - No re-scheduling of classes unless advised by the respective Course Chair

#### **Teaching Team**

Names	Contact No.	Email
Ms. HU Huimei (Subject Leader)	6780 6932	hu_huimei@tp.edu.sg
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#### Total Hours based on Syllabus / Breakdown of Hours

Hours Based of	n Syllabus	Breakdown of Hours			
Class/Activity Hours		Face-to-Face	E-Learning/Independent Learning		
Workshop	58 hours	46 hours	12 hours		
		Breakdown of Assessment Hours			
Assessment(s)	2 hours	Project Presentation	2 hours		
Total	60 hours				

#### <u>Assessment</u>

Type of Assessment	Raw Marks	ILOs covered	Topics tested for assessment	Individual%	Group%
Continuous Assessment (100%)		Covereu	assessment		
- Project Part 1: Proposal (20%)	40 marks	1, 2	Week 1, 2	20%	
- Project Part 2: Basic Application Program Code (20%) Presentation and Demonstration (5%)	50 marks	1, 2	Week 1, 2, 3, 5	25%	
- Project Part 3: Authentication Program Code (20%) Presentation and Demonstration (5%)	50 marks	1, 2, 3	Week 6, 7	25%	
- Project Part 4: Database Operations and Additional Features Program Code (25%) Presentation and Demonstration (5%)	60 marks	1, 2, 3	Week 11, 12, 13, 15	30%	
Continuous Assessment (100%)					
Total				100%	0%

### **Project (100%)**

The individual project will be used to assess students' application of the concepts and the mobile development process to create a mobile application on a specific platform. For the project, the deliverables would include a proposal, the program codes and a presentation and demonstration of the application.

#### Penalties for late submissions

late and < 1 day: 10% deduction from absolute mark given for the assignment e.g 75 marks (100 marks max) becomes 65 marks (deduct 10% of 100 marks)

late >=1 and <2 days: 20% deduction from absolute mark

late >=2 days: 0 marks awarded

#### References

- 1. Rap Payne. (2019). Beginning App Development with Flutter: Create Cross-Platform Mobile Apps. APress.
- 2. Marco L. Napoli. (2019). Beginning Flutter: A Hands On Guide to App Development. Wiley.
- 3. Thomas Bailey, Alessandro Biessek (2021). Flutter for Beginners Second Edition: An introductory guide to building cross-platform mobile applications with Flutter 2.5 and Dart. Packt Publishing.

#### Follow-up in the event of emergencies leading to closure of the Polytechnic

In the event of the temporary closure of the Polytechnic due to unforeseen circumstances such as severe haze, a pandemic, or other emergencies, students should log in to LMS for instructions on the completion of independent learning activities until the resumption of on-site classes at the Polytechnic. IIT has in place a comprehensive set of eLearning materials to replace face-to-face lessons and these would be made available to students via LMS when classes cannot be conducted on campus.

Prepared by	:	Ms. Hu Huimei	(Subject Leader)	
Vetted by	:	Ms. Fua Ying Huey	(Manager)	
Approved by	:	Mr. Sankara	(Course Chair)	