

King Mongkut's Institute of Technology Ladkrabang Regulation on Rules, Step, Procedure and Condition of Workload, Special Wage and Wage Increase As a Result of Performance Evaluation of Academic Institute Staff B.E. 2563 (2020 A.D.)

Since it is deemed appropriate that amendments be made to King Mongkut's Institute of Technology Ladkrabang for personnel management,

Be it, therefore, under the power in accordance with the statement of section 8.2, 25, 26, and 27 in the King Mongkut's Institute of Technology Ladkrabang regulation on personnel management B.E. 2562 (2019 A.D.), along with section 12, section 15 and section 19 of King Mongkut's Institute of Technology Ladkrabang on Wage, Position Allowance, Remuneration, Extra Pay of Institute staff B.E. 2562 (2019 A.D.), in conjunction with resolution of personnel management of King Mongkut's Institute of Technology Ladkrabang at its 9/2020 on 1 September, 2020 enacted the announcement as follows:

Article 1. This announcement shall come into force 1st October, 2020 onwards.

Article 2. Any announcements, regulations, resolutions which were enforced prior to or contradict with this announcement shall be abrogated; this announcement shall be used instead.

Article 3. Under this announcement:

"Institute" refers to personnel of King Mongkut's Institute of Technology Ladkrabang consisting of civil servants, institute staff and special institute staff.

"Fiscal Year" refers to a budget year under the Bureau of the Budget regulation, began on 1 October, and will end on 30 September.

"Academic Year" refers to the length of employment started on August 1 to July 31.

"Wage" refers to the salary which institute staff earn from academic position and executive and academic position at the rate of minimum and maximum indicated on King Mongkut's Institute of Technology Ladkrabang regulation on Wage, Position Allowance, Remuneration, Extra Pay of Institute staff B.E. 2562 (2019 A.D.).

"Special Wage" refers to the salary which institute staff earn from academic position at the rate of minimum and maximum indicated on King Mongkut's Institute of Technology Ladkrabang regulation on Wage, Position Allowance, Remuneration, Extra Pay of Institute staff B.E. 2562 (2019 A.D.).

"Executive Position" refers to the executive position prescribed by the statement of section 11.2 and 11.3 under the King Mongkut's Institute of Technology Ladkrabang regulation on personnel management.

"Wage Increase" refers to the extra income paid to the institute staff indicated in the regulations of this announcement.

"Training or skill development leave" refers to the training or skill development leave indicated in the King Mongkut's Institute of Technology Ladkrabang regulation on Leave, Wage, Position Allowance, Wage Increase, Position Remuneration During the Leave of Institute staff B.E. 2563 (2020 A.D.).

Article 4. The workload of academic institute staff shall be consisting of:

- 4.1 Teaching
- 4.2 Research
- 4.3 Academic Service or fame enhancement work
- 4.4 Profit-making work
- 4.5 Other workloads are under the PMC-KMITL regulation indicated

Criteria for the workload of academic staff shall be determined by the appendix of this announcement.

Article 5. The criteria for performance of each leave of workload in the evaluation of minimum workload of academic institute staff

5.1 To request for a salary increase, the standards of teaching workload calculation of lecturer, assistant professor, associate professor and professor are demonstrated in the following table.

Academic Position	Teaching Workload	Other workloads
Lecturer	4 courses/academic year	Pre-Level
Assistant Professor	4 courses/academic year	Level 1
Associate Professor	4 courses/academic year	Level 2
Professor	4 courses/academic year	Level 3

5.2 To request for a special wage, the standards of teaching workload calculation of lecturer, assistant professor, associate professor and professor are demonstrated in the following table.

