IIMT1611 Principles of Technology Entrepreneurship
(6 credits)
2021/22, Semester 1

GENERAL INFORMATION

Instructor: Joseph Chan
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(*Course coordinator: Joseph Chan. Please refer to Joseph for any course and project approach enquiries, or project marking requirement.)

Class venue and time:
Semester 1
Class quota: **50 students per sub-class (1A)**
Venue and Time: Please refer to university timetable

Students are required to have an open mindset and creative spirit + interest in exploration and implementation of entrepreneurship and/or intrapreneurship

COURSE DESCRIPTION

The purpose of this course is to introduce students to the entrepreneurial process of the technology industry in general. The introductory course will go through the fundamental aspects of launching a technology entrepreneurial venture to complement the research and development activities in science and technology. It will expose students to common practices in venture development process such as opportunity identification and verification, to technology transfer and commercialization. Topics on legal subjects, e.g. intellectual properties & patent laws, and simple financing & strategic approach in the business plan will be covered. Learning from entrepreneurship cases will be one of the important components of this course, in order to further nurture an entrepreneurial mindset via learning from real-life examples in this specific industry of technology.

COURSE OBJECTIVES

1. Students to learn about what entrepreneurship is – its definition, theory, the related capacity and value in it; plus what it means to be an entrepreneur.
2. Students to learn about the characteristics of technology entrepreneurship – how it helps their works on innovation in science and technology.
3. Students to understand the relationship between R&D and entrepreneurship, supported by the business model and financial planning required. To equip the students w the capabilities to make their venture proposal with R&D believable and feasible, as well as the management skills for a sustainable business.
4. Students to learn about the fundamental in understanding the market, commercialization and technology transfer, considering the key stakeholders and users.
5. To equip the students with the technique of pitching as a crucial skill in the competitive market.
6. Students to learn from local and international cases, and the trend and performance of technology start-ups and enterprises in different regions globally.

FACULTY LEARNING GOALS (FLGs)

FLG1: Acquisition and internalization of knowledge of the programme discipline
FLG2: Application and integration of knowledge
FLG3: Inculcating professionalism
FLG4: Developing global outlook
FLG5: Mastering communication skills
FLG6: Cultivating leadership

COURSE LEARNING OUTCOMES

Course Learning Outcomes	Aligned Faculty Goals
CLO1. Acquire basic knowledge and principles in technology entrepreneurship per Course Objectives.	FLG1, FLG 4
CLO2. Present project specifics lucidly.	FLG5
CLO3. Apply the entrepreneurship skills to knowledge acquired from other courses	FLG2-6
CLO4. Show their understanding of technology-based business model	FLG2-5
CLO5. Work out the action plan relating to new project or venture establishment	FLG2-6

COURSE TEACHING AND LEARNING ACTIVITIES

Course Teaching and Learning Activities	Expected Study Hours	Study Load (% of study)
T&L1. Lectures with interactive presentation	30	23
T&L2. Reading, Case-based study and analysis	20	15
T&L3. Tutorial and In-class interactive discussion	10	8
T&L4. Business Model proposal and Technology Project Planning	50	39
T&L5. Presentations and Pitching	20	15
Total	130*	100

Please note that the expected study hours have, apart from class time, also included the students' individual and group reading, research and project development time. All project info and requirements will be debriefed at start of project in class – students should conduct good time-management to organize their study/project plan and to stick with it, instead of leaving all works towards close to hand-in or presentation time. Course instructor is contactable along the way and is willing to provide necessary support to the students' learning journey.

Assessment Methods	Brief Description	Weight	Aligned Course Learning Outcomes
A1. Case Research and Analysis	*Assignment 1*: Case Studies on the students' own selected entrepreneurship case and the learning from it – preferably not desktop case and research.	15%	CLO1, 3, 4
A2. Written Assignments:		20%	CLO1, 4, 5
A3. Project and Presentation	*Assignment 2*: Reports on 2 Exhibition and Public Lecture attended of students' choice on related topics.	50%	CLO1 - 5
A4. Practice in group discussions and class engagements.		15%	CLO1, 2, 3
	Assignment 3: Aspirations and comprehensive project on multi-disciplinary design and technological topics – the whole project is in stages where students are required to complete exercise on time in each stage while progressing from stage to stage. Project-based assignments will include research and analysis, followed by a series of exercises on different entrepreneurship topics. The students will present their full project at the end of the course.		
	Assignment 4: Overall participation, interactive discussion and contribution to class; individual digital portfolio is to be submitted at end of course to record all assignment works, their own learning journey and the reflection.		
Total		100%	

