

**ISDN 4001 – Final Year Design Project I  
Fall 2023**

**Tuesday 9:00 am to 11:50 am & Individual Team Appointment,  
Room 4223, 4 Credits**

**Course Description**

This course is the second part of the final year project course, which continues the project based learning training from the first semester. Students will continue their project and come to a conclusion achieving the project milestones or coming up with the final product prototype by the end of the semester. A final project presentation covers the overall project achievements to the faculty advisor, other ISD faculty members and mentors. Instructor's approval is required for enrollment in the course.

**Intended Learning Outcomes (ILO)**

ILO No.	Description
1	Defining the problem and project; ensuring creation of value
2	Follow design process to create prototype and iterate to enhance
3	Conduct technical, business and design research and being resourceful to overcome limitations and obstacles
4	Seek external funding and IP/copyright establishment if needed
5	Document and present (including pitching) on project

**Course Instructors**

Prof. C.Y. TSUI  
Email: [cetsui@ust.hk](mailto:cetsui@ust.hk)

Prof. Chi Ming CHAN  
Email: [kecmchan@ust.hk](mailto:kecmchan@ust.hk)

Dr. Jac LEUNG  
Email: [egjac@ust.hk](mailto:egjac@ust.hk)

**Course Coordinators**

Ming CHAN  
Email: [mingchan@ust.hk](mailto:mingchan@ust.hk)

## Grading

Task Items	Deliverables	Type of Submission	% of final grade
Framing the problem	Research to formulate project topics <ul style="list-style-type: none"> <li>• Aspirations</li> <li>• Impact/Market assessment</li> <li>• Project scope</li> </ul>	Individual	10%
Defining the problem	Technology/Design concept research presentation <ul style="list-style-type: none"> <li>• Project scope</li> <li>• Timeline</li> <li>• Knowledge domains</li> <li>• Design thinking process</li> <li>• Design requirements</li> </ul>	Team	5%
Prepare to meet industrial partner	A report (ppt) on user study and idea generation	Team	5%
Pitch to industrial partner	Presentation and responses to feedback (team and individual performance)	Team / individual	15%
Final deliverables	<p><b>Group Final Presentation (20%)</b></p> <ul style="list-style-type: none"> <li>• Clarity of problem definition</li> <li>• Research and analysis</li> <li>• Design thinking process</li> <li>• Milestones</li> <li>• Presentation skills (tone, preparedness, storytelling)</li> <li>• Potential impact</li> </ul> <p><b>Group Final Report (15%)</b></p> <ul style="list-style-type: none"> <li>• Problem framing</li> <li>• Impact/market assessment</li> <li>• User journey</li> <li>• Ideation</li> <li>• Technical specification</li> <li>• Project management</li> </ul> <p><b>Prototype demo for showcasing (10%)</b></p> <ul style="list-style-type: none"> <li>• User-centeredness</li> <li>• Creativity</li> <li>• Iteration</li> <li>• Feasibility</li> </ul>	Team	45%
On-going progress	<b>Overall performance</b> (active participation, preparedness to and communication during meetings)	Individual	20%
Reflection	<b>Individual report</b> (reflective statement on learning, contribution, champion in specific knowledge domain)	Individual	10%

## Assignment Submissions

Students are required to submit course assignments onto Canvas to the designated assignment folders. Assignments that are meant to be completed independently will be graded individually while team assignments will receive a team grade. However, students will not receive a grade for any assignment they do not submit.

### *Late Submissions*

25% and 50% of the total marks will be deducted from an assignment for two and five days that it is late, respectively (weekends are also counted). Assignments submitted more than 5 days after the due date will receive a zero grade.

### **Attendance**

Students need to contact Course Instructors or Course Coordinators in advance to make alternative arrangements if they cannot complete/attend any assessments.

### **Team Assessments**

Individuals who have not received permission to be excused and are not present will receive a zero grade (except in cases of emergencies and documented illnesses). The whole team will lose out on any grades associated with a missing students' participation or contributions.

### **Recommended Reading**

Subject to project topic.

## Course Schedule (subject to project progress)

<b>Week</b>	<b>Activities/Topics</b>	<b>Deliverables</b>
1	Introduction + meeting with Industrial partners, theme familiarization + reflection	
2	Background study, fact finding, problem statement generation	Research to formulate project topics
3-4	Problem framing and initial team formation, user study preparation	Concept research presentation
5-6	User study/industrial partner engagement	
7-8	Problem reframing, problem statement finalization, team formation, relevant technology requirement identification  [Relevant learning module for building up technology/design knowledge requirement for the project]	Prepare to meet industrial partner
9-11	Pitching to industrial partners (include viability, feasibility, desirability, functional and technical specification)	Presentation and responses to feedback
12-13	Proof of concept and first prototyping (including visual prototype, functional working prototypes)	
14	Project presentation, critique from industrial partners, refining the design, function, specification of the design, that ready for refinement in ISDN4002	Group Final Presentation Group Final Report Prototype demo for showcasing Individual report