Academic Position	Teaching Workload	Other workloads
Lecturer	2 courses/academic year	Level 2

Assistant Professor	2 courses/academic year	Level 3
Associate Professor	2 courses/academic year	Level 4
Professor	2 courses/academic year	Level 5

5.3 The standards of workload calculation

- (1) Teaching workload: 1 course equals 3 credits not including thesis, dissertation, special project, Internship, cooperative education or equivalent.
- (2) Other workloads: They should conform to the criteria in accordance with article 5.1 or 5.2.
- (3) One piece of academic work: It should belong to institute staff or joint work not more than 2 authors. Institute staff should be the first author or last author or corresponding author.
- (4) In case that the number of authors in the academic work exceeds one person, all authors have to sign an agreement.
- (5) The academic work under item (3) that the Institute staffs who submit for the evaluation of faculty workload are not is able to use for wage raise, special wage or extra pay.
 - (6) The academic work should be approved by the two academic Institute staffs.
- (7) Provided the number of academic work exceeds the yardstick, it will be considered as the workload of the following year. Nonetheless, it must not be the same academic work used for the evaluation of faculty workload, wage raise, special wage and extra pay.
- Article 6. The criteria of work in each level of each workload for the evaluation of wage raise, special wage and extra pay are as follows.
- 6.1 Workload for the evaluation of wage raise, special wage and extra pay refers to the workload in each budget year. For instance, in the evaluation for budget year B.E. 2565 (2022 A.D.), workload from 1 August, 2021 to 31 July, 2022 will be considered.
- 6.2 The calculation of workload: Should the number of authors in the academic work exceed one person, it will be weighted in percentages of the involvement of each author, and all authors have to sign an agreement.
- 6.3 The workload must be in that year of service, and the institute staff submits for the evaluation of workload and extra pay request.
 - 6.4 The academic work must be approved by the two academic institute staff.
- Article 7. The criteria of work in each level of each workload for the evaluation of extra pay are as follows.
- 7.1 The workload must be in that budget year backdated two academic years. For instance, for a request for special wage in the budget year 2565, the workload from 1st August B.E. 2563 (A.D. 2020) onwards can be used for consideration. Nonetheless, the workload can be backdated three academic years in the first year that this announcement shall come into effect.
- 7.2 The institute staff never submits the workload for a request for special wage, the evaluation of wage raise, special wage and the evaluation of minimum workload.

- 7.3 One piece of workload can once submit for request for a special wage. In case that the number of authors in the academic work exceeds one person, all authors have to sign an agreement.
- 7.4 The institute staff can submit a request for extra money in August of every year and receive extra money from one type per year. The duration of receiving extra money is one budget year.
 - 7.5 The academic work must be approved by the two academic institute staffs.

Article 8. The criteria of academic workload in each dimension and in each level for the consideration of wage increase, special wage, extra money, and the evaluation of the minimum workload of academic institute staff. The details are as follows.

Level of workload	Research work	Teaching work	Academic service	Profit-making work
			or fame	
			enhancement work	
		Score		0
Pre-level	0	0	0	0
Level 1	2	2	2	2
Level 2	5	5	5	5
Level 3	8	8	8	8
Level 4	11	11	11	11
Level 5	14	14	14	14
Level 6	17	17	17	17

- Article 9. The criteria of academic workload evaluation for the consideration of wage increase, special wage, extra money, and the evaluation of the minimum workload of academic staff. The details are as follows.
- 9.1 The academic institute staff who passes the evaluation of the minimum workload in article 5 receives the started score at 60.
- 9.2 The academic institute staff who did not pass the evaluation of the minimum workload in article 5 receives a wage increase not more than 2.00 percent of the calculation base.
- 9.3 Providing that the academic institute staff has teaching workload four courses per academic year more than the minimum, the teaching workload that does not submit for extra money for extra teaching workload, income for teaching workload or income for teacher assistance requests can be calculated for the evaluation which means one point per one course (three credits) counted from the actual teaching hours.
- 9.4 Academic affairs assign the additional teaching workload under the allocated budget of 0.5 percent of the total wage of academic institute staff in each academic affairs.
- Article 10. The percentage of calculation base that being used as the criteria for calculating the wage increase for institute staff. The details are as follows.
 - 10.1 Having the performance score from 90.01-100: A means Excellent Getting wage increase 8.01-10.0 percent of calculation base