STANDARDS FOR ASSESSMENT

Course Grade Descriptors

A+, A, A-	**Excellent (A) -** Candidate has consistently demonstrated a thorough understanding and original view of the subject as evidenced by exceptionally astute analysis and synthesis. Authentic style has been established and shown in the project development.
B+, B, B-	**Good (B) -** Candidate frequently demonstrated a substantial understanding of the subject and has demonstrated his/her effort in achieving the project brief and requirement.
C+, C, C-	**Fair (C) -** Some of the responses are well organized, clear but with insufficient elaboration – there is significant room for improvement to achieve a more satisfactory level to the project course or project requirement.
D+, D	**Pass(D)/Review -** Solutions to questions and problems containing unstructured but relevant observations. Candidate has shown marginally interest in the subject.

	F	**Fail -** Little evidence of basic familiarity with the subject, nor demonstration of sufficient effort to basic project and course requirement.

Assessment Rubrics for Each Assessment

Students' project submission and presentation will be assessed based on requirements set in each brief handed out. In general, these will be of equal importance: relevant and thorough analysis, development process, quality of works and presentation.

Student to note that relevant trials and engagements are the key of success in this course. Simply submitting the project in the way as checklist 'box-ticking' will not be sufficient.

COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

Please refer to University Calendar. (Subject to COVID-19 situation, this course will be delivered in the format accordingly to university policy. Please refer to university policy closer to date.)

A Facebook group will be used for sharing of market news and insight, as well as discussion, supported by whatsapp and wechat group. Please contact course instructor for info to add yourselves in.

The course may include interactive lectures, guest speakers and visits.

Course content:
1.   Basic principles in entrepreneurship and intrapreneurship
2.   Entrepreneurship mindset
3.   Changing business/market/social environment and condition
4.   Upstream: funding
5.   Midstream: (products and services) From ideas to operations
6.   Market adoption
7.   Logistics and business services
8.   Business Model Canvas
9.   Technology role from as facilitator disruptive innovation
10.   Business design criteria
11.   Commercialization and scale-up
12.   University's research and technology transfer
13.   IP protection
14.   Mainland market: from risk to opportunity
15.   Space economy and space technology
16.   Blockchain, digital-currency and crypto-currency
17.   Latest technology trend

REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)

Technology Entrepreneurship: Taking Innovation to the Marketplace by Thomas N. Duening, Robert D. Hisrich and Michael A. Lechter
New Venture Creation: Entrepreneurship for the 21st Century by Timmons, Jeffry A., and Stephen Spinelli
Zero to One by Peter Thiel to
Business Model Generation by Alex Osterwalder
Startup Owner's Manual by Steve Blank
The Innovation Blind Spot: Why We Back the Wrong Ideas—and What to Do About It By Ross Baird, September 2017 (BenBella Books)
The Lean Start-Up by Eric Reis
Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant By Chan Kim, Renee Mauborgne
The Entrepreneur's Guide to Business Law by Constance E. Bagley, Craig E. Dauchy
Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations by Thomas L. Friedman
The Entrepreneur Mind: 100 Essential Beliefs, Characteristics, and Habits of Elite Entrepreneurs by Kevin D. Johnson
Innovation and Entrepreneurship, by Peter Drucker

Online Articles
"The Innovator's DNA" Harvard Business Review by Jeffery Dyer. Covers the key activities that separate innovative managers from the rest of the pack.
"The Business Model Canvas Can Get Your Startup Funded". "There are no shortcuts to funding, but it pays to use the tools that work. Try this one." – Marty Zwilling
"How to be a Student Entrepreneur Without Losing Your Mind". 11 How-to tips to make you successful.

MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE

○ Y - SETL around the end of the semester

○   Online response via Moodle site

○   Others: _____ (please specify)

COURSE POLICY (e.g. plagiarism, academic honesty, attendance, etc.)
General requirements in plagiarism, academic honesty and attendance apply. Any lateness or absence to the class needs to have the lecturer(s) officially informed with sound reason – otherwise penalty in the form of mark deduction might apply.
ADDITIONAL COURSE INFORMATION (e.g. e-learning platforms & materials, penalty for late assignments, etc.)
Further to what has been described in the assessment section, participation and engagement in the class and tutorial is required in this course. Lecturers will help students to see into their own work and to assist to bring it into its fullest manifestation, through an effective and interactive learning.