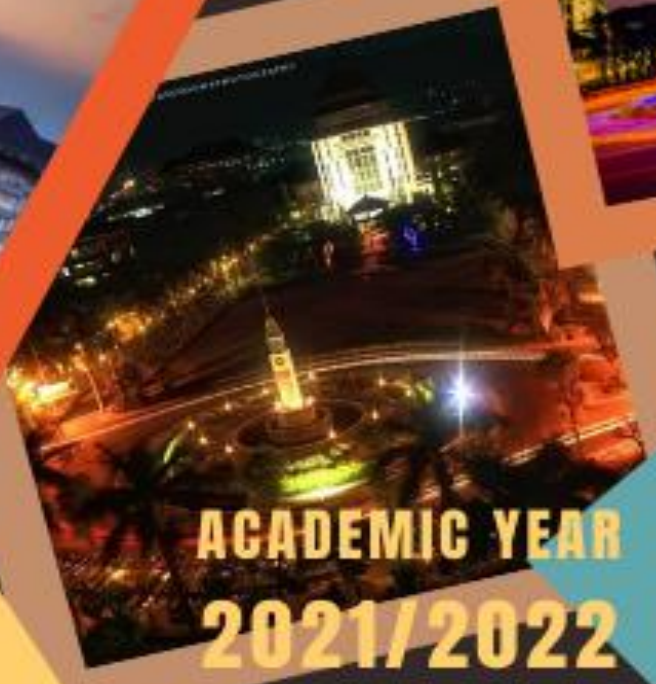
MASTER THESIS GUIDEBOOK

FACULTY OF ABRICULTURAL TECHNOLOGY
UNIVERSITAS BRAWIJAYA



ACADEMIC YEAR
2021/2022

FINAL PROJECT GUIDE

MASTER STUDY PROGRAM

DRAFTING TEAM
FTP FINAL PROJECT GUIDEBOOK

FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG
2021

GUIDEBOOK

THESIS

DRAFTING TEAM
FTP FINAL PROJECT GUIDEBOOK

FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG
2021/2022

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FOREWORD

The Faculty of Agricultural Technology (FTP) Universitas Brawijaya has three Master programs, namely the Master Program in Agricultural Industrial Technology, the Master Program in Agricultural Engineering and the Master Program in Agricultural Product Technology. This manual for writing scientific papers is prepared as a reference for all Master Program students in the FTP environment in writing scientific papers, the supervisor/advisor commission for the Master Program in the FTP environment. This manual is especially prepared as a basic guide in writing procedures, systematics and typing formats for scientific papers. However, in some cases inserted logic of thinking, the reasons for the writing sequences used in this guide.

The drafting team has tried to accommodate all opinions, especially the Head of the Study Program in the FTP Masters environment, thus it is hoped that it has fulfilled the expectations of all study programs in the FTP Masters Program. S-2 students in compiling scientific papers are required to follow the provisions written in this writing guide. The supervising/advising committees are also expected to read this book well, so that they can direct the format of their students' writing.

The drafting team has been trying to improve this second edition, although we believe there are still shortcomings, which of course can be improved in the future. Finally, I would like to thank the Drafting Team for publishing this Manual.

Malang, August 2021
Dean,

Prof. Dr. Ir. Imam Santoso, MP
NIP19681005 199512 1 001

KEPUTUSAN
DEKAN FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS BRAWIJAYA
NOMOR 94 TAHUN 2021

Tentang

PANDUAN TUGAS AKHIR PROGRAM STUDI MAGISTER (TESIS)
FAKULTAS TEKNOLOGI PERTANIAN UNIVERSITAS BRAWIJAYA
TAHUN AKADEMIK 2021/2022

DEKAN FAKULTAS TEKNOLOGI PERTANIAN UNIVERSITAS BRAWIJAYA

Menimbang :

a. Bahwa dengan diterbitkannya Pedoman Pendidikan Universitas Brawijaya Tahun Akademik 2021/2022, maka Panduan Tugas Akhir Program Studi Magister (Tesis) Fakultas Teknologi Pertanian perlu disempurnakan agar sesuai dengan ketentuan-ketentuan yang ada pada Pedoman tersebut.
b. Sehubungan dengan butir a diatas, perlu diterbitkannya Panduan Tugas Akhir Program Studi Magister (Tesis) Fakultas Teknologi Pertanian Universitas Brawijaya Tahun Akademik 2021/2022.

Mengingat :

1. Undang-Undang RI Nomor: 20 tahun 2003 tentang Sistem Pendidikan Nasional
2. Undang-Undang Republik Indonesia Nomor 12 Tahun 2012 tentang Pendidikan Tinggi
3. Peraturan Pemerintah Republik Indonesia nomor : 17 tahun 2010 tentang Pengelolaan dan Penyelenggaraan Pendidikan
4. Keputusan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor:012a/O/1998 tentang Pendirian Fakultas Teknologi Pertanian
5. Keputusan Menteri Pendidikan Nasional Republik Indonesia nomor : 080/O/2002 tentang Statuta Universitas Brawijaya.
6. Peraturan Menteri Pendidikan dan Kebudayaan No. 3 Tahun 2020 tentang Standar Nasional Pendidikan Tinggi
7. Keputusan Rektor Universitas Brawijaya No. 308 Tahun 2019 tentang Pemberhentian dan Pengangkatan Dekan Fakultas Teknologi Pertanian Universitas Brawijaya.
8. Peraturan Rektor Universitas Brawijaya Nomor 52 Tahun 2018 Tentang Publikasi Ilmiah sebagai Bagian Tugas Akhir Pendidikan Program Magister dan Program Doktor
9. Peraturan Dekan Fakultas Teknologi Pertanian No. 4 Tahun 2021 Pelaksanaan Tugas Akhir Program Magister Bertahap di Fakultas Teknologi Pertanian Universitas Brawijaya

MEMUTUSKAN

Menetapkan :

Kesatu : Tim Penyusun Panduan Tugas Akhir Program Studi Magister (Tesis) Fakultas Teknologi Pertanian Universitas Brawijaya Tahun Akademik 2021/2022 sebagaimana yang tercantum dalam lampiran Surat Keputusan ini.

Kedua : Panduan Tugas Akhir Program Program Studi Magister (Tesis) Fakultas Teknologi Pertanian Universitas Brawijaya Tahun Akademik 2021/2022 sebagai pengganti buku panduan Tugas Akhir Program Studi Magister (Tesis) sebelumnya dan menjadi acuan seluruh unit pelaksana akademik di Fakultas Teknologi Pertanian Universitas Brawijaya.

Ketiga : Keputusan ini berlaku sejak tanggal ditetapkan dan apabila di kemudian hari terdapat kekeliruan dalam keputusan ini akan diadakan perbaikan sebagaimana mestinya.

Ditetapkan di : Malang
Pada tanggal : 15 Agustus 2021
Dekan,

IMAM SANTOSO
NIP. 196810051995121001

Tembusan :
1. Wakil Dekan di lingkungan FTP-UB
2. Ketua Jurusan di lingkungan FTP-UB
3. Koordinator Tata Usaha FTP-UB
4. Sub Koordinator Subbagian di lingkungan FTP-UB

LAMPIRAN I : KEPUTUSAN DEKAN
FAKULTAS TEKNOLOGI PERTANIAN
NOMOR 94 TAHUN 2021
TANGGAL 15 AGUSTUS 2021

TIM PENYUSUN PANDUAN TUGAS AKHIR PROGRAM STUDI MAGISTER
(TESIS)
FAKULTAS TEKNOLOGI PERTANIAN UNIVERSITAS BRAWIJAYA
TAHUN AKADEMIK 2021/2022

Pengarah	:	Prof. Dr. Ir. Imam Santoso, MP
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Anggota	:	1. Dr. Widya Dwi Rukmi Putri., STP., MP 2. Achmad Adi Sulianto, Dr. Eng., STP., M.Eng 3. Dr. Siti Asmaul Mustaniroh, STP., MP 4. Wenny Bekti S, STP.,M.Food.St.,Ph.D. 5. Dr. Mohammad Bagus Hermanto, S.TP.,M.Sc. 6. Sri Suhartini, STP., M.Env.Mgt.,Ph.D 7. Ir. Aji Sutrisno, M.Sc.,Ph.D. 8. Dr. Sucipto, STP.,MP. 9. Dr. Ir. Sandra Malin Sutan, MP

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PART I
THESIS IMPLEMENTATION PROCEDURE

CHAPTER 1 INTRODUCTION

Thesis is a scientific work that expresses problems and theories that explain the process and/or choices of forms of problem solving whose validity and reliability have been proven through research using scientific methods. As a scientific paper, a thesis is the result of a systematic study of a problem. The thesis contains methods of collecting, analyzing and processing data, and presenting conclusions and proposing recommendations.

In the education system in the Master Program of FTP-UB, a thesis is part of the requirements for students to obtain a Master's degree. The final work in the form of a thesis can be started after students have completed lecture assignments. Before carrying out research, students are required to make a research design, conduct seminars, and then obtain approval from the supervisory commission.

In writing a thesis, the originality of the thesis must appear to indicate independent and critical thinking. The writing is standard and the thesis is defended in court. The thesis is argumentative and resulted from a research process that has a certain weight of originality. Writing a thesis requires: clarity of argument, weight of argument, ease of understanding at least by the academic community, practical use for society and the profession. The thesis always assumes the existence of certain theoretical arguments that are referred to.

Thesis research is in the form of submitting a (new) theory, testing (application) of the theory, and assessing the theory that has been documented. Arguments must be clear and explicit, will increase the reader's knowledge. The arguments are well presented, reflected in the literature review and supporting data. The thesis has the weight of novelty, in terms of developing a theory or concept, offering an appropriate methodology, or exploring important data that has never or rarely been done. This novelty will have a contribution to the development of the science involved. The thesis must be comparable with other scientific works (comparison items: method, time/period or other).

This writing format guidebook was prepared with the aim of (1) uniforming the format of writing scientific papers in the Master Program of FTP-UB, (2) being used as a guide for students in writing scientific papers as well as a supervisor/advisor commission in directing the writing of student scientific papers.

The supervising commission for Master Program students has academic responsibility for student scientific work, in terms of scientific truth and writing format. This academic responsibility is marked by the signature of the supervisor or advisory commission affixed in the student's scientific work approval sheet. Therefore, students must obtain the approval of each supervisory committee to take the thesis exam. There are differences in rights and authority between examiners-supervising lecturers and examiners outside the supervisory commission. All examiners have the right to test students' ability to defend their scientific work. However, it is not appropriate for the supervising commissions to question or question the scientific truth of the student's scientific work at the time of the examination, because the scientific work is the result of their guidance.

CHAPTER 2. REGULATIONS RELATING TO THESIS

2.1. Thesis Limits and Status

1. Thesis is an academic paper resulting from an in-depth research study that is carried out independently and contains a new contribution to the development of science and/or technology carried out by a master candidate under the supervision of his supervisor.
2. Thesis is a final task that must be carried out by master program students at Brawijaya University.

2.2. Purpose of Thesis

1. Thesis preparation is intended so that students are able to make a description, analysis and synthesis of the facts/symptoms studied or the results of the study of mathematical theories and/or new designs that they have designed themselves, or modify/develop mathematical theoretical models, and/or designs that already exist. first proven in accordance with scientific rules.
2. Research is a rule-abiding activity in an effort to find the truth and/or solve problems in science, technology and/or art.

2.3. Forms of Activities to Get Data/Facts

1. The data or facts used as the basis for the preparation of the Thesis must come from research activities, either in the form of surveys and/or experiments with a statistical/mathematical approach, or the results of an in-depth study of mathematical theories/models in accordance with their scientific field.
2. Data must be obtained honestly and free from plagiarism elements.

2.4. Amount of Thesis Study Load

1. Thesis has a minimum study load of 12 credits for Masters.
2. The Dean of the Faculty at the suggestion of the Head of the Postgraduate Study Program describes the magnitude of the thesis study load based on the form of activity, into the study/study and the outpouring of time for its implementation.

2.5. Substance and Depth of Study/Review

The substance of the thesis is the development of science, technology or art according to the scientific field and must be in accordance with the scope of the scientific field in the study program where the student is enrolled. The thesis that is prepared must reflect scientific autonomy without any intervention from other parties, adhere to the principle of academic freedom, can be submitted in a seminar that adheres to the freedom of the academic pulpit and in the mentoring process promotes partnership between lecturers and students.

2.6. Student Requirements, Obligations and Rights

1. Students can carry out a series of activities related to the Thesis after fulfilling the academic and administrative requirements that have been determined by the faculty.
2. Students are required to compile a thesis based on ethics and scientific manners, honest and free from plagiarism elements and refer to the Thesis and Dissertation Handbook.

3. The Advisory Lecturer can use the data in the Thesis as material for publication in scientific journals/magazines or mass media by paying attention to ethics and scientific manners.
4. All forms of output in the form of intellectual property rights, articles in scientific journals and others related to the material/substance of the Thesis are shared rights between students, their supervisors and the university.
5. In the event that the research implementation is in collaboration with other parties, the right to use data and all forms of output in the form of intellectual property rights and other forms is regulated in a cooperation agreement approved by the Dean.
6. The provisions on ownership and intellectual property rights resulting from the Thesis, as referred to in the provisions in paragraph 4 are regulated separately by the Chancellor.
7. Further provisions related to the requirements, rights and obligations of students as well as other provisions as referred to in paragraphs 1 to 5 in carrying out the Thesis shall be regulated by the Dean.

2.7. Qualifications, Determination, Rights and Obligations of Supervisors

1. Thesis preparation is directed by 2 (two) Supervisors or more who hold a doctorate in the appropriate field of science, or at least in the same scientific sub-group as the study program in which the student is registered, and at least has the functional position of Lecturer.
2. Thesis Advisory Lecturers are appointed by the Dean of the Faculty at the suggestion of the Head of the Postgraduate Study Program.
3. Further provisions regarding qualifications, procedures for determining, rights and obligations of Supervisors are regulated by the Postgraduate Program of FTP UB.

2.8. Thesis Assessment Components

1. The assessment of the thesis research proposal is carried out by the examiner team in the thesis proposal seminar exam forum, the examiner team consists of supervisors and examiners.
2. Assessment of research implementation and thesis writing is carried out by the supervisor.
3. The evaluation of the thesis research results seminar is carried out by a team of supervisors in the thesis research seminar examination forum.
4. The assessment of the thesis exam is carried out by the examiner team in the thesis exam forum. The testing team consists of supervisors and examiners.
5. The requirements for examining lecturers are lecturers with doctoral education with a minimum functional position of lector.
6. The assessment criteria follow the academic guidelines in each study program.
7. The percentage of assessment components following the standard is set in 4 components, namely (a) research proposals, (b) research implementation, (d) seminar results and (e) thesis exams.

2.9. Thesis Component Assessment Weight

Values are assigned according to the applicable system. The final value is the average (weighted) of the previously mentioned values.

1. The minimum pass score for the thesis exam is B. If it is less than that value, students must repeat the thesis exam and are given the opportunity to take one test. If the student does not pass again, then the person concerned is given a special task (with the approval of the supervisory commission) to improve his thesis text or is declared a failure in the study of the Postgraduate program.
2. The revision of the thesis manuscript (based on suggestions from the thesis examiner team) must be completed no later than one month after the thesis examination. If the specified repair time limit has expired and the revision of the

thesis manuscript has not been completed and the student is given a grade reduction sanction as described in point 3.7.ex

3. Students who have passed the thesis exam, and have made improvements with the approval of the supervisory commission, can duplicate a certain amount of the thesis text (for the Advisory Commission, Postgraduate Program Organizers, Brawijaya University and other parties who require it). The thesis manuscript is then ratified and signed by the Supervisory Commission and the Head of the Postgraduate Program Organizer.

CHAPTER 3. THESIS IMPLEMENTATION FLOW

3.1. Thesis Supervisor

a. In carrying out the thesis, students are guided by One Main Advisor and one Companion Lecturer with the requirements of S3 education with a minimum functional position of Lector.
b. The distribution of supervisors is carried out in the middle of the first semester.
c. After the distribution of the thesis supervisor, students are required to consult with the supervisor for the topic and implementation of thesis research.

3.2. Proposal Preparation

a. After getting a supervisor and the requirements for the final project, the student consults with the supervisor 1 and begins to prepare a proposal for the final project in the form of a research proposal.
b. When consulting with the supervisor, students are required to record in a logsheet (Appendix 4) signed by the supervisor

3.3. Proposal exam

a. After the proposal is prepared and approved by the supervisor, students carry out a closed proposal examination with two examiners.
b. The requirements for examining lecturers are minimum S3 education with a minimum functional position of lector.
c. The proposal test is carried out for a maximum of 90 minutes.
d. The components and weights for the assessment of the thesis proposal can be seen in Table 3.1.

Table 3.1. Thesis Proposal Assessment Components

No.	CPMK	Components (with assessment according to the rubric)	Criteria	%
1	CPMK 1	Able to sort and formulate relevant thesis and literature topics	1. A good thesis topic according to the rules contains: important now and in the future, something new for science, beneficial for science and society. 2. Up-to-date and relevant literature: the theoretical basis for research topics, methods, variables and indicators	15
2	CPMK 2	Able to wheezeidentification, formulating, and alternative problem solving	1. Problem identification is stated clearly and systematically 2. Able to formulate problems associated with explanations in the background in the proposal 3. Able to provide solutions to problems 4. Solutions to the problem of hookups with research methods designed	15
3	CPMK 3	Able to develop conceptual framework and research operations.	1 The research concept framework is structured systematically and is easy to understand 2 The research concept framework is supported by adequate and relevant literature	20

			3 The research concept framework is clearly formulated 4 The conceptual framework of research is related to the operational framework of research 5 Linked operational framework with the designed method 6 The operational framework is in the form of general operational steps that will be implemented	
4	CPMK 4	Able to write a good thesis proposal in terms of language and typography.	1 Thesis is written in clear, systematic, easy-to-understand language 2 No typographical errors 3 Aesthetic writing 4 Writing follows the PUEBI rules 5 The writing follows the FTP UB Final Project Guidebook	15
5	CPMK 5	Able to plan and develop research methods as planned.	1 The research method is related to the formulation of the problem, conceptual framework, and research operational framework 2 Reliable research methods (can be implemented) 3 The method used is up to date according to the weight of the thesis 4 Methods are written systematically and in detail 5 The analysis carried out is relevant and in accordance with the problems that have been identified 6 Methods supported by up-to-date libraries	20
6	CPMK 6	Able to master state of the art knowledge of research topics and writing in proposals	1 Backed by up-to-date libraries (less than last 10 years) 2 Mastering state of the art research 3 Mastering the content of the proposal well 4 Able to answer questions well 5 Mastering the latest issues related to designed research methods 6 Able to explain the method and analysis well	15
Amount				**100**

3.4. Research Implementation

a. Students carry out activities for thesis preparation. During the implementation of the final project, students are required to consult with supervisor 1 and supervisor 2. Consultation activities must be recorded in a logsheet which can be seen in Appendix 4 The logsheet must be signed by the supervisor every time a consultation.
b. During data collection activities, students are required to record activities in a logbook in accordance with Attachment 5. The logbook is signed by the party verifying data collection activities such as technicians/laborers.
c. Components of Thesis Research Implementation Assessment can be seen in Table 3.2.

Table 3.2. Components of Assessment of Thesis Research Implementation

Assessment criteria	Score (1-100)	Weight	Value Number x Weight
A. Research competence (50%)			
1. Commitment and perseverance		15	
2. Initiative and creativity		15	
3. Independence		15	
4. Efficiency at work		15	
5. Research skill development		15	
B. Data analysis ability			
1. Able to perform data analysis appropriately		15	
2. Able to process data well		10	
Total Number Value			
Letter Value			

3.5. Preparation of Thesis Draft

a. Students prepare a thesis draft in consultation with the supervisor.
b. Consultation activities must be recorded in a logsheet and signed by the supervisor every time there is a consultation.

