



DOCTORAL PROGRAM ACADEMIC HANDBOOK

FACULTY OF AGRICULTURAL TECHNOLOGY
UNIVERSITAS BRAWIJAYA

Academic Year
2022/2023



**DOCTORAL PROGRAM
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TECHNOLOGY**



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ACADEMIC YEAR 2022/2023**

TABLE OF CONTENTS

TABLE OF CONTENTS	iii
FOREWORD	v
I. PRELIMINARY	1
1.1. HISTORY OF FACULTY OF AGRICULTURAL TECHNOLOGY	1
1.2. DEVELOPMENT OF EDUCATION ORGANIZATION	4
II. VISION, MISSION AND GOALS	6
2.1. UNIVERSITY VISION, MISSION AND OBJECTIVES	6
2.2. VISION, MISSION AND OBJECTIVES OF THE FACULTY	6
2.3. VISION, MISSION AND OBJECTIVES OF THE DEPARTMENT	8
III. DOCTORAL EDUCATION PROGRAM.....	11
3.1. DOCTORAL PROGRAM OF FOOD SCIENCE	11
3.2. DOCTORAL PROGRAM OF AGROINDUSTRIAL TECHNOLOGY.....	14
IV. EDUCATION SYSTEM.....	16
4.1. BASIC UNDERSTANDING	16
4.2. CREDIT VALUE AND STUDY EXPENSES.....	17
4.3. CURRICULUM	18
4.4. ACADEMIC ABILITY ASSESSMENT.....	19
4.5. ACADEMIC SANCTIONS.....	22
4.6.FINAL PROJECT OF DOCTORAL PROGRAM	23
4.7. STUDY EVALUATION	38
4.8. STUDY TIME LIMIT	38
4.9. RECOGNITION OF LEARNING RESULTS FROM OTHER UNIVERSITY TO UNIVERSITAS BRAWIJAYA	39
4.10. STUDENTS TRANSFER FROM OTHER UNIVERSITY TO UB	40
V. EDUCATION ADMINISTRATION	42
5.1. GENERAL EXPLANATION	42
5.2. IMPLEMENTATION OF CREDIT SYSTEM ADMINISTRATION	42
5.3. STUDENT REGISTRATION	44
5.4. TERMS OF PAYING STUDY FEES	47
5.5. STUDENT IDENTIFICATION CARD	48
5.6. STUDENT MUTATIONS.....	48
5.7. STUDENT TRANSFER TO UNIVERSITAS BRAWIJAYA	49
5.8.TRANSFER OF STUDENTS BETWEEN FACULTY IN UNIVERSITAS BRAWIJAYA.....	50
5.9.TRANSFER OF STUDENTS BETWEEN DEPARTMENTS/PROGRAMS STUDY IN THE FACULTY OF AGRICULTURAL TECHNOLOGY UNIVERSITAS BRAWIJAYA.....	51
VI. ACADEMIC COUNSELING AND ADVISORY GUARANTEE	52
6.1.ACADEMIC CONSIDERING AND COUNSELING AGENCY (BKPA)	52
6.2. ACADEMIC HANDBOOK	52
VII. DOCTORAL PROGRAM CURRICULUM	54
7.1. AGROINDUSTRIAL TECHNOLOGY DOCTORAL PROGRAM.....	54
7.2. FOOD SCIENCE DOCTORAL PROGRAM	55
VIII. DOCTORAL COURSE SYLLABUS	56
8.1. DOCTORAL PROGRAM FACULTY COURSE.....	56

8.2. SYLLABUS FOR DOCTORAL PROGRAM IN AGROINDUSTRIAL
TECHNOLOGY 60

8.3. SYLLABUS FOR DOCTORAL PROGRAM IN FOOD SCIENCE 62

IX. STUDENTS 72

9.1. STUDENT CODE OF CONDUCT 72

9.2. GRADUATION 77

FOREWORD

The purpose of implementing Higher Education according to the Regulation of the Minister of Research, Technology and Higher Education of the Republic of Indonesia No. 44 Article 3 of 2015 concerning National Higher Education Standards are: 1) ensuring the achievement of higher education goals that play a strategic role in educating the nation's life, advancing science and technology by applying humanities values as well as civilizing and empowering the Indonesian nation that is sustainable; 2) ensure that learning in study programs, research, and community service organized by universities in all jurisdictions of the Unitary State of the Republic of Indonesia achieves quality in accordance with the criteria set out in the National Higher Education Standards;

In achieving these goals, a curriculum is prepared that refers to Presidential Decree no. 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI), which is a competency qualification framework that can juxtapose, equalize, and integrate the fields of education and the field of job training and work experience in order to provide recognition of work competencies in accordance with the work structure in various sectors. In this regard, the Education Manual for the Faculty of Agricultural Technology for the Academic Year of 2022/2023 is prepared so that students understand the curriculum of the Study Program at the Faculty of Agricultural Technology, Universitas Brawijaya and become a guide or reference for students in carrying out academic activities and also as a guide for lecturers in directing and guide students.

Permendikbud No. 3 of 2020 concerning National Standards for Higher Education and PP No. 4 of 2022 concerning amendments to PP No. 57 of 2021 concerning National Education Standards, which mandate the implementation of independent learning-independent campuses and community service for students. The Education Manual includes guidelines for implementing independent learning. The evaluation of the undergraduate curriculum in 2020 in all undergraduate study programs at FAT UB has accommodated the implementation of independent learning and includes community service courses.

Hopefully this Doctoral Program Academic Handbook will be useful in supporting doctoral students to study effectively in the Faculty of Agricultural Technology, Universitas Brawijaya and producing quality and characterful students.

Malang, August 2022
Dean,



Prof. Dr. Ir. Imam Santoso, MP
NIP. 196810051995121001

I. Introduction

1.1. HISTORY OF FACULTY OF AGRICULTURAL TECHNOLOGY

Faculty of Agricultural Technology Universitas Brawijaya (FAT UB) was established on January 26, 1998 with the Decree of the Minister of Education and Culture of the Republic of Indonesia (Mendikbud RI) Number: 012a/O/1998. However, for a period of 22 years, from 1975 to 1997, Agricultural Technology Science (TP) has been held by the TP Department when it was still under the Faculty of Agriculture, Universitas Brawijaya (FP UB).

The journey to the establishment of FAT UB is quite long, starting with the opening of a new department called the Department of Agricultural Products Technology (THP) under the Faculty of Agriculture, Universitas Brawijaya in 1975. The establishment of this new department is intended to develop disciplines related to post-harvest handling of agricultural products. Based on the Decree of the Minister of Education and Culture of the Republic of Indonesia Number: 0211/U/1982, since 1982 this institution has been officially designated as one of the majors under FP-UB, overseeing the THP Study Program (PS) with an interest in the study of Agricultural Mechanization. In 1984, based on the Decree of the Director General of Higher Education of the Ministry of Education and Culture of the Republic of Indonesia (Dirjen Dikti Depdikbud RI) Number: 118/DIKTI/Lap/84, the name of the THP department was changed to the TP Department which managed two PS, namely Agricultural Product Technology Study Program (THP) and Agricultural Mechanization Study Program (MP). In an effort to spur the development of the agricultural sector, especially the agroindustrial, the Department of Agricultural Technology opened a new study interest, namely MS Agroindustrial Technology (TIP) in 1983. Since 1984, the Department of Agricultural Technology has had three Study Programs (PS), namely PS THP, PS TEP and PS TIP, although the determination as PS TIP only occurred on April 1, 1998 with the issuance of the Decree of the Director General of Higher Education, Ministry of Education and Culture Number: 103/DIKTI/Kep/1998. In 1994, the Decree of the Minister of Education and Culture of the Republic of Indonesia No. 0411/U/1994 was issued which changed the name of the Agricultural Mechanization Study Program (MP) to Agricultural Engineering Study Program (TEP). namely MS Agroindustrial Technology (TIP) in 1983. Since 1984, the Department of Agricultural Technology has three Study Programs (PS), namely PS THP, PS TEP and PS TIP, although the determination as PS TIP only occurred on April 1, 1998 with the issuance of a decree Director General of Higher Education, Ministry of Education and Culture Number: 103/DIKTI/Kep/1998. In 1994, the Decree of the Minister of Education and Culture of the Republic of Indonesia No. 0411/U/1994 was issued which changed the name of the Agricultural Mechanization Study Program (MP) to Agricultural Engineering Study Program (TEP). namely MS Agroindustrial Technology (TIP) in 1983. Since 1984, the Department of Agricultural Technology has three Study Programs (PS), namely PS THP, PS TEP and PS TIP, although the determination as PS TIP only occurred on April 1, 1998 with the issuance of a decree Director General of Higher Education, Ministry of

Education and Culture Number: 103/DIKTI/Kep/1998. In 1994, the Decree of the Minister of Education and Culture of the Republic of Indonesia No. 0411/U/1994 was issued which changed the name of the Agricultural Mechanization Study Program (MP) to Agricultural Engineering Study Program (TEP).

In 1998, FAT UB was officially established by overseeing three departments, namely the THP Department, the TEP Department, and the TIP Department. In 2011 there was a change in the name of PS THP to PS Food Science and Technology (ITP) based on the Decree of the Director General of Higher Education No. 865/EI.3/HK/2011. The change in the name of the Department to the Department begins in 2022. This name change occurs in line with the change in UB's status from a Public Service Agency (BLU) State University to a Legal Entity State University (PTNBH) based on Government Regulation Number 108 of 2021 and the Rector's Regulation of Universitas Brawijaya No. 24 2022 concerning Organization and Work Procedure of the Faculty of Agricultural Technology. Currently, the name of the THP Department has changed to the Department of Food Science and Biotechnology, the TEP Department to the Department of Biosystem Engineering, and the TIP Department to the Department of Agroindustrial Technology. Until 2022, FAT UB has 6 Undergraduate Study Programs (S1) which are under 3 Departments. The Department of Food Science and Biotechnology houses 2 Bachelor's Degree Programs, namely the Bachelor of Food Science and Technology (ITP) and Bachelor of Biotechnology. The Department of Biosystems Engineering houses 3 undergraduate programs, namely Agricultural Engineering (TEP), Environmental Engineering (TL) and Bioprocess Technology (TBP). The Department of Agroindustrial Technology has one Master's Degree Program, namely the Bachelor of Agroindustrial Technology (TIP). PS Bachelor Degree in Environmental Engineering (TL) and PS Bachelor Degree in Bioprocess Technology (TBP). The Department of Agroindustrial Technology has one Master's Degree Program, namely the Bachelor of Agroindustrial Technology (TIP). PS Bachelor Degree in Environmental Engineering (TL) and PS Bachelor Degree in Bioprocess Technology (TBP). The Department of Agroindustrial Technology has one Master's Degree Program, namely the Bachelor of Agroindustrial Technology (TIP).

FAT UB also has a Postgraduate study program. FAT UB has 3 PS Masters, namely PS Masters in Agricultural Products Technology (since 1999) under the Department of Food Science and Biotechnology, PS Masters in Agroindustrial Technology (since 2007) under the Department of Agroindustrial Technology and PS Masters in Agricultural Engineering (since 2013) under the Department of Biosystems Engineering. For the Doctoral level, the opening of the Doctoral Program for Agroindustrial Technology PS has received a permit in 2013 with the Decree of the Minister of Education and Culture No. 420/E/O/2013 under the Department of Agroindustrial Technology. PS Food Science has obtained a permit in 2016 with the Decree of the Minister of Research, Technology and Higher Education No. 448/KPT/I/2017 dated August 21, 2017 under the Department of Food Science and Biotechnology.

In terms of institutional organization and management of existing departments, study programs, and laboratories, FAT UB follows the statutes of Universitas Brawijaya according to the Decree of the Minister of Education and Culture of the Republic of Indonesia Number: 0444/O/1992. Along with the development of the study program, the field of laboratory science underwent adjustments. Based on the Rector's Regulation of Universitas Brawijaya Number 24 of 2022 concerning Organizational Structure and Work Procedures, FAT is in charge of 23 laboratories, namely the Laboratory of Processing Technology and Biomass, Laboratory of Chemistry and Biochemistry of Food and Agricultural Products, Laboratory of Food Microbiology, Laboratory of Food Nutrition, Laboratory of Food Processing and Product Engineering Agriculture, Agricultural Power and Machinery Laboratory, Natural Resources and Environmental Engineering Laboratory, Biosystem Mechatronics Laboratory, Agroindustrial Process Engineering Laboratory,

In addition to the laboratory, there are other service units at the faculty level, namely the Quality Assurance Group (GJM), the Research and Community Service Agency (BPPM), the Counseling and Academic Consideration Agency (BKPA), the Information Systems and Public Relations Manager (PSIK), English Language Service Unit (ULBI), and Journal Publishing Agency (BPJ), Quality Assurance Unit at the Department level (UJM), Counseling and Academic Consideration Agency (BKPA), Integrated Service Unit (ULT), Integrated Service Unit for Sexual Violence and Bullying (ULTKSP), International Relations Office (IRO)

Regarding the number of graduates, until July 2022, 8,418 Bachelors and Masters have been produced spread throughout Indonesia. To increase the number and quality of graduates produced and to strengthen the role of graduates in the development of the agricultural sector, especially agro-industry, FAT UB always strives to increase the quantity and quality of its lecturers. Until 2022, FAT-UB has 134 lecturers consisting of 84 PNS lecturers, 40 non-PNS permanent lecturers, 1 lecturer with a work agreement, and 9 contract lecturers. FAT UB's lecturer staff consists of 13 professors, 70 lecturers with doctoral degrees (S3), and 64 lecturers with masters degrees. For education staff, FAT has 79 people of which 28 are civil servants, 37 are non-civil servants,

All study programs in FAT UB already have accreditation certificates from the National Accreditation Board for Higher Education (BAN-PT). PS Bachelor of Food Science and Technology, PS Bachelor of Environmental Engineering, and PS Master of Agroindustrial Technology received accreditation with superior predicate. PS Bachelor of Biotechnology, PS Bachelor of Agricultural Engineering, PS Bachelor of Agroindustrial Technology, PS Master of Agricultural Products Technology, PS Master of Agricultural Engineering, PS Doctoral of Agroindustrial Technology received accreditation A, PS Doctoral Food Science has been accredited B and PS Bachelor of Bioprocess Technology received accreditation with good predicate.

In addition to obtaining BAN-PT accreditation, several study programs at FAT UB have been internationally certified and have received international accreditation. The Bachelor of Food Science and Technology (PS ITP) has been internationally certified by the Institute of Food Technologists (IFT) in 2012-2017 and 2017-2022. In 2018 IFT

issued new guidelines, reassessment of PS ITP by IFT was carried out at the end of 2019 and reapproval was given to PS ITP effective from 2020-2025. PS Bachelor of Agricultural Engineering and PS Bachelor of Agroindustrial Technology have been certified at the ASEAN regional level by the Asean University Network - Quality Assurance (AUN-QA). PS Bachelor of Environmental Engineering in 2021 has been internationally accredited by the Indonesian Accreditation Board for Engineering Education (IABEE) under the guidance of JABEE (Japan Accreditation Board for Engineering Education) which participated in the signing of the Washington Accord, a multilateral agreement that regulates the equality of various independent accreditation institutions from abroad for engineering study programs. In 2021, six study programs at FAT UB including PS Bachelor of Food Science and Technology, PS Master of THP, PS Master of TIP, PS Master of TEP, PS Doctoral Food Science and PS Doctoral TIP have sent a Self Evaluation Report (SER) document in the context of accreditation international Agentur Fur Qualitatssicherung Durch Akkreditierung von Studiengangen EV (AQAS).

1.2 DEVELOPMENT OF EDUCATION ORGANIZATION

Basically, educational institutions such as FAT-UB, are public institutions engaged in services in the field of education. The satisfaction of stakeholders is the best measure in assessing the performance of such an institution. Stakeholders of FAT-UB are students, parents of students, graduate users and the wider community, as well as the Government as shareholder. The expected elements of equality for educational services in general are to produce graduates who are competent in their fields, short study duration, able to compete well in getting jobs so that the waiting time after graduation is short and in the long term will be able to become leaders or figures in their fields or in the field. social life.

In line with that, in various steps taken by FAT-UB, it always pays attention to three factors, namely: (i) the factor of students as students, who naturally have individual differences, both in talents, interests and academic abilities; (ii) the increasing demand for experts in the community, both in quality and quantity; (iii) the factor of the rapid development of science and technology.

In order to fulfill these three aspects effectively and efficiently, the education system used must be adaptive. One of those systems is the “credit with semester time unit” system. Through this system it is hoped that:

1. Skilled and virtuous manpower is created in as many quantities as possible,
2. Provide opportunities for students who are capable and active in learning to complete their studies in the shortest possible time without compromising the quality of education.
3. Improving the efficiency and effectiveness of the implementation of education,
4. Facilitate the adjustment of the curriculum to the development of science and technology as well as existing employment opportunities,
5. Can open up opportunities for improving the evaluation system of student learning skills and progress,

6. Allows the transfer (transfer) of credit and transfer of students between departments, faculties and even between universities.

To achieve the things mentioned above, the education system in FAT-UB has gradually and continuously undergone changes, both in the form of comprehensive improvements and in the form of minor improvements in accordance with the development of the needs and demands of stakeholders.

If at the start of Agricultural Technology education in 1975, a semester system with a study length of 5 (five) years was applied. Initially, this credit system was a package, but since 1980/1981, it was further refined into an undergraduate (Strata 1) system with an individual credit system. In 2020 based on Permendikbud No. 3 in 2020, undergraduate education costs 144 to 160 credits, which requires 6-14 semesters of education, with timely graduation taken 4 years or less.

In the 1984/1985 academic year, there was a change in the Agricultural Technology education curriculum which refers to the "Core Curriculum for Undergraduate Education in Agricultural Technology" issued by DIKTI through the Decree of the Director General of Higher Education, Ministry of Education and Culture of the Republic of Indonesia Number: 28/DJ/Kep/1983. After going on for about 10 years, in 1994 the Decree of the Minister of Education and Culture of the Republic of Indonesia Number: 0411/U/1994 was issued regarding the nationally applicable curriculum on Agricultural Technology education and has been implemented in FAT-UB since the 1995/1996 academic year. In accordance with developments and needs, in 2004-2005 a curriculum reconstruction was carried out for each study program in FAT-UB which was implemented in the 2005/2006 Academic Year. In 2010 the curriculum was re-evaluated and implemented in the 2010/2011 Academic Year. Since 2013, FAT has implemented educational curriculum adjustments that refer to Presidential Decree no. 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI) and refers to the Regulation of the Minister of Research, Technology and Higher Education of the Republic of Indonesia No 44/2015 concerning National Standards for Higher Education. In an effort to continue to improve the competence of graduates and meet the needs of users, in 2015 a review and evaluation of the curriculum was carried out for the 2015/2016 Academic Year.

