



**KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

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**KEPUTUSAN REKTOR INSTITUT TEKNOLOGI SEPULUH NOPEMBER
NOMOR T/2086/IT2/HK.00.01/2020**

TENTANG

BAKU MUTU PROGRAM STUDI PASCASARJANA

REKTOR INSTITUT TEKNOLOGI SEPULUH NOPEMBER,

- Menimbang** : bahwa sehubungan untuk meningkatkan kualitas pendidikan Pascasarjana di lingkungan Institut Teknologi Sepuluh Nopember serta untuk menjadi universitas berkelas dunia (*World Class University*), perlu menetapkan Keputusan Rektor tentang Baku Mutu Program Studi Pascasarjana;
- Mengingat** : 1. Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia tahun 2012 Nomor 158, Tambahan Lembaran Negara Republik Indonesia Nomor 5336);
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
3. Peraturan Pemerintah Nomor 54 Tahun 2015 tentang Statuta Institut Teknologi Sepuluh Nopember (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 172, Tambahan Lembaran Negara Republik Indonesia Nomor 5723);
4. Keputusan Majelis Wali Amanat Institut Teknologi Sepuluh Nopember Nomor 03 Tahun 2019 tentang Pengangkatan Rektor Institut Teknologi Sepuluh Nopember Masa Jabatan 2019-2024;
5. Peraturan Rektor Institut Teknologi Sepuluh Nopember Nomor 24 Tahun 2019 tentang Organisasi dan Tata Kerja Institut Teknologi Sepuluh Nopember;
6. Peraturan Rektor Institut Teknologi Sepuluh Nopember Nomor 25 Tahun 2019 tentang Organisasi dan Tata Kerja Fakultas di Lingkungan Institut Teknologi Sepuluh Nopember;
7. Peraturan Rektor Institut Teknologi Sepuluh Nopember Nomor 32 Tahun 2019 tentang Peraturan Akademik Untuk Program Pendidikan Akademik Institut Teknologi Sepuluh Nopember Tahun 2019;

MEMUTUSKAN:

- Menetapkan** : **KEPUTUSAN REKTOR TENTANG BAKU MUTU PROGRAM STUDI PASCASARJANA.**
- KESATU** : Menetapkan Baku Mutu Program Studi Pascasarjana, sebagaimana terlampir dalam lampiran yang merupakan bagian tidak terpisahkan dari Keputusan ini.
- KEDUA** : Mencabut keputusan Rektor Institut Teknologi Sepuluh Nopember Nomor 2656/IT2/HK.00.01/2018 tentang Baku Mutu Pascasarjana.
- KETIGA** : Keputusan Rektor ini mulai berlaku pada tanggal ditetapkan.

Ditetapkan di Surabaya
pada tanggal 29 Mei 2020
**REKTOR INSTITUT TEKNOLOGI
SEPULUH NOPEMBER,**



MOCHAMAD ASHARI
NIP 196510121990031003



Salinan keputusan ini disampaikan kepada:

1. Para Wakil Rektor;
2. Direktur Pascasarjana dan Pengembangan Akademik;
3. Kepala Kantor Penjaminan Mutu;
4. Kepala Bagian Administrasi Umum dan Kearsipan Digital;
di lingkungan ITS;

ATTACHMENT
DECISION OF RECTOR OF SEPULUH
NOPEMBER INSTITUTE OF
TECHNOLOGY
NUMBER T/2086/IT2/HK.00.01/2020
REGARDING
QUALITY STANDARDS OF
POSTGRADUATE STUDY PROGRAM

QUALITY STANDARDS OF POSTGRADUATE PROGRAM

SEPULUH NOPEMBER INSTITUTE OF TECHNOLOGY
2020

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PREFACE

The Postgraduate Study Program Quality Standards Manual is an improvement of Postgraduate Quality Standards 2018 which contains various matters related to the latest developments of ITS Postgraduate. The Quality Standards Manual is prepared to provide a reference for all elements involved in the entire academic processes in ITS Postgraduate Study Program, so that the quality of graduates of ITS Postgraduate Study Program meets the expectation.

With the completion of the quality standards manual, we would like to express our gratitude to:

- 1) All members of Drafting Team of ITS Postgraduate Study Program Quality Standards Manual;
- 2) All members of ITS Academic Senate, especially Postgraduate Ad-Hoc Team and Daily Commission;
- 3) All parties who have contributed to the completion of the manual.

We hope the manual will be useful for all of us, especially for the improvement of ITS Postgraduate Study Program.

Surabaya, April 2020
Vice Rector 1 of ITS,

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CHAPTER I

INTRODUCTION

Postgraduate education program that consists of master's and doctoral program is a part of the academic programs in ITS. Postgraduate education program is the spearhead of ITS' ideals to be a world-class university. One of important indicators for a university to be said as world-class is the number of its contributions to science and technology, one of which is realized in scientific publication in reputable international journal. It will be easier to realize if postgraduate program is implemented by paying attention to the improvement of national competitiveness in facing globalization in various aspects, through development of science and technology. It is observable from the characteristics of postgraduate education whose educational milestone is conducting researches to find and produce new sciences required to be published. To guarantee that postgraduate education can run according to the expectation, it requires a postgraduate education quality standards manual.

The postgraduate education quality standards manual is an improvement of postgraduate quality standards manual Year 2018 that needed to be done after the issuance of Regulation of Rector of Sepuluh Nopember Institute of Technology No. 24 of 2019 on Organization and Work Procedure of Sepuluh Nopember Institute of Technology and Regulation of Rector of ITS No. 17 of 2020 on Implementation of Postgraduate Program of Research Pathway. With the new organization and work procedure, some management changes occur in various fields including academic affairs, financial management, and organization system. Therefore, it is considered necessary to adjust the quality standards manual so as to accommodate the postgraduate program of both regular pathway and research pathway to avoid the stakeholders' confusion that results in ineffectiveness of postgraduate program implementation.

The postgraduate education quality standards manual contains the quality standards related to the quality of new students, learning process, and graduates. The aspects of learning process include among others planning, thesis, implementation of qualification assessment and dissertation exam, and graduation evaluation. Some other aspects include the quality of thesis and dissertation advisors and the quality of course lecturers. The manual is a reference that has to be followed by all stakeholders in the implementation of postgraduate education program, especially master's and doctoral program. The quality standards are implemented to postgraduate level of both regular pathway and research pathway.

1.1. Legal Basis

The postgraduate program quality standards manual is prepared by considering and paying attention to applicable laws and regulations including:

- Law of the Republic of Indonesia No. 5 of 2003 on National Education System;
- Law of the Republic of Indonesia No. 12 of 2012 on Higher Education;
- Government Regulation No. 54 of 2015 on Statutes of ITS;
- Presidential Regulation No. 8 of 2012 on Indonesian National Qualification Framework;
- Regulation of Minister of Education and Culture No. 3 of 2020 on National Standards of Higher Education;
- Master Plan of ITS Development (Renip) 2015-2045;
- Strategic Plan (Renstra) of ITS PTNBH 2015-2020;
- Regulation of Rector of ITS No. 15 of 2018 on Academic Regulations of ITS Year 2018;
- Regulation of Rector of ITS No. 24 of 2019 on Organization and Work Procedure of ITS;
- Regulation of Rector of ITS No. 17 of 2020 on Implementation of Postgraduate Program of Research Pathway.

1.2. Vision, Missions, and Goals of ITS

The vision, missions, and goals of ITS as specified in Statutes of ITS are:

VISION:

To be a university with international reputation in science and technology especially those supporting marine and industries with environmental insights.

MISSIONS:

To contribute to the development of science and technology for social welfare through educational activities, researches, community services, and managements based on information and communication technology.

The description of missions in field of education, research, community service, and management is:

MISSIONS IN FIELD OF EDUCATION:

- a. To organize higher education based on information and communication technology with internationally-qualified curricula, lecturers, and learning methods;
- b. To produce graduates who have faith and fear to God the Almighty and have noble morals and characters; and

- c. To provide graduates with technology-based entrepreneurial knowledge.