3.6. Research Results Seminar

a. After the supervisor approves the thesis draft and the requirements for the final exam are met, the student
b. The results seminar was attended by both supervisors and no examiner lecturers
c. Students carry out research seminars attended by a minimum of 5 students.
d. The result seminar is held for a maximum of 90 minutes
e. The components and weights of the result seminar assessment can be seen in Table 3.3.
f. If a student attends a national or international seminar as an oral presenter, the national/international seminar can be a substitute for the results seminar. The components and weights of national/international seminar assessments by supervisors can be seen in Table 3.4. The topics presented must be related to the research topic. The assessment is carried out by the main supervisor and thesis assistant

Table 3.3. Thesis Seminar Assessment Components

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%
1.	CPMK 1	Able to write scripts according to scientific rules	Writing articles according to scientific rules characterized by: 1. Abstract represents the overall content of the article (background, objectives, methods, results and conclusions) 2. Introduction contains state of the art 3. The methodology used can solve the problem 4. Discussion related to research results 5. Make conclusions that have a correlation with the goal	35
2	CPMK 2	Able to present articles orally	Excellent presentation characterized by: 1. Good mastery of the material. 2. Power point in the form of interesting, artistic points	35

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%
3	CPMK 3	Able to communicate scientifically	Excellent communication characterized by 1. Presentation with appropriate voice intonation, not too fast or slow, not memorized, 2. Master the audience, master the material 3. Correct and appropriate timing 4. Polite	30
Amount				**100**

Table 3.4. Thesis Seminar Assessment Components through National/International Seminars

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%
1.	CPMK 1	Able to write scripts according to scientific rules	Writing articles according to scientific rules characterized by: 1. Abstract represents the overall content of the article (background, objectives, methods, results and conclusions) 2. Introduction contains state of the art 3. The methodology used can solve the problem 4. Discussion related to research results 5. Make conclusions that have a correlation with the goal	35
2	CPMK 2	Able to present articles orally	Excellent presentation characterized by: 1. Power points in the form of interesting, artistic, aesthetic points 2. Powerpoint is very communicative 3. Powerpoint is easy to understand	35
3	CPMK 3	Able to communicate scientifically	The quality of the seminar	30
Amount				100

3.7. Thesis Publication

Students are required to publish scientific articles in indexed international journals according to UB Chancellor's Regulation No. 52 of 2018, or accredited national journals with a minimum rank of Sinta 2, national journals approved by the UB Chancellor, or publications in Scopus indexed proceedings. This scientific publication is prepared based on the results of thesis research. In the preparation of scientific publications and the selection of journals, students must consult with their supervisors. Proof of submitting manuscripts to scientific journals and proof that the manuscripts have been sent or are under review are one of the requirements for the thesis examination. The components of the assessment of thesis publications can be seen in Table 3.5 and the components of the assessment of thesis publication guidance can be seen in Table 3.6.

Table 3.5. Components of Thesis Publication Assessment

No	Component Rating	Bweight %
1.	Quality of Journal/Proceeding Publishing	15
2.	Introduction	10
3.	Methods	15
4.	Results and Discussion	30
5.	Conclusion	5
6.	Reference	10
7.	Abstract	5
8.	English Quality	10
Amount		**100**

Table 3.6. Components of Thesis Publication Guidance Assessment

Rating Points		Rating Score				Proportion (%)	Score
		1	2	**3**	4		
1	Completeness of the journal is fulfilled according to the journal/proceeding guidelines and the required conditions					20	
2	Revisions were carried out well and reviews from reviewers were responded well					30	
3	Seriousness in compiling journals					10	
4	Independence in compiling journals					10	
5	Difficulty level in publication					10	
6	Timeliness in preparing journals					10	
7	Intensity of mentoring					10	
		Total Value					
		Final Score = Total Score : 4					

Information:
1 = Bad, 2 = Fair, 3 = Good, 4 = Very good

3.8. Implementation of Thesis Examination

a. Requirements

1. The thesis manuscript has been revised based on suggestions from the research seminar.
2. The thesis manuscript has been approved and signed by all supervisors.
3. Thesis already declared free from plagiarism from the postgraduate plagiarism detection team of Universitas Brawijaya or the Journal Clinic of FTP UB. Plagiarism should not be more than 20% for Chapters I, II, III, V, and VI.
4. Has fulfilledall administrative requirements in accordance with applicable regulations.
5. Registration for the Final Thesis Examination is carried out at least 3 days before the exam.
6. Have at least present research at national or international seminars whether held at home or abroad or have submitted to publish research in accredited national journals or indexed Sinta 2 or UB journals determined by the Chancellor, international seminar proceedings indexed at Scopus and Thompson Reuter. In this case, the student does not have to be the first author.

b. Implementation

1. Thesis exam is assessed through a closed examination by a team of examiners consisting of a supervisory committee andtwo examiners.
2. The thesis examination can be carried out if attended by at least3 out of 4 members of the Examiner Team. The main supervisor must be present in the thesis examination.
3. The maximum length of the thesis exam is 90 minutes

c. Procedure

1. Students consult the thesis exam schedule with the supervisory committee and examiner and inform the schedule of the thesis examination to the FTP postgraduate administration.
2. Students complete and submit the Thesis Examination requirements to the FTP Postgraduate Administration Section.
3. The FTP Postgraduate Administration Section checks the completeness of the administration and prepares the exam files.
4. FTP Postgraduate Administration Section submitsinvitation letter for the implementation of the thesis exam to students to be signed by the Head of the Study Program (KPS).
5. The student receives the exam file from the FTP Postgraduate Administration Section, asking for a signatureKPS, distributing invitations and thesis manuscripts to the supervisory committee and examiners 5 days before the thesis examination.
6. On the day of the thesis exam, the FTP Postgraduate Administration Section submits the thesis exam file to the head of the supervisory commission before the exam.
7. After the examination, the head of the supervisory commission submits the score file to the FTP Postgraduate Administration Section.
8. FTP Postgraduate Administration Sectionprocessing grades into student data archives.
9. Final exam declared valid if attended by at least one supervisory committee and two examiners.

d. SystemHow to Assess Thesis Exam

1. Assessment is carried out by all supervisors and examiners.
2. Each examiner conducts an assessment using the thesis exam assessment format in accordance with Table 3.7.

Table 3.7. Thesis Exam Assessment Components

Assessment criteria	Score (1-100)	Weight (%)	Value Number x Weight
A. Originality and Recency 20%		20	……
B. Thesis Manuscript 50%			
3. Research relevance, clarity of purpose		5	
4. Theoretical foundations and use of literature		5	
5. Use of methods and data processing		10	
6. Discussion		20	
7. Clarity of conclusions and recommendations		5	
8. Writing		5	
C, Ability to defend thesis and presentation 30%			
1. Ability to defend thesis		15	
2. Mastery of the field of science		10	
3. Verbal presentation		5	

Average value defend thesis and presentation			
Thesis Exam Total Score			

3. Test scoresthesis is the average of the scores of all supervisors and examiners who attended and gave an assessment.
4. The value of the thesis test is expressed in the form of Score Scores andQuality Letters.
5. NewsThe results of the thesis examination are signed by the chair of the session and all the examination committee (examiners) present.
6. Masters program students who have outstanding achievements in international publications as determined by the Chancellor, can be proposed by the Examining Lecturer Council to the Dean/Director of Postgraduate Program so that students are declared to have obtained a Thesis A score without a final exam.
7. The extraordinary achievements referred to in point 6 are
    a. have scientific publications:
        1) at least 2 (two) scientific articles that have been published or accepted for publication in Scientific Journals at least accredited by Sinta 2; or
        2) at least one article thathas been issued or accepted for publication in the proceedings; indexed by Scopus; or
        3) at least one article that haspublished or accepted for publication in a Scopus indexed international journal or Web of Science Core Collection (Thomson Reuter)
    b. The average value of all stages of the Thesis A test/seminar.
    c. Thesis manuscript has been evaluated by the Examining Lecturer Council and improvements to suggestions/corrections from the Examining Lecturer Council have been reviewed and approved by the Advisory Team.
8. Suggestions from the Commission for Advisory and Examiner Thesis Examination.
9. Each supervisor and examiner can submit suggestions that are considered necessary to improve the final manuscript of the thesis.
10. The examination team meeting led by the chairperson of the thesis examination set out suggestions that were deemed necessary and should be followed up by students. These agreed suggestions are stated in the minutes of the thesis examination signed by the Chairperson of the Session. This report is conveyed to students and their supervisors.
11. Students are obliged to carry out the suggestions decided in point (b) and the Advisory Committee is responsible for implementing these suggestions.
12. Students are obliged to revise the manuscript thesis and copying the manuscript.
13. The copying of manuscripts is regulated in the academic guidelines of each study program.

e. Suggestions from the Commission for Thesis Advisors and Examiners

1. Each supervisor and examiner can submit suggestions that are considered necessary to improve the final manuscript of the thesis.
2. The examination team meeting led by the chairperson of the thesis examination set out suggestions that were deemed necessary and should be followed up by students. The agreed suggestions are set out in the minutes of the thesis examination which is signed by the Chairperson of the Session. This report is conveyed to students and their supervisors.
3. Students are obliged to carry out the suggestions decided in point (b) and the Advisory Commission is responsible for implementing these

suggestions.

4. Students are obliged to revise the manuscript thesis and copying the manuscript.
5. The thesis revision is completed within 1 month at the latest, if it exceeds that time, the thesis score is reduced as follows:

No.	Lateness	Decreasing Value
1.	1 month	grade
2.	2 months	1 grade
3.	3 months	Repeat Exam

3.9. Thesis Quality Assurance Team

The thesis quality assurance team is determined by the dean at the suggestion of the Head of the Study Program. This team functions to ensure that the quality of the thesis is decent and the student is declared passed if the quality of the thesis has been checked by the Thesis Quality Assurance Team.

3.10. Master Program Study Evaluation

1. Postgraduate Administration / Academic Subdivision sends a list of students who are subject to study evaluations every year
2. The criteria for students who receive study evaluations are GPA < 3.00 for the best 8 credits in the first year
3. The Head of the Masters Study Program evaluates the study based on the list of student names sent by the Postgraduate Administration/Academic Subdivision
4. Annual evaluation
   a. Students who at the end of the first academic year do not have a GPA > 3.00 for the best 8 credits will be warned and required to make a statement
   b. If at the end of the next academic year, the GPA for the best 16 credits does not reach 3.00, the student is asked to submit his/her resignation.
5. Final evaluation of the study
   a. Students who have a study period of 3 years are given a warning and a statement letter to immediately complete their studies
   b. If in the 4th year the study period has ended and the student cannot complete his studies, then the student is asked to resign.
6. Evaluation thesis stage
   a. Students who do not pass the thesis proposal exam. If the second thesis proposal exam does not pass, the student is asked to resign.
   b. Students who do not pass the thesis examination. If the second thesis exam does not pass either, then the student asked to resign.
7. Students who do not re-register for 2 consecutive semesters will be given a warning and asked to make a statement to continue their studies or resign.
8. If the student will continue his studies then all financial obligations must be completed and the student can re-register before the new semester
9. Resignation process:
   a. The student submits a resignation letter by writing the reason to the Vice Dean for Academic Affairs with the parents knowing, the resignation file is uploaded at SIAM
   b. The Academic Sub-Section will process the resignation letter by making a certificate of studying ever published by the Deputy Dean for Academic Affairs
   c. The Academic Sub-Section makes a resignation letter signed by the Dean of the Faculty of Agricultural Technology, addressed to the Rector of Universitas Brawijaya by attaching a resignation letter from a student and a statement letter from the Vice Dean for Academic Affairs and uploaded to SIM UB

d. Students are entitled to a Study Certificate from Brawijaya University and Study Result Card from the Faculty of Agricultural Technology, Brawijaya University which can be used to continue their studies at other universities.

10. Drop out letter issuance process:
    a. FTP UB Academic Team consisting of Deputy Dean for Academic Affairs, Head of Academic Subdivision, Staff of Academic Subdivision, Head of Department, Secretary of Department and Head of Study Program held a meeting to follow up on the names of students who have the potential to drop out.
    b. From the results of the meeting, it was decided the names of students who were proposed to drop out by considering input from the Head of the Department. Secretary, and KaPS
    c. The Academic Sub-Section proposes a drop out application letter to the Vice Chancellor for Academic Affairs

3.11. Postgraduate Judiciary

A student can take part in Yudisium if he fulfills the following requirements:

a. Have completed all compulsory courses, namely national content courses, university content and faculty/study programs.
b. Has revised the thesis and was approved by the Examiner Council and obtained a minimum grade of C.
c. Have collected the Thesis which is printed with a light green cover (Appendix 3) and in the form of a CD (which contains the final project) and has been approved by the Advisory Lecturer and has been ratified by the Examiner Council and the Head of the Department. Mandatory to distribute Final Project manuscript/CD to:
    i. Main Advisory Lecturer
    ii. Advisory Lecturer
    iii. Faculty Reading Room
    iv. Brawijaya University Library

4. Not exceeding the maximum study period of 4 (four) years.
5. Have paid SPP for the semester in question
6. The format of the Final Project submitted for the Reading Room and Library of Brawijaya University follows the format in Appendix 6 (Please follow the thesis format for the library and reading room)
7. If a student is late in collecting all the completeness of the judicial documents more than 1 month after the final exam is carried out, then as a sanction a grade reduction will be given as follows:

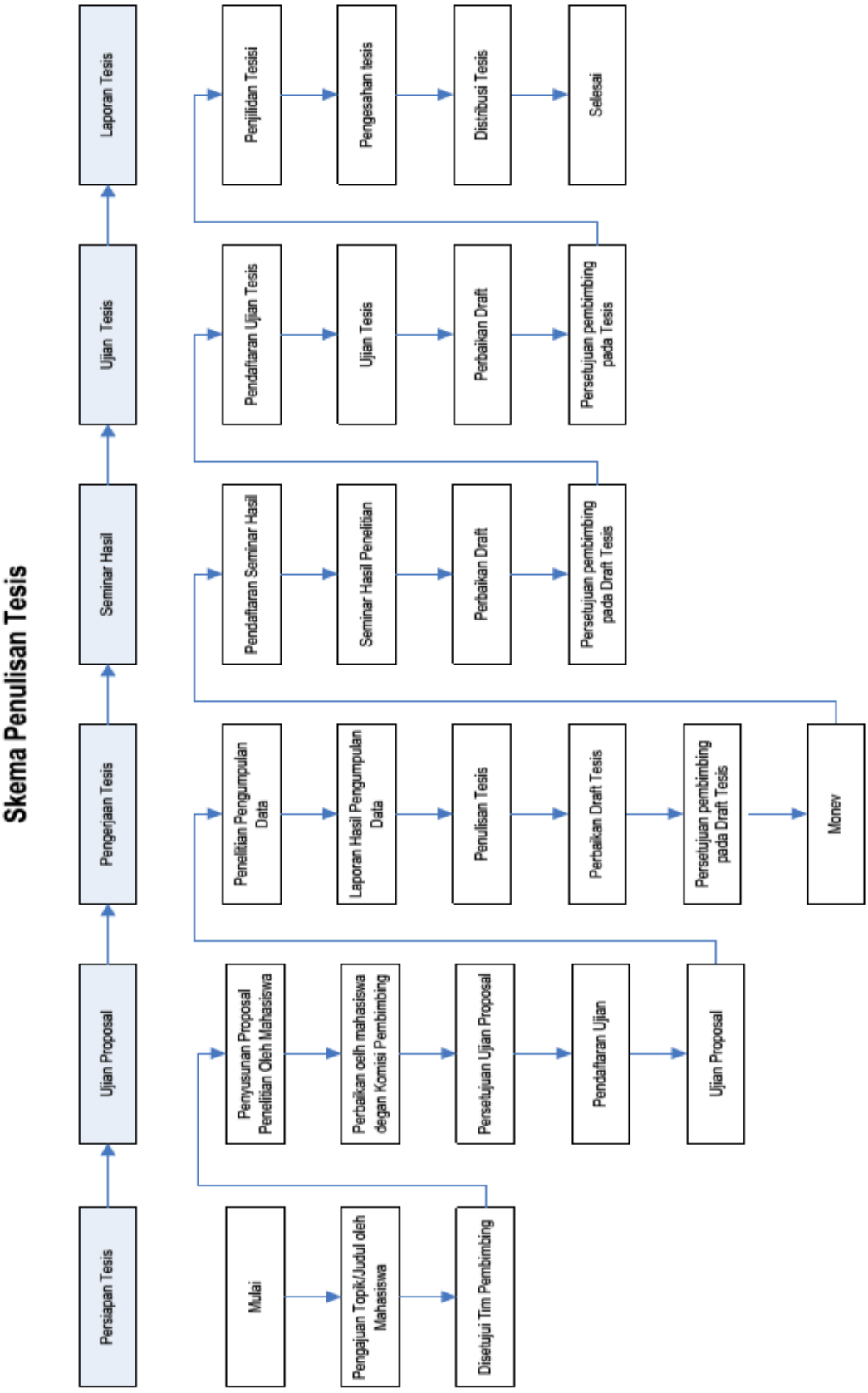
No.	Lateness	Decreasing Value
1.	1 month	grade
2.	2 months	1 grade
3.	3 months	Repeat Exam

3.10. Graduation and Graduation Requirements

1. Have a TOEFL English proficiency certificate or TOEFL equivalent with a minimum score of 500, which is obtained from an English Language Institute recognized by Brawijaya University.
2. In accordance with the circular letter of the Director General of Research, Technology and Higher Education Number: B/323/B.B1/SE/2019 concerning Publication of Scientific Work for Undergraduate Programs, Masters Programs and Doctoral Programs as well as Rector's Regulation of the University of

Brawijaya No. 52 of 2018, concerning the Publication of Scientific Works for Masters and Doctoral Programs. For the master's program, the publication obligation is to publish scientific journals indexed by Scopus or Web of Science Core Collection (Thomson reuter), the lowest national journals accredited by Sinta 2, or UB journals determined by the Chancellor, or proceedings indexed by Scopus that have been declared accepted (accepted).

The flow of the thesis implementation in the Master Study Program in the Faculty of Agricultural Technology is regulated in the following Standard Operating Procedures for Thesis Implementation.



In each stage of the thesis implementation process, students need to prepare the necessary files or forms, including the following:

1. Files of forms required for the thesis proposal exam:
   1) Thesis Proposal Examination Application Sheet (UP-1)
   2) Thesis Proposal Exam Approval Sheet (UP-2)
   3) Invitation Sheet for Thesis Proposal Examination (UP-3)
   4) Thesis Proposal Exam Notification Sheet (UP-4)
   5) Thesis Proposal Exam Rules Sheet (UP-5)
   6) Minutes of Thesis Proposal Examination (UP-6)
   7) Thesis Proposal Examination Assessment Sheet (UP-7)
   8) Suggestion Sheet for Thesis Proposal Examination (UP-8)
   9) Thesis Proposal Exam Checklist Sheet

2. Files of forms required for the thesis result seminar:
   1) Thesis Results Seminar Document Checklist Sheet (SHP-)
   2) Thesis Result Seminar Application Sheet (SHP-1)
   3) Thesis Result Seminar Invitation Sheet (SHP-2)
   4) Thesis Result Seminar Approval Sheet (SHP-3)
   5) Notification of Thesis Result Seminar (SHP-4)
   6) Minutes of Thesis Results Seminar (SHP-5)
   7) Thesis Result Seminar Assessment Sheet (SHP-6)
   8) Suggestion Sheet for Seminar on Thesis Results
   9) Attendance Sheet for Thesis Results Seminar Participants

3. Files of forms required for the thesis exam:
   1) UT-1 Thesis Examination Application Sheet
   2) Thesis Exam Invitation Sheet (UT-2)
   3) Thesis Exam approval sheet (UT-3)
   4) Thesis Exam notification sheet (UT-4)
   5) Thesis Exam Rules Sheet (UT-5)
   6) Minutes of Thesis Exam Minutes (UT-6)
   7) Thesis Exam Assessment Recapitulation Sheet (UT-7)
   8) Thesis Exam Assessment Sheet (UT-8)
   9) Suggestion Sheet for Thesis Exam Improvement (UT-9)
   10) Thesis Exam Checklist Sheet
   11) Minutes of Thesis Submission
   12) Minutes of Thesis Submission to the Manager
   13) Laboratory Loan-Free Proof Sheet
   14) Revision Certificate Sheet

CHAPTER IV THESIS IMPLEMENTATION COURSES

4.1. MASTER PROGRAM THESE COURSES

Master program students are required to program thesis courses according to the courses, credits, and semesters that will be run.