10.2 Having the performance score from 80.01-90: B+ means Very Good Getting wage increase 6.01-8.0 percent of calculation base
10.3 Having the performance score from 70.01-80: B means Good Getting wage increase 4.01-6.0 percent of calculation base
10.4 Having the performance score from 60.01-70: C+ means Fairly Good Getting wage increase 2.01-4.0 percent of calculation base
10.5 Having the performance score less than or equal 60: C means Fair Getting wage increase 0-2.0 percent of calculation base

Article 11. If the institute staff entitled to position of other category since the order took retroactive effect on before or on 1st October after receiving wage increase on 1st October, the authorities has the right to enact the wage increase by amending the order of wage increase of that institute staff by calculating the wage increase from the position that institute staff entitled except those who get special wage.

Article 12. The institute staff receiving the special wage after being appointed to another position except the executive position shall have the right to receive extra pay.

Article 13. With respect to executive position, the institute staff shall not have the right to receive extra pay.

Article 14. For the institute staff who are appointed to act in the position of another category during the budget year, the institute staff have to perform his or her responsibilities not less than six month so that the criteria of the appointed position shall come into effect.

Article 15. The institute staff that performs his or her responsibilities as the executive not less than two academic years and no longer holding the executive position shall not be considered to take the evaluation of minimum workload as a lecturer, assistant professor, associate professor and professor for wage increase for two years after the year of expiration of term of office.

Article 16. For the institute staff who leaves for training or skill development leave, he or she has the right not to take the evaluation of minimum workload as a lecturer, assistant professor, associate professor and professor for wage increase for two years since the year of performing his or her duties.

Article 17. The institute staff who performs his or her responsibilities as the executive not less than two academic years and no longer holding the executive position shall have the right to use another type of workload for the evaluation of minimum workload for wage increase request for two years after the year of expiration of term of office.

Article 18. The institute staff has to record his or her workload on the indicated electronic system of the evaluation of wage increase, special wage, a request for extra pay and the evaluation of minimum workload for wage increase of lecturer, assistant professor, associate professor and professor.

Unless the institute staff records his or her workload on the indicated electronic system, the all consideration shall be abrogated.

Article 19. The president shall be in charge of this announcement, have the authority to make a decision, order or measure related on compliance with this announcement.

The interpretation and construction of any terms or conditions of this announcement or other matters related to this announcement shall be final and conclusive by the PMC-KMITL.

Issued on 30th September 2020

(Prof.Dr.Suchatvee Suwansawat)

President

Appendix

The details academic workload in each dimension and each level are as follows:

1. Research work: counting since acceptance letter for publication has been issued

Pre-Level: research work can be any of the following.

- A research article presented at an academic conference approved by the academic council, and it was published in a full-length paper in proceedings. <u>OR</u>
- An Initiating research project funded by an external organization

Level 1: research work can be any of the following.

- One piece of research paper/review article was published in journal of TCI group 1.<u>OR</u>
- One piece of research paper/review article was published in the proceedings of Scopus.

 OR
- One piece of research work has been registered under patent, petty patent and copyright.

Level 2: research work can be any of the following.

- One piece of research paper/review article was published in English journal of TCI group

 1. OR
- One piece of research paper/review article was published in the journal of SJR or Scopus. <u>OR</u>
- Two pieces of Short communication/Note were published in the journal of SJR or Scopus. <u>OR</u>
- One piece of research work has been registered under patent, petty patent and copyright.

Level 3: research work can be any of the following.

- One piece of research paper/review article was published in the journal of WoS and SJR Q3-4. <u>OR</u>
- Two pieces of Short communication/Note were published in the journal of WoS and SJR Q3-4. OR

Level 4: research work can be any of the following.

- One piece of research paper/review article was published in the journal of WoS and SJR Q2. <u>OR</u>
- Two pieces of Short communication/Note were published in the journal of WoS and SJR O2.

Level 5: research work can be any of the following.

- One piece of research paper/review article was published in the journal of WoS and SJR Q1 in the rank of lower than 90th percentile. <u>OR</u>
- Two pieces of Short communication/Note were published in the journal of Wos and SJR Q1 in the rank of lower than 90th percentile.