MISSIONS IN FIELD OF RESEARCH:

To play an active role in the development of science and technology, especially in field of marine, environment and settlement, energy, as well as information and communication technology with environmental insights through internationally-qualified researches.

MISSIONS IN FIELD OF COMMUNITY SERVICE:

To utilize all resources owned and to participate in solving problems faced by communities, industries, central government, and regional government by putting forward information and communication technology facilities.

MISSIONS IN FIELD OF MANAGEMENT:

- a. The management of ITS is performed by paying attention to the principles of good governance supported by information and communication technology;
- b. To create conducive atmosphere and to provide full support for students, lecturers, and academic staff to develop themselves and to optimally contribute to communities, industries, science, and technology;
- c. To develop a network to synergize with other universities, industries, communities, central government, and regional government in organizing educational activities, researches, and community service.

1.3. Graduate Learning Achievements

Each graduate of ITS Postgraduate education program has to have competencies that include 4 aspects, namely: attitude, general skills, knowledge, and specific skills. The last two aspects, namely: knowledge and specific skills, have to be mastered by each graduate in accordance with the scientific field of study program stated in the curriculum. The aspect of attitude has to be owned by each graduate of ITS Postgraduate, while the aspect of general skills conforms to the level of program and the type of education.

1.3.1. Formulation of Attitude

Each graduate of postgraduate education program has to have the following attitudes:

- a. Has faith to God the Almighty and able to show religious attitude;

- b. Upholds the values of humanity in performing the duties based on religion, morals, and ethics;
- c. Contributes to quality improvement of the life of community, nation, and country, and the advancement of civilization based on Pancasila;
- d. Plays a role as a citizen who is proud of and loves the homeland, has nationalism and responsibility towards the nation and country;
- e. Respects the diversity of cultures, views, religions, and beliefs, as well as opinions or original findings of other people;
- f. Cooperates and has social sensibility and care for community and environment;
- g. Obeys the laws and disciplined in the life of community and nation;
- h. Internalizes academic values, norms, and ethics;
- i. Demonstrates responsibility for works in his/her field of expertise independently;
- j. Internalizes the spirit of independence, struggle, and entrepreneurship;
- k. Makes optimal efforts to achieve perfect results; and
- l. Cooperates to utilize his/her potentials as optimally as possible.

1.3.2. Formulation of General Skills

MASTER'S PROGRAM

Each graduate of Master's Program has to master the following general skills:

- a. Able to develop logical, critical, systematic, and creative thinking through scientific researches, creation of designs or artworks in field of science and technology that considers and implements the values of humanities in accordance with his/her field of expertise, to formulate scientific concepts and results of review based on scientific principles, procedures, and ethics in form of thesis or other similar forms uploaded to the university's website and paper published in accredited scientific journal or accepted in international journal;
- b. Able to conduct academic validation or review in accordance with his/her field of expertise in solving problems in the community or relevant industries through development of his/her knowledge and skills;
- c. Able to construct scientific ideas, results of thought, and arguments responsibly and based on academic ethics, and to communicate them through media to the public and academicians;
- d. Able to identify the scientific field that becomes the subject of his/her research and position it into a research map developed through interdisciplinary or multidisciplinary approach;

- e. Able to take decisions in context of solving problems in the development of science and technology that consider and implement the values of humanities based on analytical or experimental review on information and data;
- f. Able to manage, develop, and maintain networking with colleagues and associates in the institution and broader research community;
- g. Able to improve learning capacity independently;
- h. Able to document, save, secure, and restore data resulting from researches in order to guarantee their validity and to avoid plagiarism;
- i. Able to develop himself/herself and compete on national and international level;
- j. Able to implement the principles of sustainability in developing knowledge; and
- k. Able to implement information and communication technology in the context of his/her work performance.

DOCTORAL PROGRAM

Each graduate of Doctoral Program has to master the following general skills:

- a. Able to invent or develop new scientific theories/concepts/ideas, to contribute to the development and practice of science and/or technology that consider and implement the values of humanities in his/her field of expertise by producing scientific researches based on scientific methodology, logical, critical, systematic, and creative thinking;
- b. Able to conduct interdisciplinary, multidisciplinary, or transdisciplinary researches, including theoretical reviews and/or experiments in field of science, technology, arts, and innovation contained in form of dissertation and paper published in reputable international journal;
- c. Able to select effective, latest, advanced researches, and to give benefits to human beings through interdisciplinary, multidisciplinary, or transdisciplinary approach in order to develop and/or produce solutions to problems in field of science, technology, arts, or society, based on the results of review on availability of internal or external resources;
- d. Able to develop research roadmaps with interdisciplinary, multidisciplinary, or transdisciplinary approach, based on reviews on the main goals of researches and their constellations in broader goals;
- e. Able to construct scientific arguments and solutions, technology, or arts, based on critical views on facts, concepts, principles, or theories, which are scientifically accountable and academically ethical, and to communicate through mass media or directly to the community;

- f. Able to demonstrate academic leadership in management and development of resources and organizations under his/her responsibilities;
- g. Able to manage, including to save, audit, secure, and restore data and information resulting from researches under his/her responsibilities;
- h. Able to develop and maintain relationship with colleagues and associates in his/her environment or through cooperation network with researcher community outside his/her institution;
- i. Able to develop himself/herself and compete on national and international level;
- j. Able to implement the principles of sustainability in developing knowledge; and
- k. Able to implement information and communication technology in the context of his/her work performance.

CHAPTER II

ACADEMIC QUALITY STANDARDS OF MASTER'S PROGRAM

2.1. Quality Standards of New Students

2.1.1. Master's Program of Regular Pathway

Candidates of new students of Master's Program of Regular Pathway have to meet the following academic and administrative requirements:

Academic Requirements

1. Has graduated from bachelor's program with a study program accredited at least B or Very Good by BAN PT with $GPA \geq 3.00$ (scale 4);
2. Has passed Master's Program entry exam including: academic potential test (TPKA) (minimum 450), TEFL or equivalent (minimum 450), field topical test (minimum 66), and interview (minimum 66);
3. Candidates of new students from bachelor's program of different fields or different education programs have to follow the regulation of past learning recognition (RPL).

Administrative Requirements

1. Submits 2 (two) recommendation letters from people who understand his/her background of abilities and skills in general aspects and academic abilities. The recommendation letters can come from: lecturer/academic advisor in bachelor's program, head of department/faculty of his/her previous university, or head of institution he/she works for;
2. Submits a plan of research to be conducted in Master's Program;
3. Submits a letter of commitment to comply with applicable academic and financial provisions/regulations.

2.1.2. Master's Program of Research Pathway

Candidates of new students of Master's Program of Research Pathway have to meet the following academic and administrative requirements:

Academic Requirements

1. Has graduated with bachelor's degree from a study program accredited at least B or Very Good by BAN PT with $GPA \geq 3.00$ (scale 4);

2. Has passed Master's Program entry exam including: academic potential test (TPKA) (minimum 450), TEFL or equivalent (minimum 477), field topical test (minimum 66), and interview (minimum 66);
3. Has to have past learning recognition in form of research conducted and written in form of portfolio along with its evidence, which is equivalent to maximum 3 credits of Master's Program. The past learning recognition of research as aforementioned can be in form of:
 - a. 1 (one) scientific publication in reputable international journal; or
 - b. 1 (one) scientific publication in international seminar proceeding (indexed by Scopus or web of science); or
 - c. 1 (one) scientific publication in accredited national journal (Sinta 1, Sinta 2, Sinta 3, or Sinta 4); or
 - d. 1 (one) patent registered with Directorate General of Intellectual Property – Ministry of Justice and Human Rights – the Republic of Indonesia.

The activity period of the past learning recognition as aforementioned is the last 5 (five) years.
4. Has a proposal on research topic consulted with candidate of advisor;
5. The grade of Final Project is A.