No	Course Code	Subject	credits	Status	Semester
1	TPF81001	Thesis Proposal Preparation	2	W	3
2	TPF80001	Thesis Research	4	W	3 or 4
3	TPF80002	Thesis Seminar	1	W	3 or 4
4	TPF80003	Scientific Publications	2	W	3 or 4
5	TPF80004	Thesis Compilation	3	W	3 or 4

Note: W = Mandatory; P = Choice

4.2. THESIS COURSE DESCRIPTION

TPF81001 THES PROPOSAL COMPANYING 2(2-0)

Students plan research for a thesis as outlined in a research proposal. The preparation of research proposals follows scientific principles in a systematic and structured manner. The proposal is a student research guide under the guidance, direction, input, and incentive suggestions of the supervisor. The proposal indicates a research direction that is appropriate for obtaining a master's degree according to KKNI level 8. After the proposal is approved by the supervisor, students must present it in front of the examiner who is determined by the head of the study program.

Course Learning Outcomes

1. Students are able to review the relevant literature on the thesis topic.
2. Students are able to identify, formulate, and solve problems.
3. Students are able to develop conceptual frameworks and research operations.
4. Students are able to write good research proposals in terms of language and writing typography.
5. Students are able to plan and develop research methods as planned.
6. Students master state of the art knowledge of their research topics.

TPF80001 THESIS RESEARCH 4(4-0)

It is a data collection activity in accordance with the research plan that has been prepared inresearch proposal. Research carried out in accordance with the IQF level 8 and must be worthy of publication in an international journal indexed by Scopus or Thomson Reuter, or a national journal with a minimum rank of Sinta 2, a national journal that is approved by the Rector of UB but must be with the approval of the Head of the Study Program, or proceedings indexed by Scopus.

Achievements Course Learning (CPMK):

1. Students are able to do research independently
2. Students are able to perform analysis and synthesis of research data
3. Students are able to solve problems scientifically and systematically through research.

TPF80002 SEMINAR THESIS 1(1-0)

Students communicate orally their research results in scientific meeting forums. The results seminar is conducted in semester 4 on a programmed basis with the aim that students must strive to carry out research in a timely manner. If the data obtained is still lacking, students can add material to the seminar as a result of the results of a literature review with topics related to their research. Research

seminar activities can be in the form of seminars held internally, attended by supervisors and students who attend seminars. The result seminar can be replaced with student participation as an oral presenter in national or international seminars in semester 3 or 4.

Achievements Course Learning (CPMK):

1. Students are able to present their research results
2. Students are able to perform scientific communication orally

TPF80003 THESIS PUBLICATION 2(2-0)

Students are required to publish scientific articles in indexed international journals according to UB Chancellor's Regulation No. 52 of 2018, or an accredited national journal with a minimum rank of Sinta 2, a national journal approved by the UB Chancellor, or published in a Scopus indexed proceedings. This scientific publication is prepared based on the results of thesis research. In the preparation of scientific publications and the selection of journals, students must consult with their supervisors. Proof of submitting manuscripts to scientific journals and proof that the manuscripts have been sent or are under review are one of the requirements for the thesis examination.

Achievements Course Learning (CPMK):

1. Students are able to choose good scientific publication media (journals or proceedings) for their scientific publications
2. Students are able to communicate concepts and research results clearly and effectively in scientific journals.
3. Students are able to publish in scientific journals and follow publication procedures

TPF80004 THESIS COMPANYING 3(3-0)

Students must be able to prepare a thesis script properly and deserve to be tested in the final thesis examination from the research results obtained. To be able to take the final thesis examination, students are required to have at least 1 (one) scientific publication from the minimum thesis research results in the review process.

Achievements Learning Courses (CPMK):

1. Students are able to identify relevant theories and concepts and relate them to methodologies and evidence, apply appropriate techniques and draw conclusions systematically.
2. Students are able to compile research reports that have up-to-date topics in their fields
3. Students are able to interpret and apply information in the literature to explain the results of their research.
4. Students demonstrate the ability to make a real contribution to (new) knowledge through the results of their research.
5. Students are able to communicate concepts and research results clearly and effectively in scientific writing and orally.

4.3. THESIS ASSESSMENT

The assessment of the thesis course is based on the time/semester in which the course is programmed. The assessment of theses courses is as follows:

No.	Code	Thesis Components	Credits	Status	Semester
1	TPF81001	**Thesis Proposal Preparation** In semester 3 students prepare a thesis proposal and must carry out a thesis proposal exam. The	2	Must	3

No.	Code	Thesis Components	Credits	Status	Semester
		value for the preparation of this thesis proposal is in accordance with the test scores If you don't do the proposal exam in semester 3, then the value of Thesis Compilation in that semester is E The value of E can change if the proposal exam is held in the next semester but the score is not maximum Maximum value if executed on Semester 4 = B+ Semester 5 = B Semester 6 = C+ Semester 7 = C Semester 8 = D Examining lecturers will be given information on the student's semester position and the maximum score obtained.			
2	TPF80001	**Thesis Research** Students carry out research under the guidance of a thesis supervisor. Students are required to consult regularly with the thesis supervisor. Thesis Research Assessment is carried out by the supervisor by considering the workload, depth, and student performance during the research. Thesis research can be carried out starting in semester 2 but the scoring is done when the student has carried out the thesis examination and the score is entered into the KRS according to the semester plan the student will complete his thesis research.	4	W	3 or 4
	TPF80002	**Thesis Seminar** Students are required to present their research results in an open seminar attended by other students and supervisors in semester 4. This research seminar is scheduled in the lecture schedule. Students present the results of their research, and if the data presented is still lacking, students can add the results of a review of the literature related to their research topic. Students can replace the seminar results of this research as an oral presenter at the National or International Seminar with the approval of the supervisor in semester 3 or 4. The advisory team	1	W	3 or 4

No.	Code	Thesis Components	Credits	Status	Semester
		will provide an assessment of the National or International Seminar based on the assessment form. International seminars published in Scopus indexed proceedings can replace one of the scientific publications.			
3	TPF80003	**Thesis Publication** Students are required to publish the results of thesis research in accordance with UB Chancellor's Regulation No. 52 Year 2018. Scientific Publication Assessment is assessed by the Thesis Quality Assurance Team formed in each department. The value of this scientific publication is in accordance with the results of the assessment If you do not publish in semester 4, the score will be E. The publications that are assessed are publications that have been submitted (submitted) to the journal with the value according to the status of the manuscript, namely: *Submitted*: max B+ *Under review*ed: max A *Accepted*: force The thesis examination can be carried out after the assessment is carried out by the Thesis Quality Assurance Team with a maximum assessment period of 2 weeks. The value of E can change if the publication is carried out in the next semester but the value is not maximum The maximum value is as follows Semester 5 = B+ Semester 6 = B Semester 7 = C+ Semester 8 = C Semester 9 = D	2	W	4
4	TPF80004	**Thesis Compilation** Students compile the results of their research in a thesis with the guidance of a supervisor. Assessment of Thesis Compilation is carried out on a thesis exam with a value in accordance with the test results.	3	W	4

No.	Code	Thesis Components	Credits	Status	Semester
		If the student does not take the thesis exam at the latest in semester 4, then the value of this thesis preparation will be E The value of E can change if the thesis exam is held in the next semester but the score is not maximum The maximum value is as follows Semester 5 = B+ Semester 6 = B Semester 7 = C+ Semester 8 = C Semester 9 = D The requirement for this exam is that student publications have been submitted to journals or proceedings in accordance with UB Chancellor's Regulation No. 52 Year 2018.			

Appendix 1.1. Thesis Proposal Examination Application Sheet (UP-1)

UP - 1

FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

Regarding : Application for Thesis Research Proposal Examination

To : Dear. Deputy Dean I
Agricultural Tech Master's Degree Program
Cq. Head of Agricultural Engineering Masters Program
Brawijaya University
Malang

Herewith we present our guidance students

Name : …….
No. Student : …….
Study program : …….

To carry out the thesis research proposal exam, and we ask that it be held on:
Day : ……
Date : ……
Time : ……
The place : ……

Thank you for the attention.

Malang,
Advisory Commission
Chairman

_____
NIP.

Copy:
Head of S-2 Study Program

Appendix 1.2. Thesis Proposal Exam Approval Sheet (UP-2)

UP - 2

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

Number : /UN10.F10...../PP/2019
attachment :-
Regarding : Invitation for Thesis Research Proposal Examination

To : Dear.
……..
……..

In connection with the following student thesis research proposal exam plans:

Name : ……
No. Student : …….
Study program : …….

which will be held on:
Day : ……
Date : ……
Time :
……
The place :
……

so we request the presence of Mr/Mrs to be the Examiner Team for the thesis research proposal according to the schedule above.

Thus, thank you for your attention and cooperation.

Malang,
Head of Master Study Program.....

NIP.

Notes :
1.Students wear white shirts, ties and dark bottoms

Appendix 1.3. Invitation Sheet for Thesis Proposal Examination (UP-3)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY

UP - 3

GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

APPROVAL OF THESIS RESEARCH PROPOSAL EXAM

The undersigned, the examiner team approves the student thesis research proposal exam:

Name : .....
No. Student : .....
Study program : .....

which will be held on:

Day : ……
Date : ……
Time : ……
The place : …….

No.	Examiner Team Name	Signaturedate Agreement
1)	…….	Chairman of the Commission …
2)	…….	Commission Member……
3)	…….	Commission Member/ ……
	Examiner *)	
4)	…….	Examiner ……
5)	…….	Examiner …….. …

Malang, ……

Agreement
Head of Master Study Program…….

NIP.

*) Cross the unnecessary ones

Appendix 1.4. Thesis Proposal Exam Notification Sheet (UP-4)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UP - 4

Number : /UN10.F10...../PP/2018
attachment :-
Regarding : Notification of Thesis Research Proposal Examination

To : Dear. Mr.……..
Study Program Students
Postgraduate Program
Brawijaya University

We hereby inform you that in accordance with the approval of the examiner team, your Thesis Proposal Examination will be held on:

Day : ……
Date : ……
Time : ……
The place : ……

Thus, thank you for your attention and cooperation.

Malang,
Head of Master Study Program.....

NIP.

Notes :
1.Students wear white shirts, ties and dark bottoms

Appendix 1.5. Thesis Proposal Exam Rules Sheet (UP-5)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UP - 5

PROCEDURE FOR IMPLEMENTING THE THESIS PROPOSAL EXAM

1. Students are allowed to take the thesis research proposal exam if they have met the requirements as stated in the manual, and to take the thesis research proposal exam students are required to fill out the form provided.

2 Team Examiners consist of a supervisory committee and examiners outside the supervisory commission appointed by the Head of the Postgraduate Study Program.

3. timetable The exam is determined jointly between all examiners and the student concerned, which is stated by filling out an approval form.

4. The thesis research proposal examination is carried out for a maximum of 90 minutes and is led by the Chairperson of the Advisory Commission; if the Chairman of the Commission is not present, he can be replaced by a member of the supervising commission, the examination can only be held if attended by three examiners.

5. Evaluation The exam includes mastery of thesis research proposal material starting from the framework of thought, methodology and logic of student reasoning.

6. After the exam is over, students are invited to leave the room, the examiner team holds a meeting to decide on the results of the exam.

7. In principle, the results of the thesis research proposal examination are determined by deliberation among the examiners; to assist in making the final decision all examiners fill out the assessment form that has been provided; and then the mean value is taken.

   The results of the research proposal exam are in the form of:
   a. Pass if the average result of the thesis research proposal exam is equivalent to B
   b. Not pass *)

8. After the examiner team holds a meeting, the results of the assessment decisions are immediately conveyed to students by allowing students to enter the exam room.

9. The assessment form and all files are returned to the teaching department by the Chair of the Examining Commission and are not given to students.

Malang,
Dean
signed.

Prof.Dr.Ir. Imam Santoso, MP
NIP. 19681005 199512 1 001

Notes :
*) The re-examination of the thesis research proposal is held no later than 1 month after the first examination.

Appendix 1.6. Minutes of Thesis Proposal Examination (UP-6)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UPT - 6

MINUTES OF THESIS RESEARCH PROPOSAL EXAM

The Postgraduate Program students are below:
Name : .....
Student Number: .....
Study program : .....

has been implemented on:
Day : .....
Date : .....
Time : .....
Score :

Name	Score (Number)	Information *)
chairman 1.		
Member 2.		
Member 3.		
Member 4.		
Member 5.		
Average		

*) Note: Pass / fail conditions are on UP-6

Malang,
Examiner Team
Chairman,

NIP.

*) Letter grades are for average only and are based on Rector's Decree 078/SK/1995

Score	Letter Value	Weight
> 80 – 100	A	4.0
> 75 – 80	B+	3.5
> 69 – 75	B	3.0
> 60 – 69	C+	2.5
> 55 – 60	C	2.0
> 50 – 55	D+	1.5
> 44 – 50	D	1.0
0 – 44	E	0

*) Cross the unnecessary ones

Appendix 1.7. Thesis Proposal Examination Assessment Sheet (UP-7)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UPT - 7

THESIS PROPOSAL EXAM ASSESSMENT

Based on the Thesis Proposal Examination conducted by students:

Name : .....
No. Student : .....
Study program : .....
Title : .....
.....

No.	CPMK	Component	Criteria	%	Score	Amount
1	CPMK 1	Able to sort and formulate relevant thesis and literature topics	1. A good thesis topic according to the rules contains: important now and in the future, something new for science, beneficial for science and society. 2. Up-to-date and relevant literature: the theoretical basis for research topics, methods, variables and indicators	15		
2	CPMK 2	Able to wheezeidentification, formulating, and alternative problem solving	1. Problem identification is stated clearly and systematically 2. Able to formulate problems associated with explanations in the background in the proposal 3. Able to provide solutions to problems 4. Solutions to the problem of hookups with research methods designed	15		
3	CPMK 3	Able to develop conceptual framework and research operations.	1 The research concept framework is structured systematically and is easy to understand 2 The research concept framework is supported by adequate and relevant literature 3 The research concept framework is clearly formulated	20		

			4 The conceptual framework of research is related to the operational framework of research 5 Linked operational framework with the designed method 6 The operational framework is in the form of general operational steps that will be implemented			
4	CPMK 4	Able to write a good thesis proposal in terms of language and typography.	1 Not written in clear, systematic, easy to understand language 2 No typographical errors 3 Aesthetic writing 4 Writing follows the PUEBI rules 5 The writing follows the FTP UB Final Project Guidebook	15		
5	CPMK 5	Able to plan and develop research methods as planned.	1 The research method is related to the formulation of the problem, conceptual framework, and research operational framework 2 Reliable research methods (can be implemented) 3 The method used is up to date according to the weight of the thesis 4 Methods are written systematically and in detail 5 The analysis carried out is relevant and in accordance with the problems that have been identified 6 Methods supported by up-to-date libraries	20		
6	CPMK 6	Able to master state of the art knowledge of research topics and writing in proposals	1 Backed by up-to-date libraries (less than last 10 years) 2 Mastering state of the art research 3 Mastering the content of the proposal well 4 Able to answer questions well 5 Mastering the latest issues related to designed research methods 6 Able to explain the method and analysis well	15		
Amount				**100**		

Thus, for checking the existence and for your attention, we thank you.

Malang,

.....

Supervisor/Examiner

NIP.

*) Equivalence of Value Values, Quality Letters and Quality Scores

Score	Letter Value	Weight
> 80 – 100	A	4.0
> 75 – 80	B+	3.5
> 69 – 75	B	3.0
> 60 – 69	C+	2.5
> 55 – 60	C	2.0
> 50 – 55	D+	1.5
> 44 – 50	D	1.0
0 – 44	E	0

Appendix 1.8. Suggestion Sheet for Thesis Proposal Examination (UP-8)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UPT - 8

THESE PROPOSAL IMPROVEMENT SUGGESTIONS

Student Thesis Proposal Examination:
Name : .....
Student Number: .....
Study program : .....
Title : .....
.....

then we can convey the following suggestions:

1.	
2	
3	
4	
5	

Thus, for checking the existence and for your attention, we thank you.

Malang,

.....

Supervisor/Examiner

NIP.

Note: One copy for students

Appendix 1.9. Thesis Proposal Exam Checklist Sheet

PROPOSAL EXAM FILE
MASTER PROGRAM

Please, after the Proposal Exam:
The scores and minutes of the exam are directly submitted to the teaching department (please don't submit it to students)

Name :
NIM :
Study program :
Specialty :
Title :

Held on:

Day :
Date :
Time :
The place :

Examiner Team :

Chairman of the Advisory Committee :
Advisory Committee Member :
Examiner I :
Examiner II :

Requirements:

☐ UPT-0 = 1 sheet
☐ UPT-1 = 1 sheet
☐ UPT-2 = 4 sheet
☐ UPT-3 = 2 sheet
☐ UPT-4 = 1 sheet
☐ UPT-5 = 1 sheet
☐ UPT-6 = 1 sheet
☐ UPT-7 and Suggestions = 4 sheets (as many as testers)
☐ Learning Progress Report = 1 sheet (Original)
☐ Copy of TOEFL Certificate = 1 sheet
☐ Copy of Landfill Certificate = 1 sheet
☐ Copy of PAT Certificate = 1 sheet

Notes :
THE EXAMINATION PROPOSAL FILE SUBMITTED TO THE TEACHING SECTION AT LEAST ONE (1) WEEK BEFORE THE EXAM

Appendix 2.1 Thesis Results Seminar Document Checklist Sheet (SHP)

SEMINAR RESULT FILE

MASTER PROGRAM

Please, After Seminar Results:
The value and minutes of the seminar are directly submitted to the teaching department (please don't submit it to students)

Name : .....
Nim : .....
Master's Program : .....
Specialty : .....
Title : .....
.....
.....

Held on:

Day : .....
Date : .....
Time : .....
The place : .....

Examiner Commission

Advisor I : .....
Advisor II : .....
Advisor III : .....

Completeness of Requirements submitted to Teaching

θ SHP - 1 = 1 sheet
θ SHP - 2 = 2 sheets
θ SHP - 3 = 2 sheets
θ SHP - 4 = 2 sheets
θ SHP - 5 = 1 sheet
θ SHP - 6 and Suggestions = 2 sheets

NOTES :
THE SEMINAR FILES BE SUBMITTED TO THE TEACHING SECTION AT LEAST ONE (1) WEEK BEFORE THE EXAMINATION OF THE SEMINAR

Appendix 2.2 Thesis Result Seminar Application Sheet (SHP-1)

SHP - 1

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

Regarding : Application for Seminar Results

To : Dear. Deputy Dean I
Cq. Head of the study program……..
Brawijaya University
Malang

Herewith we present our guidance students

Name : .....
No. Student : .....
Study program : .....

to carry out the Research Results seminar
Title : .....
.....
.....
.....

which will be held on:

Day : .....
Date : .....
Time : .....
The place : .....

THX for the attention.

Malang, ...
Advisory Committee,
Chairman,

.....
NIP.

Copy:
1. Dear. head of the study program
2. PPSUB Teaching Section

Appendix 2.3 Thesis Result Seminar Invitation Sheet (SHP-2)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

SHP - 2

Number : /UN10.F10……/PP/
attachment :-
Regarding : Result Seminar Invitation

To : Dear.
(Advisory Commission)

....

....

We hereby expect your presence at the Research Results seminar from:

Name : ....
No. Student : ....
Study program : ....

which will be held on:

Day : ....
Date ....
Time : ....
The place : ....

THX for the attention.

Malang,.....
Head of Master Study Program

.....
NIP.