Level 6: Research work can be any of the following.

- One piece of research paper/review article was published in the journal of WoS and SJR Q1 in the rank of 90th percentile up. $\overline{\text{OR}}$
- Two pieces of Short communication/Note were published in the journal of WoS and SJR Q1 in the rank of 90th percentile up.

2. Teaching workload

Pre-level -

Level 1: Active learning

Level 2: Problem-Based-Learning or Project-Based-Learning with the creative work.

Level 3: Teaching workload can be any of the following.

- Multimedia online course (Intranet) in Thai OR
- Book and textbook revision both in Thai or in English with at least 30% of revision and 300 copies of publication <u>OR</u>
- E-book in Thai

Level 4: Teaching workload can be any of the following.

- Multimedia online course (Intranet) in English with not less than 5,000 learners
- Book chapter which was published in international level OR
- E-book in English

Level 5: Teaching workload can be any of the following.

- Multimedia online course (Intranet) in English with not less than 10,000 learners
- Book and textbook in English: Not less than 300 copies of publication. OR

Level 6: Teaching workload can be any of the following.

- Multimedia online course (Intranet) in English: Not less than 1,000 non-Thai learners, from not less than 10 countries, taking this course, \underline{OR}
- Book and textbook in English published with international publication with not less than 100 sale copies

3. Academic Service Work and Fame enhancement work

Pre-level -

Level 1: The work can be any of the following.

- Academic service project at local level or for community **OR**
- Selected creative work at provincial level OR
- Practical invention/innovation/ software implementing in the institute

Level 2: The work can be any of the following.

- Academic service project at provincial level <u>OR</u>
- Selected creative work/invention/innovation/ software for exhibition or competition at national level

Level 3: The work can be any of the following.

- Academic service project at regional of Thailand level OR
- Creative work/invention/innovation/ software won the 1st prize, 2nd prize or 3rd prize at national level
- Selected creative work/invention/innovation/ software for exhibition or competition at ASEAN level

Level 4: The work can be any of the following.

- Academic service project at regional of Thailand level OR
- Creative work/invention/innovation/ software won the 1st prize, 2nd prize or 3rd prize at ASEAN level OR
- Selected creative work/invention/innovation/ software for exhibition or competition at ASIA level

Level 5: The work can be any of the following.

- Academic service project at ASEAN level <u>OR</u>
- Creative work/invention/innovation/ software won the 1st prize, 2nd prize or 3rd prize at ASIA level OR
- Selected creative work/invention/innovation/ software for exhibition or competition at international level

Level 6: The work can be any of the following.

- Academic service project at ASIA level OR
- Creative work/invention/innovation/ software won the 1st prize, 2nd prize or 3rd prize at international level

4. Profit-making work from research/academic administration/donation/extra pay for extra teaching workload/wage from any kind of work/others related work

The calculation is made by the total income from profit-making work deducted to the institute, along with donation, extra pay for teaching workload that does not get paid and an income from any workload that does not get paid in accordance with regulations or announcement of the institute. The total income is shown below.

Pre-level: -

Level 1: The total income from 40,000 to 80,000 baht

Level 2: The total income from 80,001 to 200,000 baht

Level 3: The total income from 200,001 to 500,000 baht

Level 4: The total income from 500,001 to 1,000,000 baht

Level 5: The total income from 1,000,001 to 2,000,000 baht

Level 6: The total income from: not less than 2,000,001 baht

Definition, Format, Publication and Quality Level of Academic Work

Group 1: Research

Selected Publications

Definition	Research can be defined as academic work with systematic processes conducted with recognized research methodology in each particular field, along with specific and explicit research objective(s) in order to collect data, answer research question(s) or draw conclusion(s), and to promote academic advancement (basic research) or to advocate the practical use (applied research). It can be referred to creative research or the development of equipment or the advantageous process.
Format	Research article or review article, with full research throughout the research process to public in academic journals.
Publication	 Disseminated the research or study in academic journals under the criteria specified. It can be published in the form of a printed matter or electronic media. Presented the full research or study at the academic conference at national or international level. Published and disseminated in a compilation of the proceedings in the form of a book or electronic media, and it can be disseminated before or after the proceedings.