Administrative Requirements

1. Submits 2 (two) recommendation letters from people who understand his/her background of abilities and skills in general aspects and academic abilities. The recommendation letters can come from: lecturer/academic advisor in bachelor's program, head of department/faculty of his/her previous university, or head of institution he/she works for;
2. Submits a plan of research to be conducted in Master's Program;
3. Submits a portfolio of research conducted during the last 5 (five) years along with its proof;
4. Submits a letter of commitment to comply with applicable academic and financial provisions/regulations.

2.2. Quality Standards of Curriculum

Curriculum is a set of plans and arrangements related to learning achievements of graduates, review materials, process, and assessment used as a guide of study program implementation. The curriculum of master's study program of ITS is designed to guarantee that the graduates have the qualifications equivalent to those in Indonesian National

Qualification Framework (KKNI). The curriculum of Master's Study Program has to be equipped with documents containing:

1. Study load: 36 credits after completing bachelor's program or applied bachelor's program;
2. Academic goals of postgraduate study program, containing statements of graduate profile that can be stated specifically;
3. Learning achievements of graduates (CPL) of study program, which consist of:
 - a. Attitude;
 - b. General skills;
 - c. Knowledge; and
 - d. Specific skills;
4. Correlation between CPL with review materials and courses that can be stated in form of table/matrix indicating the correlation between CPL with review materials and courses;
5. Structure of courses each semester, containing course tree that is able to indicate the preconditions of courses and position of courses each semester;
6. Human resources, containing list of courses along with the names of lecturers completed with description of scientific field, education level, and skill level;
7. Syllabus and semestral lesson plan (RPS). The planning of learning process compiled in RPS is determined and developed by lecturers independently or collectively in skill group of a field of science and/or technology in study program. RPS has to contain at least:
 - a. Name of study program, name and code of course, semester, credits, name of lecturer;
 - b. CPL imposed on the course;
 - c. Final abilities planned for each learning stage to meet CPL;
 - d. Review materials related to the abilities to be achieved;
 - e. Learning methods;
 - f. Time provided to achieve the abilities on the three stages of learning;
 - g. Students' learning experience manifested in description of tasks to be done by students within one semester;
 - h. Criteria, indicators, and assessment weight; and
 - i. List of references used;
8. Learning assessment, containing guidelines for lecturers in measuring the achievement of course learning achievements (CP MK).

2.3. Quality Standards of Learning Process and Assessment

To guarantee that the graduates of postgraduate study program can meet CPL of postgraduate study program, the teaching-learning process has to be organized well. Learning concerns with the process of interaction between students and lecturers and learning sources in a certain environment. The following quality requirements of learning process and assessment have to be implemented in academic process of postgraduate program of ITS.

1. Learning process has to be student-centered.
2. Learning process in each course has to be implemented in accordance with RPS.
3. Learning process related to research has to be implemented by referring to research standards.
4. Learning process has to be able to grow and give opportunities to students to develop their potentials and abilities during and after the study period.
5. Learning process outside the Study Program and/or ITS will be implemented based on cooperation agreement between ITS and other Universities or other relevant institutions, under the guidance of ITS Lecturers.
6. Students have to obtain clear information about the goals of each learning process, methods of assessment, and levels of success achieved.
7. Students have to obtain feedbacks and opportunities to question about the assessment of their abilities and to get clear guidance to support the effort of improving and developing themselves.
8. Learning methods implemented have to be efficient and effective in developing academic interaction between lecturers, students, and learning sources, supported by service of academic staff.
9. Assessment conducted has to include: the principles of being educative, authentic, objective, accountable, and transparent, the techniques and instrument, and clear procedure.
10. Lesson plan has to be compiled and implemented appropriately and controlled by adequate monitoring and evaluation system.
11. Students have to obtain clear information about learning facilities, scholarship opportunities, research activities, and other academic activities.
12. Learning materials have to be relevant, updated, directed to formation of clear competencies and abilities, and can motivate and develop students' innovation and creativity.

13. Complete written guidelines about the procedure and process of research guidance, composition and writing of thesis, dissertation, and other works, have to be provided and easily accessible by students.
14. Facilities and opportunities have to be provided for students to disseminate the results of their researches and other scientific writings.
15. Learning progress report of each student containing assessment of student's progress and learning achievements has to be delivered periodically to be used as feedbacks to improve learning methods in achieving CPL.

2.4. Quality Standards of Graduation

2.4.1. Master's Program of Regular Pathway

To graduate from Master's Program of Regular Pathway, students have to meet the following quality standards:

1. Has completed all study loads of minimum 36 credits, including thesis within maximum 8 (eight) semesters;
2. Has grade point average (GPA) ≥ 3.00 , without grade D and E, and with grade C of maximum 20% of required total credits;
3. Has published the results of research related to thesis in a paper published in accredited national scientific journal, or has been accepted in international journal, or has been presented verbally in reputable international seminar.

Reputable international seminar is an indexed international seminar, attended by more than 5 countries, and to be published in indexed proceeding (Scopus or web of science);

4. Has met the requirements of English skills with TEFL score ≥ 477 . TEFL score (result of test at UPT Bahasa ITS) obtained when taking entry exam on the same level can be recognized as a requirement of graduation.

2.4.2. Master's Program of Research Pathway

To graduate from Master's Program of Research Pathway, students have to meet the following quality standards:

1. Has completed all study loads of minimum 36 credits, including thesis within maximum 8 (eight) semesters;
2. Has grade point average (GPA) ≥ 3.00 , without grade D and E, and with grade C of maximum 20% of required total credits;

3. Has presented 1 (one) paper in a reputable international seminar added by:
 - a. A paper accepted in reputable international journal (indexed by Scopus at least Q3; or web of science with impact factor); or
 - b. A paper published in accredited national scientific journal with qualifications of Sinta 1, Sinta 2, Sinta 3, or Sinta 4; or
 - c. A patent registered with Directorate General of Intellectual Property – Ministry of Justice and Human Rights – the Republic of Indonesia.

2.4.3. Master's Program of Collaboration with Partner Universities

Master's Program of Collaboration with Partner Universities can be in form of joint degree or double degree. The detailed mechanism regarding the program is provided separately in memorandum of understanding between the study program organizer in ITS and the partner. However, the quality standards also set out the basic requirements of student graduation from the collaboration program.

Students of Master's Program of Collaboration with Partner Universities graduate from joint degree program if they have met the following requirements:

1. Has completed and passed minimum 50% of total credits required by ITS, excluding thesis;
2. Has completed and passed all courses required by partner university through a process of equivalency to the curriculum system of ITS;
3. Has met the requirements of scientific publication and foreign language score.

2.5. Quality Standards of Thesis

Production of thesis has to be preceded by a thesis proposal by the student.

2.5.1. Thesis Proposal

1. Follows the format specified by ITS, containing at least:
 - a. Title of research;
 - b. Abstract;
 - c. Background;
 - d. Formulation of problems;
 - e. Goals of research;
 - f. Contributions and benefits of research;
 - g. Literature review;

- h. Research method;
 - i. Implementation schedule;
 - j. References;
2. Has been consulted and approved by advisors;
 3. Contains the element of novelty and usefulness;
 4. Has been presented before a team of advisors and examiners, and passed with grade of minimum B.

2.5.2. Thesis

1. Follows the format specified by ITS, containing at least:
 - a. Title of research;
 - b. Abstract;
 - c. Background;
 - d. Formulation of problems;
 - e. Goals of research;
 - f. Contributions and benefits of research;
 - g. Literature review;
 - h. Research method;
 - i. Results of research;
 - j. References;
2. Has been consulted and approved by advisors;
3. Contains the element of novelty and usefulness;
4. Has been examined before a team of advisors and examiners, and passed with grade of minimum B.

