Subject Code	MM5451
Subject Title	Technology Innovation and Management
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	None
Objectives	The context of this course is Innovation Driven Enterprises (IDE). These include large successful companies e.g. Apple, Cisco, NVIDIA, and Facebook; and large new digital economy companies e.g. PingAn Technology, Xiaomi, and JD Technology; and start-ups e.g. Lemonade Insurance, and OneDegree etc. This course has lectures but most importantly by doing. • Learn thru examples, to appreciate the challenges technological innovation within large enterprises, and how do they innovate; • Learn thru theory. Theory is the summary of observed pattern and it helps to break; • Learn thru teamwork. Innovation doesn't often come in isolation, and teamwork is needed; • Learn thru innovation, by working on an innovation idea by yourself. At the end of the course, you will capture the pragmatic, action-oriented, and complex nature of managing technological innovation We will have two sessions of this course. The weekday night session will be more focus on Hong Kong and US IDE. The Saturday session will be more focus on China and Greater Bay Area. Please pick your session according to you interest.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. Appreciation of Challenges & Complexities Technology Innovation b. Appreciation of Structure Processes and Tools c. Try it Out -- Demonstration of Creativity, Experiment Innovation Loop

Subject Synopsis/ Indicative Syllabus	• Section 1 – Context of Innovation -- Pain Points
	     o Using examples and Primary Market Research (PMR) from different IDE, we will take Deep dive understanding of innovation pain points
	
	 • Section 2 – What is an IDE
	     o Introduction to Five Digital Technologies (IOT, 5G, Cloud Computing, Big Data, AI, Blockchain) -- Definition, Characteristics, why it matters, and its Network Effect
	     o Industry Verticals – Health Informatics, Social Media & Digital Marketing, Education Technology
	
	 • Section 3 – Innovation
	     o Regionals – Silicon Valley, China, Singapore and Hong Kong
	     o Innovation Process – Sources, Open, Service, Business Models
	     o Market Adjacency
	     o Eco-System
	     o Technology Push vs Market Pull
	
	 • Section 4 – Product Innovation Process & Tools
	
	 • Section 5 – Validation
	     o User Experience & Feedback
	     o Financial
	     o Teaming
	
	 • Section 6 – IDE Group Project

Teaching/Learning Methodology	Class Preparation and In Class Participation • Class participation via Case Study discussion and guest lectures • Individual presentation on a topic on TIM, topics to provide, or self-nominated topics if approved • Individual presentation on a service redesign project – select one service that you consider important, and conduct primary market research, and incorporate feedback in a redesign of the service offering • Group innovation project, including Business Model, Go-to-Market, Customer Acquisition, and Organizational Structure • Individual one-page reflection memo on group innovation project

Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
			a	b	c			
	Continuous Assessment*	**100%**						
	1. Class Attendance & Participation	20%	√	√				
	2. Individual Presentation a TIM Topic	10%	√	√				
	3. Individual Presentation on a service redesign project	20%	√	√	√			
	4. Group Innovation Project	40%	√	√	√			
	5. Individual Reflection	10%	√	√	√			
	Total	100 %						

*Weighting of assessment methods/tasks in continuous assessment may be different, subject to each subject lecturer.

To reflect the significant technology content in this subject, 10% (or more) of the overall weighting of this subject is based on individual assessment concerning technology-related knowledge.

To pass this subject, students are required to obtain Grade D or above in the overall subject grade.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: the various methods are designed to ensure that all students taking this subject –

- Readings with quantitative elements are assigned to course participants. They are required to critique these articles and prepare for discussion so as to enhance their understanding of the analytics element of the program. Student teams also need to make presentations in class and exchange views regarding conceptual, methodological and managerial issues regarding business analytics. Examination is introduced to assess whether participants are able to integrate what they have learned, and more importantly, generate research ideas of both academic and business significance.

Student Study Effort Expected	Class contact:	
	▪ Lectures	39 Hours
	Other student study effort:	
	▪ Preparation for presentations and group project	108 Hours
	Total student study effort	147 Hours

Reading List and References	Bill Aulet, 2012, *Disciplined Entrepreneurship* (either via book or YouTube video)