Petty Patent/Patent

Definition	A document issued to protect the intellectual property under the patent law
Format	 The form of patent can be varies: a book or electronic media including Have an analysis/in-depth explanation on how the intellectual property is a result of enhancement and academic advancement, broadening knowledge or advocating the specific field of study. Approved or display the detailed evidence that show the value of that intellectual property
Publication	An evidence or proof of the patent use in academic field or any related profession

Group 2 Teaching

Active learning

Definition	Active learning refers to the process of learning and teaching that engages the learners
	in the process of learning, thinking, analyzing and synthesizing. The learners participate
	in and interact closely with various activities such as analyzing, synthesizing,

	brainstorming, discussion and case study. Furthermore, the activities promote the development of critical thinking, communication, presentation and technological skills. The learners have interaction with other learners and instructors. For active learning, the responsibility of the instructor is to develop the process of learning and activities that encourage the learners to acquire knowledge more and more. The instructor reduces the lecture hours, increases the learners' motivation to take part in a wide variety of activities and prepares a highly effective learning environment.
Criteria	 The teaching hour of active learning is not less than 50% of the total. For active learning class, the instructor must design the course that engages the learner in activities confirmed with the course learning outcome and design the assessment of active learning. The instructor has to indicate the activity plan and the assessment in tem (2) in course syllabus. The instructors notify the criteria of the assessment of the course including the criteria of the assessment of class activity to the learner before the class begins. The instructor has to store the teaching materials, course syllabus and class activity in the online platform such as Google classroom, Microsoft classroom, Microsoft OneNote, Canvas, Blackboard and other platforms in order that the curriculum committee can assess and approve the model of learning and teaching.
Procedure	 The instructor creates course syllabus before the semester begins and distributes to the learner in the online platform used as a teaching tool. The instructor teaches materials and compiles the document and the result of the performance as evidence. The instructor compiles the report on the summary of learning outcomes. The instructor sends the link of the report to the curriculum committee to consider whether the learning and teaching that the instructor designs comply with the criteria of active learning or not. The instructor has to send the link within 30 days since the next day at the end of teaching and learning of the semester.

Problem-Based Learning

Definition

Problem-Based Learning is the teaching approach that the learners are encouraged to learn by solving a perplexing real-world problem that is relevant to the learners or the issues that the learners are interested in. The selected problem has to be an open-ended problem since it is ambiguous, inexplicit and it can be resolved in different ways; several correct answers can be found in this type of problem. This approach promotes critical thinking skills and problem-solving skills by self-directed learning ability, together with the knowledge that the learner obtains from the course. The learners are divided into small working groups, and The teacher's key role is as a facilitator by using the problem to motivate the learners to acquire the

knowledge. For assessment, authentic assessment is used considering the ability of the learner while participating in learning activity and the outcome of the learning activity. Criteria 1. The instructor provides the fundamental knowledge to the learner and conducts the basic knowledge test for collecting the data for dividing the learner into small working with the same level of basic knowledge. The instructor has to determine the particular real-world problem for learning and teaching so that the learner can construct the hypothesis from the problem by using their knowledge. 2. The instructor provides the opportunities of group discussion for the learner in order to share different perspectives from the investigation. Thus, the learners can solve the problem, along with learning with other learners. The instructor provides the presentation section, so the learners can discuss the problem with other learners. 3. The instructor provides the systematic assessment with an explicit range of assessment criteria. The assessment can vary including self-assessment, peer assessment, and assessment by teachers. The instructor has to provide the summary on problem-based learning, and gather the information for further dissemination. 4. The instructor has to store teaching materials, course syllabus and the learners' project presentation in the online platform such as Google classroom, Microsoft classroom, Microsoft OneNote, Canvas, Blackboard and other platforms in order that the curriculum committee can assess and approve the model of learning and teaching. Procedure 1. The instructor designs problem based learning based on real-world problems, and stores the information in the online platform used as a tool of learning and teaching. 2. During teaching, the instructor has to collect the learning and teaching process and learning outcomes as evidence. 3. The instructor sends the link of the report to the curriculum committee to consider whether the learning and teaching model that the instructor designs comply with the criteria of problem based learning or not. The instructor has to send the link within 30 days since the next day at the end of teaching and learning of the semester.