2.6. Quality Standards of Thesis Advisor

To guarantee that the process of guidance can direct to success of producing a high-quality scientific writing, each advisor has to meet the following requirements:

2.6.1. General Requirements

1. Has qualifications and competencies in accordance with the Academic Regulations of ITS;
2. Has an ability to determine the information and facilities required for the smoothness and quality of thesis production;

3. Has academic qualifications and competencies of scientific field relevant to the theme of student's thesis research, and has academic background relevant to the field of research handled so as to be able to give proper advices;
4. Has research track record relevant to the field of research reviewed by the student;
5. Conducts periodic, regular, and continuous guidance process;
6. Reads all reports written by the student guided and able to give feedback to develop his/her knowledge;
7. Has an initiative to introduce research groups and professional associations in the same field of science to the student guided;
8. Has an ability to play the role in the process of quality assurance of academic outcomes of Postgraduate Program of ITS;
9. Guides maximum 4 (four) students of master's program as the advisor team leader within one semester.

2.6.2. Requirements to be Advisor Team Leader

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Lector;
2. Comes from the study program where the postgraduate student is registered. For a multidisciplinary study program, the advisor team leader can come from another study program that has a field of study the closest to the topic of student's thesis research;
3. Has good track records in his/her area of expertise indicated by works produced within the last 5 (five) years as the corresponding author in form of:
 - a. At least a paper in reputable international journal, or equivalent in form of reputable international seminar proceeding (has been reviewed), a chapter of book, an internationally recognized artwork/design; or
 - b. At least two papers in different accredited national journals, or equivalent in form of nationally recognized artworks/designs; or
 - c. At least five papers in national seminars in accordance with his/her area of expertise;
4. Active in conducting researches in his/her area of expertise;
5. Has good track records as research advisor;
6. Complies with lecturer's code of conduct and has good scientific integrity.

2.6.3. Requirements to be Advisor Team Member

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Expert Assistant. Specifically for field of arts, design, and architecture, the requirement can be replaced by a recognition of competencies to the concerned from scientific community and institution;
2. A member of advisor team can come from an institution outside the university provided that he/she holds a doctoral degree or applied doctoral degree relevant to the study program, or has a professional certificate relevant to the study program and has qualifications equivalent to level 9 (nine) of KKNI;
3. Has good track records in his/her area of expertise indicated by works produced within the last 5 (five) years as the corresponding author in form of:
 - a. At least a paper in accredited national journal, or equivalent that can be in form of two nationally recognized artworks/designs; or
 - b. At least three papers in national seminars in accordance with his/her area of expertise;
4. Active in conducting researches in his/her area of expertise;
5. Has good track records as research advisor;
6. Complies with lecturer's code of conduct and has good scientific integrity.

2.6.4. Requirements to be Thesis Examiner

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Expert Assistant. Specifically for field of arts, design, and architecture, the requirement can be replaced by a recognition of competencies to the concerned from scientific community and institution;
2. A member of advisor team can come from an institution outside the university provided that he/she holds a doctoral degree or applied doctoral degree relevant to the study program, or has a professional certificate relevant to the study program and has qualifications equivalent to level 9 (nine) of KKNI;
3. Has good track records in his/her area of expertise indicated by works produced within the last 5 (five) years as the corresponding author in form of:
 - a. At least a paper in accredited national journal, or equivalent that can be in form of two nationally recognized artworks/designs; or
 - b. At least three papers in national seminars in accordance with his/her area of expertise;
4. Active in conducting researches in his/her area of expertise;
5. Has good track records as research advisor;

6. Complies with lecturer's code of conduct and has good scientific integrity.

2.7. Quality Standards of Master's Program Implementation with Partner Universities

Academic program of joint degree can be implemented by study programs that belong to the same family with a partner university with the following requirements:

1. The study program has been accredited B or Very Good by BAN PT;
2. Has the same study load of at least 50% of total study load;
3. Partner university has to have good reputation. For domestic university, it has to be accredited by BAN PT with grade of at least B or Very Good, and the accreditation of partner study program has to be the same as the study program of ITS;
4. If foreign partner university requires certain language skills, it will be set out further in cooperation agreement between ITS and partner university.

2.8. Quality Standards of Course Lecturers in Master's Program

To guarantee that the learning process can run well in accordance with the expectation, course lecturers have to meet the following qualifications:

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Lector. A lecturer who comes from an institution outside ITS has to hold a doctoral degree or applied doctoral degree relevant to the study program, or has a professional certificate relevant to the study program and has qualifications equivalent to level 9 (nine) of KKNI, and plays a role only as a teaching team member;
2. Has an authority in determining the information and facilities required for the smoothness and quality of study;
3. Has a field of expertise relevant to the subject taught;
4. Able to communicate well with students;
5. Able to give feedback on students' learning progress and abilities;
6. Guides maximum 4 (four) courses in postgraduate study program as person in charge.

CHAPTER III

ACADEMIC QUALITY STANDARDS OF DOCTORAL PROGRAM

3.1. Quality Standards of New Students

3.1.1. Doctoral Program of Regular Pathway

Candidates of new students of Doctoral Program of Regular Pathway have to meet the following academic and administrative requirements:

Academic Requirements

1. Has graduated from Master's Program with a study program accredited at least B or Very Good by BAN PT with GPA ≥ 3.00 (scale 4);
2. Has passed Doctoral Program entry exam including: academic potential test (TPKA) (minimum 450), TEFL or equivalent (minimum 477), field topical test (minimum 66), and interview (minimum 66), has been approved by new student admission department team, and has experiences in publishing scientific writings;
3. Candidates of new students from master's program of different fields or different education programs have to follow the regulation of past learning recognition (RPL).

Administrative Requirements

1. Submits an advisor candidate approval form and acknowledged by the head of postgraduate study program;
2. Submits 2 (two) recommendation letters from people who understand his/her background of abilities and skills in general aspects and academic abilities. The recommendation letters can come from: lecturer/academic advisor in bachelor's program, head of department/faculty of his/her previous university, or head of institution he/she works for;
3. Submits a list of research result publications done in accordance with the field pursued (including final project of S1 and thesis of S2);
4. Submits a design of dissertation proposal in accordance with the format specified;
5. Submits a letter of commitment to comply with academic and financial provisions/regulations applicable in ITS.

3.1.2. Doctoral Program of Research Pathway

Candidates of new students of Doctoral Program of Research Pathway have to meet the following academic and administrative requirements:

Academic Requirements

1. Has graduated from Master's Program with a study program accredited at least B or Very Good by BAN PT with GPA ≥ 3.00 (scale 4);
2. Has passed Doctoral Program entry exam including: academic potential test (TPKA) (minimum 450), TEFL or equivalent (minimum 500), field topical test (minimum 66), and interview (minimum 66), and has been approved by new student admission department team;
3. Has to have past learning recognition in form of research conducted and written in form of portfolio along with its evidence, which is equivalent to maximum 6 credits of Doctoral Program. The past learning recognition of research as aforementioned can be in form of:
 - a. 2 (two) publications that consist of international journal (indexed by Scopus or web of science); international seminar proceeding (indexed by Scopus or web of science); accredited national journal (Sinta 1 or Sinta 2), or combination of those; or
 - b. 1 (one) publication in international seminar proceeding (indexed by Scopus or web of science) and 1 (one) patent registered with Directorate General of Intellectual Property – Ministry of Justice and Human Rights – the Republic of Indonesia.The activity period of the past learning recognition as aforementioned is the last 5 (five) years.
4. Has a proposal of research topic consulted with candidate of promotor.

Administrative Requirements

1. Submits an advisor candidate approval form and acknowledged by the head of postgraduate study program;
2. Submits 2 (two) recommendation letters from people who understand his/her background of abilities and skills in general aspects and academic abilities. The recommendation letters can come from: lecturer/academic advisor in bachelor's program, head of department/faculty of his/her previous university, or head of institution he/she works for;
3. Submits a portfolio of research conducted within the last 5 years along with its proofs;
4. Submits a design of dissertation proposal in accordance with the format specified;
5. Submits a letter of commitment to comply with academic and financial provisions/regulations applicable in ITS.

