

TEMG4970 T&M International Business Plan Competition
Winter term of 2024-25

1. GENERAL INFORMATION

Course Title:	TEMG4970D T&M IBPC Competition: “ <u>Innovating the Future of Transportation</u> ”, co-offered with 3 universities
Course credits:	3 credits
Classroom:	Room 5619 Lift 31-32
Instructor:	Betty LIN, Associate Professor of Interdisciplinary Education
Email:	BettyLin “at sign” UST .HK
Phone:	3469-2235
Office & office hours:	Academic Concourse Room 4366 – by appointment 3 weeks in the Winter term, daily from 9am-12pm, 1pm-4pm, and 7-9pm
Class meeting time:	review N/A
Course exclusion(s):	Students use SIS to request “instructor consent” along with latest transcript and CV. After receiving consent, students can proceed with “course enrollment”. If the course requires traveling overseas, it will be exclusively for T&M-DDP students. If held at HKUST, it will be open to all students with priority given to T&M-DDP students and >20% seats reserved for others.
Course enrollment:	

2. COURSE DESCRIPTION

The purpose of the IBPC is to create an opportunity for aspiring young students to work in a multicultural environment to develop an innovative business leveraging breakthroughs in technology and business to impact human living conditions. The pedagogy of this experiential course relies on participating universities to prepare students with learning the Lean Launchpad methodology, Business Model Canvas, Go-to-Market strategies, and trendy technologies, and subject matter familiarity such that they “hit the ground running”. The actual competition is 10 days of intensive residential period where students are assigned teammates from other countries, conduct field research and receive daily coaching by faculty and industry subject matter experts. After the competition, there is time for celebration, networking, and local cultural exploration.

During the trip, students are expected to commit over 8 hours per day in a highly intensive, competitive, and demanding environment. Some information will be gathered from primary sources in the local language while all discussion, planning and presentations will be conducted in English for an immersive international culture experience.

Participating universities rotate being the hosting university. For 2025 January, the event host is the T&M Minor Program of UIUC. 48 participating students are:

- HKUST: 12 UG T&M Dual-degree Program students, HKUST, Hong Kong.
- KAUST: 12 PG Technology Innovation & Entrepreneurship MSc Program, KAUST, Thuwal, Saudi Arabia.

- UBT: 6 UG and 6 PG Technology Innovation & Management Program, UBT, Bayreuth, Germany.
- UIUC: 12 UG T&M Minor Program, UIUC, Illinois, USA.

3. IBPC STARTUP THEME

"Innovating the Future of Transportation"

Transportation is a critical component of modern society, connecting people, goods, and services across the globe. As we look to the future, the transportation industry faces numerous challenges and opportunities driven by rapid technological advancements, environmental concerns, and changing consumer expectations. Innovations in technology, such as autonomous vehicles, electric and hydrogen fuel cell powertrains, smart infrastructure, last-mile delivery, and advanced logistics solutions, are poised to revolutionize how we move people and products. However, realizing the full potential of these innovations requires addressing complex issues related to safety, sustainability, accessibility, and efficiency.

Participants work in teams of students in Technology and Management Programs from Saudi Arabia, Hong Kong, Germany, and USA to develop a comprehensive business case for a technology-driven solution that addresses a significant challenge in the transportation industry. Students are introduced to experts in parallel fields to inspire thought and support their ideation for the project, with a larger goal of complementing their overall education. The program primes students for entry into the global innovation marketplace by challenging them to work cross-culturally, and cross-categories, and to manage a project strategically with time constraints. Students emerge from the experience with a portfolio-ready deliverable, an enlightening understanding of working with people of various backgrounds and strengths, and an expanded, worldwide network of peers.

