

TEMASEK POLYTECHNIC
SCHOOL OF INFORMATICS & IT
DIPLOMA IN INFORMATION TECHNOLOGY
AY2025/2026 APRIL SEMESTER (LEVEL 2)
TEACHING PLAN FOR APPLICATION SECURITY (CIT2C29)

Wk	Commencing	Contact Hours		Non-Contact Hours	ILO		Remarks
		Workshop (2x2hrs)		E-Learning/Independent Learning	Contact Hours	Non-Contact Hours	
		Session #1	Session #2				
1 (1)	21 Apr 25	P1: Application Security Development 1	P1: Application Security Development 1	L1: Application Security Development 1 (2hr)	ILO1(4)	ILO1(2)	Project Release
2 (2)	28 Apr 25	P2: Application Security Development 2	P2: Application Security Development 2	L2: Application Security Development 2 (2hr)	ILO1(4)	ILO1(2)	1 May (Thu): Labor Day
3 (3)	5 May 25	P3: Application Security Development 3	P3: Application Security Development 3	L3: Application Security Development 3 (2hr)	ILO1(4)	ILO2(2)	6 May (Tue): Graduation Ceremonies for IIT
4 (4)	12 May 25	FLEX WEEK					
5 (5)	19 May 25	P4: Application Security Development 4	P4: Application Security Development 4	L4: Application Security Development 4 (1hr)	ILO1(4)	ILO2(1)	CCN Day 17 May (Fri, pm) (TBC)
6 (6)	26 May 25	P5: Application Security Development 5	P5: Application Security Development 5	L5: Application Security Development 5 (1hr)	ILO2(4)	ILO2(1)	Assignment (20%)
7 (7)	2 Jun 25	Assignment Presentation & Demonstrations	Assignment Presentation & Demonstrations	L6: Application Security Development 6 (1hr)	ILO2(4)	ILO3(1)	7 June (Sat): Hari Raya Haji Assignment Presentation & Demonstrations (10%)
8 (8)	9 Jun 25	TERM TEST					
9 (9)	16 Jun 25	TERM BREAK					
10 (10)	23 Jun 25	TERM BREAK					

11 (11)	30 Jun 25	P6: Application Security Development 6	P6: Application Security Development 6	L6: Application Security Development 6 (1hr)	ILO2(4)	ILO3(1)	4 Jul (Fri): Mid-Semester CCM (TBC)
12 (12)	7 Jul 25	P7: Application Security Development 7	P7: Application Security Development 7	L7: Application Security Development 7 (1hr)	ILO2(4)	ILO3(1)	Case Study Project Interim Submission (20%)
13 (13)	14 Jul 25	Case Study: Interim Demonstration & Presentation	Case Study: Interim Demonstration & Presentation	L7: Application Security Development 7 (1hr)	ILO2(4)	ILO3(1)	Case Study Project Interim Presentation & Demonstrations (10%)
14 (14)	21 Jul 25	FLEX WEEK					
15 (15)	28 Jul 25	Consultation	Consultation	L7: Application Security Development 7 (1hr)	ILO2(4)		
16 (16)	4 Aug 25	Consultation	Consultation		ILO3(4)		9 Aug (Sat): National Day Case Study Project Final Submission (20%)
17 (17)	11 Aug 25	Case Study: Final Demonstration & Presentation	Case Study: Final Demonstration & Presentation		ILO3(3)		Case Study Project Final Presentation & Demonstrations (20%)
18 (18)	18 Aug 25	STUDY WEEK					
		EXAMINATION (25 Aug – 5 Sep 2025)					
		VACATION (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	Email
Mr Andrew Tan (Subject Leader)	andrewt@tp.edu.sg
Mr Mark SOONG	Mark_SOONG@tp.edu.sg

Total Hours based on Syllabus / Breakdown of Hours

Hours Based on Syllabus		Breakdown of Hours	
Class/Activity	Hours	Face-to-Face	E-Learning/Independent Learning
Workshop	59 hours	47 hours	12 hours
Breakdown of Assessment Hours			
Assessment(s)	1 hours	Project Presentation	1 hours
Total	60 hours		

Assessment

Type of Assessment	Raw Marks	ILOs covered	Topics tested for assessment	Individual%	Group%
Continuous Assessment (100%)					
- Assignment (30%)	100 marks	ILO1 ILO2	Application Security Development 1,2,3	30%	0%
- Case Study Project Interim Submission and Presentation (30%)	100 marks	ILO1 ILO2	Application Security Development 4,5	30%	0%
- Case Study Project Final Submission and Presentation (40%)	100 marks	ILO3	Application Security Development 6,7	40%	0%
Total				100%	0%

Assignment (30%)

The assignment will be used to assess the students' proficiency in building a simple web application and applying the necessary security solutions.

Case Study Project

Interim Submission and Presentation (30%)

The case study project will be used to assess the students' ability to design and develop a suitable web application based on mvp requirements. They would be expected to present their designs and conduct functionality and vulnerability test demonstration on their applications to ensure the web application is secure against current web vulnerabilities and threats.

Final Submission and Presentation (40%)

The case study project will be used to assess the students' ability to design and develop a suitable web application based on additional requirements. They would be expected to present their designs and conduct functionality and vulnerability test demonstration on their applications to ensure the web application is secure against current web vulnerabilities and threats.

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

Hoffman, A. (2020). Web application security (2nd ed.). O'Reilly Media, Inc.

Nadalin, A. (2020). Web application security for the everyday software

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 : Mr Andrew Tan (Subject Leader)

Vetted by : Mr Tan Hong Yap (Manager)

Approved by : Mr. Sankara (Course Chair)