Minister of Education and Culture Regulation (Permendikbud) No. 3 of 2020 mandates universities to implement independent learning-independent campuses in undergraduate programs, so this Handbook also includes guidelines for implementing independent learning-independent campuses at FAT UB. In addition, the mandate of the Minister of Education and Culture No. 3 of 2020 also requires community service for students as a compulsory subject. In line with that, the undergraduate study program at FAT UB has evaluated the curriculum and reconstructed its curriculum by including compulsory community service courses. Curriculum reconstruction also includes the implementation of Outcome Based Education (OBE) as a mandatory requirement for international accreditation. In 2020, curriculum evaluation is carried out for all undergraduate study programs that refer to OBE.

II. VISION, MISSION AND GOALS

In 2002, the Decree of the Minister of National Education of the Republic of Indonesia Number: 080/O/2002 regarding the Statutes of Universitas Brawijaya (UB) was issued, hereinafter referred to as the Statutes of the University of 2002 which includes the vision, mission, and goals of the university. After a decade, along with the development of UB, there are several changes to the vision, mission and goals of the university which are included in the educational guidelines of UB.

2.1. UNIVERSITY VISION, MISSION AND OBJECTIVES

2.1.1. Vision

UB's vision is to become a superior university with international standards and able to play an active role in nation building through the process of education, research, and community service.

2.1.2. Mission

1. Organizing international standard education so that students become human beings who have academic and/or professional abilities with high quality and personality and have entrepreneurial spirit and/or abilities;
2. To develop and disseminate science, technology, and art, as well as to strive for their use to improve the standard of living of the people and enrich the national culture.

2.1.3. UB's goal based on Permenristekdikti No. 58 of 2018 concerning the Statute of Universitas Brawijaya

1. Produce quality human resources, fear God Almighty, have an entrepreneurial spirit, have broad insight, have discipline, and work ethic so that they become strong academic and professional people who are able to compete at the international level;
2. Transforming, developing, and disseminating science, technology, and art in order to encourage the development of the nation;
3. Helping community empowerment through the application of science, technology, and art;
4. Realizing an entrepreneurial university that is internationally competitive; and
5. Realizing UB's governance that is credible, transparent, accountable, responsible, and fair.

2.2 VISION, MISSION AND OBJECTIVES OF THE FACULTY

2.2.1 Vision

To become a superior faculty in the field of agricultural technology that is known and recognized at the international level and contributes to national development through the Tridharma of Higher Education.

2.2.2 Mission

1. Organizing an educational process to produce graduates who excel in the field of agricultural science and technology, have character, have an entrepreneurial spirit and are globally competitive.
2. Conduct research and development of agricultural science and technology in order to encourage the progress of agro-industry and contribute to solving global problems.
3. Disseminate agricultural science and technology and use it for the welfare of the community as well as establish strong cooperation with national and international stakeholders.

2.2.3 Objectives

1. Producing quality human resources, devoted to God Almighty, able to teach themselves who have broad insight, have discipline and work ethic, so that they become strong experts in the field of Agricultural Technology, and are able to compete globally.
2. To become a center for the development of science, technology, and art in the field of Agricultural Technology in order to encourage the development of advanced and resilient agro-industry.
3. Have the ability to empower agro-industry communities through the development of problem-solving concepts using scientific methods.

2.2.4 Organizational Values

The achievement of FAT's vision will be more effective if its achievement is based on organizational values that are understood and implemented by all members of the organization. The values developed in the FAT institution include philosophical values and basic organizational attitudes as follows:

1. Faith, knowledge and charity
Making faith as the main foundation in thinking and acting; knowledge as a field of service and the Tri Dharma of higher education as a vehicle for doing good deeds.
2. Trust and dedication
Be trustworthy in carrying out the obligations, duties, authorities and responsibilities carried out and dedicated in every action and deed.
3. Difference, innovation and excellence
Making every difference an entry point for innovation in realizing excellence.
4. Independence and togetherness
Able to work independently in carrying out their main duties and functions but have a togetherness attitude in achieving organizational goals.

2.2.5 Motto

FAT's motto is "Do the best towards perfection".

2.3 VISION, MISSION AND OBJECTIVES OF THE DEPARTMENT

2.3.1 Department of Food Science and Biotechnology

a. Vision

To become a center for the development of science, technology and human resources in the field of agricultural product technology and with an entrepreneurial perspective with quality and reputation at the national, regional and international levels.

b. Mission

1. Organizing educational programs that are oriented towards producing superior human resources in the field of agricultural technology and with an entrepreneurial perspective.
2. Conducting research for the development of science, knowledge, and technology as well as innovative works for the benefit of mankind in the field of technology for agricultural products based on local materials.
3. Take an active role in the dissemination and application of agricultural technology that provides added value to improve people's lives.

c. Objectives

1. Produce reliable, competent, and qualified human resources in the field of agricultural technology with an entrepreneurial perspective.
2. Produce applicative research work in the field of agricultural technology based on local materials to support the development of agro-industry.
3. Generate added value that can support the development of competitive local agroindustry.

2.3.2 Department of Agroindustrial Technology

a. Vision

To be a department that excels in the development of integrated and sustainable agro-industry at the international level.

b. Mission

Organizing superior higher education in the field of agro-industry through the implementation of the tri dharma of higher education and collaboration with national and international institutions.

2.3.3 Department of Biosystems Engineering

a. Vision

To become a center for Agricultural Engineering education with international standards and play an active role in the development of science through research activities and community service.

b. Mission

1. Carry out the educational process in a professional manner to produce graduates with competence in the field of Agricultural Engineering.
2. Take an active role in solving problems in the field of Agricultural Engineering through synergies with other scientific discipline groups.
3. Take an active role in global scientific activities in the field of Agricultural Engineering.
4. Build and develop science and technology related to agricultural engineering.

c. Objectives

1. Produce quality graduates of Agricultural Engineering Graduates, devoted to God Almighty, independent, entrepreneurial spirit, broad insight, disciplined, high work ethic, professional and able to compete at the international level.
2. Develop science and technology in the field of Agricultural Engineering to encourage national development.
3. Develop and apply research in the field of Agricultural Engineering to support community development and empowerment.

2.4. VISION, MISSION AND OBJECTIVES OF THE STUDY PROGRAM

2.3.3.1 Doctoral Study Program Food Science

a. Vision

Become a doctoral study program in the field of food science that is able to produce superior and innovative human resources in research and development of food based on local resources at the international level.

b. Mission

1. Organizing doctoral education in the field of food science to produce independent human resources in managing, leading, and developing research and playing a real role in the life of the global community.
2. Conducting research to develop food science based on local resources that are relevant in solving current problems to support national development through synergies with other scientific disciplines.
3. Take an active role in the diffusion of innovative and applicable research work to provide added value to society.

c. Objectives

1. Produce graduates who are able to develop novelty in the field of food science independently through research with an inter, multi or trans-disciplinary approach.
2. Produce research in the field of food science that can be published at the international level.
3. Produce innovative and applicable works that are beneficial for the benefit of mankind.

2.3.3.2 Doctoral Study Program Agroindustrial Technology

a. Vision

Become a PS that excels in producing new knowledge in the fields of technology, agro-industry management, and agro-industrial system engineering.

b. Mission

1. Organizing education in the field of Agroindustrial Technology through a research-based scientific development process.
2. Carry out scientific research and development activities in the fields of technology, agro-industry management and agro-industrial systems engineering.
3. Disseminate new findings in the form of scientific works on a national and international scale.

c. Objectives

1. Produce graduates who master the principles of research that are philosophical, applicable and independent in the field of agro-industry.
2. Produce graduates who can create new findings that have more value, are innovative, tested and original in the fields of technology, agro-industrial management and agro-industrial systems engineering.
3. Produce graduates who are able to publish reputable scientific papers on a national and international scale.

III. DOCTORAL EDUCATION PROGRAM

3.1. Doctoral program of Food Science

The Doctoral Program of Food Science (DFS) provides flexibility for students to choose courses that support their dissertation. The total credit that must be taken to complete the Doctor of Food Science program is a minimum of 42 credits. This credit load consists of: One semester of lectures with a load of 12 credits. Dissertation of 30 credits consists of a) 1 credit of Qualification Examination; b) 2 credits of proposal exam; c) 18 credits of research and research results seminars; d) 4 credits Publication of international scientific articles 1 and 2; e) 5 credits of dissertation writing and dissertation examination.

DFS graduate profiles are expected to have the following abilities:

1. Able to develop science and technology in the field of food processing through research to produce creative, innovative and original works.
2. Able to solve problems of science, technology in the field of food and agricultural products through an interdisciplinary approach
3. Able to develop research and apply it for the benefit of the user community and get national and international recognition.
4. Mastering the concepts and theories of food science and theories of other related fields of science so that they can act as expert researchers, academics, expert practitioners or professionals with reliable abilities in applying and developing food science.

The learning outcomes of the Doctoral Program of Food Science (DFS) are as follows:

1. Able to develop food science through independent research, with an inter, multi or trans disciplinary approach.
2. Able to carry out the latest, innovative, and applicable research in the field of food science so as to provide results and impacts to increase the competitiveness of local food.
3. Able to plan, manage, lead, implement and develop a research roadmap in the field of food science through an inter, multi or trans-disciplinary approach that is beneficial for the benefit of mankind.
4. Able to produce scientific work that has innovative, tested, and original novelty in the field of food science and published in international journals.

The learning competence of the UB Food Science Doctoral Program is stated in a learning achievement, which refers to the Regulation of the Ministry of Research, Technology and Higher Education No. 44 of 2015 concerning SNPT, as follows:

General Skills

Graduates of the Doctoral Program of Food Science (DFS) must have the following general skills:

1. Able to find or develop scientific theories/conceptions/ideas, and contribute to the development, and practice of science and/or technology that pays attention to and

applies humanities values in their fields of expertise, by producing scientific research based on scientific methodologies, logical, critical, systematic, and creative;

2. Able to compile interdisciplinary, multidisciplinary or transdisciplinary research, including theoretical studies and/or experiments in the fields of science, technology, art, and the resulting innovations in the form of a dissertation, and publish 2 articles in indexed international scientific journals.
3. Able to choose appropriate, current and advanced research and provide benefits to mankind through an interdisciplinary, multidisciplinary, or transdisciplinary approach, in order to develop and/or produce problem solving in the fields of science, technology, art, or society, based on the results of studies on availability internal and external resources.
4. Able to develop research roadmaps with an interdisciplinary, multidisciplinary, or transdisciplinary approach, based on a study of the main research objectives and their contellation to broader targets
5. Able to formulate scientific, technological or artistic arguments and solutions based on a critical view of facts, concepts, principles, or theories that can be accounted for scientifically and academically, and communicate them through mass media or directly to the public
6. Able to demonstrate academic leadership in managing, developing and fostering resources and organizations under their responsibility.
7. Able to manage, including storing, auditing, securing, and rediscovering data and information on research results that are under their responsibility.
8. Able to develop and maintain collegial and peer relations within their own environment or through collaborative networks with research communities outside the Institute.

Special skill

1. Able to deepen in the development of food science through independent research, with an inter, multi or trans-disciplinary approach.
2. Able to carry out the latest, innovative, and applicable research in the field of food science so as to provide results and impacts to increase the competitiveness of local food.
3. Able to plan, manage, lead, implement and develop a research roadmap in the field of food science through an inter, multi or trans-disciplinary approach that is beneficial for the benefit of mankind.
4. Able to produce scientific works that are novel, innovative, tested, and original in the field of food science and published in international journals.
5. Able to deepen the synthesis of new food products containing bioactive components of natural ingredients based on studies of molecular models, in vitro, and in vivo.
6. Able to deepen the synthesis of food component derivatives and design their applications in food processing and nutrition.
7. Able to deepen in process innovation based on a deep understanding of basic concepts in food processing.
8. Able to deepen the creation of specific processes to solve problems in food processing.

9. Able to carry out engineering deepening and integrated application of various processing technologies to control the growth of spoilage and pathogenic microorganisms.
10. Able to deepen the development of microorganism-based technology and products that are creative, original and innovative.
11. Able to deepen the development of functional food products based on local food ingredients that are scientifically tested to improve public health and are safe.

Knowledge

1. Mastering the philosophy of food science, food science theory with a particular field of study, the latest developments in food science, and having innovative abilities in developing local resources, as well as the application of theories in other relevant disciplines.
2. Mastering the philosophy of the nature and role of food components in the change and formation of food characteristics.
3. Mastering the philosophy of mechanism and reaction control in accordance with the reaction mechanism in food products, during processing and controlling damage to food products.
4. Mastering the philosophy of the mechanism of extraction and separation of bioactive components of natural ingredients as well as determining extraction techniques, separation of bioactive components and their application to food products
5. Mastering the philosophy of synthesizing food component derivatives and designing their applications in food processing and nutrition
6. Mastering the philosophy of the extraction mechanism and separation of bioactive components of natural ingredients and determining extraction techniques, separation of bioactive components and their application to food products.
7. Mastering the philosophy of changes in the characteristics of food raw materials and analyzing changes in food components as the effect of applied processing.
8. Mastering the philosophy of process innovation based on a deep understanding of the basic concepts in food processing
9. Mastering the philosophy of creating specific processes to solve problems in food processing
10. Mastering the philosophy of exploring beneficial microorganisms and metabolites and having novelty in the fields of food, agricultural products and the environment.
11. Mastering engineering philosophy and its integrated application of various processing technologies to control the growth of spoilage and pathogenic microorganisms.
12. Mastering the philosophy of designing, implementing and evaluating microbiological quality control systems and food safety and agricultural products
13. Mastering the philosophy of developing creative, original and innovative microorganism-based technology and products
14. Mastering the philosophy of evaluating the biological value of nutritional components and the biological activity of non-nutritive components with appropriate methods.
15. Mastering the philosophy of developing functional food products based on local food ingredients that are scientifically tested to improve public health and are safe.

16. Mastering the philosophy of developing new food products with optimal quantity and quality of nutritional and non-nutritive substances to answer nutrition-food and health problems that exist in the community

3.2. Doctoral Program of Agroindustrial Technology

The Doctoral Program of Agroindustrial Technology (DAIT) is aimed at producing reliable and independent researchers who are able to develop and utilize the potential of natural resources in order to empower the Indonesian people and help achieve long-term development goals in the field of higher education to increase the number and quality of teaching staff and researchers with degrees doctorate in Agroindustrial Technology. The total credit that must be taken to complete the Doctoral Program in Agroindustrial Technology is a minimum of 42 credits. This credit load consists of: One semester of lectures with a load of 12 credits and a dissertation of 30 credits.

The Doctoral Program of Agroindustrial Technology (DAIT) produces graduates who have competencies in accordance with KKNI level 9, namely:

Attitude

1. Fear God Almighty by showing a religious attitude;
2. Upholding human values in carrying out duties based on religion, morals, and ethics;
3. Contribute to improving the quality of life in society, nation, state, and the progress of civilization based on Pancasila;
4. To act as citizens who are proud and love their homeland, have nationalism and a sense of responsibility to the country and nation;
5. Appreciate the diversity of cultures, views, religions, and beliefs, as well as the opinions or original findings of others;
6. Cooperate and have social sensitivity and concern for society and the environment;
7. Obey the law and discipline in the life of society and the state;
8. Internalize academic values, norms, and ethics;
9. Demonstrate an attitude of being responsible for work in their field of expertise independently;
10. Internalize the spirit of independence, struggle, and entrepreneurship.

Knowledge

1. Mastering the concepts and theories of Agroindustrial Technology concerning the scientific fields of process technology, agro-industrial management, and systems engineering and other related fields of science.
2. Able to integrate concepts and theories of Agroindustrial Technology independently with an inter-disciplinary, multi-disciplinary or trans-disciplinary approach in various professions.

General Skills

1. Mastering the philosophy and theory of agroindustrial technology with the field of process technology studies, including production process optimization techniques, tool and machine performance analysis, as well as the development of competitive new products.

2. Mastering the philosophy and theory of agroindustrial technology with the field of agro-industry management studies, including aspects of production planning, analysis of productivity and performance of agro-industrial production units.
3. Mastering the philosophy and theory of agroindustrial technology with the field of systems engineering studies, including supply chain analysis, and integration of agro-industrial systems.
4. Mastering the philosophy and theory of agricultural engineering with fields covering Agricultural Cultivation Mechanical Engineering, Soil and Water Engineering, Agricultural Mechanization Systems and Management, Food Processing and Agricultural Products Engineering, Agricultural Energy and Electrification, Agricultural Environment and Buildings as well as Ergonomics and Agricultural Electronics.
5. Able to plan and develop sustainable agroindustry downstream.
6. Able to innovate and its application in agro-industrial systems.
7. Able to plan and evaluate the quality system in the field of agro-industry comprehensively.
8. Able to analyze problems and develop agro-industry policy strategies from upstream to downstream aspects.
9. Able to design and develop innovative agricultural tools and machines in the field of food processing and agricultural products.
10. Able to analyze and explore the application of waste treatment technology to achieve an environmentally sound agro-industry business.
11. Able to design and develop smart farming systems based on information technology and control systems.
12. Able to explore renewable energy to support the achievement of environmentally friendly agro-industry.

Special skill

1. Able to produce scientific works that are novelty, innovative, tested and original in the field of agroindustrial technology, especially in the fields of scientific technology, management, and engineering of agro-industrial systems and can be published on a national and international scale.
2. Able to produce scientific works that are novelty, innovative, tested and original in the field of agricultural engineering, especially in fields including Agricultural Cultivation Mechanical Engineering, Soil and Water Engineering, Agricultural Mechanization Systems and Management, Food Processing Techniques and Agricultural Products, Energy and Electrification of Agriculture, Environment and Agricultural Buildings as well as Ergonomics and Agricultural Electronics through independent research activities with inter, intra, multi, or trans-disciplinary approaches and can be published on a national and international scale.
3. Able to solve problems and make strategic decisions and policies within the scope of the agro-industry system so as to provide results and have an impact on improving performance, sustainability and competitiveness of agro-industry
4. Able to plan, manage, lead, implement and develop research roadmaps in the field of Agroindustrial technology that are beneficial to agro-industrial system stakeholders.

IV. EDUCATION SYSTEM

4.1. BASIC UNDERSTANDING

4.1.1. Credit System

- a. The credit system is a reward system for student study load, lecturer workload and educational program implementation burden.
- b. Credit is a unit or units that state the content of a course quantitatively.
- c. The characteristics of the credit system are:
 1. In the credit system, each course is assigned a value called a credit score
 2. The number of credit scores for different courses is not always the same
 3. The number of credits for each course is determined on the basis of the amount of effort to complete the tasks stated in lecture activities, practicums, field work practices or other tasks.

4.1.2. Semester System

- a. The semester system is a system of administering educational programs that uses a semi-annual time unit called a semester.
- b. Semester is a unit of time for the effective learning process for at least 16 (sixteen) weeks, including the mid-semester examination and the end-semester examination.
- c. The implementation of education in one semester consists of lecture activities, seminars, practicum, field work practices, in the form of face-to-face, as well as structured and independent academic activities.
- d. In each semester a number of courses are presented and each subject has a weight stated in semester credit units (credits).

4.1.3. Semester Credit System (SKS)

- a. SKS is a credit system that is held in semester units.
- b. SKS has two very important objectives, namely:

1. General purpose

In order for higher education institutions to better meet the demands of development, it is necessary to provide varied and flexible educational programs. In this way, it will provide wider possibilities for each student to determine and arrange the courses to be taken and the teaching and learning process strategies in order to obtain the best results according to the plans and conditions of each student.

