

中國工業工程學會
Chinese Institute of Industrial Engineers

2024 Master's Thesis Competition in
Industrial Engineering and Management
< **International Student Session** >

Call for Papers

I. Competition purpose

To encourage international master's students in Taiwan to actively participate in research in fields related to Industrial Engineering and Management, the Chinese Institute of Industrial Engineers (CIIE) invites submissions for the Master's Thesis Competition International Student Session in Industrial Engineering and Management. This competition hopes to take advantage of learning and exchange opportunities to help the fields of industrial and engineering management develop and achieve the goal of training excellent and professional engineers.

II. Sponsors and Co-organizers

Sponsor: Chinese Institute of Industrial Engineers
Co-organizer: Department of Industrial Engineering and Management, National Science and Technology Council
Organizers: Department of Industrial Engineering and Management, National Chin-Yi University of Technology
Department of Industrial Engineering and Enterprise Information, Tunghai University

III. Eligibility

International master students from Industrial Engineering and Management colleges (including exchange students) will graduate in the **2023-2024 academic year**. The thesis must be written and reported in English.

IV. The fields of thesis

The competition welcomes the following five major fields: Operations Research and Decision Science, Big Data Analysis and Information Systems, Human Factors Engineering and Design, Production System and Intelligent Manufacturing, Service System and Technology Management.

1. **Operations Research and Decision Science** (optimization, network analysis, stochastic modeling, decision analysis, soft computing and heuristics, AI applications for industrial engineering and management, scheduling and inventory systems)
2. **Big Data Analysis and Information Systems** (statistical analysis, data science and big data analytics, product and service realization technology, e-business, decision-making information systems and digitalized decision, application of information and communication technology in industrial engineering and management)
3. **Human Factors Engineering and Design** (biomechanics and human measurement, safety and health, human-machine systems, macro-ergonomics, product and system design, engineering psychology, emotions and life experience)
4. **Production System and Intelligent Manufacturing** (manufacturing strategy and operations

management, supply chain management, analysis, design, planning and management of production systems, intelligent factory and production system automation, lean management, total quality management and reliability, circular economics and sustainability)

5. **Service System and Technology Management** (Analysis and design of a service systems, service resource planning and performance management, gerontechnology and long-term care system, intelligent service systems, technology strategies and digital transformation, technology and engineering management, integrated topics on service system and technology management)

V. Submission information

1. Registration online: (<https://shorturl.at/ciABZ>)
2. Registration eligibility is limited to fresh graduates of the 2023-2024 academic year. When registering, please upload a scan of your valid (with registration stamp) student ID card or other proving document.
3. Primary review: full or lite version of the master's thesis (no format restriction) shall be uploaded to the registration system as a PDF file that should not exceed 10 MB.
4. Final review: participants whose thesis passes the primary review need upload the final report file (maximum 30M in PPT format) to the form within the planning schedule.

VI. Review procedure

1. Primary review (in writing): The organizer will invite scholars and experts in related fields to review the submitted theses.
2. Final review (in presentation): Participants who pass the primary review must prepare a briefing file to give an oral report and answer questions from the reviewers (estimated to be 12 minutes for presentation and 3 minutes for Q&A, 15 minutes in total).
3. Review items: research motivation, methods and processes, innovation, practicality, expected benefits, etc.
4. **Note:**
 - (1) The submitted thesis that involves copyright, patent rights and other issues and is verified to be accurate will be revoked the qualification and reward. The organizers will not be held liable.
 - (2) Participants who are late in submitting relevant information documents will be disqualified.
 - (3) The final review requires candidates to present and report in person, otherwise it will be considered as a waiver.
 - (4) All submitted documents will not be returned, please make copies yourself.
 - (5) The participating thesis supervisor will not be a reviewer in the primary and final review of the respective participants.
 - (6) The full or lite version of the thesis and final report document will not reveal the college/university, supervising professor, and student's name. Violators will be deducted points according to review regulations.

VII. Important dates

1. Registration and thesis submission deadline: **June 7, 2024 (Friday)**
2. Announcement of the finalists: **June 21, 2024 (Friday)** (announced on the CIIE's website <http://www.ciie.org.tw/>)
3. Final report submission deadline: **June 28, 2024 (Friday)**
4. Final review and award date: **July 5, 2024 (Friday)** (Location: Tunghai University)
Note: If the date and location are subject to change, please refer to the announcement on the CIIE's website.

VIII. Rewards

From the participating theses, the number of awarded theses will be selected according to proportion:

- Best theses will be awarded with a prize of TWD 5,000 and a certificate.
- Excellent theses will be awarded with a prize of TWD 3,000 and a certificate.
- The supervisor of the awarded theses will receive a certificate.

IX. Contact information

Organized professor: Prof. Ping-Chen Chang
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Contact professor: Prof. Thi-Phuong Nguyen
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