Appendix 2.4. Thesis Result Seminar Approval Sheet (SHP-3)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

SHP - 3

SEMINAR APPROVAL OF THESE RESEARCH RESULTS

The undersigned, the Advisory Committee approves the seminar on student thesis research results:

Name :
No. Student :
Study program :
Research Title : .....
.....
.....

which will be held on:

Day : .....
Date : ……
Time : ……
The place : ……

No.	Advisory Commission	Signature	date Agreement	
1)	.....	chairman	.....	.....
2)	.....	Member	.....	.....
3)	.....	Member	.....	.....

Malang, **……**

agree

Head of the Masters Study Program,

.....

NIP.

*) Cross the unnecessary ones

Copy:

1. **Head of Study Program Archives**
2. **PPSFTP-UB Finance Section**

Appendix 2.5. Notification of Thesis Result Seminar (SHP-4)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

SHP - 4

Number : /UN10.F10……/PP/
attachment :-
Regarding : Notice of Research Results Seminar

To : Dear. Student

Study program .....

Brawijaya University Postgraduate Program

Malang

We hereby look forward to your attendance at the seminar. Results of:

Name : ....
No. Student : ....
Study program : ....
Title : ....
....
....

which will be held on:

Day : ....
Date : ....
Time : ....
The place : ....

Thus, to be noticed.

Malang, ...
Head of Master Study Program,

.....
NIP.

Appendix 2.6. Minutes of Thesis Results Seminar (SHP-5)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

SHP 5

MINUTES OF SEMINAR RESULT

Organizing a seminar on the results of these students:

Name : .....

No. Student : .....

Study program : .....

has been implemented on:

Day : .....

Date : .....

Time : .....

Score : .....

Rating By Commission	Score (Number)	Score (Letter)
Chairman :	.....	.....
Member :	.....	.....
Member :	.....	.....
Average	.....	.....

Thus, to make checks exist.

Malang, ...
Advisory Commission
Chairman,

.....
NIP.

*) Letter grades are for average only and are based on Rector's Decree 078/SK/1995

Score	Letter Value	Weight
>80 - 100	A	4.0
>75 - 80	B+	3.5
>69 - 75	B	3.0
>60 - 69	C+	2.5
>55 - 60	C	2.0
>50 - 55	D+	1.5
>44 - 50	D	1.0
0 - 44	E	0

Note: The value of the results submitted directly to the teaching section

Appendix 2.7. Thesis Result Seminar Assessment Sheet (SHP-6)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

SEMINAR RESULT ASSESSMENT

Based on the results of the seminar, the results that have been carried out by the students are listed below:

Name : .....
No. Student : .....
Study program : .....

then the following assessment can be made:

Assessment Component	Score)
1. Manuscript Draft	:
2. Manuscript Presentation	:
3. Discussion	: .....
Average Value	: .....

Thus, to be known by the parties concerned.

Malang, ...
Advisory Commission
Chairman,

.....
NIP.

Notes :
The value of the seminar results is submitted directly to the teaching section

Appendix 2.8. Suggestion Sheet for Seminar on Thesis Results

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

Suggestions for Improvement of Results
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Thus, to make checks exist.

Malang, ...
examiner,

.....
NIP.

Appendix 2.9. Attendance Sheet for Thesis Results Seminar Participants

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

STUDENT NAME : .....
NIM : .....
DATE AND TIME : .....
CLOCK/ ROOM : .....

NO.	STUDENT NAME	SIGNATURE
1.	.....	01. .....
2.	.....	02. .....
3.	.....	03. .....
4.	.....	04.....
5.	.....	05. .....
6.	.....	06. .....
7.	.....	07. .....
8.	.....	08. .....
9.	.....	09. .....
10.	.....	10. .....
11.	.....	11. .....
12.	.....	12. .....
13.	.....	13. .....
14.	.....	14. .....
15.	.....	15. .....
16.	.....	16. .....
17.	.....	17. .....
18.	.....	18.....
19.	.....	19. .....
20.	.....	20. .....
21.	.....	21. .....
22.	.....	22. .....

Advisory Commission
Chairman,

.....
NIP.

Appendix 3.1.UT-1 Thesis Examination Application Sheet

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

Regarding : Application for Thesis Examination

To : Dear. Deputy Dean I
Cq. head of the study program
Brawijaya University
dammit

Herewith we present our guidance students

Name :

No. Student :

Study program :

Thesis Title :

To carry out the Thesis Examination, and we ask that it be held on:

Day :

Date :

Time :

The place :

THX for the attention.

Malang,

Advisory Commission
chairman

NIP.

Copy:
1. Head of the study program

Appendix 3.2. Thesis Exam Invitation Sheet (UT-2)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 2

Number : /UN10.F10...../PP/2018
Attachment : -
Regarding : Thesis Exam Invitation

To : Dear.
(Advisory Commission)
……..
……..

We hereby expect the presence of Mr/Mrs in the Thesis Examination from:

Name :
No. Student :
Study program :
Thesis Title :

which will be held on:
Day :
Date :
Time :
The place :

THX for the attention.

Malang,
a/n. Dean of PPSFTPUB
head of the study program

NIP.

Notes :
1. Examiners are requested to wear a tie
2. Students wear white shirts, ties and dark bottoms

Appendix 3.3. Thesis Exam approval sheet (UT-3)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 3

THESIS EXAM APPROVAL

The undersigned, the examiner team approves the student's Thesis Examination:

Name :
No. Student :
Study program :
Thesis Title :

which will be held on:

Day :
Date :
Time :
The place :

No.	Examiner Team Name	Signature date Agreement
1)	…….	Chairman of the Commission
2)	……..	Commission Member
3)	…….	Commission Member/ Examiner *)
4)	…….	Examin
	…….	Examiner

Malang, ……
agree
a/n. PPSUB Director
Head of Masters Study Program

NIP.

1. Dean
2. Academic Subdivision
3. Finance Subdivision

*) Cross the unnecessary ones

Appendix 3.4. Thesis Exam notification sheet (UT-4)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 4

Number : /UN10.F10...../PP/2018
attachment :-
Regarding : Thesis Exam Notification

To : Dear.
Study Program Students
Brawijaya University Postgraduate Program
dammit

We hereby inform you that in accordance with the approval of your Thesis Examiner Team, your thesis examination will be held on:

Day : ……
Date : ……
Time : ……
The place : ……

Thus, thank you for your attention and cooperation.

Malang, ……
agree
a/n. PPSUB Director
Head of Masters Study Program

NIP.

Notes :
1. Students wear white clothes, dark bottoms and tie
2. Student wears white clothes, dark subordinates without wearing a tie

Appendix 3.5. Thesis Exam Rules Sheet (UT-5)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 5

PROCEDURES FOR IMPLEMENTING THE THESE EXAM

1. Students are allowed to take the thesis exam if they have met the requirements as stated in the manual, and to take the thesis exam the Chairperson of the Advisory Commission from students who are ready for the exam submit an application to the Assistant Dean I cq. Head of the Postgraduate Study Program, Faculty of Agriculture, Universitas Brawijaya (PPSFTPUB) to determine the time of the exam.

2 Team Examiners consist of a supervisory committee and examiners outside the supervisory commission approved by the Dean of PPSFTPUB at most 2 people.

3. timetable The pre-determined exam is submitted to the examiner team by the student concerned for approval.

4. The thesis examination is carried out for a maximum of 90 minutes and is led by the Chairperson of the Advisory Commission; if the Chairman of the Commission is not present, he can be replaced by a member of the supervising commission. The thesis examination can be held if attended by a minimum of three examiners (including the Advisory Committee).

5. The assessment is carried out on the thesis manuscript, thesis presentation and the ability to defend the thesis. The assessment is presented with an adjusted value based on the SK. Chancellor No. 078/SK/95.

6. After the exam is over, students are invited to leave the room, the examiner team holds a meeting to decide on the results of the exam.

7. In principle, the results of the thesis examination are determined by deliberation among the examiners; to assist in making the final decision all examiners fill out the assessment form that has been provided; and then the mean value is taken. Students are declared to have passed or passed with the condition that their average score is a minimum of C and is declared unsuccessful if the average value is below C.

8. After the examiner team holds a meeting, the results of the assessment decisions are immediately conveyed to students by allowing students to enter the exam room.

9. The supervisor makes a summary of the thesis assessment based on the value of the proposal seminar, research implementation, seminar results and thesis exam.

10. The assessment form and all files are returned to the teaching division by the Chair of the Examining Commission and are not given to students.

Malang,
Dean

signed.

Prof. Dr. Ir. Imam Santoso, MP
NIP. 19681005 199512 1 001

Appendix 3.6. Minutes of Thesis Exam Minutes (UT-6)

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 6

THESIS EXAM NEWS

The Postgraduate Program students are below:

Name : .....
No. Student : .....
Study program : .....

has been implemented on:

Day : .....
Date : .....
Time : ..... WIB
Score :

Name	Score (Number)	Score (Letter) *)
chairman :		
Member :		
Member :		
Member :		
Member :		
Average		

Note: Pass / pass with conditions**) / not pass***)

Malang, ...
Examiner Team
Chairman,

_____
NIP.

*) Letter grades are for average only and are based on Rector's Decree 078/SK/1995

Score	Letter Value	Weight
> 80 – 100	A	4.0
> 75 – 80	B+	3.5
> 69 – 75	B	3.0
> 60 – 69	C+	2.5
> 55 – 60	C	2.0
> 50 – 55	D+	1.5
> 44 – 50	D	1.0
0 – 44	E	0

**) Students are assigned to improve the thesis

***) Students must repeat the thesis exam, no later than 1 month after the first exam

Appendix 3.7. Thesis Exam Assessment Recapitulation Sheet (UT-7)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT – 7

THESIS ASSESSMENT RECAPITULATION

The undersigned, Chairman KoAdvisor mission of students:

Name : ....

No. Student : ....

Study program : ....

assess the student's thesis on the basis of the value of the thesis activities:

Table 3.7. Thesis Exam Assessment Components

Assessment criteria	Score (1-100)	Weight (%)	Value Number x Weight
A. Originality and Recency 20%		20	……
B. Thesis Manuscript 50%			
1 Research relevance, clarity of purpose		5	
2 Theoretical foundations and use of literature		5	
3 Use of methods and data processing		10	
4 Discussion		20	
5 Clarity of conclusions and recommendations		5	
6 Writing		5	
C, Ability to defend thesis and presentation 30%			
1 Ability to defend thesis		15	
2 Mastery of the field of science		10	
3 Verbal presentation		5	
Average value defend thesis and presentation			
Thesis Exam Total Score			

Then the thesis value of the students mentioned above is: ……*)

Malang,
.....
Advisory Commission
Chairman,

NIP.

Appendix 3.8.Suggestion Sheet for Thesis Exam Improvement (UT-9)

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

Suggestions

Student Thesis Exam:

Student name :
NIM :
Master's Program :
Title :

then we can convey the following suggestions:

1.	
2	
3	
4	
5	

Thus, for checking the existence and for your attention, we thank you.

Malang,
Supervisor/Examiner

……

Note: One copy for students

Appendix 3.9Thesis Exam Checklist Sheet

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY - MALANG

THESIS EXAMINATION FILE

Name :
No. Student :
Master's Program :
Specialty :
Thesis Title :

Examiner Team :
Chairman of the Advisory Committee :
Advisory Committee Member :
Examiner I :
Examiner II :
Held on:
Day :
Date :
Time :
The place :
Requirements:

☐ UT-1 = 1 sheet
☐ UT-2 = 4 sheets (as many as testers)
☐ UT-3 = 2 sheets
☐ UT-4 = 1 sheet
☐ UT-5 = 1 sheet
☐ UT-6 = 1 sheet
☐ UT-7 = 1 sheet
☐ UT8-+ Suggestions = 4 sheets (as many as testers)
☐ Learning Progress Report (LKB) = 1 sheet
☐ Copy of Last Tuition Receipt = 1 sheet
☐ Copy of Last KRS = 1 sheet
☐ Copy of Landfill Certificate = 1 sheet
☐ Copy of TOEFL Certificate = 1 sheet
☐ Copy of PAT Certificate = 1 sheet
☐ Thesis Guidance Card
☐ Results Seminar Participation Card
☐ Journal Evidence
☐ Recommended Submission in English

Appendix 3.10.Minutes of Thesis Submission

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 11

MINUTES OF THE SUBMITTING THESIS

We, the undersigned, students:

Student name :
NIM :
Master's Program :
Title :

has submitted one copy of the Thesis manuscript to all Advisory Committees:

No	Name	Commission Advisor	Sign hand	Delivery date
1.		chairman		
2.		Member		

Thus, thank you for your attention and cooperation.

Malang,
Student

.....

Appendix 3.11. Minutes of Thesis Submission to the Manager

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

UT - 12

NEWS

**SUBMISSION OF THE REPAIR MANUAL,
HAS BEEN APPROVED BY ALL SUPERVISORS, AND HAVE BEEN
APPROVED BY THE DIRECTOR OF PPSUB**

On this day: _ _____, date _____, at the Teaching Sub-Section of PPSUB, We:

Student name :
NIM :
Master's Program :

Submit one copy of THE THESIS TEXT THAT HAS BEEN CORRECTED, HAS BEEN APPROVED/SIGNED BY ALL THE SUPERVISORY COMMISSIONS, AND HAS BEEN APPROVED BY THE DIRECTOR OF PPSUB to the PPSUB Teaching Sub-Section Officer.

Thus, to make checks exist.

Malang,
.....
.....

Teaching Sub-Section Officer Student

(.....) ( )

Note: This sheet is for PPSFTP Academy Sub-Section – UB

Appendix 3.12.Laboratory Loan-Free Proof Sheet

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY
MALANG

EVIDENCE OF FREE LABORATORY LOAN ENVIRONMENT OF POSTGRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY
BRAWIJAYA UNIVERSITY

NO.	LABORATORY NAME	RESEARCH DATE (..... S/ .....)	SIGNATURE
1.	Lab.Central Science and Tech.Food		
2.	Labs. Center for Life Sciences		
3.	Labs. Agricultural Product Production Quality		
4.	Agricultural Product Processing Lab		
5.	Lab. Agricultural Product Processing Engineering		
6.	Labs. Agricultural Power and Machinery		
7.	Labs. Soil and Water Engineering		
8.	Labs. Process Engineering and Industrial Systems		
9.	Labs. Bio Industry and Waste Treatment		
10.	Labs. Industrial Management and Systems		
11.	Labs. Biology F. MIPA		
12.	Labs. Tech. Fapet's Livestock		
13.	Labs. Fapet Cattle Production		
14.	Labs. Fapet Cattle Reproduction		
15.	Labs		
17.	Labs		
18.	Labs		
19.	Labs		
20.	Labs		
21.	Labs		
22.	Labs		
23.	Labs		
24.	Labs		
25.	Labs		
25.	Labs		
27.	Labs		
28.	Labs		
29.	Labs		
30.	Labs		

Malang,
The one that confirms

.....

Appendix 3.13. Revision Certificate Sheet

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
BRAWIJAYA UNIVERSITY
GRADUATE PROGRAM
FACULTY OF AGRICULTURAL TECHNOLOGY

CERTIFICATE OF REVISION

The undersigned, the Main Advisory Lecturer from the Postgraduate Program students of Universitas Brawijaya:

Name : ……..

No. Student: …….

Study program : …….

Specialty : .....

Thesis Title : ……

..... ……

……

date Thesis Exam: ……..

Original Address : ..... …….

Address in Malang: .....

The thesis has been revised according to the request.

Thus, we have made this certificate so that it can be used properly.

Main Advisor

.....

NIP.

Examiner Team

No.	Name	Supervisor/Examiner	signed
1.		(Advisor II)	
2.		(Advisor III / Examiner I)	
3.		(Examiner II)	
4.		(Examiner III)	

Appendix 4. Guidance Card Logsheet

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION
BRAWIJAYA UNIVERSITY MALANG
FACULTY OF AGRICULTURAL TECHNOLOGY

THESIS CONSULTATION ACTIVITY CARD

Student name : …….. Thesis title :.....……
Registration number : ……..
……
Major : …….. ……..

Consultation Date		DESCRIPTION	Signature
accept	Return		

Malang, ……..

Knowing,
Head of program, Advisor I, Advisor II, Advisor III,

…….. …… …… …….
NIP NIP NIP

Appendix 5. Research Logbook

Name :

ID :

LOGBOOK

No.	Day	Date	Time	Location	Activity	Results	Laboratory initials
1. 2. 3.							

Appendix 6. Reading Room Format

Thesis Format for Reading Room

For thesis collection in the reading room, the writing format follows the thesis writing format, but is more concise which includes:

i. Abstract
ii. preliminary
iii. Method
iv. Results and Discussion. Presented succinctly as well as the results and discussion for the journal
v. Conclusion
vi. References

Appendix 7. Assessment Rubric for Thesis Proposal Preparation

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CPMK 1	Able to sort and formulate relevant thesis and literature topics	1. A good thesis topic according to the rules contains: important now and in the future, something new for science, beneficial for science and society.		Topics are not important, not new, and not obviously useful to society	Topics are not important, not new, and useful for society	Unimportant, new and useful topics for society	Important, new and useful topics for society
		2. Up-to-date and relevant literature: the theoretical basis for research topics, methods, variables and indicators		Malang literature with fulfillment of criteria in column 3 less than 50%.	The literature is sufficient with the fulfillment of the criteria in column 3 reaching 50-<70%	Good literature with the fulfillment of the criteria in column 3 reaches 70 - <80%	The literature is very good with the fulfillment of the criteria in column 3 reaching 80 - 100%
CPMK 2	Able to wheezeidentification, formulating, and alternative problem solving	1. Problem identification is stated clearly and systematically 2. Able to formulate problems associated with explanations in the background in the proposal 3. Able to provide solutions to problems 4. Solutions to the problem of hookups with research methods designed		depth of identification, clarity of formulation, and alternative problem solving bad with meeting the criteria in column 3 less than 50%.	The depth of identification, clarity of formulation, and alternative problem solving is sufficient to meet the criteria in column 3 to achieve 50-<70%	Depth of identification, clarity of formulation, and alternative problem solving both by fulfilling the criteria in column 3 achieve 70 - <80%	The depth of identification, clarity of formulation, and alternative problem solving are very good with meeting the criteria in column 3 achieving 80 - 100%
CPMK 3	Able to develop conceptual	1. The research concept framework is structured		Malang clarity of conceptual framework and	The clarity of the conceptual framework and	The clarity of the conceptual framework and	The clarity of the conceptual framework and

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	framework and research operations.	systematically and is easy to understand 2. The research concept framework is supported by adequate and relevant literature 3. The research concept framework is clearly formulated 4. The conceptual framework of research is related to the operational framework of research 5. Linked operational framework with the designed method 6. The operational framework is in the form of general operational steps that will be implemented		research operations	research operations is sufficient	research operations is good	research operations is very good
CPMK 4	Able to write a good thesis proposal in terms of language and typography.	1. Thesis is written in clear, systematic, easy-to-understand language 2. No typographical errors 3. Aesthetic writing 4. Writing follows the PUEBI rules		Malang thesis writing language and typography	The language and typography of thesis writing is sufficient	Good thesis writing language and typography	The language and typography of the thesis writing is very good

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		5. The writing follows the FTP UB Final Project Guidebook					
CPMK 5	Able to plan and develop research methods as planned.	1. The research method is related to the formulation of the problem, conceptual framework, and research operational framework 2. Reliable research methods (can be implemented) 3. The method used is up to date according to the weight of the thesis 4. Methods are written systematically and in detail 5. The analysis carried out is relevant and in accordance with the problems that have been identified 6. Methods supported by up-to-date libraries		Bad research method	Research method is sufficient	Good research method	Mexcellent research method
CPMK 6	Able to master state of the art knowledge of research topics	*State of the art* the research topic is written clearly		Clarity level *state of the art* low research topic	Clarity level *state of the art* enough research topic	Clarity level *state of the art* high research topic	Clarity level *state of the art* research topic is very high

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	and writing in proposals	1 Backed by up-to-date libraries (less than last 10 years) 2 Mastering state of the art research 3 Mastering the content of the proposal well 4 Able to answer questions well 5 Mastering the latest issues related to designed research methods 6 Able to explain the method and analysis well					

Assessment Form for Thesis Proposal Preparation

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%	Score	Number	Quality Letters
1	CPMK 1	Able to sort and formulate relevant thesis and literature topics	3. A good thesis topic according to the rules contains: important now and in the future, something new for science, beneficial for science and society. 4. Up-to-date and relevant literature: the theoretical basis for research topics, methods, variables and indicators	15			
2	CPMK 2	Able to wheezeidentification, formulating, and alternative problem solving	5. Problem identification is stated clearly and systematically 6. Able to formulate problems associated with explanations in the background in the proposal 7. Able to provide solutions to problems 8. Solutions to the problem of hookups with research methods designed	15			
3	CPMK 3	Able to develop conceptual framework and research operations.	7 The research concept framework is structured systematically and is easy to understand 8 The research concept framework is supported by adequate and relevant literature 9 The research concept framework is clearly formulated 10 The conceptual framework of research is related to the operational framework of research 11 Linked operational framework with the designed method 12 The operational framework is in the form of general operational steps that will be implemented	20			
4	CPMK 4	Able to write a good thesis proposal in terms of language and typography.	6 Thesis is written in clear, systematic, easy-to-understand language 7 No typographical errors 8 Aesthetic writing 9 Writing follows the PUEBI rules 10 The writing follows the FTP UB Final Project Guidebook	15			
5	CPMK 5	Able to plan and develop research methods as planned.	1 The research method is related to the formulation of the problem, conceptual framework, and research operational framework 2 Reliable research methods (can be implemented) 3 The method used is up to date according to the weight of the thesis 4 Methods are written systematically and in detail	20			

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%	Score	Number	Quality Letters
			5 The analysis carried out is relevant and in accordance with the problems that have been identified 6 Methods supported by up-to-date libraries				
6	CPMK 6	Able to master state of the art knowledge of research topics and writing in proposals	7 Backed by up-to-date libraries (less than last 10 years) 8 Mastering state of the art research 9 Mastering the content of the proposal well 10 Able to answer questions well 11 Mastering the latest issues related to designed research methods 12 Able to explain the method and analysis well	15			
Amount				100			

Note: The number of examiners is 2 people, the proportion of assessments of examiners and supervisors is the same.