2. Special purpose

- a) Provide opportunities for capable and hardworking students to complete their studies in the shortest possible time.
- b) Provide opportunities for students to take courses that match their interests, talents and abilities.
- c) Provide the possibility that an education system with multiple inputs and outputs can be implemented.
- d) Facilitate curriculum adjustments from time to time with the development of science and technology that is very rapid today.

- e) Provide the possibility that the evaluation system for student learning progress can be carried out as well as possible.
- f) Provide the possibility of transfer (transfer) of credit between Study Programs or between
- g) Faculties within a university or between universities.
- h) Allows the transfer of students from one university to another or from a study program to another study program in a particular university.
- c. Semester credit units (sks) are the amount of time for learning activities that are charged to students per week per semester in the learning process through various forms of learning or the amount of recognition for the success of students' efforts in participating in curricular activities in a study program.
- d. Each course or other academic activity is presented in each semester with a set price for the semester credit which states the weight of the activities in the course.

4.2. CREDIT VALUE AND STUDY EXPENSES

4.2.1. Semester Credit Score for Lectures

For lectures, the value of one semester credit unit is determined based on the activity load which includes all activities per week as follows:

- a. One (1) credit in the learning process in the form of lectures, responses, or tutorials, consisting of:
 - 1. Face-to-face activities 50 (fifty) minutes per week per semester;
 - 2. Structured assignment activities 60 (sixty) minutes per week per semester; and
 - 3. Independent activities 60 (sixty) minutes per week per semester.
- b. One (1) credit in the learning process in the form of seminars or other similar forms, consisting of:
 - 1. Face-to-face activities 100 (one hundred) minutes per week per semester; and
 - 2. Independent activities 70 (seventy) minutes per week per semester.
- c. One (1) credit in the form of practicum learning, studio practice, workshop practice, field practice, research, community service, and/or other equivalent forms of learning, is 170 (one hundred and seventy) minutes per week per semester, so that the credit score semesters are as follows:
 - 1. Semester Credit Score for Practicum in the Laboratory
The value of one semester credit unit is the workload in the Laboratory equivalent to 170 minutes per week for one semester.
 - 2. Semester Credit Score for Field Work Practice
The value of one semester credit unit is the workload in the field equivalent to 170 minutes per week for one semester (equivalent to 40 hours/week or, @ 8 hours/day) of work.
 - 3. Semester Credit Value for Research and Final Project Preparation for Undergraduate program is equivalent to 6 credits (6 x 170 minutes) per week, per semester, Master Program is equivalent to a minimum of 9 credits (9 x 170 minutes) per week, per semester and for Doctoral

programs equivalent with a minimum of 28 credits (28 x 170 minutes) per week, per semester

4.2.2. Study Load in Semester

In determining the study load for one semester, it is necessary to pay attention to individual abilities based on the results of a student's study in the previous semester as measured by the achievement index.

The amount of achievement index (IP) can be calculated as follows:

$$IP = \frac{\sum_{i=1}^n K_i NA_i}{\sum_{i=1}^n K_i}$$

Where:

IP : is the Achievement Index, can be in the form of semester achievement index or cumulative achievement index

K : is the number of credits for each course

NA : is the final grade for each course n : is the number of courses taken

The amount of study load in the first semester is determined the same for each student, then with the IP achieved in that semester the study load in the next semester is calculated based on the following table:

Tabel 4.1 GPA (IP) and credit load that can be taken

indexs Achievement (IP)	Babyan credit (credit)
IP 3.00	22 - 24
$2.50 \leq IP < 3.00$	19 - 21
$2.00 \leq IP < 2.50$	16 - 18
$1.50 \leq IP < 2.00$	12 - 15
$IP < 1.50$	< 12

4.3. CURRICULUM

Curriculum arrangement as a guide for teaching and learning process at Universitas Brawijaya refers to the Decree of the Minister of National Education Number 232/U/2000 dated December 20, 2000, Law Number 20 of 2003 concerning the National Education System and Decree of the Director General of Higher Education Number 43/DIKTI/2006 and the Regulation of the Minister of Research , Technology and Higher Education RI No 44/2015 concerning National Standards for Higher Education.

Group of Faculty/Study Program Content Courses

Faculty content courses will be arranged in separate chapters.

1. The determination of the study load for the doctoral education program curriculum is a minimum of 42 credits, including a dissertation (weight 28 credits). The composition of the courses is developed by each study program. The length of study is a minimum of 3 years (6 semesters) and a maximum of 7 years (14 semesters). Matriculation can be done before entering a formal learning program (outside the study period of at least 3 years). For students who have outstanding achievements as determined by the Ministry of Research, Technology and Higher Education, they can take part in the doctoral program at the same time as completing their master's program. Provisions regarding the Master Program Towards an Excellent Undergraduate Doctorate (PMDSU) and PPDU (Excellent Doctoral Education Program) are regulated in a separate Rector Regulation.
2. Competence in English, Information and Communication Technology (ICT) and Potential Intelligence for Universitas Brawijaya Students
The institutional curriculum that applies to Postgraduate programs at Universitas Brawijaya are:
 - a. Competence in English and ICT as well as Sports/Art activities do not have a study load (credit value = 0), but are graduation requirements for each type and level of education.
 - b. The required English proficiency/mastery is measured using the TOEIC score, while for the purposes of further study the TOEFL score is used, with the provisions for each and the type of education as follows:
 - 1) TOEFL ITP Score **>500 for Doctoral Education (S3)**
 - 2) The one who administers the TOEFL exam and issues the certificate is an official institution appointed by Universitas Brawijaya
 - c. Capability in the field of Information and Communication Technology (ICT), for each level and type of education, is determined as follows:
 - 1) Postgraduate Program: 1 (one) application program
The one who conducts ICT exams and issues certificates is an official institution appointed by Universitas Brawijaya
 - d. Potential intelligence of prospective students of Doctoral programs at Universitas Brawijaya must have a certificate of intelligence potential assessment in the form of an Academic Potential Test (TPA) certificate with a score of > 500, which is issued by an authorized institution.

4.4. ACADEMIC ABILITY ASSESSMENT

4.4.1. General requirements

1. The activity of assessing the academic ability of a subject is carried out through structured assignments, quizzes, mid-semester exams, and end-of-semester exams. Academic ability assessment activities for practicum courses include pre-test, post-test, practicum activities, reports, quizzes, and practicum final exams.
2. Structured activities in the activity of assessing the academic ability of a subject in a semester are carried out at least 2 (two) times in one semester.
3. Mid-semester and end-of-semester examinations are carried out according to the schedule specified in the academic calendar.

4. Assessment through structured assignments, quizzes, midterm exams, final semester exams and final practicum exams is intended to determine the final score (NA) with a certain weight or adjusted to the lecture activities that have been written in the RPS (Semester Learning Plan).
5. Assessment for practicum courses is in accordance with the RPS for practicum courses.

4.4.2. Final score

1. Assessment of student study success for each course is based on three alternative assessments, namely:
 - a. Using the benchmark reference assessment system (PAP), that is by determining the graduation limit.
 - b. Assessment in a course follows the assessment rubric listed in the RPS
2. The results of the final assessment of the course are stated with Quality Letters (HM) and Quality Scores (AM) as shown in the following table:

Table 4.2 Equality of Grade and Quality Value

Grade	Quality value	Capability
A	4	Very Good
B+	3,5	Between Very Good and Good
B	3	Good
C+	2,5	Between Good and Enough
C	2	Sufficient
D+	1,5	Between Sufficient and Poor
D	1	Poor
E	0	Very Poor

3. Scoring for each activity can be done with a Quality Letter (EA) which is then converted to a Quality Score (0-4).
4. The weight of a course assessment activity is determined according to the balance of the activity material with the course material as a whole in one semester.
5. Final Score calculation is done by giving weight to each lecture activity in the semester using the formula:

$$NA = \frac{\sum_{i=1}^n Bt_i \cdot Nt_i + Bq_i \cdot Nq_i + Bm \cdot Nm + Ba \cdot Na}{\sum_{i=1}^n Bt_i + Bq_i + Bm + Ba}$$

With:

Bti : is the weighted value of the structured task to i

Bqi : is the weight of the quiz score to i

Bm : is the weight of the mid-semester exam score

Ba : is the weight of the final semester exam scores

Nti, Nqi, Nm, Na is the value of each academic activity

6. From the results of the calculation of the formula point (5), if it is converted to Quality Letters using the Basic Reference Assessment (PAP), then the following references are used:

Table 4.3 Conversion of Final Score to Quality Grade

Final Score	Grade
80 < NA 100	A
75 < NA 80	B+
70 < NA 75	B
60 < NA 70	C+
55 < NA 60	C
50 < NA 55	D+
45 < NA 50	D
0 < NA 44	E

4.4.3. Repeating Courses in the Regular Program

1. Applicable for courses with a maximum of C+
2. The maximum value given is A.
3. The value taken is the best value.
4. Repeated courses must be immediately submitted to the academic department of the department for deletion of unused grades.

4.4.4. Value Transparency

The determination of the final grades for compulsory courses is transparent. Lecturers are required to provide value transparency by announcing the percentage for UTS, UAS, and structured assignments (quizzes, papers, presentations, case studies, etc.). Final grades along with the percentage of UTS, UAS, and structured assignments must be announced through the academic section of the faculty/department administration.

4.4.5. Rate Upload

For course lecturers, the conditions for uploading grades are as follows:

1. The coordinator of the course teaching lecturers must upload all components of the value of each course taught in the middle and end of the semester via SIADO online.

2. The deadline for uploading all end-of-semester grades in the form of quality grades by the course lecturer is 10 (ten) working days from the date of the final semester examination (UAS) of a course.
3. Lecturers who are late in uploading grades will receive a warning letter from the dean.

4.4.6. Resceduling exam

Requirements for rescheduling exam:

1. Report the student's absence from the exam and the desire to take the follow-up exam no later than 3 (three) days after the exam for the subject in question, except in force majeure conditions.
2. Submit an application letter to the Deputy Dean for Academic Affairs accompanied by evidence stating the reasons for not participating in the exam.
3. The proof must be sent no later than 7 (seven) days after the examination of the subject concerned, except in force majeure conditions.
4. Reasons that can be accepted for taking the follow-up exam are as follows:
 - a. Sick (proven by the examining doctor's letter).
 - b. Parents and siblings have died as evidenced by a Certificate from the Village/Kelurahan Head).
 - c. Other reasons that are justified academically and have been approved by the Deputy Dean for Academic Affairs.
 - d. If the person concerned is unable to attend or is unable to attend, then it is allowed to report through another person.
5. The follow-up examination is carried out no later than 1 week after the UTS/UAS ends (according to the UTS or UAS being followed) and fulfills administrative requirements, except for force majeure conditions. If a student does not meet this rule, then he is not allowed to take a follow-up exam.

4.5. ACADEMIC SANCTIONS

Academic sanctions are imposed on students who violate academic provisions:

1. Students who attend lectures are less than 80%, then the final score is 50% of the total final score.
2. Students cannot cancel a course outside the specified time and will be given an E if they do not attend lectures according to the applicable rules.
3. Students who commit administrative fraud (falsifying documents, data and signatures) or academic fraud (cheating, collaborating, taking other students' exams and/or students whose exams are done by someone else, taking other students' jobs) in the exam, will be subject to sanctions in the form of canceling the entire study plan. the semester in question.
4. Students who make changes to the KRS illegally will be subject to sanctions for canceling the KRS for all courses in the semester concerned.
5. Students who make changes in grades illegally will be subject to suspension for a maximum of 2 (two) semesters and are not counted as terminals.
6. Students who commit these violations if accompanied by threats of violence or giving something, or promises or tricks will be subject to sanctions from being expelled from the Faculty.

7. Students who are found to have cheated (plagiarism and data falsification) in making reports on Field Work Practice, KKN, and final assignments, the entire study plan for the semester in question will be canceled.
8. Students who are found to have forged signatures on academic documents (lecture attendance, PKL/KKN/Bachelor Thesis proposals, PKL/KKN/Thesis reports, and seminar cards) will have their entire semester study plan cancelled.
9. Students who commit acts of violence and fights are subject to sanctions in the form of cancellation of all courses taken in that semester, and other sanctions in accordance with applicable laws and regulations.
10. Students who commit criminal acts and are sentenced to court decisions that have permanent legal force, a minimum of 2 (two) years in prison are removed from the status of Universitas Brawijaya students based on the Rector's Decree.

4.6. FINAL PROJECT OF DOCTORATE PROGRAM

4.6.1. Doctoral Program

a. Dissertation Limits and Status

1. Disertasi is an academic paper that is the result of in-depth and thorough research carried out independently and contains new contributions to the development of science and/or technology carried out by doctoral candidates under the supervision of their supervisors.
2. dissertation This is the final project that must be completed by every doctoral student at Universitas Brawijaya.

b. Dissertation Objectives

1. The preparation of the dissertation is intended so that students are able to make a description, analysis, and synthesis of the facts/symptoms studied or the results of mathematical theory studies and/or designs with deep thought, and pour them into mathematical models and/or new designs that they build themselves, or modify/develop mathematical theoretical models, and/or pre-existing designs that can be 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.

c. Forms of Activities to Get Data

1. The data used as the basis for the preparation of the Dissertation 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, legally and free from elements of plagiarism.
3. Further provisions regarding the form of activity and the depth of research/study as referred to in paragraphs 1 and 2, as well as procedures for obtaining data, preparation, writing systematics and other matters

related to the Dissertation are regulated in the Handbook of the Faculty administering the doctoral program with reference to the relevant quality standards. determined by the Graduate Program.

d. Amount of Dissertation Study Load

1. The dissertation has a study load of 30 credits
2. The amount of study load is determined before the dissertation exam by the Dean of the Faculty administering the doctoral program/Director of the University Postgraduate Program at the suggestion of the Head of the Doctoral Study Program.
3. Further provisions regarding the details of the Dissertation study load, requirements, stages of implementation and all technical aspects related to the implementation of the Dissertation are regulated in the Handbook of the Faculty administering the doctoral program by referring to the quality standards set by the Postgraduate Program of Universitas Brawijaya.

e. Substance and Depth of Study/Review

1. The substance of the dissertation is the development of science, technology, arts or humanities with substance/material that must be in accordance with the scope of the scientific field in the study program where the student is registered.
2. The dissertation study must be in accordance with KKN level 9.
3. The dissertation study must be in accordance with the scholarship of the student study program, have originality and novelty with a depth that is in accordance with KKN level 9.
4. Further provisions regarding the substance and depth of the Dissertation study/study are regulated in the Handbook of the Faculty administering the doctoral program/University Postgraduate Program.
5. In the case of a dissertation for the award of an honorary doctorate or honoris causa (HC) it is regulated in a separate provision by the chancellor.

f. Student Requirements, Obligations and Rights

1. Students can carry out a series of activities related to the Dissertation after fulfilling the academic and administrative requirements that have been determined by the Faculty administering the Doctoral program and/or the University Postgraduate Program.
2. Students are required to compile a Dissertation based on ethics and scientific manners, be honest and free from plagiarism elements and refer to the Dissertation Writing Guidelines set by the faculty administering the Doctoral program/University Postgraduate Program.
3. The promoter can use the data in the dissertation 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, etc. Those related to the material/substance of the

Dissertation 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 of the Faculty administering the Doctoral program and/or the Director of the University Postgraduate Program.
6. The provisions on ownership and intellectual property rights resulting from the Dissertation, 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 Dissertation are regulated by the Dean of the Faculty administering the Doctoral program.

g. Qualifications, Determination, Rights and Obligations of Supervisors

1. The dissertation is prepared independently by the students under the direction of the Advisory Lecturer Team which is chaired by a Promoter assisted by 2 (two) or more Co-promoters.
2. The promoter at least holds the position of Head Lector with a Doctoral academic qualification in the field of science or in one scientific sub-cluster in accordance with the study program in which the student is registered and has at least 2 (two) scientific works as the main author and/or as the corresponding author. published in reputable international journals.
3. The co-promoter has at least the position of Lecturer with a Doctoral academic qualification in the field of science or in one scientific subgroup in accordance with the study program where the student is registered and has at least 2 (two) scientific works as the main author and/or as the corresponding author published in reputable international journals
4. Based on "special considerations" and agreement with the Head of the Study Program, students can propose a co-promoter outside the Study Program who can help streamline their dissertation activities, provided that point (3) is met and has KKNi level-9 competence.
5. Promoters and Co-promoters are determined by the Dean of the Faculty administering the doctoral program/Director of Postgraduate University at the suggestion of the Head of the Doctoral Study Program.
6. Further provisions regarding qualifications, procedures for determining, rights and obligations of Dissertation Supervisors are regulated in the Handbook of the Faculty administering the Doctoral program.

h. Qualifying Exam

1. Qualification exams are carried out to assess the academic ability of doctoral participants. A doctoral program participant is entitled to take a

- qualifying exam if he has successfully taken a minimum of 12 credits with a GPA of at least 3.0, no score less than B.
2. Qualification exams are carried out before the start of the preparation of the dissertation and passing this qualification exam is a requirement for the preparation of the dissertation proposal to begin.
 3. The form of assignments as material for the qualification exam is that students independently make scientific papers which can be considered as "pre-dissertation proposals". The preparation of this scientific paper was consulted with the supervisory committee.
 4. Prior to conducting the Qualification examination, the supervisory committee and students must conduct a commission session with the aim of reaching an agreement with the student research proposal pre-proposal with the supervisory committee. The commission session was attended by the advisory committee and students. If the pre-proposal has been approved by the supervisory committee, the student can apply for a qualifying exam.
 5. Qualification exams are carried out orally and the assessment is carried out by the Supervisory Commission and Examining Lecturers.
 6. Lecturers who examine the qualification exam have an academic position of at least Lector and the title of Doctor. The team of lecturers who examine the qualifications for each student is 2 people.
 7. The minimum passing standard of the Qualification Exam is 70 or the equivalent of a B grade.
 - a. Students who do not pass the qualification exam are given the opportunity to repeat 1 (one) time.
 8. Components of the assessment of the qualification exam and its weighting include (a) Mastery of research methodology, (b) Mastery of the material in the field of science, (c) Reasoning ability, including the ability to abstract, systematize, and formulate ideas; both in writing and orally, and (d) The ability to communicate scientific thoughts in writing and orally in discussions.

