

(TRANSLATION)

Announcement of the School of Engineering

King Mongkut's Institute of Technology Ladkrabang

Evaluating of the innovations or inventions for completion of graduate studies.

This announcement aims to ensure the orderly, appropriate, and efficient evaluation of work in the form of innovation or invention for completion of graduate studies, adherence to the graduate education policy and regulations of King Mongkut's Institute of Technology Ladkrabang, as well as the announcement of the Higher Education Standards Committee on Graduate Curriculum Criteria, 2022, and the corresponding announcement of King Mongkut's Institute of Technology Ladkrabang, 2022, is imperative. Assessing the quality of theses that embody innovative formats, inventions, or creative works for graduation at the graduate level in 2023 for the academic section of the School of Engineering necessitates guidelines. These guidelines are outlined as follows:

- 1. This announcement is effective from the first semester of the 2023 academic year onwards.
- 2. The minimum requirement of innovation or invention for a master's degree is level 5 or above of Technology Readiness Level (TRL). The committee is comprised of a minimum of 3 external experts. Innovations or prototype inventions must be verified through laboratory experiments and real-world applications. Documentation of experimental methods and results must align with application requirements.

2.1 Qualifications of external experts

- 2.1.1 Experts must have a minimum of 6 years of experience or work in a field relevant to the innovation or invention.
- $2.1.2 \ {\rm Experts} \ {\rm should} \ {\rm have} \ {\rm experience} \ {\rm of} \ {\rm innovation} \ {\rm or} \ {\rm inventions} \ {\rm application} \ {\rm in}$ equivalent environments of TRL level 5 or above, or
- $2.1.3 \ {\rm Experts\ have\ involved\ in\ the\ development\ of\ innovation\ or\ inventions\ at\ TRL}$ level 5 or above.
- 3. The minimum requirement of innovation or invention for a doctoral degree is level 6 or above of Technology Readiness Level (TRL). The committee is comprised of a minimum of 3 external experts.

The innovation or prototype's ability to achieve its objectives must be verified through experimentation in real-world environments. Documentation of experimental methods and results must align with application requirements.

3.1 Qualifications of external experts

3.1.1 Experts must have a minimum of 6 years of experience or work in a field relevant to the innovation or invention.

3.1.2 Experts should have experience of innovation or inventions application in real-world environments of TRL level 6 or above, or

3.1.3 Experts have involved in the development of innovation or inventions at TRL level 6 or above.

The Technology Readiness Level (TRL) is defined as follows:

TRL level	Definition
1	Basic principles observed and reported
2	Concept and/or application formulated
3	Concept demonstrated analytically or experimentally
4	Key elements demonstrated in laboratory environments
5	Key elements demonstrated in relevant environments
6	Representative of the deliverable demonstrated in relevant environments
7	Final development version of the deliverable demonstrated in operational
8	Actual deliverable qualified through test and demonstration
9	Operational use of deliverable

In this regard, students may use one piece of work to support their graduate studies, but it must be accompanied by a certificate verifying the use of the thesis work in an innovative format or invention for graduation.

- 4. For students who enrolled before the effective date of this announcement, they may use the criteria outlined in this announcement to evaluate the quality of their work for completing graduate studies.
- 5. In the event of any issues regarding the use or compliance with this announcement, the dean or assigned deputy dean will make the final decision, and the decision is final.

Announced on 13 September 2023

(Associate Professor Dr. Somyot Kaitwanidvilai)

Dean, School of Engineering

Translated by Graduate Study affair