1	Name of Course :	Probability and Statistical Modelling	Version Number:	VD1
	Course Code :	AQ077-3-2	Effective Date:	01 Sep 2019
2	Synopsis :	This module covers a variety of probabilistic techniques which enable predictions to be made about problems that are characterised by uncertainty, and introduces statistical methods of data analysis which allow inferences to be drawn about large populations from samples.		
3	Name(s) of academic staff :	**Adie Safian;** Low Kok Sun; Tan Kok Kiang		
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)	Mathematical Concepts for Computing		

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	Comprehend the fundamental of probability and statistical models (C2, PLO1)
CLO2	Perform the statistical analysis using Excel output (A2, PLO6)
CLO3	Determine appropriate probability and statistical models in solving problem (C4, PLO7)

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, Tutorial	Quiz 1, Quiz 2, Final Exam (Sect. A)
CLO 2						✓							Tutorial	Practical Test
CLO 3							✓						Lecture, Tutorial	Final Exam (Sect. B)

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	Digital Skills,
2	Numeracy 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			
Concept of Probability	1	2					2	4
Summary Measures of Statistics	1	2					4	6
Correlation and Regression Analysis	1	4					4	8
Probability Distribution	1	4					4	8
Estimation and Confidence Interval	1	4					4	8
Hypothesis Testing	1	4					4	8
Decision Making Techniques	1	2					2	4
Practical example 1: Concept of Probability and Summary Measures of Statistics)	2			5			10	15
Practical example 2: Correlation and Regression Analysis and Probability Distribution	2			7			10	17

Practical example 3: Estimation and Confidence Interval, Hypothesis Testing and Decision Making Techniques)	3			8			16	24
								0
								0
								0
								0
								0
								0
								0
								0
								0
							Total	102

	Continuous Assessment	Percentage (%)	F2F	NF2F	SLT
1	Quiz 1	10	0.5	1.5	2
2	Quiz 2	10	0.5	1.5	2
3	Practical Test	30	1.5	4.5	6
4					0
5					0
6					0
7					0
				Total	10

	Final Assessment	Percentage (%)	F2F	NF2F	SLT
1	Final Exam (Sect. A)	25	1	3	4
2	Final Exam (Sect. B)	25	1	3	4
3					0
4					0
5					0
				Total	8

****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)	Microsoft Excel
12	References :(include required and further readings, and should be the most current)	**Essential Reading:** 1. Bluman, A. (2017). Elementary Statistics: A Step By Step Approach, 10th Ed. McGraw-Hill Higher Education. (ISBN-13: 978-1259755330; ISBN-10: 1259755339). 2. Oakshott, L. (2016) Essential Quantitative Methods for Business, Management and Finance. 6th Ed. Palgrave. (ISBN-13: 978-1137518552)
13	Other additional information :	