3.1.3. Doctoral from Bachelor's Program (PDS)

Doctoral from Bachelor's Program is the implementation of doctoral education program for bachelor's graduates with extraordinary achievements through a probation period of one year in master's program.

Students of Doctoral from Bachelor's Program (PDS) have to meet the following academic and administrative requirements:

Academic Requirements

1. Extraordinary bachelor (fresh graduate) graduated within the last 3 years;
2. Holds a bachelor's degree (S1) with the following requirements of GPA:
 - GPA $\geq$ 3.25 for applicants coming from a university and a study program accredited A;
 - GPA $\geq$ 3.5 for applicants coming from a university accredited B and a study program accredited A;
 - GPA $\geq$ 3.5 for applicants coming from a university accredited A and a study program accredited B;
 - GPA $\geq$ 3.75 for applicants coming from a university and a study program accredited B;
3. Not older than 24 years old when registering;
4. Has passed Doctoral Program entry exam including: academic potential test (TPKA) (minimum 450), TEFL or equivalent (minimum 477), field topical test (minimum 66), and interview (minimum 66), has been approved by new student admission department team, and has experiences in publishing scientific writings.

Administrative Requirements

1. Submits an advisor candidate approval form and acknowledged by the head of postgraduate study program;
2. Submits 2 (two) recommendation letters from people who understand his/her background of abilities and skills in general aspects and academic abilities. The recommendation letters can come from: lecturer/academic advisor in bachelor's program, head of department/faculty of his/her previous university, or head of institution he/she works for;
3. Submits a list of research result publications done in accordance with the field pursued (including final project of S1);
4. Submits a design of dissertation proposal in accordance with the format specified;

5. Submits a letter of commitment to comply with academic and financial provisions/regulations applicable in ITS.

3.2. Quality Standards of Curriculum

The curriculum of Doctoral Study Program of ITS is designed to guarantee that the graduates have the qualifications equivalent to those in Indonesian National Qualification Framework (KKNI). The curriculum of Doctoral Study Program has to be equipped with documents containing information as described in sub-chapter 2.2. It is just that the study load of doctoral program is 42 credits after completing master's, applied master's, or specialist program; or 70 credits to complete PDS.

3.3. Quality Standards of Learning Process and Assessment

The quality requirements of learning process and assessment to be implemented in the academic process of Doctoral Program of ITS are as described in sub-chapter 2.3.

3.4. Quality Standards of Graduation

3.4.1. Doctoral Program of Regular Pathway

To graduate from Doctoral Program of Regular Pathway, students have to meet the following quality standards:

1. Has completed all study loads of minimum 42 credits, including dissertation within maximum 14 (fourteen) semesters for graduates of master's program;
2. Has completed all study loads of minimum 70 credits, including dissertation within maximum 14 (fourteen) semesters for graduates of bachelor's program;
3. Has passed all required study loads in accordance with respective study program with grade of minimum B;
4. The grade of dissertation exam is minimum B;
5. Has published the results of research related to dissertation in at least a paper accepted in reputable international journal and a paper presented verbally in reputable international seminar.

Reputable international journal is an international journal indexed by Scopus, or an international journal indexed by web of science with impact factor of more than 0.01;

6. Has met the requirements of English skills with TEFL score ≥ 500 . TEFL score (result of test at UPT Bahasa ITS) obtained when taking entry exam on the same level can be recognized as a requirement of graduation.

3.4.2. Doctoral Program of Research Pathway

To graduate from Doctoral Program of Research Pathway, students have to meet the following quality standards:

1. Has completed all study loads of minimum 42 credits, including dissertation within maximum 14 (fourteen) semesters for graduates of master's program of the same field;
2. Has passed all required study loads in accordance with respective study program with grade of minimum B;
3. The grade of dissertation exam is minimum B;
4. Has presented 1 (one) paper in a reputable international seminar added by:
 - a. A paper published in reputable international journal (indexed by Scopus at least Q2; or web of science with impact factor of more than 0.5); or
 - b. Two papers published in reputable international journal (indexed by Scopus at least Q3; or web of science with impact factor); or
 - c. A paper published in reputable international journal (indexed by Scopus at least Q3; or web of science with impact factor) and 1 registered and verified patent.

3.4.3. Doctoral Program of Collaboration with Partner Universities

Students of Doctoral Program of Collaboration with Partner Universities graduate from joint degree program if they have met the following requirements:

1. Has completed and passed minimum 50% of total credits required by ITS, excluding dissertation;
2. Has completed and passed all courses required by partner university through a process of equivalency to the curriculum system of ITS;
3. Has met the requirements of scientific publication and foreign language score.

3.5. Quality Standards of Dissertation

Production of dissertation has to be preceded by a dissertation proposal by the student.

3.5.1. Dissertation Proposal

1. Follows the format specified by ITS, containing at least:
 - a. Title of research;
 - b. Abstract;
 - c. Background;
 - d. Formulation of problems;
 - e. Goals of research;
 - f. Contributions and originality of research;
 - g. Literature review;
 - h. Research method;
 - i. Implementation schedule;
 - j. References;
2. Has been consulted and approved by advisors;
3. Has been presented before a team of advisors and examiners, and passed with grade of minimum B;
4. Dissertation proposal seminar focuses on the efforts to assess the element of novelty, originality, and usefulness.

3.5.2. Dissertation

1. Dissertation book is written following the format specified by ITS, containing at least:
 - a. Title of research;
 - b. Abstract;
 - c. Background;
 - d. Formulation of problems;
 - e. Goals of research;
 - f. Contributions and originality of research;
 - g. Literature review;
 - h. Research method;
 - i. Results of research;
 - j. References;
2. Has been consulted and approved by advisors;
3. Has been examined in dissertation exam before a team of examiners consisting of a team of advisors and at least three examiners, one of which comes from outside ITS, and passed

with grade of minimum B. The seminar focuses on the efforts to assess the element of novelty, originality, usefulness, and the results obtained.

3.6. Quality Standards of Dissertation Advisor

To guarantee that the process of guidance can direct to success of producing a high-quality scientific writing, each advisor has to meet the following requirements:

3.6.1. General Requirements

1. Has qualifications and competencies in accordance with the Academic Regulations of ITS;
2. Has an ability to determine the information and facilities required for the smoothness and quality of dissertation production;
3. Has academic qualifications and competencies of scientific field relevant to the theme of student's dissertation research, and has academic background relevant to the field of research handled so as to be able to give proper advices;
4. Has research track record relevant to the field of research reviewed by the student;
5. Conducts periodic, regular, and continuous guidance process;
6. Reads all reports written by the student guided and able to give feedback to develop his/her knowledge;
7. Has an initiative to introduce research groups and professional associations in the same field of science to the student guided;
8. Has an ability to play the role in the process of quality assurance of academic outcomes of Postgraduate Program of ITS;
9. Guides maximum 6 (six) students of doctoral program as the advisor team leader.

3.6.2. Requirements to be Advisor Team Leader

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Head Lector;
2. Comes from the study program where the doctoral student is registered. For a multidisciplinary study program, the advisor team leader can come from another study program that has a field of study the closest to the topic of student's dissertation research;
3. Does not enter retirement age within the next two years when accepting new students;
4. Advisor for Doctoral Program of Regular Pathway has to have good track records in his/her area of expertise indicated by works produced within the last 5 (five) years as the corresponding author in at least one paper in reputable international journal, or equivalent

that can be reputable international seminar proceeding (has been reviewed), a chapter of book, an internationally recognized artwork/design.

Advisor for Doctoral Program of Research Pathway has to have good track records in his/her area of expertise indicated by works produced within the last 5 (five) years as the corresponding author in at least two papers in reputable international journal;

5. Active in conducting researches in his/her area of expertise;
6. Has good track records as research advisor;
7. Complies with lecturer's code of conduct and has good scientific integrity.

