

Spring 2024-25

ENTR3100 Industrial Landscape

Course Syllabus (Final)

Course Code ENTR 3100

Semester Spring 2024-2025

Course Title: Industrial Landscape

Course Credit: 3

Pre-requisites NIL

Max Class size: 40 students (all students welcome)

Course enrolment: Year 2 to 4 students preferred. Instructor consent is required.

Class schedules 2-hour lecture followed by 1-hour tutorial (schedule: TBA)

Classroom: TBC - Blended Learning Classrooms (Rm 4582, 1104, 6580)

Instructor: Dr. Daniel Chun Tel 3469-2950 Email djychun@ust.hk

Course Description (Long)

ENTR 3100 - Industrial Landscape is a collaborative course jointly run by the Schools of Engineering, Science, and Business & Management, designed to equip students with essential knowledge and skills for entrepreneurship. This semester, the course theme is ***Ageing Technology***, addressing the critical challenges posed by an ageing population and deteriorating building stock in Hong Kong. Students will explore the intricate interactions among various industry players who produce products and services for specific customer groups, developing a deep understanding of industrial ecosystems and identifying opportunities within this landscape. The curriculum includes project-based learning that integrates classroom instruction with practical experiences, such as site visits and guest lectures from industry experts. Students will collaborate with the Hong Kong Housing Society and local social enterprises to gain insights into the realities of ageing in urban environments. Through teamwork and communication, students will survey and analyze companies within the ageing sector, examining operational models and identifying opportunities for innovation. The course culminates in a group project where students create a startup proposal aimed at addressing real-world challenges identified during their research. In summary, ENTR3100 - Industrial Landscape

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focuses on *Ageing Technology*, exploring challenges related to an ageing population and building stock in Hong Kong. Students engage in project-based learning through site visits and expert lectures, culminating in a startup proposal that addresses real-world issues faced by the elderly.

Course Intended Learning Outcome (CILO)

CILO 1	To analyze the interactions within industrial ecosystems and assess their impact on entrepreneurial opportunities and challenges.
CILO 2	To apply user-centered design principles and empathy to develop innovative solutions addressing the needs of an ageing population.
CILO 3	To collaborate effectively within teams to create and present a comprehensive business proposal that addresses real-world challenges in the context of an ageing technology.
CILO 4	To evaluate emerging technologies and their potential applications in the development of entrepreneurial solutions, demonstrating an understanding of market trends and consumer needs.
CILO 5	To reflect critically on personal and team learning experiences throughout the course, demonstrating growth in communication and strategic thinking skills relevant to entrepreneurship.

Project team

Each team will consist of 3-4 students which play the roles of consultants of startup founders associates role to help develop the business proposal of a start-up with a strategic plan, business canvas and pitch deck.

Course Grading Policy

The course grade consists of both class discussions, mid-term assessment and final written assessment in the form of the business proposal. Participation will be judged based on the student's attendance, contribution to class discussions and group project work.

Attendance	5%
Quizzes and research assignments	20%
Mid-Term Assessment	20%
Final Business Proposal (Group project)	35%
Presentation (Group project)	10%

Group member evaluation	10%
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Course Schedule (13-weeks)

Week	Topics	Briefly outline what this topic will cover (including reading / assignments if available)	Indicate which course ILOs this topic is related to
1	Introduction to Entrepreneurship landscape	<ul style="list-style-type: none"> - Overview of the course objectives and structure, assessment, etc - Introduction to the concept of entrepreneurship industry ecosystem and landscape - Discussion on the implications of an ageing population in Hong Kong and Asia 	CILO1
2	Overview of industry theme – Ageing Technology	<ul style="list-style-type: none"> - Explore the concept of double ageing: ageing population and ageing buildings - Case studies from Hong Kong and other Asian economies (e.g., Japan, Taiwan) - Group discussion on initial thoughts and observations - Guest Speaker -Prof. Ling Kar Kan, Chairman of Hong Kong Housing Society 	CILO1, CILO2
3	Current Challenges Faced by Elderly	<ul style="list-style-type: none"> - Site visit to HK Housing Society - meeting with elderly communities - identify and discuss common challenges faced by the elderly in urban environments - Guest Speaker – Representative from a charity or social enterprise focused on elderly issues - Group activity: Brainstorming session / using Design Thinking methodologies to articulate problem statements on identified challenges - Q&A session with students 	CILO1, CILO2, CILO3,
4	Technological Innovations for Ageing Society	Introduction to technologies addressing ageing issues (e.g., elderly friendly homes, wearables, health tech) and discussion on Case studies of startups innovating in this space	CILO4, CILO5
5	Emerging Technologies	An overview of the advancement in fundamental science and technologies and understanding specific inventions vis-à-vis application of business model innovation in developing innovative services for targeting ageing society.	CILO4, CILO 5
6	Ideation and Product Roadmap	Generating new ideas and identifying the gaps for product or service innovations - identifying product-market fit / problem-solution fit	CILO3
7	Business Model & Strategy	Refining business operating model using BMC framework, to enhance the group discussion on societal impact, Go-to-market strategies and growth plans	CILO2, CILO 3
8	Business Proposal Project	Storytelling and/or prototyping a new innovative service or product in preparation for mid-term review	CILO2, CILO3

		Mid-Term Assessment	
9	Business Project - prototyping	Groups present initial prototypes or concepts of their startup ideas for peer feedback - Facilitate feedback sessions with emphasis on constructive criticism and refinement	CILO2, CILC3
10	Customer validation	Validating assumptions through consultations with potential distribution / key customers	CILO3, CILO4
11	Industry-specific competitive analysis	Introduction of strategy frameworks (E.g. PESTLE, SWOT, BOS) - identifying the existing industry competition landscape - incumbents and developing comprehensive analysis	CILO1, CILO2
12	Implementation Planning	Developing detailed product/project implementation plans for the final business proposal, reviewing the technology and business roadmap and final deliverables (prototype or proposal)	CILO3, CILO 4, CILO5
13	Final Presentations	Presenting final business proposal plans. Groups will present their startup case studies addressing issues discovered during site visits - Peer evaluations conducted following presentations - Course reflection discussion: Lessons learned and future directions in addressing ageing society challenges	CILO5

Recommended Reading / Reference:

Baines, N., Klangboonkrong, T., & Smith, H. L. (2024). Exploring product/service innovation process in UK: University spin-offs from practice-based lens. *The Journal of Technology Transfer*, 49(2), 715-739.

Hanák, R., & Grežo, M. (2020). The effect of entrepreneurial experience on the quality of a business plan proposal in applying for angel investment. *International Journal of Entrepreneurial Venturing*, 12(6), 617-647.