

# Singapore Medical Technology Innovation and Entrepreneurship Ecological Exchange

(Online Course Program for Students from AUA Member Universities)

‘Interdisciplinary Innovation Research in Medical Engineering’ is a course co-developed and offered by the iCenter of Tsinghua University and Tsinghua Changgung Hospital (School of Clinical Medicine, Tsinghua University). The course provides two core technologies: (1) A demonstration of smart earphones and an open API interface (restricted to course use only), and (2) World model technology. The department of rehabilitation medicine, Tsinghua Changgung Hospital provides clinical application scenarios and practical demand inputs for the program.

Students in Tsinghua University will form 8 project teams in the course, and will conduct on-site visits to the National University of Singapore, the Lee Kong Chian School of Medicine at Nanyang Technological University, and its affiliated hospital from August 3 to August 5. Team-based projects will be conducted during the course, and a final presentation on the projects will be delivered on August 7 at the end of the course.

This course now opens online participation opportunities to students from AUA member universities, allowing them to join the online field visits (Tencent Meeting) and team-based project discussions & presentations.

## **Academic Backgrounds of Participating Students**

Materials Science, Mechanical Engineering, Electronic Engineering, Computer Science, Artificial Intelligence, Medicine, Bioengineering, Product Design, and Business Administration. Each member university is allocated **2 quotas** for online participation in this course. Enrollment is on a first-come, first-served basis.

### Registration Deadline: 19 July 2026

Before 31 July, the course team will share all project information with registered AUA students for project team selection, and set up a dedicated WeChat group for AUA participants to carry out project-related communication.

A Tencent Meeting link will be provided to enable online access to all activities scheduled from 3 August to 5 August, as well as presentations on 7 August. AUA students are strongly encouraged to continue participating in team project collaboration after the course concludes.

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program Name          | Singapore Medical Technology Innovation and Entrepreneurship Ecological Exchange (Online Course Program)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Host University       | Tsinghua University                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Mode                  | Online                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Date                  | 3-5 August 2026 (Online)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Expected Outcomes     | <p>This program will offer several benefits to participating students, including:</p> <ul style="list-style-type: none"><li>● Deeper understanding of the technology improvement of smart products and world model technology.</li><li>● This course opens online participation to students from member universities of the Asian Universities Alliance (AUA) to join the online visits (Tencent Meeting) and team project discussions &amp; presentations.</li><li>● AUA students are strongly encouraged to continue participating in team project collaboration after the course concludes.</li></ul> <p>A certificate of completion will be provided to AUA students who join both the Online Field Visit and Team-Based Innovation Project Presentation.</p> |
| Program Schedule      | Kindly refer to <i>Appendix 1</i> for details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Eligible Participants | <p>Materials Science, Mechanical Engineering, Electronic Engineering, Computer Science, Artificial Intelligence, Medicine, Bioengineering, Product Design, and Business Administration.</p> <p>Each AUA member institution is allocated 2 quotas for online participation. Enrollment is on a first-come, first-served basis.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Application Process   | Interested students from AUA member universities can directly send their registration forms in the attached Excel template to <a href="mailto:zhangqi2020@mail.tsinghua.edu.cn">zhangqi2020@mail.tsinghua.edu.cn</a> by <b>19 July, 2026</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Fees                  | Free registration fee for students from AUA member universities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                        |                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------|
| Contact<br>information | Dr. Zhang Qi<br><a href="mailto:zhangqi2020@mail.tsinghua.edu.cn">Email: zhangqi2020@mail.tsinghua.edu.cn</a> |
|------------------------|---------------------------------------------------------------------------------------------------------------|

## Appendix 1. Schedule

| Date       | Theme                                              | Morning (Online visit)                                                                                                                                                                                                                                                                           | Afternoon (Online visit)                                                                                                                                                                                                                                                                                                                                                                  |
|------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2026-08-03 | National University of Singapore (NUS)             | <ol style="list-style-type: none"> <li>1. Welcome Address;</li> <li>2. BioDesign Methodology Deep-dive Workshop (Part I) — Needs Identification Framework, Case Analysis;</li> <li>3. BioDesign Methodology Deep-dive Workshop (Part II) — Needs Screening &amp; Concept Development.</li> </ol> | <ol style="list-style-type: none"> <li>1. Laboratory Visit — Biofluid Mechanics Lab, Synthetic Biology Lab, etc.;</li> <li>2. iHealthtech Visit — Health Tech Research Achievements, HATCH Translation Platform &amp; Startup Ecosystem Introduction;</li> <li>3. Clinical Needs Identification Group Exercise &amp; Presentation;</li> <li>4. Day 1 Summary &amp; Reflection.</li> </ol> |
| 2026-08-04 | NTU LKC + A*StartCentral + A.L.I.C.E               | <ol style="list-style-type: none"> <li>1. NTU LKC Visit — Medical Education Innovation, Biomedical Engineering Research Project Introduction, Laboratory Visit &amp; Exchange;</li> <li>2. A*StartCentral Deep Tech Entrepreneurship Platform Introduction &amp; Facility Visit.</li> </ol>      | A.L.I.C.E Medical Innovation Center Visit — Facility Introduction, Maker Space, Digital Sandbox Demonstration.                                                                                                                                                                                                                                                                            |
| 2026-08-05 | One-North + Demo Day @ CHI, Tan Tock Seng Hospital | <ol style="list-style-type: none"> <li>1. Singapore Biodesign Visit — Researcher Training Program Introduction, Alumni Startup Project Showcase;</li> <li>2. Auristone Visit — Epigenomics Startup, A*STAR Research Commercialization Journey.</li> </ol>                                        | <ol style="list-style-type: none"> <li>1. Demo Day — Student Team Achievement Showcase &amp; Presentation;</li> <li>2. Judge Feedback &amp; Comments;</li> <li>3. Closing Address.</li> </ol>                                                                                                                                                                                             |