Table 4.6 Qualification Exam Assessment Components

No	Assessment Component	Description	Weight (%)
1	Ability to review literature	Review articles are well presented which are characterized by: <ol style="list-style-type: none"> 1. The background in Chapter 1 is presented in a sequence so that there is a common thread with the research problems to be carried out; 2. Chapter 2 (review of literature) is well presented; 3. 80% of the libraries referred are primary/research results; 4. 75% of the referenced libraries are up-to-date (last 10 years). 	20
2	Mastery of related scientific concepts	The conceptual framework is presented characterized by: <ol style="list-style-type: none"> 1. The conceptual framework is well presented; 2. There are concept diagrams that are clearly presented. 	20

No	Assessment Component	Description	Weight (%)
3	Ability to formulate research problems	The problem formulation is very clear and well written which is characterized by: 1. The formulation of the problem to be studied is stated in clear sentences; 2. The problems studied are up to date, there is no plagiarism or repetition; 3. The benefits are well formulated and the benefits to society and science and technology are well illustrated.	10
4	Ability to present manuscripts orally and defend them in front of examiners	The ability of students to submit scientific arguments in answering questions	15
		Mastery of scientific substance and ability to present novelty	15
		Scientific logic and presentation	10
		Scientific writing	10
Total Score			
Quality Letter			

i. Proposal Examination

After the proposal is approved by the supervisory committee, students can take a dissertation proposal exam. Students take care of the administrative process to the postgraduate administration of the Faculty of Agricultural Technology. The head of the study program appoints 3 lecturers as examiners on the recommendation of the supervisory commission. The requirements for examining a student's dissertation research proposal are at least a Doctoral degree with the position of Lector and having competencies similar to the student's research topic. The dissertation proposal review team is determined by the dean's decree.

Prior to carrying out the Proposal Examination, students and the supervisory commission have conducted a research proposal commission meeting at least once. This commission session aims to obtain an agreement between the supervisory committee and students regarding the research topic and the scope of the student's dissertation research.

Implementation of the dissertation proposal examination:

1. The dissertation proposal examination is conducted openly and must be attended by the supervisory commission and 3 examiners.
2. The dissertation examination assessment includes: dissertation research proposal manuscript, mastery of research methods, mastery of theories relevant to the research topic and reasoning abilities, abstraction, systematic thinking and formulation of ideas
3. The value of the dissertation proposal examination is the average value of the supervisor and examiner commissions present.
4. Students are declared to have passed the dissertation proposal exam if they get an average score of at least B. The proposal exam can be repeated 1 time for students who do not pass.

Table 4.7 Components of Dissertation Proposal Examination Assessment

No	Assessment Component	Description	Weight (%)
1	Manuscript Writing ability	The manuscript is very clear and very well written which is characterized by: 1. Relevant cited libraries; 2. As many as 80% of the cited literature is primary/research results, not review literature; 3. 75% of the literature cited is up to date (last 10 years); 4. Arranged systematically, in depth and coherently; 5. Does not indicate plagiarism (check plagiarism 10%); 6. Sentences are well structured, following the rules of PUEBI (General Guidelines for Indonesian Spelling).	15
2	Clarity of problem objectives and benefits	The problem formulation is very clear and well written which is characterized by: 1. The formulation of the problem to be studied is stated in clear sentences; 2. Goals are clear and in line (gayut) with the method; 3. The benefits are well formulated and the benefits to society and science and technology are well illustrated.	15
3	Clarity of framework and clarity of research methods	Very clear and very well written framework and methods characterized by: 1. It is clear that the background, problems and methods used in writing the framework of the framework are clearly described; 2. In the method, it is clear the stages and designs used, as well as the resulting outputs; 3. It is clear how the data analysis method will be used so that it is able to answer the dissertation problem.	20
4	Ability to present proposals orally and defend them	1. The presentation display is in the form of points, not sentences, is attractive, and aesthetically pleasing. 2. Presentation with appropriate voice intonation, not too fast or slow, not memorized, mastering the audience, mastering the material. 3. The timing is correct and appropriate.	5
		The ability of students to put forward scientific arguments in answering questions.	15
		Mastery of scientific substance and ability to present novelty	15
		Student reasoning ability in presentation	15
Total Score			
Quality Letters			

j. Research and Research Advancement Seminar

Student research activities produce research data that are worthy of publication in national/international scientific seminars or published in reputable international journals and/or accredited national journals, and can be used in the preparation of their dissertation. Assessment of the

implementation of dissertation research is carried out by all members of the supervisory commission (promoter and co-promoter) in accordance with applicable regulations.

In accordance with Rector's Regulation 52 of 2018, the results seminar is one component of the completion of the dissertation. Students can conduct research progress seminars after having data on research results that are deemed appropriate by their supervisory commission. During their doctoral program, students are required to conduct research progress seminars 3 times. Student participation in national seminars or international seminars as an oral presenter can replace **one** (1 time) research progress seminar. Students must obtain approval for participation in national or international seminars to the supervisory committee and provide certificates and proceedings to the supervisory committee and to the Head of the Study Program.

Requirements and Procedures:

1. The dissertation research progress seminar is conducted by students after obtaining approval from the Advisory Commission.
2. Research progress seminars are held openly
3. Seminar papers on research results are written following the article format for the intended scientific publication. The seminar paper must have been approved and signed by the Advisory Committee.
4. Students reproduce the seminar abstract as much as 20-25 copies.
5. Students are required to improve the draft publication based on suggestions from the supervisory committee.

Table 4.8 Assessment Components of Results Seminar/Research Progress or National/International Seminar

Components of Assessment Seminar Results/Research Progress			
No	Assessment Component	Rating Description	Weight (%)
1	Research competence	1. Commitment and persistence; 2. Initiative and creativity; 3. Independence; 4. Efficiency in work; 5. Research skill development.	50
2	Dissertation progress report	1. Research relevance, clarity of purpose; 2. Theoretical foundations and use of literature; 3. Use of methods and data; 4. Discussion; 5. Clarity of conclusions and recommendations; 6. Writing.	30
3	Presentation	1. Verbal presentation; 2. Mastery of the field of science.	20
Numerical Value (Amount)			
Quality Letters			
National/International Seminar Assessment Components			
No	Assessment Component	Rating Description	Weight (%)
1	Research competence	1. Commitment and persistence; 2. Initiative and creativity; 3. Independence; 4. Efficiency in work; 5. Research skill development.	50

2	Article quality	1. Research relevance, clarity of purpose; 2. Theoretical foundations and use of literature; 3. Use of methods and data; 4. Discussion; 5. Clarity of conclusions and recommendations; 6. Writing.	30
3	Presentation	1. Seminar/conference quality assessment 2. Quality of presentation material	20
Total Score			
Quality Letters			

k. Monitoring of Research Implementation

Monitoring of research implementation is carried out using (1) Research Control Card, (2) Dissertation Research Logbook, (3) Dissertation Progress Report, and (4) Research Implementation Supervision.

1. Research Control Card

- The research control card (RCC) contains brief information about the progress of the research implementation on a regular basis (weekly).
- This KKP is held and filled out by students and regularly (monthly) is consulted and informed to the Advisory Lecturer.
- The supervising lecturer signs the RCC periodically when students consult.
- By the time students will carry out the seminar on the results of the Dissertation research, it is hoped that the RCC has been filled out completely and has been signed by the Promoter.
- The completed RCC (point 1.4) is one of the complete requirements for registering a research seminar.

2. Dissertation Research Logbook

- This logbook contains brief notes/information about things that students do in carrying out their research as well as notes that need to be provided by the supervisor on research problems faced by students, on a regular basis.
- The logbook can also be filled with notes/information on the results of library analysis conducted by students.
- This logbook is held and filled out by students and is regularly consulted and informed to the Advisory Lecturer.
- The supervising lecturer signs the Logbook periodically when students consult.
- The completed logbook (point d) is one of the complete requirements for registering a research seminar.
- Students can take the Logbook in the academic section by showing proof of having passed the dissertation proposal exam.

3. Dissertation Progress Report (DPR)

- Students who are carrying out the dissertation learning process are obliged to make a report on the progress of the research implementation every mid-semester and at the end of each semester.

- b. The Dissertation Progress Report can be in the form of: (1) Research Implementation Progress Reports, (2) Study Progress Reports and Data Analysis, (3) Progress Reports on Preparation/Writing of Seminar Papers and Dissertation Scripts.
- c. This progress report contains information about:
 - 1) Student Identity
 - 2) Dissertation Title
 - 3) Advisory Committee and Examining Lecturer Team
 - 4) Overall Dissertation Schedule
 - 5) The substance of the Progress Report includes:
 - a) Activities that have been completed, and their results. If possible, these results can be written in the form of scientific articles.
 - b) Activities being carried out and time limits (schedule).
 - c) The planned activities will be carried out along with the time schedule.
- d. This progress report must be approved and signed by the Promoter.
- e. This progress report is addressed to the Head of the Doctoral Program.
- f. Progress reports are made in five copies, each for students, promoters, co-promoters 1, co-promoters 2, and the head of the doctoral program.
- g. Progress reports are submitted to the academic section and students are given proof of receipt of progress reports.
- h. Submission of this Progress Report can be done at any time.
- i. This progress report will be used by the Promoter as one of the considerations in assessing the implementation of the dissertation research.
- j. This progress report will be used by the Head of the Doctoral Program to monitor the smoothness of the Dissertation learning process carried out by students.

4. Supervision of Research Implementation

- a. Research Supervision The dissertation is carried out for research using experimental methods carried out in the laboratory, greenhouse, and/or in the field.
- b. Research Dissertation using the survey method is not subject to research supervision, unless there are special considerations.
- c. Research supervision is carried out with the aim of (1) proving whether the implementation of research is in accordance with what is planned in the research proposal, and (2) finding solutions to problems faced by students in carrying out their research in the laboratory and/or in the field.
- d. Research supervision is carried out once by the Promoter or Co-promoter appointed by the Promoter to represent it.
- e. The supervising lecturer who carries out research supervision is obliged to make a supervision report and at the same time an assessment of the implementation of the research.

- f. The Research Supervision Report contains information on:
 - 1) Identity of Students and Supervisors who carry out supervision.
 - 2) Dissertation Title.
 - 3) Title/research activity being carried out.
 - 4) Problems faced by students in conducting research.
 - 5) Evidence of research implementation documentation.
 - 6) Other information deemed necessary.
 - 7) The funding for research supervision is borne by the student. Provisions regarding this matter are stipulated by a Decree of the Dean/Director of PPS.

5. Dissertation Quality Assurance Team

The dissertation 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 dissertation starting from the proposal examination to the final dissertation report is appropriate and students are declared passed if the quality of the dissertation has been checked by the Dissertation Quality Assurance Team. The study program further regulates the Dissertation Quality Assurance Team.

- a. Team Dissertation Quality Assurance is an ad hoc team formed to assess the feasibility of a dissertation
- b. The team is a lecturer representative from the scientific field (laboratory) in the study program and is proposed by the Head of the Doctoral Study Program to the Dean and determined based on the Dean's Decree
- c. The working period of the Dissertation Quality Assurance Team is 2 years and after that a new Dissertation Quality Assurance Team is formed.
- d. The requirements for members of the Dissertation Quality Assurance Team are:
 1. Functional position of Professor or Head Lector
 2. Having experience in one publication in a reputable international journal (minimum Q3)

I. Scientific publications

According to UB Chancellor's Regulation No. 52 th 2018, every Doctoral Program student is required to take and complete a final project in the form of a dissertation and scientific publication. The final assignment in the form of Scientific Publication as referred to is prepared based on the results of the Dissertation research. The scientific publications are in the form of:

1. 2 (two) scientific articles in international Scientific Journals indexed by Scopus or Web of Science Core Collection (Thomson Reuter), having the lowest impact factor of 0.1, or Microsoft Academic Search; or
2. 1 (one) scientific article in a scientific journal as referred to in (a) and 1 (one) article in the Proceedings. One of the Scientific Publications must be written by the student as the first author.

Students must consult the supervisory committee regarding the name of the scientific journal to be addressed and the research results to be written in the journal. During the doctoral study program, students are required to publish the results of research in scientific journals as many as 2 articles in accordance with UB Chancellor's regulation no. 52 of 2018. The assessment of article quality is determined by the Dissertation Quality Assurance Team from each doctoral study program at the UB Faculty of Agricultural Technology. Students who can publish 2 (two) international scientific journals at least Q3 from the results of their dissertation research have the right not to be assessed for their dissertation eligibility by the Dissertation Quality Assurance Team from each doctoral study program at FAT UB.

m. Evaluation of the Feasibility of the Dissertation by the Dissertation Quality Assurance Team

1. The requirements for the dissertation eligibility assessment are as follows:
 - a. Have passed the research result seminar
 - b. Have made improvements to the dissertation manuscript
 - c. The dissertation manuscript has been approved by the supervisory committee and has met the administrative requirements that have been determined
 - d. Include proof of plagiarism free from FAT UB with the allowed plagiarism rate of 20%.
 - e. Have a published manuscript that has been accepted to be published in international journals or proceedings according to UB Chancellor's Regulation no. 52 Year 2018.
2. Procedure for conducting the dissertation feasibility assessment:
 - a. Students register for a feasibility assessment at the Doctoral Program Chair.
 - b. Students submit files for dissertation feasibility assessment, including:
 - Dissertation manuscript
 - Publication manuscript
 - Evidence of acceptance of manuscripts from international scientific journals
 - Proof of proceedings (if any)
3. The dissertation feasibility assessment is carried out by desk evaluation by 2 (two) members of the Dissertation Quality Assurance Team with expertise relevant to the dissertation research topic. The appraiser gives an assessment in the form provided within 2 weeks from the time the assessment files are submitted.

n. Dissertation Final Exam

1. Requirements
 - a. The dissertation manuscript has been approved and signed by all supervisors (Promoter and all Co-promoters).

- b. Has fulfilled all academic administrative requirements in accordance with applicable regulations.
 - c. The dissertation manuscript has been approved and signed by all supervisors (Promoter and all Co-promoters).
 - d. Has fulfilled all academic administrative requirements in accordance with applicable regulations.
 - e. The dissertation manuscript has been assessed for eligibility by the Doctoral Committee.
 - f. Has fulfilled all financial administration requirements in accordance with applicable regulations.
 - g. Registering the final examination of the dissertation in the academic section. Registration is done 10-15 days before the exam.
2. The Dissertation Final Examination Committee consists of:
 - a. Chairperson of the session (Dean/Director/appointed person to represent).
 - b. Promoter (one person) and Co-Promoter (2 people).
 - c. Dissertation Evaluation Committee (examiner lecturer) (3 people).
 - d. One person is "Guest Examiner", an expert from outside Universitas Brawijaya who has expertise in a field that is in accordance with the contents of the dissertation.
 - e. The Guest Examiner is proposed by the Promoter to the Head of the Doctoral Program, and is determined by the Dean's decree.
 - f. The dissertation examination can be carried out if attended by at least two people from the supervisory commission (Promoter and/or Co-promoter), two dissertation assessors (examiners) and or an outside examiner. Deviations from this provision require special approval from the Head of the Doctoral Program.
3. Completion of Dissertation revision
 - a. After being declared to have passed the final dissertation exam, the student concerned is given 1 (one) month to revise (if any).
 - b. The revised dissertation manuscript, signed by the supervising commission and KPS-S3 and then submitted to the postgraduate program of the Faculty of Agricultural Technology.
 - c. If up to 1 (one) month the student has not submitted his dissertation manuscript to the postgraduate academic section of the Faculty of Agricultural Technology, the value of the student's dissertation is reduced by one level.
 - d. If within 1 (one) month the dissertation manuscript has not been submitted, the student's dissertation score is lowered according to the following table:

No.	Lateness	Decreasing Value
1.	1 month	½ grade
2.	2 months	1 grade
3.	3 months	Repeat Exam

o. Assessment of Learning Outcomes for Dissertation

1. In the event that the material/substance of the dissertation consists of several sub-researches, it must be a unified whole research work that is interrelated or in series.
2. Student learning outcomes on the implementation of the Dissertation are assessed starting from the process of preparing proposals, implementation, reporting, scientific articles/papers and exams.
3. The research form for each stage of the dissertation is regulated in the Handbook of the Faculty administering the Doctoral Program/University Postgraduate Program.
4. Referring to the Rector's Regulation of 2018 Article 4 concerning Dissertations and Scientific Publications, students are required to use the material/substance of the Dissertation to compile 2 (two) scientific articles in reputable International Scientific Journals (indexed by Scopus or Web of Science Core Collection (Thomas Reuters) or 1 (one) scientific article in a reputable International Scientific Journal and 1 (one) article in Scopus indexed proceedings, and students are still required to compile a Dissertation to be assessed by the Examining Lecturer Council in an Exam
5. In the event that a student is declared to have obtained an A dissertation score without a final exam, the student is required to produce two scientific articles that have been published or accepted for publication in an International Scientific Journal indexed by Scopus or the Web of Science Core Collection (Thomas Reuters) which has the lowest impact factor of 0.200; the average value of all stages of the Dissertation examination/seminar A; and the dissertation manuscript has been evaluated and approved by the Promoter Team and disseminated in scientific forums at the Faculty / Postgraduate.
6. The student's proposal to get an A dissertation score without a final exam is carried out by the Promoter to the Dean/Director of Post Graduate.
7. The components of the dissertation assessment include (a) research proposals, (b) special tasks to support dissertation, (c) research implementation, (d) dissertation writing, (e) scientific publications, (f) seminar results, and (g) dissertation examinations.

p. Doctoral Program Judisium

Yudisium is implemented after students can complete all academic and administrative requirements, namely:

1. Have fulfilled all academic requirements (lectures and academic assignments) and administrative and passed the final exam
2. GPA > 3.00 during the study period
3. Complete other requirements set by the study program
4. If within 1 (one) month the student has not submitted the complete judicial documents, the student's dissertation score will be lowered according to the following table:

No.	Lateness	Decreasing Value
1.	1 month	½ grade
2.	2 months	1 grade
3.	3 months	Repeat Exam

5. Judicial implementation

- The Yudisium was held openly attended by promoters, co-promoters, test teams, invitees, and students
- The head of the doctoral study program acts as the head of the judiciary
- In the graduation, students present the results of their research followed by the submission of reviews of student research results by the promoter, co-promoter, and the examiner team.
- Students are declared to have passed the graduation in accordance with the predicate of graduation from the doctoral program.

q. Doctoral Program Graduation Predicate

Students who are declared passed will receive the following graduation predicate:

- Graduated with "Compliments" (Cumlaude), the requirements are:
 - GPA of courses and supporting courses for the dissertation > 3.75, without a B grade.
 - Dissertation Value A.
 - Publish the results of his dissertation research in more than one international scientific journal article title with impact factors indexed by Scopus, Web of Science (at least there is a letter of acceptance of the article).
 - The maximum length of study is eight semesters.
- Graduated with "very satisfactory" predicate, the requirements are:
 - Does not meet the requirements in point (1) and,
 - Achieved $3.50 < \text{GPA} < 3.75$ (total for lectures and dissertation)
- Graduated with "Satisfactory" predicate, the requirements are:

Achieved $3.00 \leq \text{GPA} < 3.50$ (total for lectures and dissertation) This graduation predicate is determined by the Dissertation Final Examination Committee and ratified by the Dean and announced at the graduation.

4.6.2. Double Degree Program

The Double Degree education program is an educational program that provides 2 (two) diplomas, from UB and universities abroad that are partners of UB, for students who have met the requirements.

a. Learners

- Students for the Double Degree Education Program are community members who are registered as active students in Bachelor, Master, or Doctoral programs at UB.