3.6.3. Requirements to be Advisor Team Member

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Lector. Specifically for field of arts, design, and architecture, the requirement can be replaced by a recognition of competencies to the concerned from scientific community;
2. A member of advisor team can come from an institution outside the university provided that he/she holds a doctoral degree or applied doctoral degree relevant to the study program, or has a professional certificate relevant to the study program and has qualifications equivalent to level 9 (nine) of KKNI;
3. Does not enter retirement age within the next two years when accepting new students;
4. Has good track records in his/her area of expertise indicated by works produced within the last 5 (five) years in form of:
 - a. A paper in reputable international journal, or equivalent that can be in form of two artworks/designs, one of which has to be nationally recognized; or
 - b. A paper in accredited national journal, or equivalent that can be in form of two nationally recognized artworks/designs; or
 - c. Five papers in national seminars in accordance with his/her area of expertise;
5. Active in conducting researches in his/her area of expertise;
6. Has good track records as research advisor;
7. Complies with lecturer's code of conduct and has good scientific integrity.

3.6.4. Requirements to be Qualification and Dissertation Examiner

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Lector. Specifically for field of arts, design,

and architecture, the requirement can be replaced by a recognition of competencies to the concerned from scientific community and institution;

2. A member of advisor team can come from an institution outside the university provided that he/she holds a doctoral degree relevant to the study program, or has a professional certificate relevant to the study program and has qualifications equivalent to level 9 (nine) of KKNI;
3. Has good track records in his/her area of expertise indicated by works produced within the last 5 (five) years in form of:
 - a. At least a paper in reputable international journal, or equivalent in form of reputable international seminar proceeding (has been reviewed), a chapter of book, an internationally recognized artwork/design; or
 - b. At least five papers in national seminars in accordance with his/her area of expertise;
4. Active in conducting researches in his/her area of expertise;
5. Has good track records as research advisor;
6. Complies with lecturer's code of conduct and has good scientific integrity.

3.7. Quality Standards of Qualification Exam and Dissertation Exam

Doctoral Program qualification exam consists of written exam of field material mastery and verbal exam of research proposal design. Qualification exam has to meet the following quality standards:

3.7.1. Preparation of Qualification Exam

Qualification exam can be implemented if the doctoral program participant (PPD) has met the following requirements:

1. Has completed the study required to be taken of at least 6 (six) credits with grade of minimum B;
2. Has compiled dissertation research proposal guided by advisor team;
3. Has obtained written approval from advisor team to take qualification exam.

Qualification exam (for Doctoral Program of Regular Pathway) has to be done no later than the fourth semester for graduates of master's program of the same field, or no later than the sixth semester for graduates of master's program of different field and graduates of bachelor's program. For Doctoral Program of Research Pathway, qualification exam has to be done no later than the second semester. If it cannot be achieved, the student will be liable to sanctions in accordance with the provisions specified in Academic Regulations.

3.7.2. Doctoral Qualification Exam

Doctoral qualification exam is implemented with the following provisions:

1. Examiner team consists of advisor team and at least two examiners from ITS;
2. Exam is aimed to specifically assess the student's abilities in:
 - a. Both basic and specific scientific field;
 - b. Mastery of research methodology in related scientific field;
 - c. Reasoning including the ability to compose abstract;
 - d. Systematization and formulation of results of thought;
3. Doctoral Program Participant (PPD) passes qualification exam if he/she obtains a grade of minimum B.

3.7.3. Requirements of Dissertation Exam

Dissertation exam is implemented in form of closed exam. Doctoral promotion exam is optional that is only done for dissertations which produce phenomenal works theoretically or in application, which will give pride to ITS and be beneficial for people. The decision about whether it needs to organize doctoral promotion exam or not is taken by Qualification and Dissertation Exam Assessor Team (PPUKD) and Faculty Consideration Committee (KPF).

Closed exam can be done if the doctor candidate has met the following requirements:

1. Has completed the study required to be taken with grade of minimum B;
2. Has met the requirements of publication;
3. Has met the requirements of English skills (TEFL);
4. Has obtained an approval from advisor team to proceed with closed exam;
5. Has submitted a dissertation book signed by advisor team.

3.7.4. Dissertation Exam

Dissertation exam is done in form of closed exam with the following provisions:

- a. Dissertation examiner team consists of advisor team and at least three examiners other than the advisors. One of the examiner team members has to come from outside ITS. The examiner from outside ITS in assessing and evaluating can use online media;
- b. Closed exam is aimed to specifically assess the student's abilities in:
 - Both basic and specific scientific field;
 - Mastery of research methodology in related scientific field;

- Reasoning including the ability to compose abstract;
 - Systematization and formulation of results of thought;
 - Explaining the results of his/her research systematically in the scientific field;
- c. The grade of dissertation exam includes 20% grade of qualification exam, 50% grade of dissertation progress seminar, and 30% grade of closed exam;
- d. Examiners can only give minor revisions to the dissertations examined.

Graduation judgement is done after closed exam, with the following possibilities of judgement results:

- Graduated without revisions;
- Graduated with minor revisions.

For all doctor candidates graduating with revisions (either recommended for doctoral promotion exam or not), dissertation revisions have to be completed no later than 1 (one) month after judgement. Doctoral promotion exam can only be organized after the student completes dissertation revisions. If doctoral promotion exam is organized, the exam aims to assess the student's abilities in:

- Explaining the results of his/her research briefly and clearly as asked by dissertation examiner team;
- Promoting the results of his/her research to public.

3.8. Quality Standards of Implementation of Doctoral Program with Partner Universities

Academic program of joint degree can be implemented by study programs that belong to the same family with a partner university with the following requirements:

1. The study program has been accredited Excellent (A) by BAN PT or at least equivalent to the accreditation of study program of ITS; or a foreign study program accredited Good in respective country;
2. Has the same study load of at least 50% of total study load;
3. Partner university has to be accredited Excellent (A) by BAN PT, or a foreign university accredited Good in respective country;
4. If foreign partner university requires certain language skills, it will be set out further in cooperation agreement between ITS and partner university.

3.9. Quality Standards of Course Lecturers in Doctoral Program

Course lecturers in doctoral program have to meet the following qualifications:

1. Holds a doctoral degree from a university recognized by Ministry of Education and Culture and occupies an academic position of at least Head Lector. A lecturer can come from an institution outside ITS provided that he/she holds a doctoral degree or applied doctoral degree relevant to the study program, or has a professional certificate relevant to the study program and has qualifications equivalent to level 9 (nine) of KKNI, and plays a role only as a teaching team member;
2. Has an authority in determining the information and facilities required for the smoothness and quality of study;
3. Has a field of expertise relevant to the subject taught;
4. Able to communicate well with students;
5. Able to give feedback on students' learning progress and abilities;
6. Guides maximum 4 (four) courses in postgraduate study program as person in charge

CHAPTER IV

PROCEDURE FOR IMPLEMENTING QUALITY STANDARDS OF POSTGRADUATE PROGRAM

4.1. General Procedure

The work procedure described in the chapter only applies for Master's Program and Doctoral Program.

4.1.1. Work Procedure for Implementing Quality Standards of New Students

1. The Directorate of Postgraduate and Academic Development forms a New Student Admission Selection Committee of Master's and Doctoral Program and recommends the Rector to issue a Decision.
2. The Rector issues a Decision on New Student Admission Committee of Master's and Doctoral Program.
3. The Dean, upon recommendation from the Head of Department, determines the allotment of new students of master's and doctoral program.
4. The Directorate of Postgraduate and Academic Development determines the allotment of new students for each study program and makes the schedule of new student selection process of master's and doctoral program.
5. The Directorate of Postgraduate and Academic Development announces the registration of new students of master's and doctoral program via www.smits.its.ac.id.
6. The Directorate of Postgraduate and Academic Development receives and manages the files of registration forms from student candidates along with their completeness online.
7. The Dean coordinates the study programs under him/her to prepare problems of field material entry exam.
8. Each study program organizes field material exams in accordance with the specified schedule.
9. Each study program conducts interview test in accordance with the specified schedule.
10. The Directorate of Postgraduate and Academic Development invites the Heads of Study Programs to conduct a meeting of new student admission selection based on the results of entry exam.
11. The Vice Rector of Academic and Student Affairs prepares a Decision of Rector on new student candidate determination based on the results of meeting of new student admission selection.