4. COURSE GRADING STRUCTURE

Assessment Methods	Description	Weight (%)
Class participation	Class attendance and discussion contribution	10%
Peer grading	Anonymous feedback and assessment of contribution by team members	15%
Individual assignments	Pre-trip background research and quiz Post-trip postmortem reflection	30%
Team-based assignment and final presentation	Team-based activities and final startup pitch deck and 1-page overview for investors. Performance and contribution to team success as assessed by teammates.	45%
	Total	100%

5. COURSE SCHEDULE

- Day -40: Course overview, Design Thinking & Lean Launchpad Business Planning workshop.
- Day -20: Students conduct research and online discussion posts.
- Day -2: Quiz on "Lean Launchpad" methodology before flight departure
- Day 1 Thu Jan 2nd: Hotel check-in; Welcome, History, Innovation Workshop.
- Day 2 Fri Jan 3rd: Visit Tesla Giga Factory, Teamwork (5hr); Mentor Review (Team Charter).
- Day 3 Sat Jan 4th: Talk by AVRide Last Mile Delivery Robot. Mentor Review (6 ideas).
- Day 4 Sun Jan 5th: Teamwork(7hr); Mentor Review (Main idea on 3 slides).
- Day 5 Mon Jan 6th: Travel to Houston; visit Port Authority; NASA Space Center, Travel back.

- Day 6 Tue Jan 7th: Visit Google; Teamwork; Mentor Review (Problem, Solution slides).
- Day 7 Wed Jan 8th: Teamwork (7hr); 2-min Shark-tank Style Pitching.
- Day 8 Thu Jan 9th: Teamwork(7hr); Dry run with external judges (Full deck)
- Day 9 Fri Jan 10th, Final Presentation and Celebration Dinner.
- Day 10 Sat Jan 11th: Hotel checkout.

Please refer to CANVAS for actual class meeting plan: <https://canvas.ust.hk/courses/60376/>

6. COURSE POLICY (regarding plagiarism, copyright, academic honesty, attendance, etc.)

Course policies will strictly follow HKUST policies. Cheating, dishonesty and plagiarism will not be tolerated at any time and may result in strict sanctions.

1. **Attendance:** Please be punctual in class. Late arrival by more than 5minutes or early departure will be marked as absent unless student notifies instructor at least 24-hour in advance with evidence of legitimate reasons.
2. **Participation:** Active participation is required and is an important part of the grade. Students are required to make at least one suggestion, comments, and question per class meeting. This can be done in person, by raising your hand physically or online via Zoom chat.
3. **Beeping devices:** mobile phones and other beeping devices need to be turned off or put on silent mode. Portable computers, laptops and tablets are allowed so long as they do not lead to inappropriate behavior and disturbance.
4. **Video recording:** recording may be arranged by the School and the Instructor. Any other recording (photo, audio or video) is strictly prohibited. Lectures are the copyright property of the instructor. Any recording can only be produced with the express consent of the instructor.
5. **Exam:** There will be no make-up exam. Unexcused absence will result in zero grading for that test. Students are advised to contact the instructor prior to week 3 to negotiate schedule conflicts with other courses, especially during mid-term time.
6. **Course materials and handouts:** Course materials will be posted on the University's CANVAS, please check the website on a regular basis for new postings. The Lecture notes are the copyright property of the instructor and are provided for the sole private use of the students. They may not be reproduced or disseminated without the express consent of the instructor.

7. INTENDED LEARNING OUTCOMES

T&M Dual-degree Program's Intended Learning Outcomes

1. P-ILO1: Adopt an inter-disciplinary approach to tackle complex real-world problems.
2. P-ILO2: Communicate effectively with people of different levels and work areas.
3. P-ILO3: Transfer acquired knowledge to meet changes and challenges in different fields.
4. P-ILO4: Engage in activities that lead to impact of social improvement.
5. P-ILO5: Have the ability to create and innovate with divergent thinking.
6. P-ILO6: Be able to apply technical and business skills in an integrated manner in problem-solving.
7. P-ILO7: Be a leader in the field of technology management and innovation, and entrepreneurship.

TEMG4970 Course Intended Learning Outcomes

1. Improve awareness of latest trends in target tech sector and business applications (P-ILO 1, 2, 4, 6)
2. Improve ability to apply Lean Launchpad Startup business planning (P-ILO 6, 7)
3. Improve public speaking and investor pitching (P-ILO 3)
4. Improve global culture appreciation and cross-culture teamwork (P-ILO 2, 5)