2. Prospective students must follow and pass the selection as students in
3. Double Degree Education Program.
4. The selection system, which contains the requirements, procedures and graduation, and the partner universities abroad are determined by the Chancellor.

b. Requirements

1. During compulsory academic activities at UB, students must be registered as active students in the study program at the chosen level which organizes the Double Degree Education Program.
2. During compulsory academic activities in other universities abroad that are partners of UB, students must be registered as active students in the established study program.
3. All consequences of academic administration as a result of participation in the Double Degree Education Program in accordance with applicable regulations.

c. Financing

Students are required to pay off all forms of payment obligations related to the Double Degree Education Program in accordance with applicable regulations.

d. Curriculum

1. Double Degree Education Program students must take the curriculum that has been determined by the study program at the chosen level at the University.
2. The faculty/program leader proposes to the Chancellor the requirements and educational curriculum that must be completed in UB before students are allowed to study in the Double Degree Education program set by UB and partner universities abroad.
3. Students must pass the academic and/or administrative requirements set by partner universities abroad.
4. Double Degree is included in the regular class, not a special class.
5. To get 2 (two) diplomas, students must pass all academic obligations and complete administrative requirements at the education level chosen in the Double Degree Education Program set by UB and partner universities abroad.

e. Diplomas and Degrees

1. Diplomas from 2 (two) study programs at UB and other universities abroad that are partners are given to students who have completed all the Double Degree Education Program curricula at the level chosen legally and according to the provisions.
2. Title designations from other foreign universities that are partners follow the designation rules imposed by these universities.

4.6.3. Credit Transfer Program (Credit Transfer)

The credit transfer program is a lecture program that is partially implemented in other universities. Lectures carried out at other universities are recognized as credits that can be converted into credits with the appropriate courses.

4.6.4. Cooperation Guidance Program (Joint Supervision)

The implementation of research outside Universitas Brawijaya either in research centers or other universities can be guided by external supervisors. The lecturer becomes a mentoring lecturer with the main supervisor being a lecturer of FAT UB. The supervising lecturer must follow all the processes of carrying out the final project such as mentoring, proposal seminars, and final exams. If FAT UB students carry out research outside of UB in order to help research projects for lecturers/researchers outside UB, the study program and department must evaluate the satisfaction of research partners as an evaluation material and improve research collaboration in the future.

4.7. STUDY SUCCESS EVALUATION

4.7.1. Doctoral Program

a. Failed Study

Students are declared failed studies if:

1. Not passing the qualifying exam on the second chance, or
2. Did not pass the dissertation proposal exam on the second chance, or
3. Did not pass the dissertation exam on the second chance, or
4. The study period has expired (more than 14 semesters) and has not been able to complete the study load according to applicable regulations.
5. No re-registration for 3 consecutive semesters

b. Evaluation of Study Success

The evaluation of the success of the doctoral education program studies are:

1. Students who at the end of the first semester have not been able to achieve a minimum GPA of 3.0 for the best 12 credits will be given a warning to try their best to improve their academic performance in the following semesters.
2. Students who at the end of the first semester can achieve a GPA of 3.00 for the best 12 credits, then the student concerned can apply for a qualifying exam in the second semester.
3. Courses that score below A can be repeated and implemented in the following semester.

4.8. STUDY TIME LIMIT

The study load for the doctoral program is for participants with a master's degree in one field, at least 42 credits scheduled for 6 (six) semesters and can be taken in less than 6 (six) semesters with a maximum study length of 14 (fourteen) semesters. The study load for the doctoral program for participants with S2 education is not in the same area, at least 52 credits are scheduled for 5 (five) semesters and can be taken in less than 6 (six) semesters with a maximum study duration of 14 (fourteen) semesters. Students who apply for the dissertation

exam for less than 5 semesters must receive consideration from the Doctoral Committee to assess the merits of achievement. Eligibility for achievement is measured by the number of international scientific publications in Q3 that have been published, the quality of published articles and journals and other achievements that support student academic programs.

4.9. RECOGNITION OF LEARNING RESULTS FROM OTHER PTS TO UNIVERSITAS BRAWIJAYA

4.9.1. Limitations of Studying at Other Colleges

1. Universitas Brawijaya students are allowed to study at other universities to complete some activities/academic burdens in the study program they take at Universitas Brawijaya.
2. Studying at other universities is the participation of students in learning activities within a certain period of time at other universities, both at home and abroad, which have cooperation with Universitas Brawijaya.

4.9.2. Academic Burden and Form of Activities

1. Activities/academic burdens that can be taken through learning activities at other universities are limited to no more than 50% of the academic burden of the applicable curriculum in the study program taken by students at Universitas Brawijaya.
2. Studying in other universities, as referred to in article 1, includes the participation of Universitas Brawijaya students in the form of activities:
 - a. Double degree program (Double degree program),
 - b. Twin Program (Twinning program),
 - c. Sandwich program,
 - d. Student Exchange Program (Student Exchange),
 - e. Other equivalent Academic Programs.
3. As long as they are legally studying at other universities, students are exempted from tuition fees at Universitas Brawijaya.
4. The conditions for temporary study, the form of the program, the study load that can be taken at other universities and other conditions are regulated by the Chancellor.

4.9.3. Recognition of Study Results in Other Universities

1. Learning outcomes from academic activities/loads taken legally, institutionally and fulfilling academic requirements from other universities can be equalized after going through verification.
2. The Dean of the Faculty/Head of Program/Director of the Postgraduate Program forms a committee at the suggestion of the Head of the Study Program/Department for the verification task as referred to in paragraph 1.
3. Procedures for verification and recognition of learning outcomes are regulated in the Faculty/Program/Postgraduate Program Handbook.
4. All costs incurred related to learning activities and recognition of learning outcomes at other universities are the responsibility of the student concerned.

4.9.4. Degree Award

1. Students who complete part of the study load at other universities legally and pass verification can be given a graduation degree according to the study program and level of study they take.
2. Further provisions regarding the awarding of titles are regulated in the Dean's Decree.

4.10. STUDENTS TRANSFER FROM OTHER UNIVERSITY TO UB

1. Students from other universities must meet the following main requirements:
 - a. Not a forced college dropout (dropped out) and have never received and/or are undergoing academic sanctions from the original university.
 - b. The original field/study program is in accordance with the one at Universitas Brawijaya.
 - c. The original study program is accredited by BAN with at least an A rating.
 - d. Have studied continuously at the original university for:
 - 1) Doctoral Program: a minimum of 1 (one) semester and a maximum of 2 (two) semesters, provided that you have taken 12 credits with a GPA 3.50
 - 2) Get permission/approval to move from the head of the university of origin, and submit evidence of other legal academic activities.
 - e. Have a valid certificate for Academic Potential test results issued by an authorized institution with a score of > 450 for the Vocational program, a score of > 500 for the Bachelor, and a score of > 550 for the Postgraduate program.
 - f. Students submit a letter to the Chancellor of Universitas Brawijaya with a copy of the letter to the Dean of the Faculty/Head of Program/Director of the Postgraduate Program in charge of the intended study program.
2. In order to guarantee the quality of graduates, Faculties/Programs/Postgraduate Programs may set additional requirements, other than those stipulated in paragraph 1.

4.10.1. Capacity

1. Acceptance of transfer students from other universities must consider the capacity of the intended study program.
2. The Dean of the Faculty determines the capacity for transfer students from other universities.

4.10.2. Equivalence Test and Recognition of Study Loads That Have Been Taken

1. Students from other universities who have met the administrative and academic requirements can undergo the Equivalence Test.
2. The Equality Test is carried out by a committee formed by the Dean of the Faculty/Chairman
3. Program/Director of Postgraduate Program at the suggestion of the Head of Study Program/Department.
4. Students who have passed the Equivalence Test are entitled to receive recognition for the learning outcomes they have taken at the original university.

5. Recognition of learning outcomes from other universities and the determination of the curriculum that must be taken by students to complete education in the intended study program is determined by the Dean of the Faculty/Head of Program/Director of the Postgraduate Program at the suggestion of the Head of the Study Program/Department.
6. The cost of conducting the Equivalence Test and recognition of student learning outcomes from other universities is the responsibility of the transferring student.
7. The requirements, procedures for the Equivalence Test and recognition of learning outcomes that have been taken by students at their home universities and other related matters are regulated in the University/Faculty/Postgraduate Program Handbook.

V. EDUCATION ADMINISTRATION

The implementation of educational administration at the Faculty of Agricultural Technology is regulated and implemented centrally, by utilizing the online SIAKAD (Academic Information System) to meet the demands of the semester credit system.

5.1 GENERAL EXPLANATION

5.1.1 Educational Guidelines

This Education Guide is provided before the course of a particular academic year begins, and contains, among other things:

- a. Academic Calendar, which regulates:
 1. Start and end time of lectures, exams, re-registration and other academic activities in odd and even semesters.
 2. Dies Natalis, Graduation and other ceremonial activities.
 3. Student activities.
- b. Explanation of the Semester Credit System.
- c. Explanation of Educational Objectives, for Undergraduate, Masters, Specialist and Doctoral Programs.
- d. Explanation of Academic Regulations related to lectures, examinations, evaluation of study success, student transfers, and others.
- e. Explanation of the management of education administration.
- f. Explanation of guidance counseling and academic advisory.
- g. An explanation of the manners of life on campus.

5.2 IMPLEMENTATION OF CREDIT SYSTEM ADMINISTRATION

Several stages of activities in each semester are required to carry out the administration of the credit system, namely:

5.2.1 Registration Preparation

The equipment required at this stage of preparation for registration includes:

- a. List of names of Academic Advisors (PA) and the students they supervise.
- b. Instructions for charging and the cards, namely:
 1. Study Plan Card (KRS).
 2. Study Plan Change Card (KPRS).
 3. Study Result Card (KHS).

5.2.2 Study Plan Card Filling (Online)

Filling in the KRS online is carried out in the following stages:

a. Taking registration complete

Students come to the Academic Sub-Section of the Faculty of Agricultural Technology to take complete registration by showing a valid Student Identity Card for the semester.

b. Determination of Semester Study Plan

The determination of the semester study plan is carried out with the guidance of the appointed Academic Advisory Lecturer (PA Lecturer). For new

students, the first semester study plan is required to take a predetermined study load. The determination of the next semester's study plan is determined based on the achievements achieved by students in the previous semester. The amount of study load that may be taken in the next semester is determined by the achievement index that has been achieved. Students plan the courses to be taken by inputting data on SIAKAD. Students are required to print the KRS and must seek approval from the Academic Advisor lecturer, then submit it to the Academic Sub Division of the Faculty of Agricultural Technology, Universitas Brawijaya.

c. Change of Study Plan

Changes in the study plan are replacing one course with another course in the same semester. Changes in the study plan are carried out no later than the end of the second week since the lecture begins and must obtain approval from the PA lecturer and immediately reported to the Academic Sub-Division of the Faculty of Agricultural Technology.

d. Course Cancellation

Cancellation of courses is the cancellation of the plan to take courses which are therefore not tested in the semester concerned.

Students who wish to cancel a course are given the opportunity no later than the second week of the first week of the semester in question. This cancellation must be approved by the PA lecturer, and immediately reported to the Academic Sub-Division of the Faculty of Agricultural Technology.

e. Study Results

Study results are the scores obtained by students for all courses programmed in the KRS and included in the Study Results Card (KHS).

5.2.3 Lectures, Seminars, and Practicum

Students are required to attend lectures, seminars, practicums and similar academic activities in accordance with their study plans in an orderly and orderly manner according to applicable regulations. The schedule for lectures and practicum is regulated by the Faculty.

5.2.4 Implementation of Course Exams

The stages that need to be considered in administering the exam are as follows:

a. Planning Exam Schedule

In accordance with the academic calendar, the schedule for the mid-semester and end-semester examinations must be carefully planned in advance and announced to students and lecturers.

The exam schedule is announced no later than a week before the exam takes place, so that students and lecturers can arrange the necessary preparations as early as possible. The exam schedule is prepared together with the preparation of the lecture schedule and practicum schedule. Mid-semester

examinations and end-of-semester examinations are held by a committee determined by the Dean.

b. Exam Implementation

Students who are allowed to take the exam are students who have attended at least 80% of the lectures for the semester in question and meet other requirements. For students who attend courses less than 80%, are not entitled to take UAS, however, they still consider the assessment components other than the UAS that have been obtained for that course. The test results in the form of final grades and their components (mid-semester test scores, practicum grades, quiz scores and others) are announced to students. Students who cheat in exams (cheat, take other students' exams and or students whose exams are taken by someone else) will be subject to sanctions for canceling exams for all courses in the relevant semester.

5.2.5 Value Administration

a. Study Result Card (KHS)

Exam results must be entered online in the SIADO (Lecturer Information System) online by the supervisor to be used as the basis for making KHS and KRS for the next semester by the Academic Sub-Section. The KHS semester is made in 4 (four) copies, one each for students, parents/guardians, the Department and the Academic Sub-Section.

b. Storage of Student Assessment Results

Storage of student assessment results is carried out by the Academic Sub-Division of the Faculty of Agricultural Technology. Data on student assessment results that need to be stored are:

1. List of student assessment results for each course.
2. KHS which includes the cumulative value of the student's assessment results in each semester and their achievement index.
3. Cumulative value for all courses from the first semester up to the semester concerned.
4. Documentation of student learning assessment results must be complete with all assessment tools archived also in the administration of the Department

5.3 STUDENT REGISTRATION

5.3.1 Destination

- a. To control the implementation of academic activities in each semester.
- b. To find out the student body and the number of students who actively participate in academic activities in each semester.
- c. To get data about student activities and status.

5.3.2 Type of Student Registration

a. Administration Registration

Administrative registration is an activity to obtain registered status as a student at the Faculty of Agricultural Technology, Universitas Brawijaya. Administrative registration activities must be carried out by all students in an

orderly manner at the beginning of each semester in accordance with the provisions of the academic calendar.

1. New Student Prospective Administration Registration

a) Doctoral Program Registration Requirements

- 1) Must meet all the administrative requirements as a new student.
- 2) Have fulfilled all the academic requirements specified by bringing complete original documents and submitting copies/photocopies including:
 - Master's Degree (S2) with a Grade Point Average > 3.0 on a scale of 0-4).
 - Academic Potential Test Certificate (TPA) OTO Bappenas with a minimum score of 500.
 - Certificate of English equivalent to TOEFL with a minimum score of 500 issued by an institution appointed by Universitas Brawijaya
 - PAT certificates for students with master's programs are not linear.

b) Penalty

- 1) Any prospective student who does not meet the specified requirements, cannot be accepted as a student of the Faculty of Agricultural Technology, Universitas Brawijaya.
- 2) Any prospective student who is late for administrative registration, for any reason cannot be justified and is considered to have resigned.
- 3) Any prospective students who provide incorrect information can have their administrative registration canceled or expelled from the Faculty of Agricultural Technology, Universitas Brawijaya.
- 4) There is no extension of time for administrative registration.

2. Registration (re-registration) of old student administration

a) Undergraduate and Postgraduate Program Registration Requirements

Each old student is required to come alone to complete the registration by submitting:

- 1) Completed administrative registration form.
- 2) Student Identity Card for the previous semester.
- 3) Proof of payment of tuition fees for the previous academic year.
- 4) Evidence of payment of tuition fees for the semester/academic year concerned.
- 5) Two passport photos measuring 3x3 cm.
- 6) For students who were not registered in the previous semester, they must obtain permission to re-register administration from the Chancellor.

b) Penalty

- 1) Existing students who do not carry out administrative registration in a certain semester are declared unregistered in that semester and will still be counted as study period.
- 2) Old students who are late for administrative registration for any reason cannot be justified and in that semester they are declared not to be registered as students of the Faculty of Agricultural Technology, Universitas Brawijaya.
- 3) Old students who are not registered as in number 2 can apply for academic leave to the Chancellor no later than 1 (one) week from the closing of administrative registration.
- 4) Old students who are not registered for 2 (two) cumulative semesters are considered to have resigned as students of the Faculty of Agricultural Technology, Universitas Brawijaya.
- 5) Old students of the Postgraduate Program are required to register on a predetermined schedule, for students who do not register in the current semester are declared to have resigned.
- 6) There is no extension of time for administrative registration.

b. Academic Registration

Academic registration is registration to obtain the right to participate in certain semester academic activities.

1. Academic registration activities include, among others:
 - a) Completion and validation of Study Plan Card (KRS)
 - b) Filling in the Study Plan Change Card (KPRS)
 - c) Course cancellation
2. Consultation on study plans is an activity that must be carried out between students and academic advisory lecturers (PA) according to the academic calendar.
3. A student can become a participant in a course if he has fulfilled the applicable provisions and approved by the PA lecturer.
4. To get the approval of the PA lecturer, students must consult. Consultation methods, whether face-to-face, remotely, and others, are fully entrusted to the authority of the PA lecturer
5. PA lecturers must validate the course programs to be taken by students through the Lecturer Academic Information System (Siado)
6. KRS can be printed and signed by the PA lecturer after the MK to be taken is approved by the PA lecturer
7. The KRS that has been approved by the PA lecturer must be immediately submitted to the Academic Sub-Division of the Faculty of Agricultural Technology in accordance with the specified time.
8. If the student is unable to submit the KRS for justifiable reasons, the KRS is collected according to the schedule and may be collected by others by bringing a power of attorney

9. KPRS procedure

- a. Students are allowed to make changes to their study plans due to:

- The course schedule for this course clashes with the schedule for other courses
- The number of students taking these courses does not meet the set quota, which is a minimum of 10 students
- b. Students must consult with their academic supervisor regarding changes to the study plan by bringing their KPRS
- c. If the academic supervisor agrees to change the study plan, he must sign the KPRS
- d. Students submit their KPRS to the academic and class service department
- e. Class service will transfer student attendance from the previous class to the new class
- f. KPRS can be done no later than 2 weeks after the lecture runs
- g. If the student does not report to the academic and class service subsection, then the KPRS is invalid and cannot be processed
- h. The transfer of attendance must be done and if it is not done it will cause the student to be considered absent from college and can have an impact on not being allowed to take UAS if attendance is less than 80%.

5.4 TERMS OF PAYING STUDY FEES

5.4.1 New students

Every new student who is accepted at the Faculty of Agricultural Technology, Universitas Brawijaya through the SBMPTN and SNMPTN channels, pays tuition fees in the form of a Single Tuition Fee (UKT). Meanwhile, new students who are accepted through the independent pathway are required to pay the Educational Development Contribution (SPP), the Educational Facility and Development Contribution (SPFP) and other costs, the amount of which is determined by the Rector's Decree. Payment of these fees at the time of administrative registration, where the SPP can be paid at once in one year or in two stages at the beginning of each odd and even semester. Meanwhile, SPFP and SPIP fees and other costs are paid once while being a student and paid in full at the time of the new student administration registration activity.

5.4.2 Old Student

- a. Every student who carries out administrative registration is required to pay tuition fees which can be paid at once in one year or in two stages at the beginning of each odd and even semester.
- b. For students who do not re-register for 1 semester without the permission of the Chancellor, they are still required to pay tuition as long as the person concerned is inactive and the payment is made at the time of registration where the person concerned will be active again by submitting an active application again.
- c. If a student obtains the Chancellor's permission for academic leave, he/she is freed from the obligation to pay tuition fees during the academic leave. If an academic leave permit is granted after the deadline for applying for academic

leave, it is still required to pay tuition fees. This provision also applies to new students.