Appendix 8. Thesis Research Assessment Rubric

CPMK	Criteria	Not enough <55	Enough 55 < NA< 70	Well 70 < NA< 80	Very good 80 < NA 100
CPMK 1 Able to do research independently CPMK 3 Students are able to solve problems scientifically and systematically through research	1.1. Commitment and perseverance	Students have no motivation and run away from research and always give up	Students are always motivated but often do their research as an obligation. Sometimes distracted from work.	Students are motivated and able to solve their own problems with a little help from their supervisor.	Students are highly motivated, Strive to get the most out of their research. Able to control all matters relating to his research. Taking adversity as his motivation
	1.2. Initiative and creativity	Students have absolutely no motivation or ideas	Students get new initiatives and or ideas suggested from other people (supervisors), are not motivated to make choices	Students have the initiative to start discussions with new ideas with their supervisor and develop one or two ideas in the minor part of the research.	Research methods are innovative and or advanced analytical methods. Research problems are formulated scientifically by students
	1.3. Independence	Students are only able to carry out research projects properly after repeating the instructions given and with direct assistance from their supervisor	Students often ask for instructions and assignments that must be explained by the supervisor in detail and the supervisor must check carefully to see if the student has done all the assignments.	Students choose and plan their assignments together with their supervisors and carry out their duties in their own way.	Students plan and carry out obligations independently and are able to organize some assistance obtained independently
	1.4. Work efficiency in carrying out research	Students are unable to set and or execute research experiments	Students are able to execute detailed instructions on several things but often make some mistakes	Students are able executing an experiment that has been designed by someone else. By considering the sources of error and uncertainty qualitatively	Students are able to set up or modify experiments according to their needs to answer research objectives. Consider quantitatively sources of error and uncertainty. Execute experiments smoothly
	1.5. research skill development	Students' knowledge and insight is not enough and	Students are able to adopt some of the skills shown	Students are able to adopt skills in accordance with	Students have broad scientific knowledge and

CPMK	Criteria	Not enough <55	Enough 55 < NA< 70	Well 70 < NA< 80	Very good 80 < NA 100
		students are not able to handle it	during mentoring	those presented during mentoring and develop several skills independently	insight. Students are able to explore problem solving with their abilities, improve their skills and knowledge if they feel the need
CPMK 2 Students are able to analyze research data	Able to perform data analysis Able to interpret research data	Unable to analyze and process research data	Enough to be able to analyze and process research data	Able to analyze and process research data	Very capable of analyzing and processing research data

Advisory Team Assessment Form

Assessment criteria	Score (1-100)	Weight	Value Number x Weight
B. Research competence (50%)			
6. Commitment and persistence		15	
7. Initiative and creativity		15	
8. Independence		15	
9. Efficiency at work		15	
10. Research skill development		15	
B. Data analysis ability			
9. Able to perform data analysis appropriately		15	
10. Able to process data well		10	
Total Number Value			
Letter Value			

Rating Compilation

No.	Evaluator	Weight (%)	Number (1-100)	Weight x Number
1.	Advisor 1	60		
2.	Advisor 2	40		
			Final Score	
			Final Value	

Appendix 9. Thesis Seminar Assessment Rubric

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CPMK 1	Able to compile articles according to scientific rules	The preparation of articles is in accordance with scientific principles which are characterized by: 1. The formulation of the abstract represents the content of the whole article 2. Preliminary problem formulation contains state of the art (newness of existing research with previous research) 3. Formulate methodologies that can solve problems 4. Analyze data according to research results 5. Supported by up-to-date and relevant literature (last 10 years) 6. Sentences are well structured, following the rules of PUEBI (General Indonesian Spelling Guidelines)		The formulation of the problem is not clear and well written with characteristics of less than 50% fulfilling a very good and clear problem formulation as in column 3	The formulation of the problem is written quite clearly and well with the characteristics of meeting 50-<75% very good and clear problem formulation as in column 3	The problem formulation is written clearly and well with the characteristics of meeting 75-<100% very good and clear problem formulation as in column 3	The problem formulation is written very clearly and well with the characteristics of meeting 100% of the excellent and clear problem formulation as in column 3
CPMK 2	Able to present articles orally	Excellent presentation characterized by 1. Sufficient mastery of theory related to the topic studied 2. Power point: in the form of points not sentences,		Malang presentation characterized by less than 50% of the criteria in column 3 are met.	The presentation is quite good which is characterized by 50-<75% of the criteria in column 3 are met.	The presentation is quite good which is characterized by 75-<100% of the criteria in column 3 are met	The presentation is quite good, which is characterized by 100% of the criteria in column 3 being met

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		artistic, interesting, aesthetic					
	1. Able to explain research gaps that underlie article writing	Excellent mastery of the theoretical basis underlying article writing, which is characterized by 1. Able to explain research gaps based on previous research 2. Able to connect theory with the method used		Mastery of the basic theory that underlies article writing is very lacking	Mastery of the basic theory underlying article writing quite well	Mastery of the basic theories that underlie good article writing	Mastery of the basic theory that underlies article writing very well
CPMK 3	Able to communicate scientifically	Communicating good power points characterized by: 1 Presentation with appropriate voice intonation, not too fast or slow, not memorized, 2 Mastering the material presented, mastering the audience. 3. Correct and appropriate timing		Malang communication characterized by less than 50% of the criteria in column 3 are met.	Communication is quite good which is characterized by 50-<75% of the criteria in column 3 are met.	Communication is quite good which is characterized by 75-<100% the criteria in column 3 are met	Communication is quite good, which is characterized by 100% of the criteria in column 3 being met

Thesis Seminar Assessment Form

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%	Score	Number	Quality Letters
1.	CPMK 1	Able to write scripts according to scientific rules	Writing articles according to scientific rules characterized by: 6. Abstract represents the overall content of the article (background, objectives, methods, results and conclusions) 7. Introduction contains state of the art 8. The methodology used can solve the problem 9. Discussion related to research results 10. Make conclusions that have a correlation with the goal	35			
2	CPMK 2	Able to present articles orally	Excellent presentation characterized by: 3. Good mastery of the material. 4. Power point in the form of interesting, artistic points	35			
3	CPMK 3	Able to communicate scientifically	Excellent communication characterized by 5. Presentation with appropriate voice intonation, not too fast or slow, not memorized, 6. Master the audience, master the material 7. Correct and appropriate timing 8. Polite	30			
Amount				100			

Note: Assessment is carried out by supervisors 1 and 2

Final score

No.	Advisor	Proportion	Indigo	Proportion X Value
1	Advisor 1	60%		
2	Advisor 2	40%		
	Final score			

Note: In the case of students presenting oral at national/international seminars following RPS Seminar Thesis (Participation in International Seminars)

Appendix 10. Rubric for Assessment of Thesis Seminar through National/International Seminars

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CPMK 1	Able to compile articles according to scientific rules	The preparation of articles is in accordance with scientific principles which are characterized by: 7. The formulation of the abstract represents the content of the whole article 8. Preliminary problem formulation contains state of the art (newness of existing research with previous research) 9. Formulate methodologies that can solve problems 10. Analyze data according to research results 11. Supported by up-to-date and relevant literature (last 10 years) 12. Sentences are well structured, following the rules of PUEBI (General Indonesian Spelling Guidelines)		The formulation of the problem is not clear and well written with characteristics of less than 50% fulfilling a very good and clear problem formulation as in column 3	The formulation of the problem is written quite clearly and well with the characteristics of meeting 50-<75% very good and clear problem formulation as in column 3	The problem formulation is written clearly and well with the characteristics of meeting 75-<100% very good and clear problem formulation as in column 3	The problem formulation is written very clearly and well with the characteristics of meeting 100% of the excellent and clear problem formulation as in column 3

CPMK	CPMK Description	Scoring Criteria	Related CPL (Filled in Study Program)	Not enough <55	Enough 55 - <70	Well 70 - <80	Very good 80 - 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CPMK 2	Able to present articles orally	Excellent presentation characterized by: 5. Power point in the form of interesting points 6. Artistic power point, aesthetic 7. Powerpoint is very communicative 8. Powerpoint is easy to understand		Malang presentation characterized by less than 50% of the criteria in column 3 are met.	The presentation is quite good which is characterized by 50-<75% of the criteria in column 3 are met.	The presentation is quite good which is characterized by 75-<100% of the criteria in column 3 are met	The presentation is quite good, which is characterized by 100% of the criteria in column 3 being met
CPMK 3	Able to communicate scientifically	The quality of the seminar		Organized by a less reputable institution In national language No proceedings	Organized by a less reputable institution In national language Proceedings are not indexed by a reputable indexer	Hosted by a reputable institution In international language Proceedings are not indexed by a reputable indexer	Hosted by a reputable institution In international language Proceedings indexed by reputable indexers

Thesis Seminar Assessment Form

No.	CPMK	Component (with assessment according to the rubric)	Criteria	%	Score	Number	Quality Letters
1.	CPMK 1	Able to write scripts according to scientific rules	Writing articles according to scientific rules characterized by: 11. Abstract represents the overall content of the article (background, objectives, methods, results and conclusions) 12. Introduction contains state of the art 13. The methodology used can solve the problem 14. Discussion related to research results 15. Make conclusions that have a correlation with the goal	35			
2	CPMK 2	Able to present articles orally	Excellent presentation characterized by: 1 Power points in the form of interesting, artistic, aesthetic points 2 Powerpoint is very communicative 3 Powerpoint is easy to understand	35			
3	CPMK 3	Able to communicate scientifically	Quality of seminars:	30			
Amount				100			

Note: Assessment is carried out by supervisors 1 and 2

Final score

No.	Advisor	Proportion	Indigo	Proportion X Value
1	Advisor 1	60%		
2	Advisor 2	40%		
	Final score			

Appendix 11. Thesis Publication Assessment Rubric

Sub-CPMK	Description of Sub CPMK	Assessment criteria	Not enough	Enough	Well	Very good
			Score 1	Score 2	Score 3	Score 4
1	Able to determine journals/proceedings in accordance with the topic being researched and the depth of research Able to meet the requirements listed in the journal/proceeding guide	Journal publishing quality 1. Continuously indexed on Scopus 2. Publishing consistency 3. The number of articles published in each edition is consistent 4. Not indicated as predatory 5. Quality of article layout 6. Editing quality 7. Review process 8. Reputation of the journal and its index	1. Often discontinues on Scopus 2. Inconsistent publishing 3. The number of articles is inconsistent 4. Including predatory journal 5. Bad layout 6. Bad editing 7. No review process 8. Minimum of Sinta 2 national journals	1. Several times discontinued on Scopus 2. Publishing is rather consistent 3. The number of articles is rather consistent 4. Have you ever been a predator? 5. Layout is quite good 6. Editing is enough 7. Enough review process 8. National journal at least Siinta 2	1. Ever been a disco in Scopus 2. Publishing is quite consistent 3. The number of articles is quite consistent 4. Not including predatory 5. Layout is quite good 6. Good editing 7. Good review process 8. International journal or national journal at least Sinta 2 with good quality	1. Never discontinues on Scopus 2. Consistent publishing 3. Consistent number of articles 4. Journal Q1, Q2, or Q3 5. Very good layout 6. Bsik editing 7. Good review process 8. Reputable indexed international journal or national journal at least Sinta 2
2	Able to compose Introduction	1. Clarity/sharpness/urgency/problem formulation 2. Appropriateness/clarity/sharpness of theoretical basis 3. Past research/current supporting literature review 4. novelty/novelty 5. Clarity of research objectives	1. Urgency/problem formulation is not clear/not sharp 2. Bad theory base is not appropriate/clear/sharp 3. Past research/supporting literature review is few and not up-to-date 4. Bad novelty or there are similarities with other research	1. Urgency/problem formulation is quite clear/not sharp 2. The theoretical basis is quite appropriate/clear/sharp 3. Previous research/supporting literature review is sufficient and quite up-to-date 4. Recentness/novelty is sufficient or there is no resemblance to other research	1. Urgency/problem formulation is clear/sharp 2. The theoretical basis is appropriate/clear/sharp 3. Previous research/supporting literature review is adequate and up-to-date 4. The newness/novelty is good or there is	1. The urgency/problem formulation is very clear/sharp 2. The theoretical basis is very appropriate/clear/sharp 3. Previous research/supporting literature review is very adequate and very up-to-date 4. The novelty is very good or there is no

Sub-CPMK	Description of Sub CPMK	Assessment criteria	Not enough	Enough	Well	Very good
			Score 1	Score 2	Score 3	Score 4
			5. Research objectives are not clear	5. Research objectives are not clear	no resemblance to other research	resemblance to other research
3	Able to arrange method	1. Compatibility with problems 2. Clarity 3. Analysis update 4. The suitability of the data analysis used	1. Does not match the problem 2. Unclear 3. Analysis not up to date 4. The data analysis used is not appropriate	1. Enough with the problem 2. Quite clear 3. The analysis is quite up to date 4. The data analysis used is quite appropriate	1. According to the problem 2. Clear 3. Cutting-edge analysis 4. The data analysis used is appropriate	1. Very suitable for the problem 2. Very clear 3. Very up-to-date analysis 4. The data analysis used is very appropriate
4	Able to arrange Results and Discussion	1. Compatibility with problems and goals 2. Depth and sharpness of discussion 3. Updating supporting literature 4. Data interpretation 5. Comprehensive	1. Not in accordance with the problem and purpose 2. Not deep and not sharp 3. Supporting literature is not up to date 4. Improper interpretation of data 5. Not comprehensive	1. Sufficiently in accordance with the problem and purpose 2. Deep enough and sharp enough 3. Supporting literature is quite up-to-date 4. Data interpretation is rather precise 5. Quite comprehensive	1. In accordance with the problem and purpose 2. Deep and sharp 3. Up-to-date supporting literature 4. Precise data interpretation 5. Comprehensive	1. Very in accordance with the problem and purpose 2. Very deep and very sharp 3. Supporting literature is very up-to-date 4. Data interpretation is very precise 5. Comprehensive
5	Able to draw conclusions	1. Answering problems and goals 2. Do not repeat data 3. The generalization of the research results is well conveyed	1. Does not answer the problem and purpose 2. Repeat writing data 3. There is no generalization of research results	1. Simply answer the problem and purpose 2. Part of the data rewritten 3. The generalization of the research results is written quite precisely	1. Answering problems and goals well 2. Only a small amount of data rewritten 3. Generalization of research results is written correctly	1. Answering problems and goals very well 2. Do not repeat data 3. The generalization of the research results is written very precisely
6	Able to arrange Reference	1. Number of literature 2. No missing literature 3. Libraries	1. The amount of literature is	1. The amount of literature is sufficient	1. Sufficient amount of literature	1. The amount of literature is very adequate

Sub-CPMK	Description of Sub CPMK	Assessment criteria	Not enough	Enough	Well	Very good
			Score 1	Score 2	Score 3	Score 4
		4. Library updates (< last 10 years) 5. Library relevance 6. Bibliography traceability (libraries can be searched online or there is a DOI or can be accessed internationally)	inadequate/very little and what it is 2. Missing literature is more than 50% 3. Primary library <25% 4. No up-to-date library 5. No relevant library 6. All libraries can not be searched	2. Missing literature 25-50% 3. Primary library 25 - <50% 4. Up-to-date library <50% 5. The library is quite relevant 6. <50% library traceability	2. Missing literature <25% 3. Primary library 50 - <75% 4. Up-to-date library 50-<75% 5. Relevant library 6. Traceability 50 - <75%	2. Missing literature 25-50% 3. Primary library 75-100% 4. 75-100% up-to-date library 5. The library is very relevant 6. 75-100% library traceability
7	Able to compose Abstract	1. Interesting written abstract 2. Cover all the elements in the main article briefly	1. Abstract written unattractive 2. Does not cover all the elements in the main article briefly	1. Abstract written quite interesting 2. Covers some of the elements in the main article briefly	1. Interesting written abstract 2. Covers most of all the elements in the main article in a nutshell	1. Abstract written very interesting 2. Cover all the elements in the main article briefly
8.	Able to write according to the grammar and rules of the language used	1. Spelling/writing errors 2. Grammar error 3. Punctuation error 4. Aesthetics of writing 5. According to the journal guide	1. Lots of spelling/writing errors 2. Lots of grammar mistakes 3. There are so many punctuation errors 4. Unaesthetic writing 5. Not following journal guidelines	1. Many spelling/writing errors 2. Lots of grammar mistakes 3. Many punctuation errors 4. Slightly aesthetic writing 5. Not fully following the journal guidelines	1. Moderate spelling/writing errors 2. Moderate grammar error 3. Medium punctuation error 4. Aesthetic writing 5. Follow the journal guide	1. Slight spelling/writing errors 2. Few grammar mistakes 3. Slight punctuation error 4. Very aesthetic writing 5. Follow the journal guide
9.	Able to compile completeness of journals/proceedings/other requirements and delivery (assessed by Supervisor)	Completeness of the journal is fulfilled according to the journal/proceeding guidelines and the required conditions	Completeness of journals/proceedings and other requirements are met as is	Completeness of journals/proceedings and other requirements are met quite well	Completeness of journals/proceedings and other requirements are met properly	Completeness of journals/proceedings and other requirements are met very well

Sub-CPMK	Description of Sub CPMK	Assessment criteria	Not enough	Enough	Well	Very good
			Score 1	Score 2	Score 3	Score 4
10.	Able to make revisions (assessed by Supervisor)	Revisions were carried out well and reviews from reviewers were responded well	Revisions and responses are not done well / Malang	Revisions and responses were done quite well	Revision and response done well	Revisions and responses are very well done

Thesis Publication Assessment Form

Student name :
NIM :
Study program :
Article Title :
Journal Name :
Vol, Edition, Year of publication :
Journal link :
SJR journal link or Journal :

Appraiser Name :
Position : Supervisor/Thesis Quality Assurance Team*
Rating Date :
Signature :
*Cross the unnecessary ones