12. The Rector issues a Decision on determination of new student admission of postgraduate program.
13. The Directorate of Postgraduate and Academic Development announces the results of selection via website www.smits.its.ac.id along with the schedule of reregistration.
14. The Sub-Directorate of Postgraduate Education and Professions reregisters the students after the determination of new students with the Decision of Rector.

4.1.2. Work Procedure for Implementing Quality Standards of Curriculum

1. Summative curriculum evaluation is implemented periodically every 5 (five) years. However, formative curriculum evaluation is also implemented every year to anticipate the developments related to learning forms and models.
2. The Vice Rector of Academic and Student Affairs forms a Curriculum Evaluation Team of ITS.
3. The Rector issues a Decision of Rector on Curriculum Evaluation Team of ITS.
4. The Dean forms a Curriculum Evaluation Team for each study program under him/her with a Decision of Dean.
5. The Curriculum Evaluation Team of ITS prepares a draft of curriculum evaluation manual of ITS.
6. The Rector sends the draft of curriculum evaluation manual to the Academic Senate for approval.
7. Each Curriculum Team of Study Program with coordination with each dean evaluates the curriculum that has been approved by the Academic Senate.
8. The Directorate of Postgraduate and Academic Development prepares academic regulations at the same time with the implementation of curriculum evaluation by each study program.
9. The results of curriculum evaluation on study program level are delivered to the Directorate of Postgraduate and Academic Development to be compiled and investigated for its conformity with curriculum manual.
10. The Directorate of Postgraduate and Academic Development prepares a draft of curriculum equivalence manual together with the dean.
11. The Rector sends the draft of curriculum equivalence manual to the Academic Senate for approval.
12. Each study program under the supervision of Faculty implements the curriculum equivalence within 3 (three) months before the new curriculum is effectively applicable.

13. The results of equivalence are reported to the Directorate of Postgraduate and Academic Development and furthermore are included in Academic SIM.

4.1.3. Work Procedure for Implementing Quality Standards of Learning and Assessment

1. The postgraduate study program prepares the schedule of courses along with the names of lecturers for each course no later than 3 (three) months before the study period starts.
2. The postgraduate study program proposes to the Faculty/Department the workloads of each lecturer to teach the courses of master's program and doctoral program.
3. The Dean issues a Decision on workloads of each lecturer with copies delivered to the Vice rector of Academic and Student Affairs and the Directorate of Postgraduate and Academic Development.
4. The postgraduate study program includes the schedule of courses in Academic SIM no later than 1 (one) week before the implementation of student FRS.
5. The postgraduate study program downloads the attendance list of each course from Academic SIM.
6. Each course lecturer conducts the study by following the syllabus and RPS contained in curriculum documents for 16 weeks (including evaluation) per semester.
7. The postgraduate study program conducts monitoring on the course implementation and reports to the dean every 4 weeks.
8. Each lecturer inputs grades online via Academic SIM no later than 2 weeks after the study period ends.

4.1.4. Work Procedure for Implementing Quality Standards of Postgraduate Program Lecturers

1. The head of postgraduate study program recommends the names of lecturer candidates to the dean through the head of department for current semester by considering the lecturers' workloads.
2. The dean reviews the qualifications of lecturer candidates and takes decisions:
 - a. To accept the recommendation of lecturer candidates who meet the requirements of quality standards;
 - b. To reject the recommendation of lecturer candidates along with the reasons for rejection and to ask the head of study program to recommend other lecturer candidates.
3. The dean issues a Decision of appointment of lecturers.

4.1.5. Work Procedure for Implementing Quality Standards of Graduates

The Sub-Directorate of Postgraduate Education and Professions via Judicium SIM prepares a list of names of graduate candidate students who have met the academic requirements (the number of credits taken and the requirements of grades).

1. The postgraduate study program examines other requirements including: publication, TEFL, thesis/dissertation, and administrative requirements, on the list of names of graduate candidate students on Judicium SIM. If the graduate candidates meet all requirements, the postgraduate study program proposes to proceed with judicium by ticking button 'proposed'.
2. The postgraduate study program prints the forms from Judicium SIM and submits them to the Head of Department as materials for pre-judicium meeting.
3. The Head of Department sends the files of results of pre-judicium meeting to the Dean and forwards to the Faculty Consideration Committee (KPF) to conduct judicium for graduate candidates.
4. The Dean sends the results of faculty judicium to the Vice Rector of Academic and Student Affairs.
5. The Rector in Management Meeting conducts judicium for graduate candidates. Specifically for doctoral program, judicium is implemented after closed exam no later than 2 weeks before graduation ceremony.
6. The Rector issues a Decision on the graduates who are entitled to attend graduation ceremony.

4.2. Work Procedure for Implementing Quality Standards of Master's Program

4.2.1. Work Procedure for Implementing Quality Standards of Thesis

1. The postgraduate study program appoints thesis advisors for each student of master's program with a Decision of Director of Postgraduate and Academic Development.
2. Students submit research proposals for thesis to their advisors.
3. Advisors examine the thesis proposals for conformity with the quality standards of thesis proposal.
4. Students conduct the research in accordance with research proposal after obtaining approval from their advisors.
5. Advisors monitor the execution of student's research at least once every month.
6. Students deliver thesis based on the results of research conducted to their advisors.

7. Advisors examine the thesis for conformity with the quality standards of thesis.
8. Students write a journal article for publication purpose.
9. The postgraduate study program makes a list of names of students whose thesis is approved by the advisors and determines the schedule of thesis exam no later than 2 months before judgement of ITS for students whose thesis has obtained approval from the advisors.
10. The postgraduate study program reports the results of thesis examination to the department by attaching a copy of journal article to be forwarded to the Faculty.
11. The Faculty examines the administrative requirements for thesis exam participant students in order of judgement preparation.

4.2.2. Work Procedure for Implementing Quality Standards of Thesis Advisor

1. The postgraduate study program creates a profile of thesis advisor candidate lecturer containing his/her area of expertise and announces to students who will take thesis.
2. Each student consults with advisor candidates who have area of expertise of his/her interest and requests for approval to be thesis advisors. Lecturer approval is done by filling a form provided and signing it.
3. Each student submits the approval form signed by advisor candidates to the head of postgraduate study program.
4. The head of postgraduate study program recommends the advisor candidates to the Director of Postgraduate and Academic Development through the head of department.
5. The Director of Postgraduate and Academic Development issues a Decision on appointment of thesis advisor by considering the workloads of the lecturer recommended. Change of thesis advisor is possible before the student takes proposal exam, upon the student's suggestion with approval from the Head of Study Program. Change of thesis advisor after proposal exam is only possible for urgent reasons, upon approval from the Head of Study Program, Department, and the Dean.

4.3. Work Procedure for Implementing Quality Standards of Doctoral Program

4.3.1. Work Procedure for Implementing Quality Standards of Dissertation Advisor

1. The postgraduate study program creates a profile of dissertation advisor candidate lecturer containing his/her area of expertise for student candidates of doctoral program.
2. Each student candidate consults with advisor candidates who have area of expertise of his/her interest and requests for approval to be dissertation advisors if he/she is accepted

to be a doctoral program student. Lecturer approval is done by filling a form provided and signing it.

3. Each student submits the approval form signed by advisor candidates along with new student registration form.
4. The head of postgraduate study program recommends the dissertation advisor candidates to the Director of Postgraduate and Academic Development through the head of department for students who are accepted in doctoral program.
5. The Director of Postgraduate and Academic Development issues a Decision on appointment of doctoral advisor by considering the workloads of the lecturer recommended. Change of dissertation advisor is possible before the student takes qualification exam. Change of advisor after qualification exam is only possible for urgent reasons, upon approval from the Head of Study Program, Department, and Faculty.