- d. The amount of the SPP is determined by the Rector's Decree.

5.5 STUDENT IDENTIFICATION CARD (KTM)

Registered students will have a KTM in a physical plastic card with a "barcode number" and an RFID registration confirmation with a "hot stamp".

- a. KTM is accepted to students who have completed complete administrative registration.
- b. If there is an error in filling out the KTM, the student must report it to the Bureau
- c. Academic Administration and Cooperation (BAAK) to be replaced with a new KTM.
- d. KTM is proof of being registered as a student of Universitas Brawijaya in the semester concerned.

5.6 STUDENT MUTATIONS

Student transfer is a change in student status which includes academic and administrative status. Student mutations can be grouped as follows:

5.6.1 Academic Leave

- a. Academic leave is a postponement of administrative registration within a certain period of time with the permission of the Chancellor and can be carried out starting in the third semester.
- b. A student can apply for academic leave of a maximum of 4 (four) semesters for vocational, undergraduate, double degree programs and a maximum of 2 (two) semesters for postgraduate programs including specialists.
- c. The period of academic leave is not counted as the study period and the study period is still taken into account for students who do not re-register without the permission of the Chancellor.
- d. Students can take academic leave for the following reasons:
 1. Health problems / illness for a long time.
 2. Maternity leave.
 3. Domiciled/worked in a place where it is not possible to carry out the learning process.
 4. Other acceptable reasons.
- e. Applications for academic leave are submitted to the Chancellor accompanied by strong reasons, known by the Dean and parents/guardians/student institutions concerned. This submission is no later than 1 (one) week from the closing of academic registration.

5.6.2 Student Assignments

Faculty of Agricultural Technology Universitas Brawijaya accepts students as study assignments from Government/private Agencies with the following requirements:

- a. Certified Academic/Bachelor/Bachelor/Master of State University.
- b. Meet the academic and administrative requirements specified.
- c. Comes from the appropriate Faculty or study program.

- d. Acceptance of study assignments is carried out by the Chancellor at the discretion of the Dean/Director of the Postgraduate Program and is carried out as long as the capacity allows. Study assignment students are required to submit a written application to the Chancellor with a copy to the Dean/Director of the Postgraduate Program no later than 1 (one) month before the start of the new academic year lectures.
- e. Letter of Recommendation from the relevant agency/Government.

5.6.3 Transferring to Another College

- a. Students of the Faculty of Agricultural Technology, Universitas Brawijaya who will transfer to other universities, must submit an application to the Chancellor with a copy to the Dean, along with the reasons for the move.
- b. Students who have transferred to other universities cannot be re-admitted as students of the Faculty of Agricultural Technology, Universitas Brawijaya.

5.6.4 Drop Out (Drop Out)

Dropout students are students who do not meet the requirements for evaluating the success of studies at the end of each year and at the end of the study, or students who are not registered because they do not register according to the provisions of the faculty/programme.

- a. The number of students dropping out of college each semester is reported by the Dean to the Chancellor.
- b. The Chancellor issues a Decision Letter on dropping out of college for the student concerned.

5.6.5 Die

If a student dies, the Dean reports to the Chancellor.

5.6.6 Dismissal as a Universitas Brawijaya Student

Students can be permanently or temporarily dismissed if they violate the UB Chancellor's Regulation Number 328/PER/2011 concerning the Student Code of Ethics, as well as other provisions that apply at Universitas Brawijaya.

5.7 STUDENTS TRANSFER TO UNIVERSITAS BRAWIJAYA

5.7.1 Terms

- a. As a transfer student who can be accepted are:
 - 1. For the Postgraduate Program, it has been listed in the Universitas Brawijaya Handbook.
- b. Comes from a state university that has the same field of study and program as the original study program, accredited by BAN PT at least with an A predicate.
- c. Not dropping out of college because they do not meet academic requirements.
- d. Never violated the original College rules.
- e. Approval to move from the original faculty.
- f. The Dean of the Faculty of Agricultural Technology stated in writing his willingness to accept.

- g. Transfer students who are accepted at the Faculty of Agricultural Technology, Universitas Brawijaya have the obligation to pay tuition fees like new students and fulfill the conditions set by the Faculty.

5.7.2 Procedure for Submitting a Transfer Application

The procedure for submitting a transfer application is as follows:

- a. The application for transfer is submitted in writing with strong reasons to the Rector of Universitas Brawijaya with a copy to the Dean of the Faculty of Agricultural Technology.
- b. The application must be accompanied by:
 - 1. List of original grades obtained from the original university, with its GPA.
 - 2. Transfer letter from the original university.
 - 3. Parental/guardian/agency approval.
 - 4. Certificate of never violating the original higher education regulations.

5.7.3 Transfer Application Time

- a. The transfer application must be received by Universitas Brawijaya no later than 1 (one) month before the start of the new academic year (odd semester) lectures.
- b. The transfer application will not be considered if the time limit as referred to in point (a) is exceeded.

5.8 TRANSFER OF STUDENTS BETWEEN FACULTY IN UNIVERSITAS BRAWIJAYA

Transfer of students between faculties can be done by taking into account the following conditions:

- a. Prospective students who can be accepted as transfer students are:
- b. For the Undergraduate Program, have attended education continuously for at least 2 semesters and a maximum of 4 semesters and have collected:
 - 1. For 2 semesters, 24 credits with a minimum GPA of 3.50.
 - 2. For 4 semesters, 48 credits with a minimum GPA of 3.50.
- c. Not dropping out (drop out) because it does not meet the academic requirements of the original faculty.
- d. Never violate the rules of the original Faculty.
- e. Approval to move from the original faculty.
- f. The Dean of the Faculty of Agricultural Technology stated in writing his willingness to accept.
- g. Transfer of students between faculties may only be 1 (one) time as long as the person concerned is a student of Universitas Brawijaya.

5.8.1 Procedure for submitting a Transfer Application

The procedure for applying for a transfer between faculties is as follows:

- a. The application for transfer is submitted in writing with strong reasons to the Rector of Universitas Brawijaya with a copy to the Dean of the Faculty of Agricultural Technology, Universitas Brawijaya.
- b. The application must be accompanied by:
 - 1. List of original grades obtained from the original Faculty with their GPA.

2. Transfer letter from the original faculty.
3. Parental/guardian/agency approval.
4. Certificate of never violating the original Faculty regulations.

5.8.2 Time to submit a Transfer Application

- a. The transfer application must be received by the Chancellor at least 1 (one) month before the lecture starts.
- b. Transfer applications will not be considered if such time limit is exceeded.

5.9 TRANSFER OF STUDENTS BETWEEN DEPARTMENTS / STUDY PROGRAM IN THE FACULTY OF AGRICULTURAL TECHNOLOGY UNIVERSITAS BRAWIJAYA

Transfer of students between Departments/Study Programs can be done by taking into account the following conditions:

- a. Not dropping out of college because it doesn't meet academic requirements.
- b. Have a linear scientific competence.
- c. Original study program, accredited by BAN PT at least with an A . predicate
- d. Never violate the regulations of the original Department/Study Program.
- e. Approval to move from the original Department/Study Program.
- f. The Head of the designated Department/KPS stated in writing his willingness to accept.
- g. Transfer of students between Departments/Study Programs may only be 1 (one) time as long as the person concerned is a student of Universitas Brawijaya.

5.9.1 Procedure for Transfer Application

The procedure for applying for a transfer between departments/PS is as follows:

- a. The application for transfer is submitted in writing with strong reasons to the Dean of the Faculty of Agricultural Technology with a copy to the Head of the Department/KPS intended.
- b. The application must be accompanied by:
 1. List of original grades with their GPAs.
 2. Transfer letter from the original Department/PS.
 3. Parental/guardian/agency approval.
 4. Certificate of never violating the rules during college.

5.9.2 Time to submit a Transfer Application

- a. The transfer application must be received by the Dean of the Faculty of Agricultural Technology at least 1 (one) month before the lecture starts.
- b. A transfer application will not be considered if it exceeds this time limit.

VI. ACADEMIC COUNSELING AND ADVISORY GUARANTEE

6.1. ACADEMIC COUNSELING AND CONSIDERATION AGENCY (BKPA)

1. The Counseling and Academic Advisory Board (BKPA) is a unit that carries out activities to help students understand themselves and their world in realizing optimal self-development and independence, with the nature of humanity as servants of God Almighty, as individual beings and social beings in dealing with humans and the universe. In addition, it is also intended to facilitate self-development and independence of students so that they can live their daily lives as students effectively, creatively and dynamically and have life skills for their future careers.
2. The Counseling and Academic Advisory Board (BKPA) plays a role in helping self-development and carrying out preventive activities against various kinds of problems that interfere with the success of student studies, by detecting these problems early, and then helping to solve the problems.
3. The Counseling and Academic Consideration Board (BKPA) consists of several lecturers in the FAT environment assisted by professionals/psychologists from outside the FAT.
4. BKPA as a unit has an important role in increasing the success of student studies, in collaboration with the Department has the obligation to make periodic reports related to the progress of student studies to the Faculty through the Vice Dean for Academic Affairs.
5. Periodic reports are carried out every semester to effectively monitor and evaluate the progress of student studies.

6.2. ACADEMIC HANDBOOK

Academic Handbook is guidance carried out by higher education providers in the academic field to facilitate the student's study process. Academic Handbook is carried out by the Academic Advisor.

Academic Advisor (PA) is a lecturer who provides assistance in the form of academic and non-Academic Handbook and advice to students based on the potential possessed by students so that students can complete their studies on time.

1. Academic Advisor Duties:
 - a. Provide information on the use of supporting facilities and infrastructure for academic and non-academic activities.
 - b. Helping students in overcoming academic problems.
 - c. Helping students in developing good study attitudes and habits so that independent learning grows as an expert.
 - d. Provide recommendations on the level of student learning success for certain purposes.
 - e. Helping students in developing their personality towards the realization of a complete Indonesian human being who is insightful, thinks and behaves in accordance with religious values, Pancasila, customs and others.
 - f. Helping students develop scientific learning insights independently throughout their life.
 - g. Give warnings to students whose GPA (Gradual Achievement Index) is less than 2, at the end of every odd semester (1, 3, 5, and 7).

- h. Give a warning about the academic evaluation/achievement index (IP) to students whose GPA for 2 (two) consecutive semesters is less than 2 (two), which is carried out at the end of every odd semester (1, 3, 5, and 7) .
2. Duties of Academic Advisor

At the time of academic registration at the beginning of each semester, the academic advisor is obliged to carry out tasks with activities including:

 - a. Determine the correctness of the number of credits that students may take in the semester concerned by taking into account the applicable regulations.
 - b. Researching and giving approval to semester studies prepared by students in KRS.
 - c. When deciding the amount of study load, the PA lecturer is obliged to provide sufficient explanation of the decision so that students can realize and accept the decision with full attention.
3. In carrying out their duties based on the rules, the Academic Handbook process each semester takes into account the learning outcomes of:
 - a. Foster students individually or in groups.
 - b. All students of the department concerned in groups for the class of the year concerned or earlier.
4. Academic advisors can request assistance from other work units such as Counseling and Academic Consideration (BKPA) at the faculty level or Counseling Guidance at the University level in the context of Academic Handbook.
5. Guidance activities in the academic field are coordinated by the Vice Dean for Academic Affairs, while in non-academic matters are coordinated by the Deputy Dean for Student Affairs.
6. Every Academic Advisor lecturer must always pay attention to the Code of Ethics for Campus Life.
7. Advisory administration is developed through various lists and cards. The types and uses of such lists and cards should be understood by the Academic Advisor lecturer. The list in question is:
 - a. List of student names
 - b. Student lecture attendance list
 - c. List of test scores

The cards in question are:

 - a. Study Plan Card (KRS)
 - b. Study Plan Change Card (KPRS)
 - c. Study Result Card (KHS)
8. Academic Advisors are required to report the progress of their foster students to the Department periodically (every semester).

VIII. DOCTORAL PROGRAM CURRICULUM

7.1. AGROINDUSTRIAL TECHNOLOGY DOCTORAL PROGRAM

No.	Code	Subject	credits	Status	Semester
MANDATORY COURSES					
1	TPI91001	Science phylosophy	2	W	1
2	TPI91002	Agroindustry Development	2	W	1
3	TPI91003	Agroindustry Innovation System	2	W	1
SUPPORTING SUPPORTING COURSES					
3	TPI91004	Integrated Quality System	2	P	1
4	TPI91005	Agroindustry Downstream Biotechnology	2	P	1
5	TPI91006	Agroindustry Policy Strategy	2	P	1
6	TPI91007	Downstream Product Technology	2	P	1
7	TPI91008	Agricultural Equipment and Machinery Engineering	3	P	1
8	TPI91009	Industrial Waste Treatment	3	P	1
9	TPI91010	Control Instrumentation and Biosystem	3	P	1
10	TPI91011	Renewable Energy for Industry	3	P	1
DISSERTATION COURSES					
11	TPF92001	Qualifying Exam	1	W	2
12	TPF9202	Proposal Writing and Proposal Examination	2	W	2
13	TPF91001	Research and Research Results Seminar I	6	W	3
14	TPF92003	Research and Research Results Seminar II	6	W	4
15	TPF91002	International Scientific Publications I	2	W	5
16	TPF91003	Research and Research Results Seminar III	6	W	5
17	TPF92004	International Scientific Publications II	2	W	6
18	TPF92005	Dissertation Writing and Dissertation Examination	5	W	6
Total Credits Required : 42 credits					

7.2. FOOD SCIENCE DOCTORAL PROGRAM

No.	Code	Subject	credits	Status	Semester
	MANDATORY COURSES				
1	TPP91001	Philosophy of Science and Research Methods in Food Science	2	WP	1
2	TPP91002	Advanced Food Science	2	WM	1
	Number of Credits		4		
	Dissertation SUPPORTING COURSES (take a minimum of 8 credits)				
3	TPP91003	Bioactive Components and Their Utilization	2	P	1
4	TPP91004	Food Component Interaction	2	P	1
5	TPP91005	Derivatization of Food Components	2	P	1
6	TPP91006	Food Processing Technology Innovation	2	P	1
7	TPP91007	Food Sensory Science	2	P	1
8	TPP91008	Capita Selecta Food Processing Technology	2	P	1
9	TPP91009	Bioactive Compound Production Technology	2	P	1
10	TPP91010	Advanced Food Microbiology	2	P	1
11	TPP91011	Food Virology	2	P	1
12	TPP91012	Food Biotechnology	2	P	1
13	TPP91013	Food Microbial Toxicology	2	P	1
14	TPP91014	Molecular Nutrition	2	P	1
15	TPP91015	Bioassay Technique	2	P	1
16	TPP91016	Food Nutrition Physiology	2	P	1
	Number of Credits		28		
	DISSERTATION COURSES				
17	TPF92001	Qualifying Exam	1	W	2
18	TPF9202	Proposal Writing and Proposal Examination	2	W	2
19	TPF91001	Research and Research Results Seminar I	6	W	3
20	TPF92003	Research and Research Results Seminar II	6	W	4
21	TPF91002	International Scientific Publications I	2	W	5
22	TPF91003	Research and Research Results Seminar III	6	W	5
23	TPF92004	International Scientific Publications II	2	W	6
24	TPF92005	Dissertation Writing and Dissertation Examination	5	W	6
	Number of Credits		30		
Total Credits Required : 42 credits					

VIII. DOCTORAL PROGRAM SYLLABUS

8.1. Doctoral Program Faculty Courses

TPF92001 QUALIFICATION EXAM

1(1-0)

Students prepare a pre-proposal containing the study material that will be used as research material. Qualification exams are carried out to assess students' readiness in theory, concepts or techniques to conduct research on their dissertation. In this exam, students must be able to demonstrate the feasibility of conducting independent research to obtain a doctorate in food science.

Course Learning Outcomes (CLO):

1. Students are able to review literature and are relevant to the dissertation topic.
2. Students master scientific concepts related to the topic of their dissertation research.
3. Students are able to formulate research problems to be carried out.

TPF9202 PROPOSAL WRITING AND PROPOSAL EXAM 2(2-0)

Students must prepare a research proposal under the supervision of the promoter and co-promoter. The proposal is a research guideline for compiling a dissertation. Proposal writing can be started by students. The promoter and co-promoter provide direction and advice according to their competence so that the content of the research is worthy of a doctorate in food science. This process requires intensive discussion with the promoter and co-promoter. Proposals must demonstrate the student's ability to conduct research independently and have good research qualities for a doctorate degree. After the proposal is approved by the promoter and co-promoter, students must present it in front of the promoter, co-promoter, and examiner appointed by the head of the study program.

Course Learning Outcomes (CLO):

1. Students are able to review literature in depth and are relevant to the dissertation topic.
2. Students are able to identify, formulate and solve problems.
3. Students are able to plan and develop research methods for their dissertation research.
4. Students master state of art knowledge of research topics his dissertation.

TPF91001 RESEARCH AND RESEARCH PROGRESS SEMINAR 1

6(6-0)

Research and research progress seminars have a weight of 18 credits which are divided into 3 stages of 6 credits each. This stage can be in accordance with the research stages in the dissertation proposal or not because the research stages are not in three stages. Students are required to arrange the material for this research progress seminar so that it can be divided into three stages. The division of these three stages is carried out so that the promoter can monitor the progress of research and the progress of writing scientific papers in journals on a regular basis. If the data

obtained is still lacking, students can add material for the progress seminar from the results of a literature review with topics related to their research. Research progress seminar activities can be in the form of seminars held internally with the presence of promoters and co-promoters or students attending seminars, national or international scientific conferences or meetings. At the research results seminar, students must have submitted a draft publication based on the research data that has been obtained. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors.

Course Learning Outcomes (CLO):

1. Students are able to do research independently
2. Students are able to analyze and synthesize data on the progress of research results
3. Students are able to communicate the progress of research results in writing and orally.

TPF92003 RESEARCH AND RESEARCH PROGRESS SEMINARS 2 6(6-0)

Research and research progress seminars have a weight of 18 credits which are divided into 3 stages of 6 credits each. This stage can be in accordance with the research stages in the dissertation proposal or not because the research stages are not in three stages. Students are required to arrange the material for this research progress seminar so that it can be divided into three stages. The division of these three stages is carried out so that the promoter can monitor the progress of research and the progress of writing scientific papers in journals on a regular basis. If the data obtained is still lacking, students can add material for the progress seminar from the results of a literature review with topics related to their research. Research progress seminar activities can be in the form of seminars held internally with the presence of promoters and co-promoters or students attending seminars, national or

international scientific conferences or meetings. At the research results seminar, students must have submitted a draft publication based on the research data that has been obtained. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors.

Course Learning Outcomes (CLO):

1. Students are able to do research independently
2. Students are able to analyze and synthesize data on the progress of research results
3. Students are able to communicate the progress of research results in writing and orally.