Rating Points		Rating Score				Score Score	Weight
		1	2	**3**	4		
A. Quality of Journal/Proceeding Publishing							Value = …….
1	Continuously indexed on Scopus						15%
2	Publishing consistency						
3	The number of articles published in each edition is consistent						
4	Not indicated as predatory						
5	Quality of article layout						
6	Editing quality						
7	Review process						
8	SJR journal						
		Amount				……	…../32 X 15

Rating Points		Rating Score				Score Score	Weight
		1	2	**3**	4		
B. Introduction							Value = ...
1	Clarity/sharpness/urgency/problem formulation						10%
2	Appropriateness/clarity/sharpness of theoretical basis						
3	Past research/current supporting literature review						
4	novelty/novelty						
5	Clarity of research objectives						
		Amount				……	…../20 X 10
C. Methods							Value = …….
1	Compatibility with problems						15
2	Clarity						
3	Analysis update						
4	The suitability of the data analysis used						
							…../16 X 15
D. Results and Discussion							Value = …….
1	Compatibility with problems and goals						30%
2	Depth and sharpness of discussion						
3	Updating supporting literature						
4	Data interpretation						
5	Comprehensive						
		Amount				……	…../20 X 30
E. Conclusion							Value = …….
1	Answering problems and goals						5%
2	Do not repeat data						
3	The generalization of the research results is well conveyed						

Rating Points		Rating Score				Score Score	Weight
		1	2	**3**	4		
		Amount				……	…… /9 X 5
F. Reference							Value = ……
1	Number of literature						10%
2	No missing literature						
3	Libraries						
4	Library updates (< last 10 years)						
5	Library relevance						
6	Bibliography traceability (libraries can be searched online or there is a DOI or can be accessed internationally)						
		Amount				……	…/24 X 10
G. Abstract							Value = ……
1	Interesting written abstract						5%
2	Cover all the elements in the main article briefly						
		Amount					…../8 X 5
H. Language Quality							Value = ……
1	Spelling/writing errors						10%
2	Grammar error						
3	Punctuation error						
4	Aesthetics and conformance to guidelines						
		Amount					…./16 X 10
Total Value A+B+C+D+E+E+F+G+H							Letter Value:

Thesis Publication Guidance Assessment Form
(Assessment by Supervisor)

Student name :
NIM :
Study program :
Article Title :
Journal Name :
Vol, Edition, Year of publication :
Journal link :
Appraiser Name :
Rating Date :
Signature :

Rating Points		Rating Score				Proportion	Score
		1	2	**3**	4		
1	Completeness of the journal is fulfilled according to the journal/proceeding guidelines and the required conditions					20	
2	Revisions were carried out well and reviews from reviewers were responded well					30	
3	Seriousness in compiling journals					10	
4	Independence in compiling journals					10	
5	Difficulty level in publication					10	
6	Timeliness in preparing journals					10	
7	Intensity of mentoring					10	
		Total Value					
		Final Score = Total Score : 4					

Description: 1 = Bad; 2 = Enough; 3 = Good; 4 = Very good

Compilation of Thesis Publication Assessment

Student name :
NIM :
Study program :
Article Title :
Journal Name :
Vol, Edition, Year of publication :
Journal link :
SJR journal link or :
Journal

No.	Evaluator	%	Number	Score
1.	Rating Average (from all Assessors and Advisors)	80		
2.	Guidance			
	Advisor 1	12.5		
	Bomber 2	7.5		
Amount				

Description: Number of raters: 2 people

Appendix 11. Assessment Rubric for Thesis Compilation

CPMK	Criteria	Not enough < 55	Enough 55 < NA 70	Well 70 < NA 80	Very good 80 < NA 100
1. Originality and Recency (20%)					
CPMK 1 Students are able to identify relevant theories and concepts and relate them to methodologies and evidence, apply appropriate techniques and draw conclusions systematically. CPMK 4 Students demonstrate the ability to make a real contribution to (new) knowledge through the results of their research.	1.1.Originality and Recency	Making small and unoriginal contributions using a cookbook approach, not very interesting but demonstrates the ability to do research	-Make sufficient contribution by answering relevant but small and outdated problems	Make an important contribution by solving problem solutions in new ways, answering problems in new ways but not completely	Making an interesting contribution is the main contribution, both in solving an old problem in a brilliant and innovative way as well as answering current problems
2. Thesis Writing (50%)					
CPMK 2 Students are able to compile research reports that have up-to-date topics in their fields CPMK 3 Students are able to interpret and apply information in the	2.1. Research relevance, clarity of purpose,	There is no relationship between the research objectives and the topic. There is no explanation of the research context	The explanation of the context of the topic is too general, there is no relationship between what has been researched and what will be researched	Explanation of the research formulation is good. There is a relationship between context and research objectives	Research is positioned appropriately in the relevant field of science. Students are able to demonstrate novelty and research innovation
	2.2. Theoretical foundations and use of literature	There is no discussion based on theory	Students find relevant theoretical foundations but the explanations are	Students find relevant theoretical foundations, are able to make a	The writing of the relevant theoretical foundation is clear,

CPMK	Criteria	Not enough < 55	Enough 55 < NA 70	Well 70 < NA 80	Very good 80 < NA 100
literature to explain the results of their research.			not in accordance with their research and show some errors	synthesis and successfully adapt the discussion to existing research	complete and coherent, up to date. Appropriately adapted to existing research
	2.3. use of methods and data processing	There is no explanation of the method and or research data	Some aspects concerning data collection, data treatment, model or method of analysis are not clear, so some parts cannot be reproduced	Explanation of data (how to obtain, treatment, etc.) and method of analysis are lacking in some parts	Explanation of data (method of obtaining, treatment, etc.) and method of analysis are complete and clear. Thus enabling the reproduction of research data
	2.4. Discussion	There is no discussion or reflection on his research. The discussion is only written in general The discussion is not connected with the literature	Students are able to show most of the weaknesses in research but are unable to weigh the impact on the research results relative to each other	Students show differences in research results that are clearly visible and relate them to the literature. Students try to explain the added value of their research but do not relate it to existing research	Students critically confront the research results with the existing literature, if there are differences, they can weigh the results with the existing literature. Students are able to show the contribution of their work to the development of scientific concepts
	2.5. Clarity of conclusions and recommendations	There is no relationship between research objectives, results and conclusions	Conclusions answer the research objectives but not all research objectives. Some conclusions are not based on results or just repeat the results	The relationship between research objectives and conclusions is clear. All conclusions are based on results. Conclusions are formulated precisely and clearly.	The relationship between research objectives and conclusions is clear. Conclusion based on results. Conclusions are formulated precisely and

CPMK	Criteria	Not enough < 55	Enough 55 < NA 70	Well 70 < NA 80	Very good 80 < NA 100
					thoroughly. Conclusions are grouped logically
CPMK 5 Students are able to communicate concepts and research results clearly and effectively in scientific writing and orally.	2.6. Writing	The thesis is not well structured. Not detailed explanation.	Thesis structure does not match the main format, wrong in some places and misplaced some topics The level of detail varies greatly between chapters, no information, irrelevant information)	Thesis Structure Most of the functions are clear and specific. The hierarchy of each chapter/sub chapter is mostly correct. The sequence of chapters/sub-chapters is mostly logical, there are only a few that are illogical. The level of detail is mostly good.	Good report structure: Each chapter has a specific and clear function. The hierarchy of each chapter/sub-chapter is correct. The sequence of each chapter / sub chapter is logical. All the information is in the right place. The level of detail in all the sections is good
3. Ability to defend thesis and presentation (30%)					
CPMK 5 Students are able to communicate concepts and research results clearly and effectively in scientific writing and orally.	3.1.Ability to defend thesis	Students have difficulty in explaining knowledge that is relevant to their research topic	Students are able to defend the thesis, master most of the content written in the thesis, only a small part are unable to explain what they are doing and why they are doing it.	Students are able to defend the thesis. Mastering written content, not mastering beyond it (which is still relevant)	Students are able to defend the thesis, and are able to show certain parts that are done better. Students are able to put the thesis, in a scientific or practical context
	3.2 Mastery of the field of science	Students do not understand all the knowledge that is relevant to their research topic written in the thesis,	Students understand knowledge that is relevant to their research topic at the text book level	Students understand knowledge that is relevant to their research topic including the literature used in the thesis,	Students not only understand the knowledge that is relevant to the research topic written in the discussion but also understand the

CPMK	Criteria	Not enough < 55	Enough 55 < NA 70	Well 70 < NA 80	Very good 80 < NA 100
					discussion of the topic under study with the literature
	3.3. Verbal presentation	Monotonous presentation and student reading from slides. Too much text and few graphics (graphs or tables) or vice versa.	Unstructured presentation in some parts is not clear. In some parts too much text and few graphics (graphs or tables) or vice versa	The presentation structure is clear, the presentation is monotonous in only a few parts. Only in a few parts the use of text, tables and graphics is not balanced	The presentation structure is clear and concise, to the point. Clear use of text, tables and graphics

Advisory and Examiner Team Assessment Form

Assessment criteria	Score (1-100)	Weight (%)	Value Number x Weight
A..Originality and Recency 20%		20	……
B. Thesis Manuscript 50%			
11. Research relevance, clarity of purpose		5	
12. Theoretical foundations and use of literature		5	
13. Use of methods and data processing		10	
14. Discussion		20	
15. Clarity of conclusions and recommendations		5	
16. Writing		5	
C, Ability to defend thesis and presentation 30%			
4. Ability to defend thesis		15	
5. Mastery of the field of science		10	
6. Verbal presentation		5	
Average value defend thesis and presentation			
Thesis Exam Total Score			

Compilation of Exam Assessment

No.	Evaluator	%	Number (1-100)	Score
1.	Advisor 1			
2.	Advisor 2			
3.	Tester 1			
4.	Tester 2			
Amount				

PART II
THESIS WRITING FORMAT

CHAPTER 1
THESE PARTS

Scientific work is divided into three parts, namely: the beginning, the main part and the end.

1.1. The Beginning of Scientific Work

The initial part of the scientific work consists of:

1. Cover
2. Title page
3. Approval and endorsement page
4. Designation page (not required)
5. The summary is written in Indonesian and English
6. Preface page
7. Contents page
8. Table list page
9. Image list page
10. Attachment list page

1.2. Main Section Scientific work

The main parts of the Thesis Proposal consist of:

1. preliminary
2. Literature review
3. Theoretical foundation and framework
4. Hypothesis
5. Research methods
6. References

The main parts of the Thesis Report consist of:

1. preliminary
2. Literature review
3. Theoretical foundation and frame of mind
4. Hypothesis
5. Research methods
6. Results and discussion or chapters containing the main content of the scientific work.
7. Conclusions and suggestions
8. References

1.3. Final part of scientific work

The final part of the scientific paper consists of: Appendix.

CHAPTER 2
THESIS WRITING GUIDELINES

2.1. Paper

The paper used is HVS/Photocopy of A4 size and weighs 80g. Reproduction of scientific works is carried out with clean photocopies, must not be typed back and forth and neatly bound in the form of a soft cover in light green color and black writing.

2.2. Font type

Scientific work manuscripts are typed on a computer with Arial 11 typeface.

2.3. Margin

The typing limit is 4 cm from the left side of the paper, 3 cm from the right side border, the bottom and top sides of the paper, excluding page numbers.

2.4. Format

Every time you start a new paragraph, the first word is typed to the right in five spaces. After the comma, semicolon and colon are spaced one space (before the colon is not spaced), except after the full stop for new sentences, spaced two spaces. Each chapter begins on a new page, typed with a capital letter placed at the top center of the page. Sub-chapters are typed on the left side of the page, with lowercase letters except the first letter of each word being typed in capitals, word termination in one sentence line must follow the standard and correct Indonesian rules.

2.5. Space

The spacing between lines in the text is 1.5 spaces. The distance between the lines in the title sentence, sub-headings, sub-chapters, table titles and picture titles as well as summaries are typed with a single space.

2.6. Page Number

The first part of a scientific paper is numbered using small Roman numerals (i, ii, iv and so on), placed in the lower center of the page. Especially at the beginning of a scientific paper, page numbering starts from the introduction. For the main part and the end of the scientific paper, page numbers are given in the form of numbers which are placed on the top right side of the page. For each page of a new chapter, the page number is typed at the bottom right side of the page

CHAPTER 3
THE BEGINNING OF THE THESIS

3.1. Cover

The outer cover of the thesis is light green. Printed on the cover: the title of the thesis, the words: thesis (capital letters), the sentence: To Fulfill the Requirements for Obtaining a Master's Degree, the name of the study program, the symbol of Universitas Brawijaya, the full name of the author (without a degree), the student identification number, the inscription: Postgraduate Program Universitas Brawijaya Malang, and the year the thesis was submitted (Sample cover see Appendix 1). The cover consists of two parts: a hard cover and an inner white HVS paper. On the back cover the author's name, thesis title and year of graduation are listed. How to write the back of a book, an example of a front cover for typing on a spine, see Appendix 2.

3.2. Title page

The title page of the scientific paper contains the same writing as the cover page, but is printed on white paper. Example of title page in Appendix 3.

3.3. Approval/Approval Page

The approval/approval page contains the title of the scientific paper, the author's name and the words of ratification, the composition of the board of examiners and the signature of the board of examiners in the order of the chairman of the main supervisory commission, members of the supervisory commission, the board of examiners as well as the endorsement of the Head of the FTP Masters Study Program. An example of the approval page is in Appendix 4.

3.4. Statement of Thesis Originality

Statement of originality is the author's statement and guarantee for the authenticity of the Thesis written by him. An example of a statement of originality is shown in Appendix 5.

3.5. Designation Page

The allotted page is not a mandatory page to be held. On this page, personal matters are written, among others, for whom the thesis or dissertation is presented. An example of the designation page is in Appendix 6.

3.6. summary

The summary is written in two languages: Indonesian and English. Because it is a translation between the two versions, the sentences between the two must be the same. The title of the summary is the same as the title of the scientific paper, typed in capital letters on a new page. The title of the summary or summary is placed at the top of the page. The summary includes the research problem, research objectives, research methods and salient research results. In the summary there should be no quotations (references) from the literature, so it is the result of writing/pure descriptions of the author. The contents of the summary must be understandable without having to look back at the material of the scientific paper. The summary is composed of 600-800 words (1.5 - 2 pages) and typed in one space. The bottom part of the summary is added with at least 5 keywords.

3.7. Foreword Page

The preface contains a brief description of the process of writing a scientific paper, thanks and there should be no scientific description. An example of an introductory page is in Appendix 9.

3.8. Table of Contents Halaman

The table of contents page is typed on a new page and given the title of the table of contents typed in capital letters without ending with a period and placed in the middle of the paper. The table of contents contains a list of tables, a list of pictures, titles of chapters and sub-chapters, bibliography and appendices. Information that precedes the table of contents does not need to be included in the table of contents. The title of the chapter is typed in capital letters, while the title of the sub-chapter is typed in lowercase except for the first letter of each sub-chapter which is typed in capital letters. Neither chapter titles nor sub-chapters end with a period. Chapter numbers use Roman numerals and sub chapters use Arabic numerals. The typing distance between the title lines of one chapter and another is two spaces, while the space between the chapters is one space. Sample table of contents page in Appendix 10.

3.9. Tables Page

The table list page is typed on a new page. The title of the table list is typed in capital letters without ending with a period and is placed in the center of the paper. The table list contains all the tables presented in the text and appendices. Table numbers are written with numbers. The spacing of table titles (text) that is more than one line is typed one space and the distance between table titles is two spaces. The table title in the table list page must match the table title in the text. An example of a table list page is seen in Appendix 11.

3.10. Image List Page

The image list page is typed on a new page. The image list page contains a list of images, image numbers, image titles and page numbers, both images in the text and in the Appendix. How to type on the image list page as on the table list page (Item 8). An example of an image list page is in Appendix 12.

3.11. Attachment List Page

Attachment list page is typed on a new page. The title of the attachment list is typed in the top center of the page in capital letters. The attachment list page contains the attachment and page title text numbers. The title of the attachment list must be the same as the title of the attachment. The appendix contains examples of calculations, variances, maps and data. An example of an attachment list page is in Appendix 13.

3.12. List of Symbols and Abbreviations Halaman

The list of symbols and abbreviations page contains symbols/quantities and abbreviations of terms/units. The Symbol list section does not need to be present all the time. The typing method is as follows:

- The first row/column contains abbreviations.
- There is a second row/column containing abbreviations presented in the first column.
- The abbreviations are written in the Latin alphabet, with uppercase letters followed by lowercase letters.
- If the symbol is written in Greek letters, the writing is also based on the Greek alphabet.
- Information in the second column is typed in lowercase, except for the first letter in uppercase.

3.13. Plagiarism Free Proof

In the thesis report, it is necessary to include proof of plagiarism free issued by an official institution within the Universias Brawijaya, provided that the tolerance for

similarity (similarity) is a maximum of 20%. This plagiarism-free proof is included on the last page of the thesis report.

CHAPTER 4
MAIN PART OF THE THESIS

The main part of a scientific work consists of several chapters. The number of chapters is not standardized, but adjusted to the scope of the author's research. The main sections generally consist of: introduction, literature review, research methods, results and discussion, conclusions and suggestions, and bibliography.

4.1. preliminary

This introductory chapter contains: background, problem formulation, research objectives and research benefits.

a. Research background: contains facts relevant to the research problem as a starting point for formulating research problems, the reasons why the problems raised in the research proposal are considered interesting and important to research. The position of the research carried out refers to the research that has been done before.
b. Problem formulation: contains the process of simplifying complex and complex real-world problems formulated into researchable problems, or formulating the link between scientific or technological knowledge gaps to be studied with wider scientific knowledge gaps. The formulation of the problem is not always in the form of a question sentence.
c. Research objectives: the research objectives must specify the objectives to be achieved in the research. In some cases, the research objectives should also be implied in the research title. With logic like point (b) above, if the formulation of the problem is stated in the form of questions, the number of questions does not always have to be the same as the research objectives.
d. Research benefits: stating the relationship between the research results formulated in the research objectives with the problem of wider gaps or the real world that is complicated and complex.

4.2. Literature review

The position of the literature review is placed after the presentation of the formulation of the problem, the purpose and use of the research, so that the library materials presented in the guided literature review are directed. Based on this mindset, the materials presented in the literature review should be relevant to the research problem. The essence of the literature review is not looking for problems from the literature, but rather serves to sharpen the problem, study the approaches that have been taken, what has been produced by previous researchers, and at the same time to avoid unnecessary repetitions and avoid mistakes faced by previous researchers.

In the literature review chapter, the theory that underlies the object under study is discussed, in the form of the results of previous studies that are relevant to the research problem. The literature review analyzes the development of science/research results in scientific journals that are relevant to the scope of research.

The contents of a literature review can provide a scientific basis to sharpen and answer research problems, the research methods chosen, the direction of research in the scope of similar research.

Appropriate bibliography:

1. Scientific journals, theses / dissertations, text books with ISBN
2. Recent publication references last 10 years (minimum 60%)
3. Proceedings and patents

4.3. Theoretical Foundations and Thinking Framework

The theoretical foundation is the basis of the framework of thought. This section is needed to develop a hypothesis which is a common thread/analysis based on a literature

review which contains a description of the research results that support or reject the theory, around the research problem. Hypotheses are written after the theoretical foundation and framework of thought.

4.4. Research methods

The synonym of research methods is design research in a narrow sense. In principle, in the research method, two things are stated, namely materials/tools and data analysis methods. In research that uses experiments, the first includes the experimental design, the materials used in the experiment, and the second analyzes the data used to obtain conclusions. In research using the survey method, the research locations, sampling procedures up to the smallest research unit (sample).

The research method provides a detailed description of:

a. Place and time of research: description of research location and research time since the research was conducted.
b. Materials and tools: specification of research materials or materials including the origin of the sample, method of sample preparation, age of the sample (if any), physical properties, and chemicals used. This needs to be stated so that other researchers who want to re-test the research do not take the wrong step.
c. Research methods. The research procedure is presented in full and in detail about the steps that have been taken in the implementation of the research and is described in the form of a research flow chart.
d. Parameter observation: describes the type of parameter or data collection that includes methods, methods of analyzing data, whether chemical, physical, organoleptic or biological tests and statistical data analysis.

