FACULTY OF ANIMAL SCIENCE
UNIVERSITAS BRAWIJAYA

ACADEMIC HANDBOOK

BACHELOR'S DEGREE PROGRAM 2020/2021

ACADEMIC HANDBOOK
BACHELOR'S DEGREE PROGRAM
2020/2021

FACULTY OF ANIMAL SCIENCE
UNIVERSITAS BRAWIJAYA
MALANG
2020

ACADEMIC HANDBOOK
2020/2021

Document Code	:	**0050002000**
Revision	:	**5**
Date	:	**19 Agustus 2020**
Submitted by	:	**Vice Dean of Academic** **Signed** **Dr.Ir. M. Halim Natsir, S.Pt.,MP.,IPM.,ASEAN Eng.**
Approved by	:	**Dean** **Signed** **Prof.Dr.Ir.Sc.Agr.Ir. Suyadi, MS.,IPU. ASEAN Eng.**

PREFACE

Academic handbook 2020/2021 published in order to accelerate the dissemination of information on matters relating to the implementation of the teaching and learning process in Faculty of Animal Science Universitas Brawijaya.

This academic handbook is a translation of the implementation of Sisdiknas Regulation No. 12 Year 2012 about higher education and PRD No.4/2016 about the status of Universitas Brawijaya dan Dean decree No. 77 Year 2016 which is expected to provide a clearer explaination to lecturers, students and the community regarding the implementation of education in Faculty of Animal Science UB. This book also contains the guidelines for implementing outcome based education (OBE) and 'Freedom to Learn" according to Academic Handbook Universitas Brawijaya. Considering that educational problems are always developing, it is necessary to improve educational guidelines according to the needs and developments that occur, you can see the educational guidelines on the web of Faculty of Animal Science Universitas Brawijaya (www.fapet.ub.ac.id). The curriculum in educational guidelines is formulated based on learning outcomes that refer to KKNI (PP No.8 tahun 2012). The other things that have not been regulated in this guideline follow the educational guidelines of Universitas Brawijaya.

Finally, we hope that this educational guideline can fulfill its function as a reference in implementing the teaching and learning process.

Faculty of Animal Science
Universitas Brawijaya
Dean
Signed
Prof.Dr.Sc.Agr.Ir.Suyadi, MS
NIP.19620403 198701 1 001

TABLE OF CONTENTS

PREFACE II

TABLE OF CONTENTS III

CHAPTER I 1

INTRODUCTION 1

A. HISTORY 1
B. VISION, MISSION, AND EDUCATIONAL OBJECTIVES 3

CHAPTER II 5

ORGANIZATIONAL STRUCTURE AND PERSONNEL 5

A. ORGANIZATIONAL STRUCTURE 5
B. PERSONNEL 5
C. LECTURERS 6
D. ADMINISTRATIVE PERSONNEL 7

CHAPTER III 8

EDUCATION SYSTEM 8

A. STUDY LOAD CREDIT SCORE 8
B. SHORT SEMESTER PROGRAM 12
C. FINAL PROJECT 12
D. STUDY COMPLETION 12

CHAPTER IV 14

GUIDELINES FOR IMPLEMENTING OUTCOME BASED EDUCATION (OBE) 14

A. INTRODUCTION 14
B. LEGAL BASIS 16
C. PURPOSE 16
D. EDUCATION CONCEPT 0F OBE 18
E. OBE CURRICULUM 20
F. CHARACTERISTICS AND PLANNING OF OBE LEARNING PROCESS 24

G. IMPLEMENTATION OF OBE 27
H. OBE ASSESSMENT 29
I. OBE PORTFOLIO DOCUMENTS 34
J. LEARNING INNOVATIONS IN OBE 36
K. OBE QUALITY ASSURANCE 36