TPF91002 RESEARCH AND RESEARCH PROGRESS SEMINARS 3 6(6-0)

Research and research progress seminars have a weight of 18 credits which are divided into 3 stages of 6 credits each. This stage can be in accordance with the research stages in the dissertation proposal or not because the research stages are not in three stages. Students are required to arrange the material for this research progress seminar so that it can be divided into three stages. The division of these three stages is carried out so that the promoter can monitor the progress of research and the progress of writing scientific papers in journals on a regular basis. If the data obtained is still lacking, students can add material for the progress seminar from the results of a literature review with topics related to their research. Research progress seminar activities can be in the form of seminars held internally with the presence of promoters and co-promoters or students attending seminars, national or international scientific conferences or meetings. At the research results seminar, students must have submitted a draft publication based on the research data that has been obtained. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific

publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors. If the research is still in progress, the publication draft does not have to be 100% complete for publication, the data that has been obtained and has been consulted with the promoter is discussed in the draft international scientific publication. Student participation in national or international seminars or scientific meetings must be approved by the promoter and co-promoter. Assessments for national and international scientific seminars are carried out by a team of supervisors.

Course Learning Outcomes (CLO):

1. Students are able to do research independently
2. Students are able to analyze and synthesize data on the progress of research results
3. Students are able to communicate the progress of research results in writing and orally.

TPF91003 INTERNATIONAL PUBLICATION I

2(2-0)

Students are required to publish scientific articles in reputable international journals. The intended international journal must be agreed with the promoter and co-promoter. According to UB Chancellor's regulation no. 52 of 2018 that every Doctoral Program student is required to take and complete a final project in the form of a dissertation and scientific publication. Scientific publications in the form of: a) 2 (two) scientific articles in international Scientific Journals indexed by Scopus or Web of Science Core Collection (Thomson Reuter), having an impact factor of at least 0.1, or Microsoft Academic Search; or b). 1 (one) scientific article in a scientific journal as referred to in number 1 and 1 (one) article in the Proceedings. The final assignment in the form of Scientific Publication as referred to is prepared based on the results of the Dissertation research.

Course Learning Outcomes (CLO):

1. Students are able to communicate concepts and research results clearly and effectively in reputable journals.
2. Students understand the procedure for submitting scientific manuscripts to reputable journals.

TPF92004 INTERNATIONAL PUBLICATION II

2(2-0)

Students are required to publish scientific articles in reputable international journals. The intended international journal must be agreed with the promoter and co-promoter. According to UB Chancellor's regulation no. 52 of 2018 that every Doctoral Program student is required to take and complete a final project in the form of a dissertation and scientific publication. Scientific publications in the form of: a) 2 (two) scientific articles in international Scientific Journals indexed by Scopus or Web of Science Core Collection (Thomson Reuter), having an impact factor of at least 0.1, or Microsoft Academic Search; or b). 1 (one) scientific article in a scientific journal as referred to in number 1 and 1 (one) article in the Proceedings. The final assignment in the form of Scientific Publication as referred to is prepared based on the results of the Dissertation research.

Course Learning Outcomes (CLO):

1. Students are able to communicate concepts and research results clearly and effectively in reputable journals.
2. Students understand the procedure for submitting scientific manuscripts to reputable journals

TPF92005 DISSERTATION WRITING AND DISSERTATION EXAM 5(5-0)

Students must be able to compile a dissertation manuscript properly and deserve to be tested in the final dissertation exam from the research results obtained. To be able to take the final dissertation exam, students are required to have at least 2 (two) scientific publications from the results of the dissertation research that have been published or accepted for publication.

Course Learning Outcomes (CLO):

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.

8.2. Syllabus for Doctoral Program in Agroindustrial Technology (TIP)

TPI91001 PHILOSOPHY OF SCIENCE 2(2-0)

Meaning of Philosophy, Philosophy of Science, Concept of Science, Function of Philosophy, Role of Philosophy in the Development of Science, Ontology,

Epistemology, Axiology, Scientific Thinking Tools, Language, Mathematics, Statistics, Strategies for finding findings for Dissertations based on Philosophy of Science.

TPI91002 DEVELOPMENT OF AGROINDUSTRY 2(2-0)

Definition and scope of agro-industry, upstream and downstream industries, perspective on agro-industry, agro-industry as a pioneer supported by the agricultural sector, agro-industry as a driver of export of agricultural products, agro-industry as import substitution, Utilization of Potential Demand for Farmers' Families , Utilization of Potential Demand for Farming Families, Vehicle for Adjusting the Supply of Agriculture Sector, Development of Agro-industry as a Vehicle for Diversification and Transformation of Economic Structure, agro-industry driving rural industrialization, agro-industry which is anti-development, Conditions for industry to act as driver of rural industrialization, Risks and feasibility studies for agro-industry investment .

TPI91003 AGROINDUSTRIAL INNOVATION SYSTEM 2(2-0)

The structure of this course consists of material on the relationship between research, innovation, and standards, central and regional innovation institutions, various types of agro-industry support innovations, level of technological readiness (TKT), and technology dissemination, followed by the standardization stage, regulations and standardization systems on a global and national scale, innovation products, the stage of managing Intellectual Property Rights (IPR) to inventors.

TPI91004 INTEGRATED QUALITY SYSTEM 2(2-0)

Factors affecting the quality of agro-industry products, the integrated relationship of internal and external factors forming product quality, quality system institutions on a global and national scale, the stage of formulation and determination of the Indonesian National Standard (SNI), and the latest research developments related to quality systems.

TPI91005 BIOTECHNOLOGY DROWN AGROINDUSTRY 2(2-0)

This course includes a discussion of the relationship between a publication and the applied level, scaling up, biorefinery, bioremediation, biotransformation and bioconversion and how it can be used in a dissertation.

TPI91006 AGROINDUSTRY POLICY STRATEGY 2(2-0)

Agroindustry policy and program strategies, on farm and off farm development, investment needs, investment policy support, domestic consumer price protection policies for imported agro-industry goods, price control policies to reduce price fluctuations , policies on cheap and soft credit schemes for farmers, policies on supervision and quarantine for trade traffic between countries, policies on developing facilities and infrastructure to support trade operations, policy on incentive guarantees for potential investors

TPI91007 TECHNOLOGY PRODUCTS DOWNSTREAM 2(2-0)

Understanding the development of agro-industry biotechnology through IRL and TKR, how to increase IRL and TKR into downstream products. scale-up of biotechnology

products, white biotechnology, biotransformation, bioremediation, and bioconversion in forming sustainable agroindustrial biotechnology products.

TPI91008 AGRICULTURAL EQUIPMENT AND MACHINERY ENGINEERING 3(3-0)

Agricultural processing tools and machines and their effects on commodities, examples of tools generally used in the agricultural product industry, machines that may exist in the future, the use of machine tools for sorting, threshing, distribution and transportation.

TPI91009 INDUSTRIAL WASTE TREATMENT 3(3-0)

Introduction to industrial waste treatment processes, physical units of sewage treatment (filtering, aeration, gas administration, physical precipitation). Biological process unit (aerobic treatment; microbial growth in aerobic treatment; activated sludge process and its modifications; aerobic attached growth process; trickling filters and rotating biological contactors process; anaerobic processes; fluidized bed and sludge blanket systems process; nitrification process; denitrification process), Chemical processes (Coagulation-Flocculation; Disinfection; Precipitation; Adsorption and Ion Exchange).

TPI91010 INSTRUMENTATION CONTROL AND BIOSYSTEM 3(3-0)

This course contains the static and dynamic characteristics of measurement systems, sensors and transducers, signal processing, mathematical modeling of control systems, transfer functions, response analysis, PID control, control system analysis and design, ON-OFF control systems, PLC control, Fuzzy control. , intelligent control-1, intelligent-2.

TPI91011 RENEWABLE ENERGY FOR INDUSTRY 3(3-0)

Search for renewable energy sources, which involves in-depth study of solar, wind and alternative biological energy. Principles of technology and performance evaluation for components of these technologies, water technology, geo-thermal and other energy, energy conservation, co-generation, electricity production using wasted heat, financing related to alternative energy sources issues.

9.3. Syllabus of Food Science Doctoral Program (IP) Courses

TPP91001 PHILOSOPHY AND RESEARCH METHODS OF FOOD SCIENCE 2(2-0)

This Constitutional Court explains the ancient theories of ethical philosophy. What is called the term science and scientific knowledge. Recent cases will be used as material for discussion with students, these cases include food technology, biotechnology, nutrition and health. This course also contains the latest Research Methods that are often used in food science research using the latest experimental designs, for example in the field of process or product optimization (eg RSM) along with their simulations and the software used (eg: Design Expert, Minitab).

Course Learning Outcomes (CLO):

1. Students understand the theory of philosophy of science and ethics

2. Students understand the role of scientists and their responsibilities towards environmental change, especially in the food sector (food technology, biotechnology, nutrition and health).
3. Students are able to make appropriate and up-to-date research designs for research in the food sector.
5. Students are able to prepare research proposals.
6. Students understand the stages in publishing scientific articles in reputable journals.

TPP91002 ADVANCED FOOD SCIENCE

2(2-0)

With global changes such as climate, population, availability of water and energy, food science and its application are required to play a role in overcoming these problems. This course discusses the latest topics in the field of food science including food chemistry, food biochemistry, food engineering and processing, food microbiology, food biotechnology, and food nutrition (metabolism and disease pathways, lifestyle and diet). Isolation techniques of bioactive compounds and methods of identification of bioactive compounds in food. Development of functional food and health. Aspects of the role of microbes in food processing. Food safety aspects. The latest and actual researches in the food sector are also discussed.

Course Learning Outcomes (CLO):

1. Students are able to understand the development of food science in the fields of food chemistry, food biochemistry, food processing, food engineering, food microbiology, food biotechnology, and food nutrition.
2. Students are able to explain the latest developments in a topic in the field of food science.
3. Students are able to explain the role of progress in each field of food science in life.

TPP91003 BIOACTIVE COMPONENTS AND ITS UTILIZATION 2(2-0)

This course studies bioactive components derived from natural materials of fauna and flora. The function of bioactive components as pharmaceutical or herbal medicines to treat various types of human diseases. Students study secondary bioactives derived from various sources of fauna and flora, structure and function of secondary bioactives, both commercial and non-commercial. Students also studied several examples of pathway metabolites from existing secondary bioactives. Students study Indonesia's local potential as a new bioactive component that has not been tested as a pharmaceutical drug or herbal medicine. Students learn the principles of extraction specifically to isolate, fractionate and identify bioactive components. Students conduct trials on the efficacy of pharmaceutical/herbal drugs from secondary bioactives by In Vitro, In Vivo and Ex Vivo. This course is specifically designed to provide students with sufficient supplies to design their doctoral research topics. Some of the topics discussed specifically include: bioactive components as antimicrobial, antioxidant, anti-inflammatory, antitumor, anticancer,

antidiabetic and anticholesterol. General discussion of the function of pharmaceutical drugs from plants (especially peptides and plant proteins) as antibodies and vaccines. Students are expected to be able to design experimental stages to find new pharmaceutical/herbal drugs and test the benefits/efficacy of extracts or extract isolates in the laboratory. Students are also expected to be able to develop new pharmaceutical drug products from plants/animals through an inter, multi and transdisciplinary approach. The knowledge gained by students through this course is a provision to explain phenomena that occur in natural materials that can be developed into pharmaceutical/herbal drugs or functional food products. Through this course, students are expected to be able to analyze, evaluate and create new pharmaceutical/herbal drugs or new functional food products that can or will be commercialized.

Course Learning Outcomes (CLO):

1. Able to analyze, evaluate secondary bioactive components from plant and animal materials including levels, structures, biosynthetic pathways and secondary bioactive functions from plant and animal materials.
2. Able to choose natural material extraction techniques according to the characteristics of secondary bioactive materials and products, able to select and evaluate methods of fractionation, isolation and elucidation of secondary bioactive structures.
3. Able to analyze, evaluate and make secondary bioactive products through organism culture techniques
4. Able to analyze, evaluate and make secondary bioactive products through cell tissue culture techniques or plant cell organs.
5. Able to analyze, evaluate and make secondary bioactive products through marine animal culture techniques.
6. Able to analyze, evaluate the differences in several principles of secondary bioactive efficacy test methods.
7. Able to understand cell models for testing bioactive compounds
8. Able to understand molecular simulation docking method

TPP91004 FOOD COMPONENT INTERACTION

2(2-0)

This course is a course that studies the basic principles of molecular interactions; basic principles of interaction of water with other food components, interaction of protein with other food components, interaction of carbohydrates with other food components, interaction of lipids with other food components, interaction of micro components (vitamins, minerals, pigments, polyphenols, etc.) with other food components; the impact of these interactions on the properties and characteristics of food products and nutritional quality. Students are expected to be able to explain phenomena that occur in food systems based on interactions between food components that occur based on the principle of molecular interactions. The knowledge gained by students through this course is a provision to explain phenomena that occur in food ingredients or products.

Course Learning Outcomes (CLO):

1. Able to explain the chemical phenomena that underlie the formation of the characteristics of materials and food products and the changes that occur during processing and storage
2. Able to determine how to control chemical changes that occur during processing and storage
3. Able to analyze chemical reactions and interactions between food components that result in changes in the characteristics of food products during processing and storage

TPP91005 FOOD COMPONENT DERIVATIZATION**2(2-0)**

This course studies the synthesis of new food products based on physical, chemical and enzymatic components of food. Includes physical, chemical and enzymatic derivatization of starch, cellulose, other carbohydrates, physical, chemical and enzymatic lipid derivatization, physical, chemical and enzymatic derivatization of proteins, physical, chemical and enzymatic vitamin derivatization, physical, chemical and chemical bioactive derivatization, and enzymatic, physical, chemical, and enzymatic flavor derivatization, and physical, chemical, and enzymatic synthesis of food additives.

Course Learning Outcomes (CLO):

1. Able to determine the purpose of derivatization of food components in relation to the application of these components in processing and forming food characteristics
2. Able to determine the appropriate method for derivatization of food components including derivatization of starch, other carbohydrates, lipids, proteins, vitamins, bioactive compounds, flavors, and food additives.
3. Able to evaluate the application of food component derivatives in food processing and the formation of functional properties on health.

TPP91006 FOOD PROCESSING TECHNOLOGY INNOVATION 2(2-0)

This course discusses the latest processing technology innovations that have been created/have been applied in the food industry to be able to produce food products with good physical-chemical and sensory qualities, which are safe, and provide good for human health. The lecture is also focused on studying non-thermal food processing technology that allows food producers to modify the processing process by minimizing the damage caused to food quality to a minimum. This technological innovation is also intended to answer consumer demands which are growing day by day.

Course Learning Outcomes (CLO):

1. Able to collect and use information about current consumer demands for food product quality

2. Able to understand the principles / use of the latest food processing technology in the current food (Industry) field
3. Able to analyze the shortcomings of previous processing technology and modify it with the application of the use of the latest food technology related to consumer demands

TPP91007 FOOD SENSORY SCIENCE

2(2-0)

This course explains the basics of processing sensory information from physical stimulants (products, services, environment), through sensory perception systems (peripheral and central nervous systems) in influencing the work of the brain in an integrated manner (appreciation, mood, and consumer behavior). The mechanism of the oral process in relation to perception and sensory expression is focused on examining the relationship between food ingredients, the production process of food products, and the food product itself with consumers. Neurological sensory studies as well as understanding the physical, mechanical and chemical processes of the oral process were studied in depth to understand the perception mechanism in relation to food components, multimodality and complexity of sensory stimuli.

Course Learning Outcomes (CLO):

1. Able to collect and use information about current consumer demands for food product quality
2. Able to understand the principles / use of the latest food processing technology in the current food (Industry) field
3. Able to analyze the shortcomings of previous processing technology and modify it with the application of the use of the latest food technology related to consumer demands

TPP91008 CAPITA SELEKTA FOOD PROCESSING TECHNOLOGY 2(2-0)

This course covers specific topics related to innovations in food processing which include thermal processing (drying, pasteurization, sterilization, extrusion) and non-thermal (enzymatic processing, use of pressure, irradiation, etc.) The discussion includes basic concepts in the processing process, discussion of in-depth information about the effect of the process on changes in the characteristics of raw materials and predictions of product specifications that can be produced. This course also discusses modifications in specific processing conditions and the latest developments in food processing. Foodstuffs include local ingredients including tubers, nuts, cereals and others

Course Learning Outcomes (CLO):

1. Students are able to analyze the effect of food components on the conditions of the processing that will be applied
2. Students are able to analyze changes in the characteristics of food raw materials as the effect of applied processing

3. Students are able to innovate processes based on a deep understanding of basic concepts in food processing
4. Students are able to create specific processes to solve problems in food processing

TPP91009 BIOACTIVE COMPOUND PRODUCTION TECHNOLOGY **2(2-0)**

This course discusses the latest trends in food science and technology; including the study of the development of new products and their potential to be developed/applied to the food industry as well as matters related to human nutrition. The areas of discussion include: novel raw materials and ingredients, including bioactive components; the latest developments in food processing and packaging technologies (new developments in food processing and packaging technologies); the use of biotechnology and nanoscience in food research (advanced biotechnological and nanoscience developments and applications in food research); the steps that must be met before new materials/products can be introduced to the market (analysis of biological and non-biological risks, including the possibility of allergies and intolerances);

Course Learning Outcomes (CLO):

1. Students understand the definition of bioactive compounds and their development prospects as well as modern consumer preferences for these products
2. Able to distinguish various bioactive compounds and their sources
3. Able to explain physico-chemical properties and their role for human health

TPP91010 ADVANCED FOOD MICROBIOLOGY **2(2-0)**

This course studies the relationship between pathogenic microbes and food, the environment and the host, minimal processing processes that can prevent the growth of pathogenic microbes, the prevalence of pathogens and their virulence.

Course Learning Outcomes (CLO):

1. Explain Bacterial and fungal food-related diseases.
2. Describe new minimal processing methods used in the food industry;
3. Explain defensive strategies used by bacteria;
4. Able to categorize methods for microbial detection and identification for food quality and safety assessment;
5. Able to control microbiological quality and food product safety;
6. Explain the ecology and physiology of microbes in the food and digestive tract;
7. Have a comprehensive understanding of the virulence and pathogenesis of pathogenic microbes in food and their interactions with the environment and host

TPP91011 FOOD VIROLOGY

2(2-0)

This course contains the structure, types and characteristics and functions of viruses, virus life cycles, viral gene regulation, viral replication, viral infections, virus isolation and detection techniques, viral foodborne illness, bacteriophages, phage applications in the food sector, phage applications for genetic engineering, viral expression system, phage display technology.

Course Learning Outcomes (CLO):

1. Students are able to understand the structure, role, types and characteristics of viruses
2. Students are able to understand gene regulation related to the viral life cycle
3. Students are able to understand how to isolate and identify types of viruses in food products
4. Students are able to understand virus detection techniques in food products
5. Students are able to explore bacterial viruses (bacteriophages) according to their characteristics
6. Students are able to know the type of virus that causes foodborne illness
7. Students are able to understand the benefits of bacteriophages in the food and non-food fields

TPP91012 FOOD BIOTECHNOLOGY

2 (2-0)

This course contains the basic principles of molecular biotechnology, the influence of biotechnology on food production, processing and quality, applications of biotechnology to microbes, plant tissue culture techniques, genetic engineering of plants and animals, functional food ingredients and their health benefits, biosensors for product monitoring. biology, probiotics, enzyme biotechnology, food fermentation biotechnology both modern and traditional, food safety issues of various recombinant products, regulations and patents related to GMO organisms and recombinant products.