The difficulties that arise during research and how to overcome them need to be shown, so that researchers who will be involved in similar research fields avoid unpleasant things. For students who write scientific papers on the design of tools such as programming or modeling, for example, this chapter describes the design system which includes descriptions of materials and tools, tool design and tool testing.

4.5. Results and Discussion

Research results are usually combined in one chapter, namely Results and Discussion, but this is not a requirement. Research results do not have to be contained in one chapter, but can be divided into several chapters as needed. Giving a name for each chapter is adjusted to the content of the subject matter. Examples of each chapter are in Appendix 15.

The presentation of research results can be in the form of text, tables, images, graphics and photos. TTables and figures are placed on the manuscript page in such a way that the boundary line does not exceed the limit of the paper that can be printed and tables and figures are located symmetrically (centered) in it.. Research results can contain main data, supporting and complementary data needed to strengthen research results.

The discussion is the reason why the data obtained are in such a way and a good description of the discussion from the researcher concerned must be stated, which can be strengthened, contradicted or in accordance with the results of other people's research. The reasons can be in the form of theoretical explanations, either qualitatively, quantitatively or statistically.

4.6. Conclusions and suggestions

Conclusions are presented separately from suggestions. The synonym of suggestions is the implications of research results.

a. The conclusion must be a brief and accurate statement presented from the results of the discussion. The conclusion can be a brief proof of the truth of the hypothesis (if any). The conclusion is the answer to the research problem and as far as possible must be in accordance with the research objectives.

b. Suggestions are the experiences and considerations of the authors intended for researchers in similar fields who wish to conduct further research. Suggestions can also include: problems encountered in the implementation of research.

CHAPTER 5
FINAL PART OF THESIS

The final part of the scientific paper is an appendix. The appendix may consist of data or other information that serves to complete the description presented in the main part of the thesis. Attachments can be: examples of calculations, questionnaires, descriptions of analytical methods, pictures, photos, maps, supporting data, etc. In principle, the appendix is a useful additional explanation, but it is not discussed directly in the text, which if presented in the text will interfere with the context of the discussion.

CHAPTER 6
THESIS WRITING GUIDELINES

6.1. Use of foreign language

The use of foreign languages for writing the manuscript of the Final Project may be permitted within certain limits. Words or terms in foreign languages that have not yet been translated into Indonesian are italicized, for example starter, vacuum drying. If the word in the foreign language already has a standard translation into Indonesian, it is advisable to use the translation by mentioning the foreign language version and its Indonesian equivalent at the time the word first appears in the text.

For example, the word vacuum drying. When it first appears in the text, the word vacuum drying is followed (vacuum drying), while furthermore when the word reappears, the translation can only be used: vacuum drying. Latin words must be italicized or underlined, for example: et al., ie viz, a priori, tet a tet, Oryza sativa L., Rhizopus oligosporus, and so on.

6.2. Use of punctuation and abbreviations

a. The use of punctuation marks such as periods, commas, colons and so on, refers to good and correct Indonesian rules.

b. The use of standard abbreviations for words in Indonesian and foreign languages is acceptable in the preparation of the Final Project, for example: dll, etc., et al., etc, et al. It is also acceptable to write an abbreviation for the name of an agency or institution that is repeatedly used in the Final Project, as long as it appears for the first time with an extension, for example, Disperindag (Department of Industry and Trade), Provincial Government (Provincial Government), DRK (List of Planned Activities) and so on.

6.3. Symbol (Emblem) and Unit

a. Use of Symbols (Emblems)

The symbols or symbols used for writing the manuscript of the Final Project must be standard for each discipline. Usually, for each equation, formula, formula, diagram and the like, it is followed by a description of the symbol. Although there are standard rules for the meaning of symbols, each symbol used must be given an explanation of its meaning. Even if a sufficient number of symbols are used, it is advisable to create a separate page containing a list and description of the symbols (see the subsection Pages of Lists and Symbol Descriptions).

If you use letters to symbolize something, such as variables (variables), chemical formulas, Latin Greek letters must be used, both in uppercase and lowercase letters. Coat of arms can consist of one or two letters. Symbols can be subscripted or superscripted or both. Subscripts and superscripts can be letters or numbers.

b. Numbers and Units

i. Numbers are used to write the date, time, page number, percentage, and time, for example: August 2, 2003, 05.00 am, page 106, 15 percent.
ii. In the Final Project, the amount should be stated in numbers while the unit of a quantity is stated with the abbreviation of the unit, unless the unit is not preceded by a number, for example: pipe length is measured in centimeters; the height of the tower is 105 m.
iii. Writing the unit of a quantity is not marked with a dot after it, unless it is at the end of a sentence.

iv. Writing numbers without units or symbols that are less than 10 are used letters (words), such as four parts, nine groups, one space.
v. If a sentence contains a series of numbers, both smaller and larger than 10, then all of them are listed with numbers, while the writing of the units is simply listed after the last sequence of numbers, for example: 0, 5, 10 and 15 oC; Rp. 9,000
vi. The following examples can be used as a reference in writing numbers and units, which can be seen in Table 3.1.
vii. The units for multiplication and division are written by separating the two units using a slash (Table 3.2.).

Table 6.1. The physical quantities of the Sl system and their units

Quantity	Sub quantity	Unit	Symbol
Base	Long	meters	m
	Mass	grams, kilograms	g, kg
	Time	seconds	s
	electric current	(seconds)	A
	amount of substance	ampere	mole
	Light intensity	mole	CD
Derivative	Large	candela	m2
	Speed	square meter	ms-1
	Power	meters per	W
	Pressure	second	Pa
	electrical charge	watt	C
	electric potential	Pascal	V
	difference	coulomb	□
	electrical resistance	volt	lx
	illuminance	ohm	Hz
	Frequency	lux	N
	Style	hertz	m3 or L
	Volume	newtons	
		cubic meter *	

*can be written in liters with the symbol

Table 6.2. Units in Indonesian and abbreviations for units of multiplication and division

Unit	Unit writing
millimeters per day	mm/day
kilograms of P2O5 per hectare	kg P2O5/ha
milligrams per gram per hour	mg/g/hour
grams per second	g/sec or g/s

c. Writing fractional numbers in decimal form uses a comma to delimit the fractional number from the whole number, for example 100,30. Dots are used to express multiples of thousands, for example, two thousand are written as 2,000, ten million are written as 10,000,000 and so on.

d. The units used for writing the Final Project are metric units or other international units if there is no metric unit for that quantity. Traditional units such as fathoms, pikuls, sacks, should not be used in the Final Project.

6.4. Bibliography Citing and Writing Bibliography

a. The bibliography contains the sources cited in the final project manuscript. The bibliography is written 1 space with the second line and so on indented as far as 1 cm. Between libraries are spaced 1 space.

   Example:

   McClements DJ, Zou L, Zhang R, Salvia-Trujillo L, Kumosani T, Xiao. 2015 H. Enhancing nutraceutical performance using excipient foods: designing food structures and processes to increase bioavailability. Comprehensive Reviews in Food Science and Food Safety 14: 824-847. DOI: 10.1111/1541-4337.12170

Tadros TF. 2013. Emulsion formation, stability, and rheology. In Tadros TF (ed), Emulsion Formation and Stability. 1st ed. Wiley-VCH Verlag GmbH & Co. KgaA, Weinheim.

Zhang Z, Wang X, Liu C, Li J. 2016. The degradation, antioxidant and antimutagenic activity of the mucilage polysaccharide from Dioscorea opposite. Carbohydrate Polymers 150(5): 227-231. https://doi.org/10.1016/j.carbpol.2016.05.034.

b. Authors more than 2 people are written only the first author's name by adding et al. Example: Jurak et al. (2019) if it is placed at the beginning of the sentence or (Jurak et al., 2019) if it is placed at the end of the sentence.

c. If there are 2 authors in 1 book or 1 reference source, then the writing uses the conjunction "and". Example: Cho and Jones (2019) if placed at the beginning of the sentence or (Cho and Jones, 2019) if placed at the end of the sentence.

d. The author's name can be written at the beginning, in the middle or at the end of a sentence (text) depending on the arrangement.

e. Especially for quoting tables and figures (non-text) from a library, the name of the author and the year of publication of the library are listed at the bottom of the table and after the last sentence of the title of the figure.

f. If the same author publishes two or more libraries in the same year, then the citation is to add the letters a, b, c and so on (the letters don't need to be in Superscript) in the order they appear in the final manuscript, after the year of writing, for example Vendruscolo (2016a), (Yao and McClements, 2015b).

g. How to cite the opinion of authors listed in other literature follows the following example: Li et al. (2015) in Ang et al. (2019) suggested that …… or … Phospholipids are often used in the food, pharmaceutical, and cosmetic industries as emulsifiers, antioxidants, and drug carriers for the encapsulation of bioactive compounds (Li et al., 2015 in Ang et al., 2019).

6.5. Bibliography Writing

a. Arranged in alphabetical order by author's name and year of publication. If there are 2 books that are referred to written by the same person but published in different years, the author's name is written again for each library.

b. The first author's name starts with the last/surname/family name, followed by the first and second names (if any). For example:
   - Basuki Abdullah written: Abdullah B

- Seno Sastroamidjojo written: Sastroamidjojo S
- Sutan Takdir Alisyahbana is written: Alisyahbana ST
- I Nyoman Suwandi Pendit written: Pendit INS

c. Bachelor degrees, such as Prof., Dr., Ir., dr., Drs., SH., B.Sc., MA, M.Sc., and others in the bibliography do not need to be included.

d. If there is more than one author, all authors' names are listed. Cannot be summarized as et al. or et al.

e. If there are two authors, in both citations the names are written using conjunctions and for example Cho and Jones (2019), even though the library sources are in foreign languages.

f. Sources of literature from Indonesian or Indonesian, if more than two, then cite using et al. (not et al). For example Purnomo et al. (2018) or Lestar et al., (2019).

g. The year of publication is coded a, b, c, d…..etc if the same author is published in the same year. Code writing is based on the order of citations in the script.

h. Journal names are abbreviated with standard abbreviations followed by writing volume, number, and pages.

i. The title of the book is written in capital letters for each word except for conjunctions (style title case) and is italicized, and the title of the manuscript of the journal is written in capital letters on the first word (style sentence case).

j. The names of journals, magazines, or newsletters are not abbreviated.

k. Example of writing a bibliography according to its type

The writing of the bibliography in the Bibliography depends on each type of library with the following details:

1. Libraries in the form of Periodic Scientific Magazines (Journals/Bulletins)

How to write:

Author's name, year of publication, title of article/writing, name of magazine/journal, volume and magazine number and page number of article/writing followed by digital object identifier if any

Example:

McClements DJ, Zou L, Zhang R, Salvia-Trujillo L, Kumosani T, Xiao H. 2015. Enhancing nutraceutical performance using excipient foods: designing food structures and processes to increase bioavailability. Comprehensive Reviews in Food Science and Food Safety 14: 824-847. DOI: 10.1111/1541-4337.12170

Zhang Z, Wang X, Liu C, Li J. 2016. The degradation, antioxidant and antimutagenic activity of the mucilage polysaccharide from Dioscorea opposite. Carbohydrate Polymers 150(5): 227-231. https://doi.org/10.1016/j.carbpol.2016.05.034.

2. Library in the form of Textbooks

How to write:

Name of author, year of publication, title of book, edition number (if not the first edition), name of publisher and place of publisher (name of region/city).

Example:

McClements DJ. 2015. Food Emulsions: Principles, Practices, and Techniques. 3rd ed. CRC Press, Boca Raton, Florida.

3. Chapters in Books

How to write:

Name of author, year of publication, title of chapter, name of editor, title of book, edition number (if not the first edition), name of publisher and place of publisher (name of region/city).

Example:

Tadros TF. 2013. Emulsion formation, stability, and rheology. In Tadros TF (ed), Emulsion Formation and Stability. 1st ed. Wiley-VCH Verlag GmbH & Co. KgaA, Weinheim.

4. Thesis, Thesis, Dissertation

How to write:

Name of author, year of publication, title of chapter, name of editor, title of book, edition number (if not the first edition), name of publisher and place of publisher (name of region/city).

Example:

Zahra AM. 2016. Characteristics of Lampung Silica Sand Waterglass with Smelting Sodium Hydroxide Base and Its Application in Postharvest Handling of Tomato (Solanum lycopersicum). Essay. Department of Agricultural Product Technology, Faculty of Agricultural Technology, Universitas Brawijaya.

Erning YI. 2019. Detoxification of Bitter Cassava Cyanide (Manihot esculenta Crantz) by Submerged and Solid Spontaneous Fermentation Methods and Back-Slopping Fermentation and Base Immersion. Dissertation. Doctoral Program in Agricultural Sciences, Faculty of Agriculture, Universitas Brawijaya.

5. Internet

How to write:

Author name, year, title, page, date of access.

Example:

Research and Markets. 2019. Global Rice Bran Oil Markets, 2011-2018 & 2019-2024.https://www.globenewswire.com. Access date 8 July 2019.

6. Patent

How to write:

Author's name, year, patent title, patent number.

Example:

Torgersen TL, Klaveness J, Myrset AH. 2012. Antioxidants in fish oil powder and tablets. US Patent 2012O156296A1.

7. Proceedings

How to write:

Author's name, year, article title, proceedings followed by the name of the seminar, place, date of the seminar.

Example:

Estiasih T, Harijono, Ahmadi K. 2017. Increasing production capacity, improving packaging, and implementing quality systems in small and medium-sized businesses for instant herbal drinks for export market expansion. Proceedings of the National Seminar on Communication Forum of Indonesian Agricultural Technology Universities (FKPTTPI). Kendari, 17 September.

Estiasih T, Aggriani R, Maligan JM. 2016. Protein composition and functional properties of protein concentrate from selected soybean (Glycine max) superior varieties. Proceedings of the International Conference on Food Properties (ICFP). Bangkok, Thailand, May 31-June 2.

6.6. Etc

The Indonesian language that must be used in the Thesis text follows the rules of using Standard and Correct Indonesian in accordance with the Enhanced Spelling (EYD). Grammatical rules must be adhered to by compiling complete and complete sentences. Use punctuation as necessary so that the clause can be distinguished from its main clause. It is recommended that you use clauses carefully so that the sentence does not lose its subject. Passive sentences are more commonly used in scientific writing.

Personal pronouns, especially first person pronouns (I, we), should not be used in textual sentences, except in quotations. Cutting words into syllables must follow the correct conditions. The last word in the last line of a sentence on a page should not be truncated. If a paragraph must be broken due to a page change, then the last paragraph on that page must have at least two lines remaining. Similarly, the section that is moved on the next page is a minimum of two lines. Use the enhanced Indonesian Spelling General Guidelines, General Guidelines for the Formation of Terms, and the General Indonesian Dictionary as a guide.

The first page of the Thesis is numbered using Roman lowercase numbers, starting with the approval page. The main body of the Thesis, starting with the Introduction, is numbered in Arabic numerals. Each chapter starts on a new page and the page numbers on the first sheet of each chapter do not need to be listed. All page numbers, whether Roman numerals or Arabic numerals, are typed 1 cm from the bottom border and the right side of the paper, and the page numbers do not end with a full stop punctuation mark behind the page number.

The writing of the text in the Preface must use scientific rules and correct Indonesian language, it is not allowed to use popular everyday words/terms.

CHAPTER 7
HOW TO WRITE THESIS

7.1. Title Writing

a. Indonesian title: all capital letters except for the Latin name (eg species name) italicized with a capital letter in the first word)
b. English title: italicized, capitalized at the beginning of words except for conjunctions like and, of, after, before, or, at, on, for, toward, off etc.

7.2. Table Writing

a. The table is made open (without borders on the right and left of the table cover)
b. The table title is written in capital letters at the beginning of the sentence, without ending with a period
c. Headings in table columns are capitalized at the beginning of each word except conjunctions
d. The title in the table row is capitalized at the beginning of each word except for conjunctions
e. *Fonts* in the table is Arial 11
f. *Fonts* for descriptions written with Arial 11
g. Statistical notation that follows the numbers in the table is written in lowercase and separated by spaces

Example of writing a table for 2 columns:

Table 7.1. Characteristics of palm oil fatty acid distillate (DALMS) and unsaponifiable fraction (FTT)

Characteristics	DALMS	FTT
Free fatty acid content (%)	80.74±0.49	4.06±0.70
Peroxide number (mec/kg)	4.74±0.78	3.31±0.35
Anisidin number	2.79±0.67	2.32±0.20
yield		2.17±0.39

7.3. Image Writing

a. All images must be referenced in the text. Images and illustrations must use high resolution and good contrast in JPEG, PDF or TIFF format. The minimum resolution for photos is 300 dpi (dots per inch), while for graphics and line art it is 600 dpi. Black and white images must be created in grayscale mode, while color images must be in RGB mode. Images are made to be 80 mm (one column), 125 mm (one and a half columns), or 166 mm (two columns) wide.
b. Image is rendered open (without borders)
c. The title of the image is written in capital letters at the beginning of the sentence, without ending with a period
d. The text in the image is written in Arial 11 font.

Example image (1.5 columns)

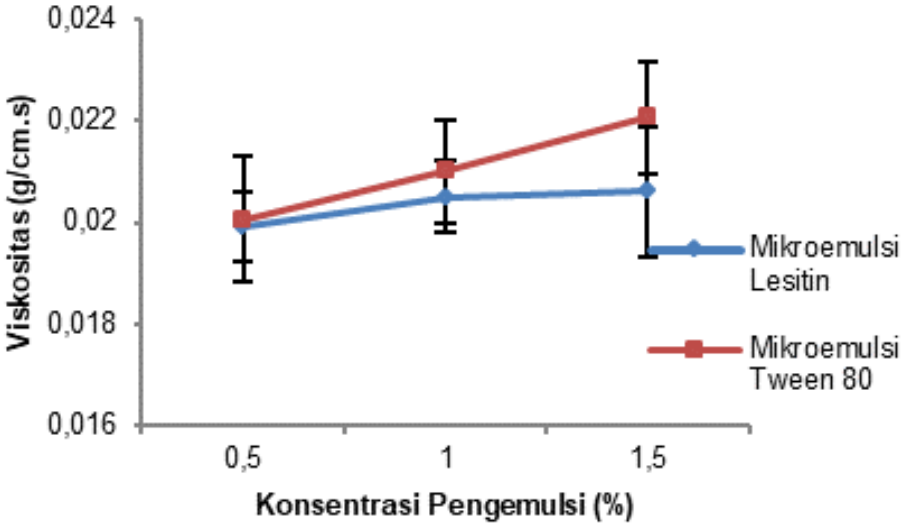


Figure 7.1. Microemulsion viscosity at various types and concentrations of emulsifier

7.4 Writing Units

a. Units are written separately from the leading digits except for %. For example 100 m, 10°C, 86%
b. Writing units refers to International Units (SI)

Table 7.1. The physical quantities of the Sl system and their units

Quantity	Sub quantity	Unit	Symbol
Base	Long	meters	m
	Mass	grams, kilograms	g, kg
	Time	seconds (seconds)	s
	Electric current	Ampere	A
	Light intensity	candela	CD
Derivative	Large	square meter	m2
	Speed	meters per second	ms-1
	Power	watt	W
	Pressure	Pascal	Pa
	electrical charge	coulomb	C
	electric potential	volt	V
	difference	ohm	□
	electrical resistance	lux	lx
	illuminance	hertz	Hz
	Frequency	newtons	N
	Style	cubic meter *	m3 or L
	Volume		

*can be written in liters with the symbol L

The units for multiplication and division are written by separating the two units using a slash.