CHAPTER V 45

'FREEDOM TO LEARN' 45

A. INTRODUCTION 45
B. LEGAL BASES 46
C. AIM 48
D. POLICY FOCUS 48
E. THE IMPLEMENTATION OF 'FREEDOM TO LEARN' PROGRAMME AT UNIVERSITAS BRAWIJAYA (UB) 55
F. THE ELECTIVE PATHWAYS WITHIN THE EDUCATIONAL SYSTEM 61
G. IMPLEMENTATION OF 'FREEDOM TO LEARN' PROGRAMME 79
H. INTERNSHIP PROGRAMME /JOB TRAINING 83
I. TEACHING ASSISTANCE AT SCHOOLS 84
J. RESEARCH 85
K. HUMANITY/ VOLUNTARY PROJECT 86
L. ENTREPRENEURIAL ACTIVITIES 87
M. INDEPENDENT PROJECT/ STUDY 87
N. RURAL AREA DEVELOPMENT 88
O. STUDENT EXCHANGE 89
P. QUALITY ASSURANCE OF 'FREEDOM TO LEARN' PROGRAMME 93

CHAPTER VI 101

CURRICULUM 101

A. LEGAL FOUNDATION 101
B. CURRICULUM IMPLEMENTATION 101

CHAPTER VII 154

EDUCATION ADMINISTRATION 154

A. ACADEMIC HANDBOOK 154
B. IMPLEMENTATION OF CREDIT SYSTEM ADMINISTRATION 154

C. STUDENTS REGISTRATION 155
D. TERMS OF PAYMENT FOR EDUCATIONAL DEVELOPMENT CONTRIBUTION (TUITION FEE) 156
E. STUDENT IDENTITY CARD 156
F. STUDENT MUTATIONS 157
G. TRANSFER OF STUDENTS TO UNIVERSITAS BRAWIJAYA 158
H. TRANSFER OF STUDENTS AMONG FACULTIES AT BRAWIJAYA UNIVERSITY 159
I. UNDERGRADUATE GRADUATION 159
J. ACADEMIC ABILITY ASSESSMENT 159
K. RETAKES THE MODULE 161
L. ACADEMIC SANCTIONS 161
M. STUDY EVALUATION 162
N. IMPOSING ACADEMIC SANCTIONS 163

CHAPTER VIII 164

RULES OF THE (KELUARGA BESAR) UNIVERSITAS BRAWIJAYA 164

A. RIGHTS AND OBLIGATIONS 164
B. SOCIAL MANNERS AND RESPONSIBILITIES 165
C. VIOLATION OF THE RULES 165
D. SANCTIONS 166
E. COMMITTEE FOR VIOLATION CONSIDERATION 167
F. ADDITIONAL PROVISIONS 167

CHAPTER IX 168

ACADEMIC ADVISORS 168

CHAPTER X 172

STUDENT ETHICS FACULTY OF ANIMAL SCIENCE UNIVERSITAS BRAWIJAYA 172

A. APPEARANCE 172
B. ATTITUDE 172
C. PERFORMANCE 173
D. SANCTIONS 173

CHAPTER XI 175

SAPTA PRASETYA ALUMNI FACULTY OF ANIMAL SCIENCE UNIVERSITAS BRAWIJAYA 175

ACADEMIC HANDBOOK TEAM FACULTY OF ANIMAL SCIENCE UNIVERSITAS BRAWIJAYA MALANG..... 182

CHAPTER I
INTRODUCTION

A. History

Faculty of Animal Science established on October 26, 1961, which was still called the Faculty of Veterinary Medicine and Animal Science. Based on the Decree of the Minister of PTIP Number: 92 dated August 1, 1962, FKHP was given state status and since July 1, 1962, it was under Airlangga University.

Meanwhile, in Probolinggo in October 28, 1961, the Probolinggo Higher Education Foundation opened a College for the Department of Marine Fisheries. This department later became one of the Faculty of Veterinary Medicine and Animal Science departments, namely based on the Decree of the Minister of PTIP No. 163 the year 1963 dated May 25, 1963.