Course Learning Outcomes (CLO):

1. Understand the basic principles of molecular biotechnology
2. Understand the influence of biotechnology on food production, processing and quality
3. Integrating basic concepts of molecular biology and biochemical pathways for food technology applications
4. Discuss technology to produce transgenic microorganisms, plants and animals
5. Provides insight into biosensors for monitoring biological products
6. Analyzing the pathogenicity and control of pathogenic bacteria and molds that cause disease in foodstuffs
7. Explore modern and traditional food fermentation biotechnology, including bioprocessing of food waste
8. Knowledge of information on regulatory and patent issues related to organic organisms and recombinant products.

TPP91013 MICROBIAL TOXICOLOGY

2(2-0)

This course studies toxins produced by microbes, classification of toxins (exotoxins and endotoxins), types of bacterial toxins (neurotoxins, enterotoxins, cytotoxins), fungi (mycotoxins) and algae, both from genetic and ecological aspects. Resistance to processing, its mechanism of action in the body and control in food.

Course Learning Outcomes (CLO):

1. Explain types of microbes (bacteria, fungi and parasites) producing toxins and their habitats
2. Explain classification of toxins produced by microbes and their mechanism of action in the body
3. Explain the host defense mechanism against toxins produced by microbes
4. Explain the resistance of microbial toxins to processing and how to prevent them

TPP91014 MOLECULAR NUTRITION

2(2-0)

This course discusses how the molecular mechanism of nutrients and non-nutrients can have a biological effect; knowledge of the mechanisms at the molecular level, biochemical processes and their effects up to the cellular level which is the center for regulating health or disease functions; specific transcription factors for specific food components that play a role. The method used to see the interaction of food components with genes in vitro and in vivo. The discussion is more focused on diseases such as obesity, diabetes and cancer. General genomic analysis techniques such as transcriptomics, proteomics and metabolomics used in molecular nutrition research are also taught.

Course Learning Outcomes (CLO):

1. Able to explain the molecular interactions between nutritional or non-nutritive substances and genes and their mechanisms in influencing health and disease.
2. Able to explain the concept of molecular nutrition research.
3. Able to explain the application of genomic technology such as transcriptomics, proteomics and metabolomics in molecular nutrition research.
4. Able to explain the results of the latest research on molecular nutrition
5. Able to make research plans on molecular nutrition.

TPP91015 BIOASSAY ENGINEERING

2(2-0)

This course discusses bioassay techniques in testing the bioavailability and bioactivity of nutritional compounds (macro or micro nutrients) and bioactive compounds. The in vitro methods taught include the gastrointestinal model and the use of the Caco-2 cell model to measure the uptake and transport of a food component. The use of cell lines, primary cells from organs, microsomal or S9 fractions from organs, transgenic microbes and others. In vivo methods include the

use of normal or transgenic experimental animals, feeding techniques or compounds being tested, feed composition. Validation technique to compare in vitro and in vivo tests or from experimental animals to humans and interpretation of in vitro test results their relevance to in vivo conditions

Course Learning Outcomes (CLO):

1. Able to apply testing techniques in vitro and in vivo to measure the bioavailability and bioactivity of food components.
2. Able to use appropriate methods to test the bioavailability and biological activity of food components.
3. Able to interpret in vitro test results data for in vivo conditions.

TPP 91016 PHYSIOLOGY OF FOOD NUTRITION

2(2-0)

This course studies the physiological and metabolic responses in the human body and their regulation of macronutrient and micronutrient intakes. This course contains the following materials, the framework of human physiology and homeostasis; important concepts about the chemical-biochemical properties of macronutrients and micronutrients; digestive system (macro and micronutrients); nutrient absorption mechanism; circulatory system, metabolic profile and biomarkers; endocrine system (and hormonal regulation); regulation of nutrient uptake into body cells; central organ in energy metabolism; metabolism of carbohydrates, proteins and fats and their interactions; vitamin metabolism; mineral metabolism; case study integration of understanding of the physiology of food nutrition and selected topics by students which is expected to lead students to the topic of their dissertation

Course Learning Outcomes (CLO):

1. Knowing the framework of human physiology and homeostasis as well as important concepts related to the physiology of food nutrition
2. Knowing the mechanism of digestion and absorption of nutrients and the factors that influence it (food factors and physiological factors of the body)
3. Knowing the circulatory system and its relationship to metabolic profiles and biomarkers in the blood related to nutrient consumption and how to determine them
4. Know the work of the endocrine system in the regulation of nutrient uptake and metabolism
5. Knowing the mechanism and regulation of nutrient uptake in body cells and the factors that influence it
6. Knowing the working relationship between central organs that play a role in energy, protein and micronutrient metabolism
7. Mastering the basics of carbohydrate, protein and fat macronutrient metabolism in muscle cells, liver and/or adipose tissue
8. Able to predict metabolic settings based on changes in macronutrient composition and bioavailability and predict their physiological output

9. Able to critically analyze food consumption behavior in real life settings and their consequences on individual physiological responses and provide examples of recommendations for improvement
10. Able to formulate problems and provide real solutions to unhealthy consumption behavior in the form of research ideas with the aim of engineering the bioavailability of macronutrients or micronutrients in food ingredients/products so as to produce the desired physiological response

IX. STUDENTS

Student affairs is one of the sub-sections in the organizational structure of the Faculty of Agricultural Technology, Universitas Brawijaya (FAT UB) under the supervision of the Vice Dean for Student Affairs. The main task of the student affairs field is to facilitate students in the field of services, including scholarship services, graduation, and non-academic learning facilitators (soft skills) through the development of various student organizations. In this case, student organizations are formed as a forum for FAT UB students to form students who excel in achievements at the provincial, regional, national and international levels, confident to be able to compete at national and international levels, honest, integrity, responsible, innovative, and have an entrepreneurial spirit according to UB's vision and mission to become a world class entrepreneur university.

9.1. Student Code of Conduct

The Code of Ethics is prepared with the aim of providing guidelines for all FAT UB students to behave well, with integrity, reputation, and noble character in carrying out activities within FAT UB and in society in general. The implementation of the Code of Ethics is a joint commitment of FAT UB students to realize the vision, mission, and goals of FAT UB, and to support FAT UB as one of the units with Integrity Zone (ZI); the formation of students who are pious, knowledgeable, have integrity, are reputable, have noble character, and are virtuous; create an orderly, orderly, orderly, and reputable academic and non-academic education process in a conducive academic and non-academic/student climate; as well as to form the character of students who are disciplined, ethical, with integrity, reputation, and obedient to legal norms,

The benefits of the Code of Ethics are:

1. Creating a conducive academic learning and student learning climate that facilitates the achievement of the vision, mission, and goals of FAT UB;
2. The creation of FAT UB as an Integrity Zone (ZI);
3. Increasing the satisfaction of students, lecturers, and education staff as well as FAT UB stakeholders, including the families of FAT UB students;
4. Availability of quality human resources, discipline, integrity, reputation, and noble character.

Good standards of behavior reflect high morals, integrity, reputation, and adherence to ethical norms that live in society and religion, which include:

1. Be devoted to God Almighty according to religion and beliefs;
2. Appreciate science, technology, literature, and the arts;
3. Uphold the national culture;
4. Maintain the authority, reputation, integrity, and good name of FAT UB;
5. Actively participate in maintaining facilities and infrastructure, environmental cleanliness, comfort, order, and security in FAT UB;
6. Maintain personal integrity and reputation as a citizen of FAT UB;
7. Obey the rules and regulations that apply in FAT UB;

8. Be polite, neat, clean, and smell good (don't wear sandals, T-shirts, tight and open clothes);
9. Behave friendly, maintain good manners towards others, keep good words, do not commit sexual harassment, and maintain association with the opposite sex (relationships between men and women) in accordance with religious and societal norms;
10. Do not smoke in any place except in the space provided;
11. Respect others regardless of ethnicity, religion, race, and social status;
12. Obedient to legal norms, religious norms, and other norms that live in the community;
13. Respecting the opinions of others and prioritizing deliberation;
14. Responsible for all actions both in real life and in activities using social media;
15. Avoid actions that are not useful and/or contrary to legal norms, religious norms, and other norms that live in the community;
16. Not bullying and intimidating others, either directly or indirectly through print media or online social media;
17. Do not cheat and cheat in academic or non-academic matters;
18. Prioritizing common interests over personal or group interests;
19. Putting forward thinking based on intellectual and scientific logic without any coercion of personal or group will;
20. Maintain the integrity and reputation of FAT UB.
21. Not spreading ideas that are prohibited by legal norms, religious norms, and societal norms to others, such as communist ideology, atheism (not believing in God Almighty), LGBT (lesbian, gay, bisexual, and transgender), radicalism, and others ;
22. Not spreading false news/fake news (hoax) that can harm others;
23. Do not incite others to do unscrupulous acts;
24. Always try to take care of yourself and take care of others, for example by using standard medical devices (masks or face shields) and keeping a distance from other people if your body condition is not very healthy.

Standards of student behavior in lecture halls and laboratories are:

1. Be present on time, or before the lecturer/teacher enters the lecture room or laboratory;
2. Dress neatly, politely, cleanly, and smell good in the sense of not deviating from the principles of propriety;
3. Respect other students by not doing actions that can disrupt lectures, for example using gadgets or other electronic devices during lectures, sitting positions that interfere with other students, and other activities that disturb the concentration and tranquility of other students;
4. Do not smoke in lecture rooms, laboratories, or other rooms except in the space provided;
5. Courteous in expressing opinions or refuting opinions, as well as prioritizing intellectual and scientific logical thinking in expressing opinions;
6. Do not use inappropriate words or hurt other people's feelings;

7. Honest, not signing the attendance of other students who he knows are not present in lectures, and not cheating in doing assignments and exams;
8. Maintain an inventory of lecture halls or laboratories;
9. Do not take actions that can cause danger while in the laboratory without the guidance of a lecturer or laboratory officer;
10. Not joking/joking during lectures/practice in the lecture hall or in the laboratory;
11. Do not pollute the room and laboratory inventory at FAT UB such as littering, crossing tables, chairs, and room walls;
12. Comply with the regulations stated in every laboratory in FAT UB;
13. Using standard medical devices (masks or face shields) and keeping a distance from other people in the room or laboratory if the body condition is not very healthy;
14. Returning laboratory equipment to its place in a clean and undamaged condition;
15. Maintain the integrity of lecture room services and laboratory services.

Student ethics in working on assignments, research reports on theses, theses, and dissertations are as follows:

1. Submit assignments/reports on time;
2. Honest in the sense of not plagiarizing or using other student's assignments/reports;
3. Not trying to influence the lecturer so that the person concerned does not submit assignments/reports with the promise of rewards in any form and name;
4. Comply with scientific ethics in writing a thesis/thesis/dissertation, for example complying with the provisions and procedures for writing, following guidance properly, not plagiarizing the work of others (plagiarism);
5. Do not promise or provide a sum of money or other facilities to lecturers or other parties with the aim of influencing the process of guidance on assignments/reports, theses/thesis/dissertation;
6. Do all assignments, research reports, theses, theses and dissertations independently and do not ask other people to do them or pay for consultant services to do them;
7. Maintain integrity in preparing assignments, research reports, theses, theses and dissertations.

The ethics of students in taking the exam are as follows:

1. Comply with the exam rules set by FAT UB;
2. Honest and in good faith, do not look at books or other sources that are not justified, except for exams that expressly confirm this;
3. Do not disturb the concentration of other students who are taking the exam;
4. Do not cross out FAT UB's inventory such as tables, chairs, walls with bad intentions for the purpose of making it easier to answer exam questions;
5. Do not promise or provide a sum of money or other facilities to lecturers or other parties with the aim of influencing the process and test results;
6. Believing in one's own abilities, in the sense of not using the influence of others for the purpose of influencing the examination process and results;
7. Do not cheat in the implementation of the exam;
8. Maintain integrity when taking exams.

The ethics between students and lecturers and education staff (tendik) are as follows:

1. Respect all lecturers and staff regardless of ethnicity, religion, race, and not based on feelings of liking or disliking;
2. Behave and communicate politely to all lecturers and staff in interactions both inside and outside the FAT UB environment;
3. Protecting the good name of lecturers and staff and their families;
4. Not disseminating information that is not good and not necessarily true about a lecturer and staff to other parties, except for violations of law and ethics that are required under the provisions of laws and regulations in FAT UB;
5. Polite in expressing opinions or expressing disagreements about scientific opinions accompanied by rational and scientific arguments;
6. Be honest with lecturers and staff in all aspects;
7. Not promising or providing a sum of money or other facilities to the lecturer with the aim of influencing the lecturer's assessment;
8. Believing in one's own abilities, in the sense of not using the influence of others for the purpose of influencing the lecturer's assessment;
9. Not issuing threats either directly or by using other people against lecturers and staff;
10. Cooperating with lecturers and staff in achieving learning objectives, including preparing before interacting with lecturers in the lecture room;
11. Maintain good manners when submitting objections to the attitude of lecturers and staff towards the leadership accompanied by sufficient evidence;
12. Avoiding the attitude of hating the lecturer or other disrespectful attitude due to the value given by the lecturer;
13. Obey the orders and instructions of the lecturer as long as the orders and instructions do not conflict with legal norms and other norms that live in the community;
14. Dare to be responsible for all actions related to interactions with lecturers and staff;
15. Not bullying lecturers and staff either directly or through print media or online social media;
16. Not playing against each other or inciting lecturers and staff to one another.

Ethics in relationships between fellow students:

1. Respect all students regardless of ethnicity, religion, race, and social status, and not based on likes or dislikes;
2. Behave and communicate in a friendly and polite manner to all students in interactions both inside and outside the FAT UB environment;
3. Cooperate with other students well in studying without imposing personal ego;
4. Have strong solidarity and help each other for a good cause and do not conflict with legal norms, religious norms, or other norms that live in society;
5. Treat your fellow students fairly;
6. Avoid words that can hurt the feelings of other students;
7. Do not make threats or acts of violence against fellow students both inside and outside the FAT UB environment;

8. Advise each other for good purposes;
9. Likes to help other students who are less fortunate in their studies or economically disadvantaged;
10. Together to maintain the integrity, reputation, good name of FAT UB, and not to take any disgraceful actions that damage the good image of FAT UB;
11. Respecting differences of opinion or views with other students, as well as prioritizing discussions based on scientific intellectual logic to avoid forcing opinions on other students;
12. Do not disturb the peace of other students who are following the learning process;
13. Not inviting or influencing other students to take disgraceful actions that are contrary to legal norms, religious norms, and other norms that live in the community;
14. Maintain associations between students of the opposite sex (relationships between men and women) according to prevailing religious and societal norms, and do not take actions that are not commendable in relation to the association of men and women;
15. Not spreading ideas that are prohibited by legal norms, religious norms, or societal norms to other students such as communist ideology, LGBT (lesbian, gay, bisexual, and transgender), atheists (don't believe in God Almighty), radicalism, and others.
16. Do not bully and intimidate other students either directly or indirectly through print media and online social media;
17. Do not take advantage of other students for personal or group interests;
18. Not spreading false news (hoax) about other students on various social media;
19. Maintain the integrity and reputation of FAT UB's individual students.

Ethics in the relationship between students and society:

1. Perform actions that elevate the integrity, reputation, and good name of FAT UB in the community;
2. Likes to help the community according to their knowledge;
3. Avoid actions that violate the norms that live in the community, both legal norms, religious norms, norms of decency, and norms of propriety;
4. Inviting the public to do good and not to invite bad deeds;
5. Comply with legal norms, religious norms, and societal norms that apply in the neighborhood;
6. Provide examples of good behavior and integrity in the community.

Code of Conduct Sanctions

Every member of the academic community has an obligation to report any violations of the Code of Ethics. The leadership of FAT UB is obliged to protect the identity of the reporter and every member of the academic community is obliged to prevent the occurrence of violations of the Code of Ethics by anyone in FAT UB. Every violation of the Code of Ethics will get a sanction from the leadership of FAT UB. The Dean may consider imposing more severe sanctions for violations of the Code of Ethics after obtaining input from parties who are aware of the occurrence of violations of the Code of Ethics.

Sanctions for violators of the Code of Ethics can be in the form of reprimand, stern warning, cancellation of course scores for one semester, cancellation of PKL/KKN, cancellation of final project, suspension for a certain period of time, and expulsion from UB. Every violator of the Code of Ethics is given the right to self-defense, no later than one week after the notification of the violation is submitted to the person concerned and the violator of the Code of Ethics receives a written notification from the FAT UB leadership.

Procedures for Passing Selection for Regional, National, International Competitions

In order to improve the achievements and reputation of FAT UB, students are encouraged to actively participate in various competitions at regional, national and international levels. In order to achieve championships at the regional, national and international levels, consultation, monitoring, and evaluation media are provided.

Implementation procedures include: 1) Students report in participating in competitions; 2) Student Affairs coordinate with the Deputy Dean for Student Affairs regarding student reports; 3) Student Affairs directs students to consult with the Vice Dean for Student Affairs; 4) The Vice Dean for Student Affairs instructs the preparation of an assignment letter for mentoring and mentoring; 5) Students process assignments and coordinate with supervisors and competing students for time line arrangements; 6) Guidance is carried out for supervising lecturers with the target of students who have passed the competition selection; 7) Administrative facilitation for students who will be competent.

Submission of Cover Letter for Fund Aid to the Rectorate

In order to have sufficient funds to support organizational activities, delegations or competitions at regional, national, and international levels so that they can help improve the quality of UB, students need to understand the procedure for submitting a cover letter for funding assistance to UB's rectorate. Universitas Brawijaya is one of the campuses whose concern is to support and facilitate students who contribute positively such as activities, competitions or student exchanges. Active students as the spearhead of all kinds of activities on campus are the benchmark for achieving the target indicators for each faculty or university without having to neglect their lectures.

Implementation procedures include: 1) Students/delegates/student institutions make submission proposals; 2) Proposal consultation in the Student Affairs subsection; 3) It is declared eligible, the ratification sheet is initialed by the Head of Subdivision for Student Affairs and signed by the Deputy Dean for Student Affairs; 4) Students make a cover letter for application for financial assistance to the university/sponsor; 5) The signing of the letter by the deputy dean for student affairs.

9.2. Graduation

Universities and faculties as a forum for holding graduations every month with a graduation system in collaboration with faculties in terms of determining quotas, as for the completeness facilities, graduates/faculty graduates who facilitate. So that alumni

data is available and the administration of graduation participants is orderly so that prospective graduates can carry out their graduation smoothly.

Implementation procedures include: 1) Graduation registration; 2) Filing in student affairs; 3) Fill in the alumni biodata; 4) Recap of biodata of prospective graduates and graduates; 5) Graduation announcement; 6) Toga taking; 7) Taking graduation photos.