4.3.2. Work Procedure for Determining Qualification and Dissertation Examiner Team

1. The head of postgraduate study program recommends the candidates of qualification and dissertation examiner team to the Directorate of Postgraduate and Academic Development through the head of department by considering the workloads of each lecturer. For closed exam, one of examiner team members has to come from outside ITS.
2. The Director of Postgraduate and Academic Development reviews the qualifications of examiner candidates and takes decisions:
 - a. To accept the recommendation of examiner candidates who meet the requirements of quality standards;
 - b. To reject the recommendation of examiner candidates and to ask the head of study program to recommend other examiner candidates.
3. The Director of Postgraduate and Academic Development issues a Decision on qualification and dissertation examiner team (PPUKD).

4.3.3. Work Procedure for Implementing Qualification Exam

1. PPD has completed the study required to be taken of at least 6 (six) credits with grade of minimum B.
2. PPD prepares a research proposal for dissertation under guidance by an advisor team. The advisor team monitors the progress of preparation of research proposal at least once every month.

3. Research proposal that has been approved by the advisor team is submitted to the head of department along with a recommendation of names of Qualification and Dissertation Examiner Team (PPUKD).
4. PPUKD Team consists of advisor team and examiner team. For qualification exam, involvement of examiners from outside ITS is not a must.
5. The Directorate of Postgraduate and Academic Development issues a Decision on determination of PPUKD Team proposed by the department.
6. PPUKD Team examines the research proposal before assessment in qualification exam.
7. The postgraduate study program sets the schedule of qualification exam.
8. PPD takes qualification exam before PPUKD Team. The advisor team leader acts as the chairman of exam.
9. The postgraduate study program reports the results of assessment of qualification exam to the department to be forwarded to the Directorate of Postgraduate and Academic Development.
10. The Directorate of Postgraduate and Academic Development issues a Decision on determination of doctor candidates.

4.3.4. Work Procedure for Implementing Dissertation Progress Report/Seminar

1. Progress report is done by the Study Program at least once every semester.
2. The Head of Study Program examines the names of doctor candidates who have to present their progress report.
3. The doctor candidates submit the files of progress report to the Study Program.
4. The doctor candidates present their progress report before PPUKD Team (without any examiners from outside ITS).
5. The Study Program reports the results of progress report to the Faculty through the Department.
6. If a doctor candidate does not attend dissertation progress seminar twice in a row, it will be considered as a resignation.

4.3.5. Work Procedure for Implementing Quality Standards of Dissertation

1. Each doctor candidate who has met the requirements submits dissertation to advisor team.
2. The advisor team examines the dissertation for conformity with the quality standards of dissertation.

3. The Head of Study Program assesses the administrative eligibility of PPD to take dissertation exam. Eligibility test is organized 2 weeks before closed exam.
The administrative completeness of doctor candidate consists of the number of credits taken, attending dissertation progress seminar periodically each semester, having passed doctoral qualification exam, scientific publication provided that the affiliation is ITS with promotor or co-promotor as the corresponding author, proof of passing TEFL, and dissertation draft.
4. The Head of Study Program sends the documents of journal articles to the head of department to be forwarded to KPF through the faculty.
5. The postgraduate study program prepares a list of names of doctor candidates who have passed eligibility test, and whose dissertations have been approved by advisor team, and sets the schedule of dissertation exam.
6. Each doctor candidate takes closed exam before PPUKD Team.
7. The postgraduate study program reports the results of dissertation exam to KPF.
8. KPF conducts judicium after closed exam, with graduation status contained in minutes of judicium.
9. Each doctor candidate is required to complete the revisions (if any) given by the examiners no later than 1 (one) month after judicium. In such condition where revisions cannot be completed because the examiner team does not perform their obligation to do correction on the results of revisions, the revisions will be considered done.

4.3.6. Work Procedure for Implementing Dissertation Closed Exam

1. Closed exam is scheduled after the doctor candidate meets the requirements.
2. The doctor candidate conducts closed exam before PPUKD Team by involving examiners from outside ITS.
3. The first advisor acts as the chairman of closed exam.
4. Closed exam is conducted for 1 to 2 hours started with a presentation of dissertation by the doctor candidate and continued with questions and answers by PPUKD Team.
5. PPUKD Team assesses the closed exam.
6. In event of Force Majeure, closed exam can be conducted fully online.

4.3.7. Procedure for Implementing Doctoral Promotion Exam

1. Doctoral promotion exam is conducted upon recommendation from PPUKD Team. Promotion exam can be conducted after the doctor candidate completes all revisions given by the examiners during closed exam.
2. The Head of Study Program appoints the chairman of exam (with academic position of at least Head Lector) outside PPUKD Team to lead the course of doctoral promotion exam.
3. A special meeting on doctoral promotion exam is opened by the chairman of exam.
4. Doctoral promotion exam is also attended by appointed representatives of KPF and invited guests. The presence of examiners from outside ITS is not a must.
5. Doctoral promotion exam is conducted for 1 to 2 hours which includes a brief presentation of dissertation research by the doctor candidate and continued with questions and answers by PPUKD Team, without crossing.

CHAPTER V

PROCEDURE FOR MONITORING AND EVALUATING QUALITY STANDARDS OF POSTGRADUATE PROGRAM

5.1. Work Procedure for Monitoring and Evaluating Quality Standards of New Students

1. The Quality Assurance Office (KPM) evaluates and monitors the conformity of procedure of new student admission of master's and doctoral program with the quality standards of new student admission.
2. The results of evaluation are delivered to the dean to be forwarded to the Director of Postgraduate and Academic Development.
3. The Director of Postgraduate and Academic Development conducts a meeting with the deans to discuss any quality problems that are still found and proposes the implementation of improvement to the Vice Rector of Academic and Student Affairs to be followed up.

5.2. Work Procedure for Monitoring and Evaluating Quality Standards of Learning and Assessment

1. KPM prepares the indicators and the schedule of monitoring and evaluation on the implementation of learning process and assessment.
2. The Quality Team of postgraduate study program (Course Family Coordinator) monitors the implementation of study in accordance with the indicators and the schedule specified.
3. The Quality Team of postgraduate study program (Course Family Coordinator) reports the results of evaluation to the Head of postgraduate study program to be forwarded to the Head of Department.
4. The Head of Department sends a letter to each lecturer, based on the results of evaluation, whose course does not meet the requirements for exam and given an opportunity to extend the course.
5. The results of evaluation of postgraduate study program are delivered to the Department to be forwarded to KPM to be discussed further.
6. The Dean delivers suggestions of improved procedure of learning process and assessment to the Vice Rector of Academic and Student Affairs to be discussed and followed up.

5.3. Work Procedure for Monitoring and Evaluating Quality Standards of Thesis/Dissertation

1. Each advisor has to monitor and evaluate the progress of thesis/dissertation production by student guided periodically in form of:
 - a. Assistance at least once every month;
 - b. Presentation in thesis/dissertation progress seminar forum at least once every semester.
2. Each advisor has to evaluate the paper to be published and facilitate so that publication can be done.
3. Each advisor has to review the content of thesis/dissertation for conformity with the quality standards.

5.4. Work Procedure for Monitoring and Evaluating Quality Standards of Doctoral Qualification Exam

1. The Dean has to conduct inspection in the middle of each semester on the data of doctoral program participants who are eligible to take qualification exam.
2. The Deans sends a letter to the Head of Department to proceed with the preparation of qualification exam for the eligible doctoral program participants.
3. The Head of Department reports the reasons for postponement if a doctoral program participant cannot take qualification exam.
4. The Dean records the names of qualification exam participants who postpone taking qualification exam and reprocess in the following semester.

5.5. Work Procedure for Monitoring and Evaluating Quality Standards of Graduates

1. The Sub-Directorate of Postgraduate Education and Professions sends a list of names of students who have met the requirements of graduation based on the achievement of credits and GPA taken from Judicium SIM to the Dean.
2. The Dean reviews the content of report and gives notes if there is a deviation.