In January 5, 1963, UB and all its faculties were state status by the Decree of the Minister of PTIP No. 1 of 1963. The Faculty of Agriculture and the Faculty of Veterinary Medicine and Animal Science which were initially under Universitas Airlangga, were returned to Universitas Brawijaya.

Since February 3, 1972, the Probolinggo Marine Fisheries Department College joined FKHP, UB as the Department of Fisheries through the Rector's Decree Number 229/Pend.5/25-72. Meanwhile, at the end of 1970, the Department of Veterinary Medicine was established to have three Departments, namely the Department of Animal Science, Veterinary Medicine, and Fisheries. The Department of Veterinary Medicine finally joined Airlangga University in Surabaya from August 1972 until now.

In subsequent developments, the Department of Fisheries in Probolinggo was moved to Malang to facilitate implementation and

the possibility of its development. Based on the Decree of the Minister of Education and Culture Number 0220/B/1973 dated December 3, 1973, the name of FKHP was changed to the Faculty of Animal Science starting from January 1, 1973. The Decree of the Rector of Universitas Brawijaya No. 51/Sk/77 dated July 5, 1977 name of the Faculty of Animal Science UB. On May 13, 1983, the Department of Fisheries obtained the status as the Faculty of Fisheries, Universitas Brawijaya with the Decree of the Minister of Education and Culture Number 39249/I/1983 FPP UB only has one department, namely the Department of Animal Science. Through the Decree Presidential of the Republic of Indonesia Number 59 of 1982 dated September 7, 1982. the name of FPP was changed back to the Faculty of Animal Science.

In 1984, through the Decree of the Director-General of Higher Education Number 118/Dikti/Kep./1984 UB's Faculty of Animal Science was allowed to hold two departments, namely the Department of Animal Feed and Nutrition, and the Department of Animal Production and three Study Programs under the Dean, namely: Reproduction and Animal Breeding Study Program, Animal Product Technology Study Program, and Livestock Socio Economy Study Program. Furthermore, based on the Letter of the Director-General of Higher Education Number 225/Dikti/Kep/1996, there are four study programs in the Faculty of Animal Science, namely: Animal Production Study Program, Animal Feed and Nutrition Study Program, Animal Product Technology Study Program, and Livestock Socio Economy Study Program. The Faculty of Animal Science only consists of 1 Study Program, namely Animal Science, which consists of 4 interests, including Animal Production, Animal Feed and Nutrition, Animal Product Technology, and Livestock Socio Economy.

Universities to face the demands of change and the world of work for graduates, it must be able to adjust themselves so that good changes are needed both in an institutional and curriculum, according because that the Competency-Based Curriculum prepares as part of the process of unifying the study program which was named "Animal Science Study Program" which was determined based on the Decree of the Director-General of Higher Education No. 0034/D2.2/2008.

B. Vision, Mission, and Educational Objectives

1. Vision

To become a leading institution in the animal science sector based on local resources at the national and international levels.

2. Mission

a. Providing education in the sector of animal science that fulfills of national and international standards.
b. Developing research that produces international standard scientific work, science and technology that is needed for society and industry.
c. Developing and expanding the cooperation networks at domestic and abroad in the sectors of education, research and international scientific publications.
d. Aligning the quality of learning with national and international standards to produce graduates who are competitive nationally and internationally and have competencies according to the needs of stakeholders.