Table 7.2. Units in Indonesian and abbreviations for units of multiplication and division

Unit	Unit writing
millimeters per day	mm/day
kilograms of P2O5 per hectare	kg P2O5/ha
milligrams per gram per hour	mg/g/hour
grams per second	g/sec or g/s

7.5 Writing Numbers

a. Numbers are written using Arabic numerals (0, 1, 2, 3, 4, s, 6, 7, 8, and 9) and are written according to the following rules:
b. The decimal sign for Arabic numerals is written with a comma. Example 10.26 kg. The number of decimal places is two digits after the comma.
c. The thousands sign for Arabic numerals is written with a period. Example 10,000 kg, 1,000,000 m
d. Numbers are written as words if they are at the beginning of a sentence. Example: "Fifty million people suffer from hunger", not "50 million people suffer from hunger"
e. Numbers followed by units are separated by their units using a space, unless they are followed by percent (%). Example: 100g instead of 100g; 50 oC, not 50oC or 50oC; 80% instead of 80%
f. High-ranking numbers can be written using times (lowercase x) separated by spaces. Example: 2,573 x 106, not 2-S7g.1O6 or 2,573 X 106
g. Numbers indicating the range are separated by a hyphen (-) without spaces and the units are written after the last number. Example: 5-10 cm instead of 5-10 cm or 5 cm _ 10 cm
h. Numbers indicating dimensions are written using a times sign (x) separated by spaces and units are written following each number. Example: 5 cm x 5 cm instead of 5 x 5 cm or 5 x 5 cm
i. Numerals are written with the prefix ,'ke" with a hyphen (_). Example: 21st century
j. Numbers representing large integers can be partially spelled for easy reading. Example: The protein content of Anjasmoro soybean is 28.96%.

7.6. Tap and Text Spacing

a. Each sentence is separated by a single tap.
b. After the comma, the next word is separated by one tap
c. The first sentence in a paragraph is indented inside the text by a distance of 0.8 inches.
d. There are no spaces between paragraphs

7.7. Conjunctions

Conjunctions are not placed at the beginning of the sentence.
Examples of conjunctions: while, and, or, so that

CHAPTER 8
THESIS TYPING FORMAT

8.1. Paper Material and Size

The draft of the thesis report is made using HVS paper measuring A4 (21 x 29.7 cm) weighing 80 g/m2 (HVS 80 GSM), must not be typed back and forth and bound in the form of a light green hardcover and black writing .

8.2. Edge Border

Typing limits are set as follows:

a. Left edge : 3 cm
b. Top, bottom and right edge: 2.5 cm

8.3. Font type

a. The script is typed using Arial 11pt font.
b. Italics or other special letters can be used for certain purposes, for example to mark foreign terms.
c. Signs that cannot be typed must be neatly written in black ink.

8.4. Line Spacing

a. In general, the distance between 2 lines is 1.5 spaces.
b. The distance between the chapter title and the first sub-chapter title, or with the first sentence, is about 2 cm (2 x 2 spaces)
c. If the sub-chapter titles are typed in descending order, the distance between the titles of one sub-chapter and the next sub-chapter is set by 2 spaces.
d. The distance between the sub-chapter title and the first line of the sentence is 2 spaces.
e. The distance between the end of the sentence from one sub-chapter with the title of the next sub-chapter is 3 spaces.
f. The distance between the line of the sentence with the title of the table, or between the end of the table with the sentence (text) 3 spaces.
g. The distance between the last line of the table/figure title and the table is 1.5 spaces, while the distance between the lines in the table/figure title is one space. The distance between the table/figure and its description is 1 space. However, the distance between the table/figure and/or its description with the text is 3 spaces.
h. The formula is typed with the spacing as needed.

8.5. Writing chapter and sub-chapter titles

Each chapter begins on a new page, and the title is typed in capital letters in the middle of the page and is given a Roman number (I., II., III. etc.) ending with a full stop. The title of the sub-chapter is typed at the edge of the paragraph, numbered by the sub-chapter using Arabic numerals, for example 2.1, ending with a period. Likewise for the sub-chapter titles. The beginning of each word in the title of the sub-chapter and sub-sub-chapter is written in capital letters and the rest in lowercase letters.

8.6. New paragraph

In each new paragraph, the first word is 1 cm from the edge of the paragraph. There are no spaces between paragraphs.

8.7. Room filling

The space contained in the manuscript page must be filled in completely, meaning that typing must start from the left edge to the right edge and no space is wasted except for new paragraphs, equations, lists, pictures, titles or special things. In typing with word

processing software, paragraph settings are often used automatically using the "justified" mode. In certain cases the distance between words becomes unequal and creates a large enough void between one word and the next. To avoid this, in typing it is allowed to decide on words, in accordance with good and correct Indonesian rules. The name of something (person, institution, etc.) in writing should not be cut off.

8.8. Table Typing Format

a. Tables are lined with upper and lower borders without side borders (open table form) as exemplified in Table 4.1.
b. Table numbers are typed in Arial font size 11 bold (bold). The table number is typed with 2 Arabic numerals separated by a period. The first number indicates the number of the chapter where the figure is located, while the second number indicates the serial number of the table or figure in the chapter.

Table 8.1. Characteristics of palm oil fatty acid distillate (DALMS) and unsaponifiable fraction (FTT)

Characteristics	DALMS	FTT
Free fatty acid content (%)	80.74±0.49	4.06±0.70
Peroxide number (mec/kg)	4.74±0.78	3.31±0.35
Anisidin number	2.79±0.67	2.32±0.20
yield		2.17±0.39

c. The table title is typed in Arial font size 11, right and left aligned (Justify). The title is written succinctly, but describes the content. Table title is typed 1 space without ending with a period and every word in it begins with a capital letter, except for conjunctions, prepositions and adverbs of place.
d. Table numbers and titles are aligned to the left.
e. The distance between the table title number and the table top line is 1 space. While the distance between rows of table titles is 1 space if the table title is more than 1 row.
f. The title of the table must be the same as the title of the table or figure listed on the table list page.
g. Table contents are typed with Arial font size 10 bold (bold) for column headings and not bold for column contents.
h. Lines between rows are 1 space apart. The important thing is that the table is easy to read.
i. The table is placed on the manuscript page in such a way that the boundary line does not exceed the limit of the paper that can be printed and the table is centered in it.
j. Table columns can be placed parallel to the width of the paper or parallel to the length of the paper (landscape). If the table columns can be placed parallel to the length of the paper (landscape), it is recommended that the entire page be filled with tables without text.
k. The table may be placed in the middle of the page between the lines of the main body text.
l. Table description, can be used to clarify the contents of the table.
m. Tables and figures quoted from other sources are explained by including the author's name and year.
n. Tables that require paper larger than the manuscript page are acceptable, but only tables that when folded once have reached the size of the manuscript page are included in the main body text. Larger tables are placed in the appendix.

8.9. Image Typing Format

a. The term drawing includes drawings, illustrations, graphs, diagrams, floor plans, maps, charts, monograms, flow charts and portraits.

b. Letters, numbers and other punctuation marks used in pictures must be clear.
c. All images must be referenced in the text.
d. Images and illustrations must use high resolution and good contrast in JPEG, PDF or TIFF format. The minimum resolution for photos is 300 dpi (dots per inch), while for graphics and line art it is 600 dpi.
e. Black and white images must be created in grayscale mode, while color images must be in RGB mode.
f. The image is made open without the image border.
g. The image is placed symmetrically (centered) against the border of the paper that can be printed.
h. The longest side of the image border can be placed parallel to the width of the paper or parallel to the length of the paper. For the last thing, the image should be made on a separate page without text to make it easier to read.
i. The image with the longest side parallel to the width of the paper may be placed in the middle of the page between lines of text.
j. Image numbers are typed in Arial font size 11 bold (bold). The image number is typed with 2 Arabic numerals separated by a period. The first number indicates the number of the chapter where the image is located, while the second number indicates the serial number of the image in the chapter.
k. The title of the image is typed in Arial font size 11, center aligned. The title is written succinctly, but describes the content. The title of the image is typed 1 space without ending with a period and every word in it begins with a capital letter, except for conjunctions, prepositions and adverbs of place.
l. The number and title of the image are placed 2 spaces below the bottom line of the image with a distance between lines of 1 space if the image title is more than 1 line.
m. Images that require a page wider than the manuscript page are acceptable. Images that require 1 fold to reach the page size of the manuscript can be inserted into the body of the text. Images larger than that should be included in the appendix.

8.10. Page Numbering

a. Pages in the introduction, table of contents, list of tables, list of figures are numbered with Roman numerals
b. The main body page numbers are in Arabic numerals.
c. Page numbers are placed symmetrically (centered) below the manuscript.
d. The appendix page number is a continuation of the main body page number.

8.11. Printing

a. The thesis report is printed as needed, namely a number of supervisors and thesis examiners and can be reproduced with photocopies for other purposes.
b. The thesis report is printed using a black ink printer for writing and/or color for images.

ATTACHMENT

Appendix 1. Example of thesis cover

ANALISIS KESESUAIAN LAHAN PERTANIAN UNTUK MENINGKATKAN HASIL PRODUKSI TANAMAN PANGAN YANG BERKELANJUTAN DI KABUPATEN INDRAMAYU

TESIS

Untuk Memenuhi Persyaratan
Memperoleh Gelar Magister

PROGRAM STUDI KETEKNIKAN PERTANIAN

KHAERUL MUTTAQIEN
176100300011001

FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS BRAWIJAYA
MALANG
2020

Appendix 2. Front cover example for how to type on the back of a book

THESIS

KHAERUL MUTTAQIEN
NIM. 176100300011001

ANALYSIS OF SUITABILITY OF AGRICULTURAL LAND TO INCREASE SUSTAINABLE PRODUCTION OF FOOD CROPS PRODUCTION IN INDRAMAYU DISTRICT

2019

ANALISIS KESESUAIAN LAHAN PERTANIAN UNTUK MENINGKATKAN HASIL PRODUKSI TANAMAN PANGAN YANG BERKELANJUTAN DI KABUPATEN INDRAMAYU

TESIS

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PROGRAM STUDI KETEKNIKAN PERTANIAN

KHAERUL MUTTAQIEN
176100300011001

FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS BRAWIJAYA
MALANG
2020

Leave 5 cm for library labels

Appendix 3. Example of thesis title page

3 cm

ANALISIS KESESUAIAN LAHAN PERTANIAN UNTUK MENINGKATKAN HASIL PRODUKSI TANAMAN PANGAN YANG BERKELANJUTAN DI KABUPATEN INDRAMAYU

Oleh:

KHAERUL MUTTAQIEN
176100300011001

MINAT TEKNIK SUMBERDAYA ALAM DAN LINGKUNGAN
PROGRAM STUDI KETEKNIKAN PERTANIAN

4 cm

3 cm

TESIS

Diajukan sebagai salah satu syarat untuk memeperoleh
Gelar Magister Teknologi Pertanian Strata Dua (S2)

UNIVERSITAS BRAWIJAYA
FAKULTAS TEKNOLOGI PERTANIAN
JURUSAN KETEKNIKAN PERTANIAN
MALANG

2020

3 cm

Appendix 4. Sample authentication page

THESIS

ANALYSIS OF SUITABILITY OF AGRICULTURAL LAND TO INCREASE SUSTAINABLE PRODUCTION OF FOOD CROPS PRODUCTION IN INDRAMAYU DISTRICT

By :
Khaerul Muttaqien
NIM. 176100300011001

has been defended in front of the examiner
on January 05, 2020
declared to have met the requirements

Advisory Committee,

chairman	Member
Chief Name	Member Name 1
NIP ……..	NIP ……..

Malang,……

Brawijaya University
Master Study Program…
head of the study program

Prof.Dr. ……
NIP …….

*) The number of mentors can be two or three people

Appendix 5. Sample statement of originality

STATEMENT
THESIS ORIGINALITY

I solemnly declare that to the best of my knowledge, there is no scientific work that has been submitted by another person to obtain an academic degree at a university, and no work or opinion has been written or published by another person and to the best of my knowledge. mentioned in citation sources and literature

If it turns out that in this thesis, it can be proven that there are elements of Plagiarism, I am willing to cancel this THESIS and the academic degree that I have obtained (MAGISTER) is canceled, and processed in accordance with the applicable laws and regulations. (Law NO. 20 of 2003, Article 25 paragraph 2 and Article 70)

Malang, [date]

Student

Stamp Rp. 6000

signed

Nama : Khairul Muttaqien
NIM : 176100300011001
PS : Agricultural Engineering

Appendix 6. Example of designation page

This scientific work is addressed to
Dear Mom and Dad,
My beloved wife and children

Appendix 7. Example Summary

KHAERUL MUTTAQIEN. 176100300011001. Analysis of the Suitability of Agricultural Land to Increase Production Yield of Sustainable Food Crops in Indramayu Regency
Advisor : 1. Dr. Ir. Alexander Tunggul Sutan Haji, MT.
2. Dr. eng. Akhmad Adi Sulianto, STP., M.Eng.

SUMMARY

Indonesia is a tropical country and has many natural resources to meet people's needs such as agricultural land. Indramayu Regency is one of the regions of West Java which has extensive agricultural land resources such as rice fields. Indramayu Regency has a land area of 209.942 ha. Consists of 115.897 ha of paddy fields (55.20%), 56.937 ha of non-rice fields (27.12%), and 37,108 ha of non-agricultural land (17.68%) (BPS, 2017). However, in the utilization of agricultural land use, farmers in Indramayu Regency still need direction in proper land use, because of the behavior of farmers who have not paid attention to land suitability and government policies on agricultural intensification.

The research activity was carried out from March 2019 to August 2019. The research was carried out at the Natural Resources and Environmental Engineering Laboratory, Agricultural Engineering Department, Faculty of Agricultural Technology, Brawijaya University, Malang. The object of this research is specifically in Indramayu Regency, West Java. The tools used in this research include ArcGIS 10.3 software, Microsoft Exel 2013 software, crowbar and camera. While the main parameters for land suitability are: climate, water availability, topography and soil fertility. The research method that will be used is a quantitative descriptive method and then a decision-making approach using the AHP (Analytical hierarchy process) and GIS methods combined to determine land suitability for selected commodities in Indramayu Regency.

The results of the weighting of the AHP criteria for land suitability for sustainable food crops in Indramayu district which has criteria for climate, water availability, topography and soil fertility, show rice plants with a priority value of climate criteria 0.107, water availability 0.397, topography 0.094 and soil fertility 0.402, corn plants with a priority value of climate criteria 0.163, water availability 0.152, topography 0.163, soil fertility 0.523, and for soybean plants with a priority value of climate criteria 0.439, water availability 0.259, topography 0.096 and soil fertility 0.205. The results of the land suitability analysis for rice, corn and soybeans in Indramayu Regency show differences in land suitability classes, where rice plants get a better land suitability class with a Very Appropriate class 92,419 ha (80%), Fairly Appropriate 7, 654 ha (6%) and Marginal Appropriate 15,824 ha (14%) compared to corn and soybeans with Sufficiently Appropriate class 87,159 ha (75%) and Marginal Appropriate 28,738 ha (25%). The area of sustainable irrigated agricultural land in Indramayu Regency is 100,381 ha (87%) for rice, while for rainfed agricultural land it is 15,516 ha (13%) for corn and soybeans.

Keywords: AHP, Land Suitability, Commodity, Sustainable

Appendix 8. Example Summary

KHAERUL MUTTAQIEN. 176100300011001. Analysis of Suitability of Agricultural Land to Increase Sustainable Production of Food Crops in Indramayu Regency.
Supervisors: 1. Dr. Ir. Alexander Tunggul Sutan Haji, MT.
2. Dr. eng. Akhmad Adi Sulianto, STP., M.Eng.

SUMMARY

Indonesia is a tropical country and it has many natural resources to meet community needs such as agricultural land. Indramayu Regency is one of the regions of West Java that has extensive agricultural land resources such as paddy fields. Indramayu Regency has an area of 209.942 ha. It consists of 115.897 ha of paddy land (55.20%), 56.937 ha (27.12%) of non-paddy land and 37,108 ha (17.68%) of non-agricultural land (BPS, 2017). However, in the use of agricultural land, farmers in Indramayu Regency still need direction in the right land use because the behavior of farmers who have not paid attention to land suitability and government policies on agricultural intensification.

The research was conducted from March 2019 to August 2019. The research was conducted in the Natural Resources and Environmental Engineering Laboratory, Department of Agricultural Engineering, Faculty of Agricultural Technology, Brawijaya University, Malang. The object of this research is in Indramayu Regency, West Java. The tools used in this study include ArcGIS 10.3, Microsoft Exel 2013 software, crowdbars and cameras. The main parameters for land suitability are: climate, water availability, topography and soil fertility. The research method used was quantitative descriptive method and then the decision-making approach used the AHP (Analytical hierarchy process) and GIS method combined to determine land suitability for selected commodities in Indramayu Regency.

AHP criteria weighting results for the suitability of agricultural land in Indramayu district which has climate criteria, water availability, topography and soil fertility, show rice plants with priority values of 0.107 in terms of water, 0.397, 0.094 and 0.402, corn plants with priority values of 0.163, 0.052, 0.163, 0.523, and soybean plants with priority values of 0.439, 0.259, 0.096 and 0.205, reespectively. The results of land suitability analysis of rice, maize and soybean in Indramayu Regency show differences in land suitability classes, where rice plants obtained better land suitability classes with Very Suitable classes 92.419 ha (80%), Quite Suitable 7,654 ha (6%) and Suitable Marginal 15,824 ha (14%) compared to maize and soybean with Quite Suitable classes 87,159 ha (75%) and Suitable Marginal 28,738 ha (25%).

Keywords: AHP, Land Suitability, Commodity, Sustainable

Appendix 9. Example foreword

KATA PENGANTAR

Puji syukur kepada Allah SWT yang telah melimpahkan rahmat, taufiq dan hidayah-Nya sehingga penulis dapat menyelesaikan tesis yang berjudul "**Analisis Kesesuaian Lahan Pertanian untuk Meningkatkan Hasil Produksi Tanaman Pangan yang Berkelanjutan Di Kabupaten Indramayu**". Tesis ini disusun sebagai salah satu syarat untuk mencapai gelar magister.

Pada kesempatan ini penyusun mengucapkan banyak terima kasih yang sebesar-besarnya kepada:

1. Dr. Ir. Alexander Tunggul Sutan Haji, MT selaku dosen pembimbing I dan Dr. Eng. Akhmad Adi Sulianto, STP., M.Eng selaku dosen pembimbing II, yang telah memberikan bimbingan, arahan, ilmu, dan pengetahuan kepada penulis.
2. Dr. Eng. Evi Kurniati, STP., MT selaku dosen penguji I dan Fajri Anugroho, STP., M. Agr., Ph.D selaku dosen penguji II yang telah memberikan kritik dan saran kepada penulis.
3. Dr. Ir. Sandra Malin Sutan, MP selaku Ketua Program Studi Pascasarjana Keteknikan Pertanian.
4. Orang tua penulis Bapak Nurmin, serta kakak Iwan, Abdullah, Sutarno dan Inayah yang selalu mendoakan, memberi dukungan moril, material, dan memberi semangat yang tiada hentinya kepada penulis.
5. Pendukung yang membuat penelitian ini terlaksana dengan baik, Ardiyunsah (memet alkatiri), Karim, Bang Dance, Lalu, Umbu, Mba Ifa, Mba Lita , Mba Firdi, Tasya, Amirada, Rikho, Umam, Bima, Mas Eka, Adi dan Pak Judo.
6. Teman-teman Pascasarjana 2016, 2017, 2018, 2019 yang telah memberikan bantuan dan semangat penulis dalam penyelesaian tesis ini.

Menyadari adanya keterbatasan pengetahuan, refrensi dan pengalaman, penyusun mengharapkan saran dan masukan di masa mendatang. Akhirnya harapan penyusun semoga tesis ini dapat bermanfaat bagi penyusun maupun pihak yang membutuhkan.

Malang, Januari 2020

Penyusun

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Appendix 10. Example table of contents

DAFTAR ISI

Appendix 11. Example of table list

DAFTAR TABEL

Halaman

Appendix 12. Example list of pictures

DAFTAR GAMBAR

Halaman

Appendix 13. Example list of attachments

DAFTAR LAMPIRAN

Halaman