

<b>Subject Code</b>	MM5451
<b>Subject Title</b>	Technology Innovation and Management
<b>Credit Value</b>	3
<b>Level</b>	5
<b>Pre-requisite / Co-requisite/ Exclusion</b>	None
<b>Objectives</b>	<p>The context of this course is Innovation Driven Enterprises (IDE). These include large successful companies e.g. Apple, Cisco, nVIDIA, and Meta (Facebook); and large new digital economy companies e.g. Amazon, Xiaomi, Shein, and JD Technology; and start-ups e.g. Lalamove, Prenetics, Farm66, G-NiiB and i2Cool etc. This course has lectures but most importantly by doing.</p> <ul style="list-style-type: none"> <li>• Learn thru examples, to appreciate the challenges technological innovation within large enterprises, and how do they innovate;</li> <li>• Learn thru theory. Theory is the summary of observed pattern and it helps to break;</li> <li>• Learn thru teamwork. Innovation doesn't often come in isolation, and teamwork is needed;</li> <li>• Learn thru innovation, by working on an innovation idea by yourself.</li> </ul> <p>At the end of the course, you will capture the pragmatic, action-oriented, and complex nature of managing technological innovation.</p>
<b>Intended Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Appreciation of Challenges &amp; Complexities Technology Innovation</li> <li>b. Appreciation of Structure Processes and Tools</li> <li>c. Try it Out -- Demonstration of Creativity, Experiment Innovation Loop</li> </ol>

<p><b>Subject Synopsis/ Indicative Syllabus</b></p>	<ul style="list-style-type: none"> <li>• Section 1 – Context of Innovation -- Pain Points <ul style="list-style-type: none"> <li>○ Using examples and Primary Market Research (PMR) from different IDE, we will take Deep dive understanding of innovation pain points</li> </ul> </li> <li>• Section 2 – What is an IDE <ul style="list-style-type: none"> <li>○ Introduction to Disruptive Technologies (IIoT, 5G, Cloud Computing, Big Data, AI, Blockchain) – Definition, Characteristics, why it matters, and its Network Effect</li> <li>○ Industry Verticals – Digital Technology, Bio-Tech and Health-Tech, Sustainable Technology, Social Media &amp; Digital Marketing, Education Technology</li> </ul> </li> <li>• Section 3 – Innovation <ul style="list-style-type: none"> <li>○ Regionals – Silicon Valley, China, Belt and Road Countries, and Hong Kong</li> <li>○ Innovation Process – Sources, Open, Service, Business Models</li> <li>○ Market Adjacency</li> <li>○ Eco-System</li> <li>○ Technology Push vs Market Pull</li> </ul> </li> <li>• Section 4 – Product Innovation Process &amp; Tools</li> <li>• Section 5 – Validation <ul style="list-style-type: none"> <li>○ User Experience &amp; Feedback</li> <li>○ Financial</li> <li>○ Teaming</li> </ul> </li> <li>• Section 6 – IDE Group Project</li> </ul>
<p><b>Teaching/Learning Methodology</b></p>	<p>Class Preparation and In Class Participation</p> <ul style="list-style-type: none"> <li>• Class participation via Case Study discussion and guest lectures</li> <li>• Individual presentation on a topic on TIM, topics to provide, or self-nominated topics if approved</li> <li>• 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</li> <li>• Group innovation project, including Business Model, Go-to-Market, Customer Acquisition, and Organizational Structure</li> <li>• Individual Presentation and Written Report on a service redesign project</li> </ul>

<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
			a	b	c		
	<b>Continuous Assessment*</b>	<b>100%</b>					
	1. Class Attendance & Participation	20%	√	√			
	2. Individual Presentation on a TIM Topic	10%	√	√			
	3. Individual Presentation and Written Report on a service redesign project	30%	√	√	√		
	4. Group Innovation Project	40%	√	√	√		
Total	100 %						
<p><i>*Weighting of assessment methods/tasks in continuous assessment may be different, subject to each subject lecturer.</i></p> <p>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.</p> <p>To pass this subject, students are required to obtain Grade D or above in the overall subject grade.</p> <p><b>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</b> the various methods are designed to ensure that all students taking this subject –</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>							
<b>Student Study Effort Expected</b>	Class contact:						
	▪ Lectures						39 Hours
	Other student study effort:						
	▪ Preparation for presentations and group project						108 Hours
	Total student study effort						147 Hours
<b>Reading List and References</b>	<p>Bill Aulet, 2012, <i>Disciplined Entrepreneurship</i> (either via book or YouTube video)</p> <p>Kern Peng, Project management for continuous innovation: management by project mapping, 2019, Pike Publications</p> <p>Eric Ries, Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, 2011, Currency</p>						