1	Name of Course :	Mobile and Wireless Technology	Version Number:	VD1
	Course Code :	CT090-3-2	Effective Date:	01 Sep 2019
2	Synopsis :	This module will cover the various area of mobile and wireless technology, WLAN System Architecture and Design, WLAN Security, and Broadband Wireless Access: Mobile WiMAx and WiFi		
3	Name(s) of academic staff :	**Dr. Kuruvikulam Chandrasekaran Arun**, David Tan, Salmiah Binti Amin		
4	Semester and Year offered :	See Programme Specification (Module may be delivered on multiple programmes and therefore in different years/semesters)		
5	Credit Value :	3		
6	Prerequisite/co-requisite: (if any)	Nil		
7	Course Learning Outcomes (CLO) : At the end of the course the students will be able to: (example) - explain the basic principles of immunisation (C2,PLO1)			
	CLO1	Explain the technical concepts and the architecture of WLAN Technology(C2,PLO1)		
	CLO2	Choose the relevant Mobile and Wireless Technology to solve problems in any given scenario(C3,PLO2)		
	CLO3	Propose WLAN Infrastructure design for an enterprise network with the usage of site survey tools and techniques(A3,PLO6)		

8 Mapping of the Course Learning Outcomes to the Programme Learning Outcomes, Teaching Methods and Assessment : Please select the learning outcome Domain(LOD) for each PLO in the cells above it. E.g PLO1- Knowledge and Understanding, PLO2- Cognitive Skills, PLO3-Practical Skills

Course Learning Outcomes (CLO)	Programme Learning Outcomes (PLO)												Teaching Methods	Assessment
	Knowledge and Understanding,	Cognitive Skills,	Practical Skills,	Interpersonal Skill,	Communication skill,	Digital Skills,	Numeracy Skills,	Leadership, autonomy and responsibility,	Personal Skills,	Entrepreneurial Skills,	Ethics and professionalism			
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12		
CLO 1	✓												Lecture	Test
CLO 2		✓											Lecture	Final Exam
CLO 3						✓							Problem Based Learning	Individual Assignment

Indicate the relevancy between the CLO and PLO by ticking "√" the appropriate relevant box.
(This description must be read together with Standards 2.1.2 , 2.2.1 and 2.2.2 in Area 2 - pages 16 & 18)

9 Transferable Skills (if applicable)
(Skills learned in the course of study which can be useful and utilized in other settings)

1	Cognitive Skills,
2	Digital Skills,
3	
4	
5	

10 **Distribution of Student Learning Time (SLT)**

Course Content Outline	CLO*	Teaching and Learning Activities					SLT
		Guided Learning (F2F)				Guided Learning (NF2F) eg: e-learning	Independent Learning (NF2F)	
		L	T	P	O			
Introduction to WLAN & WLAN Infrastructure Devices	1	3					3	6
Radio Frequency (RF) Fundamentals for WLAN Technology	1	1					1	2
WLAN Terminology and Technology	1	2					2	4
WLAN Threats & Security	1	3					6	9
WiMAX and LTE	2	6					6	12
Other current technologies	2	4					4	8
The Future: Li-Fi	2	5					5	10
IoT and Wireless Sensor Networks	2	4					8	12
Problem Based Learning:WLAN Site Survey Design and Considerations	3		7				14	21
Problem Based Learning:WLAN Deployment	3		7				14	21

				Total	105

	Continuous Assessment	Percentage (%)	F2F	NF2F	SLT
1	Test (Week-8)	20	1	2	3
2	Individual Assignment (Week-12) - Wireless Site Survey Report - 1500 words	40	0	6	6
3					0
4					0
5					0
				Total	9

	Final Assessment	Percentage (%)	F2F	NF2F	SLT
1	Final Exam	40	2	4	6
2					0
3					0
4					0
5					0
				Total	6

****Please tick (√) if this course is Latihan Industri/ Clinical Placement/ Practicum/ WBL using Effective Learning Time (ELT) of 50%** ☐ **GRAND TOTAL SLT** **120**

L = Lecture, T = Tutorial, P= Practical, O= Others, F2F=Face to Face, NF2F=Non Face to Face
**Indicate the CLO based on the CLO's numbering in Item 8.*

11	Identify special requirement to deliver the course (e.g: software, nursery, computer lab, simulation room, etc)	Softwares: Any Heat Mapper tools (Open Source)
12	References :(include required and further readings, and should be the most current)	Essential Reading Coleman, D.and Westcott, D.(2018) *CWNA Certified Wireless Network Administrator Study Guide: Exam CWNA-107* . 5th Edition. Sybex. ISBN-13: 978-1119425786. Bartz,R. J.(2017) *CWTS, CWS, and CWT Complete Study Guide: Exams PW0-071, CWS-2017, CWT-2017* .3rd Edition.New York:Wiley.ISBN-13: 978-1119385035.
13	Other additional information :	