Project-Based Learning

Definition

Project based learning refers to a teaching approach in which the learners are motivated to learn through the project based. In this instructional approach, the learners are required to use a wide range of skills such as hands-on experience, researching, practical experience not the experiment in the laboratory of each course. The learners are also required to draw up the plan, collaborate with other peoples and apply the critical thinking systematically. This approach is an integrated curriculum that allows the learners to apply the knowledge from the other fields to their project so that they can create realistic outcomes. The teacher's main role is as a coach who provides the equipment and utility for the learners and encourages the learners to fulfil their true potential. The instructor and learner carry out an assessment of whether project goal(s) and objective(s) is successfully achieved, what

	problem(s) is and how the problem is solved. Furthermore, the assessment can be self-assessment, peer-assessment, assessment by the instructor and outsider assessment.
Criteria	 The instructor provides the fundamental knowledge about the project to the learner. The learners are randomly divided into small groups with different basic knowledge. The instructor allows the learners to select the real-world problem that the learners are interested in so that they can start collaborative brainstorming and carry out the project to solve the problem. The instructor provides a progress report section; the learners can summarize their progress to the instructor so that the instructor can give the suggestion. They can also have the opportunity to discuss with other learners. The instructor provides the systematic assessment with an explicit range of assessment criteria. The assessment can vary including self-assessment, peer
	 assessment, assessment by teachers and outsider assessment. The instructor has to provide the summary on project-based learning, and gather the information for further dissemination. 4. The instructor has to store the learners' project presentation in the online platform such as Google classroom, Microsoft classroom, Microsoft OneNote, Canvas, Blackboard and other platforms in order that the curriculum committee can assess and approve the model of learning and teaching.
Procedure	 The instructor designs project based learning based on project, and stores the information in the online platform used as a tool of learning and teaching. The instructor sends the link of the report to the curriculum committee to consider whether the learning and teaching model that the instructor designs comply with the criteria of problem based learning or not. The instructor has to send the link within 30 days since the next day at the end of teaching and learning of the semester.

Multimedia online course (Intranet)

Definition	Multimedia online course (Intranet) refers to an online course for KMITL students. The students can access the course all the time: before, during, and after class. The online course has to integrate a wide range of content forms such as text, image, animation, sound and video.	
Criteria	 The course complies with King Mongkut's Institute of Technology Ladkrabang Regulation on online learning B.E. 2562 (2019 A.D.) The instructor creates clip videos that the students can easily access. The clip videos have to cover at least half of the content. Moreover, the clip videos must be approved by at least three inside or outside institute specialists. 	
Procedure	The instructor submits the course syllabus to the teaching and online learning subcommittee for approval before the semester begins.	

- 2. The teaching and online learning subcommittee approves.
- 3. The instructor starts creating clip videos and other teaching materials, and can receive the assistance from the institute and academic division that the instructor is affiliated.
- 4. The instructor submitted the clip video to at least three inside or outside institute specialists for approval.
- 5. The instructor carries out the teaching
- 6. Teacher evaluation are required (evaluation of the institute can be used)
- 7. The quality assessment of clip video and teaching materials is required.
- 8. The instructor has to submit a course report to teaching and online learning subcommittee within 30 days since the next day at the end of teaching and learning of the semester.

Multimedia online course (Internet)

Definition	Multimedia online course (Intranet) refers to an online course for Non-KMITL students. Everyone can access the course all the time: before, during, and after class. The online course has to integrate a wide range of content forms such as text, image, animation, sound and video.
Criteria	 The content of the program should be creative, must not tarnish the institute's reputation, and must not violate the law. For profit-making purposes, it is important to follow the procedure KMITL Research and Innovation Services (KRIS). For non-profit-making, the course has to publicize in the central platform of the institute by submitting the official notification to the Office of Academic Administration and Education Quality. The online course for Non-KMITL students which can accumulate the credit must be approved by Academic council and comply with King Mongkut's Institute of Technology Ladkrabang Regulation on the Training Program for Credit Accumulation Guideline.
Procedure	 For accumulating-credit online courses, the process has to comply with the procedure for establishing a short-term training program under the King Mongkut's Institute of Technology Ladkrabang Regulation on the Training Program for Credit Accumulation Guideline. For non-accumulating-credit online courses, the process has to comply with KMITL Research and Innovation Services (KRIS) regulation. The instructor has to submit the report on the number of students and the income of the program.

Textbooks

Definition	Textbooks refer to academic work covering the entire course or part of a course. It must be systemically complied with the findings research of the requester or the knowledge that the requester gains, analyze, synthesize, comply and arrange it under the conceptualization of the requester main core of the requester that it correlate with
Criteria	 Textbooks must be approved by the textbook and book quality committee of the institute before disseminating. Textbooks can be in book form or printed at least 300 copies by a publishing house or they can be in e-book form.
Procedure	 The instructor complies a textbook. The instructor submits the textbook to Textbook and Book Quality Committee through affiliation department. The textbook must be approved by Textbook and Book Quality Committee. The instructor submits a copy of ID card to KMITL Research and Innovation Services (KRIS) for intellectual property procedure. The instructor submits the approved textbook to the publishing house for publication in the form of a book or e-book. The instructor submits the report on the number of published book and sale.

Books

Definition	Book refers to academic work compiled with in-depth study on a particular topic and systematic analysis, synthesis and arrangement, together with core concepts associated with other concepts and academic language. It reflects the intellectual perspective of the author and significantly strengthens the academic advancement in its field or related field. It does not have to meet the requirement of the program or specific course in the program and it does not have to support the learning and teaching of any course.
Criteria	 Books must be approved by Textbook and Book Quality Committee of the institute before disseminating. Books must be published at least 300 copies by the publishing house or disseminated in the form of e-book.
Procedure	 The instructor complies a book. The instructor submits the book to Textbook and Book Quality Committee through affiliation department. The book must be approved by Textbook and Book Quality Committee. The instructor submits a copy of ID card to KMITL Research and Innovation Services (KRIS) for intellectual property procedure. The instructor submits the approved book to the publishing house for publication in the form of a book or e-book.

6. The instructor submits the report on the number of published book and sale.

Academic work for Public policy doctrine development

Definition	Academic work for public policy doctrine development refers to academic work of systemic research, study, analysis, synthesis on economic, social, political, administrative, environmental aspects or scientific, engineering or other related academic dimensions. Its objectives are (1) to produce the new public policy doctrine or give the empirical suggestion on public policy doctrine (2) to implement the findings of the research so that the government sector can use it to enact the policy, law, plan, order or other measures. The ultimate goal of this academic work is to solve the problems or develop public policy doctrine for the people at the local, national and international level.
Format	Academic work for public policy doctrine development should be in document form with academic explanation including an analysis and synthesis on the problem circumstance in economics, society, administration, environment or other demanding dimensions, in conjunction with academic justification and evidence, and supporting information of the solution of the problem. The output can be policy, drafting law and regulation, plan, order or other measures, together with the prediction of outcome and impact on society at local, nation and international level.
Publication	Publication can be made in any of the following forms: 1. The policy, law, plan, order or other measures with the explanation has been proposed to the stakeholder or responsible officer in the public policy doctrine, and it was in the consideration process by the responsible officer. 2. The public policy doctrine has been disseminated to those who concern with the policy.

Group 3 Innovative work/Fame enhancement work /service work

Creative work in scientific and technological work (Invention/innovation/software)

Definition	It is an academic work that refers to the innovative equipment, labor-saving device, producing new offspring by breeding animals and plants, creating microorganisms for vaccine production and other related products or inventions. This type of work is aimed to contribute to the enhancement of economics and society by developing scientific and technological knowledge, together with acceptable research methodology in that discipline of knowledge.
Format	The creative work accompanied with published article or academic document to show the concept of the research work, its development, the procedure of the research, the development of property testing result including the basic property and distinctive property, practical use testing result in appropriate circumstance and the effect of the practical use in term of economic and social dimensions.

Publication	Publication can be any of the following:
	1. Organizing exhibition, display, show, public exhibit, photos or video recording,
	photograph or picture-recording tape.
	Producing supporting document or electronic media disseminating

Creative Works in Aesthetic Dimension / Art

Definition	One piece of work or a series of works showing aesthetic, philosophy and ethics value or a reflection of society, along with the artistry and creativity of the creator, and clear description including technical explanation that facilitate the to understand the meaning and value of the work. Creative works consist of creative works in literature, performing arts, music, architecture, design, painting, sculpture, printing and related works.
Format	Creative work with an analysis which clarify the principle, techniques, and/or theoretical concepts and procedure and/or techniques in creating the work, accompanied with information and diagnostic points to facilitate the interpretation and assessment of aesthetic value in terms of cultural, social and economic aspect.
Publication	The creative works must be approved by the senior expert from various institutes in its field or related disciplines (peer reviewer). Publication in one of the followings: 1. Original work with document and publication disseminated or disseminate via electronic media 2. Organizing exhibition, display, show, public exhibit, photos or video recording, photograph or picture-recording tape.

Software

Definition Software refers to computer programs in accordance with copyright law; it is the findings of the study/research or new innovation or establishment of the body of knowledge with explicit clarification. It can be referred to as applied software which serves the purposes of academic data analysis. The characteristics of software are must be one of the follows: 1) The project on software development with numerical method or engineering design approach which improves the design procedure in direct way. 2) Work in the form of improvement, change, enhancement at the source code level in order to develop the system. The improvement must display the significant result. 3) The project with data efficiency and data effectiveness corresponding with research and technology development must demonstrate how the system develops after applying software and information technology. The improvement and the survey of the need, along with a clear outcome and indicator are required since it does not use to substitute the former system.

	the outcome of the project must be related to the characteristics of the research and development.
Format	 The format may be arranged as full report or electronic media including Clear description/explanation of the project such as manual/instruction, principle of procedure and the function of the software in order to display that the project can strengthen the academic advancement or give its field an advantage. The project must be approved or show substantial evidence reflecting the value of the work
Publication	The evidence of being used in academic circles or related professions

Academic service work

Definition	Academic service work refers to the work considered to be significant contributions to the public, especially for positive change in specific dimensions or several dimensions including community, the way of life, art and cultural, profession, economics, politics, the quality of life, wellness. It can be referred to academic service work registered as patent or intellectual poverty that can solve the problem or develop the society or it can produce a change from raising awareness of the problem and the solution in the community.
Format	Full report accompanied by a clear explanation is requested to indicate the positive contributions and positive change for society or the academic advancement in that discipline or other related fields and show that it can be used as reference. Moreover, the report have to consist of the following empirical evidence: the prediction of the circumstances before the change, the participation the acceptance of the target group, the model of the concept or the procedure of the change, knowledge and expertise used for producing the change, the prediction of the effect of the change after implementing, the evaluation of the change by follow up the progress, the summary on maintenance or implementation or improvement.
Publication	Publication in form of conference or organizing the visiting event in the area of development by relaying such publication to the public, along with the document that can be used as a reference or for further study.

Group 4 Profit-making work

- 4.1 Having a teaching workload in the regular semester more than 150 in the total that does not get extra pay for extra teaching workload.
- 4.2 An income from any workload that does not get paid in accordance with regulations or announcement of the institute.
- 4.3 Contributing income to the institute from /seminar/research/academic administration/creative work/invention/innovation/petty patent/patent/software and other related work.

4.4 Donating entities that can be measured and evaluated by money such as equipment/construction material/ money to the institute.