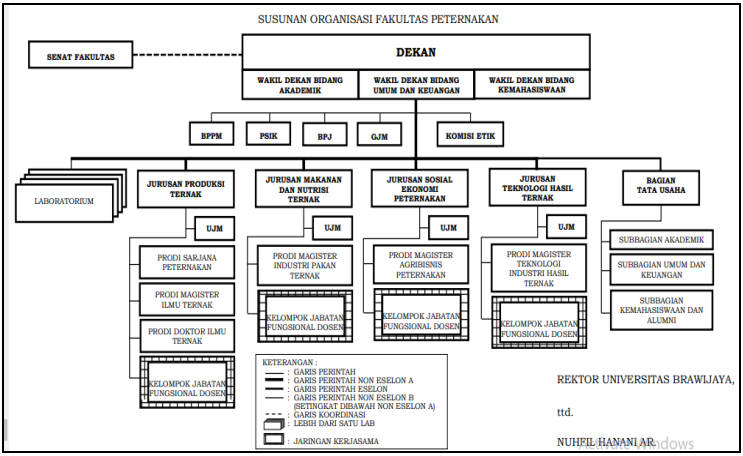
3. Educational Objectives

a. Producing graduates who are devoted to God Almighty, with the spirit of Pancasila.

b. Producing graduates who have excellence in the development and application of science and technology, especially in the sectors of animal science who are competitive nationally and internationally.
c. Producing graduates with high spirit of entrepreneurship who are able to manage and develop livesctock business.
d. Producing graduates who have qualified leadership abilities and encouragement for livestock development in the community (community leader).
e. Producing graduates who have high managerial abilities and work in various agencies/industries in a professional and highly competitive manner in the workplace both at domestic and abroad.
f. Able to develop and conserve local livestock resources to empower livestock on an industrial scale.
g. Able to establish cooperation in the Tri Dharma of Higher Education with various related parties, both national and international.
h. Able to follow the development of science and technology in the field of animal science.

CHAPTER II
ORGANIZATIONAL STRUCTURE AND PERSONNEL

A. Organizational Structure



B. Personnel

Dean: Prof.Dr.Sc.Agr.Ir. Suyadi, MS, IPU., ASEAN Eng.

Vice Dean on Academic Affairs: Prof. Dr. Ir. Muhammad Halim Natsir, S.Pt, MP., IPM., ASEAN Eng.

Vice Dean on Financial Affairs: Prof. Dr. Ir. Budi Hartono, MS., IPU., ASEAN Eng.

Vice Dean on Student Affair and Alumni: Dr. Agus Susilo, S.Pt., MP., IPM., ASEAN Eng.

Head of Major of Animal Science: Dr. Khothibul Umam Al Awwaly, S.Pt., M.Si.

Head of Undergraduate Program: Dr. Herly Evanuarini, S.Pt., MP.

Head of Master Program: Dr.Ir Tri Eko Susilorini, MP., IPM.,ASEAN Eng.
Head of Doctoral Program: Prof.Dr.Ir. Lilik Eka Radiati, MS., IPU.
Head of Animal Production Department: Ir. Nur Cholis, M.Si., IPM., ASEAN Eng.
Head of Animal Feed and Nutrition Department: Dr. Ir. Marjuki, M.Sc.
Head of Animal Production Technology Department: Dr.Ir. Imam Thohari, MP., IPM., ASEAN Eng.
Head of Livestock Social Economic Department: Rizki Prafitri, S.Pt., M.A., Ph.D.
Head of Faculty Quality Assurance: Asri Nurul Huda, S.Pt., MP., M.Sc.
Head of Journal Management Office: Dr. Premy Puspitawati Rahayu, S.Pt., MP.
Head of Research and Extension Development Office: Dr. Ir. Sri Minarti, MP. IPM. ASEAN Eng.
Head of Management Information, System and Public Relation: Dr. Nanang Febrianto , S.Pt., MP.
Head of International Relation Office: Prof. Dr. Ir. V. M. Ani Nugiartiningsih, M.Sc.

C. Lecturers

The number of lecturers is 90 people, consisting of 15 professors, 34 people with Doctoral degrees, 21 Masters, and as many as 20 people the lecturer is on a study duty. Details of the name, Employee Identification Number, address email of each permanent lecturer at the Faculty of Animal Science, Universitas Brawijaya, are presented in the Appendix on page 64.

D. Administrative Personnel

Administrative Personnel to support the smooth implementation of education at the Faculty of Animal Science, 48 staff members, all of whose employees status are Civil Affairs; 10 staff members have Bachelor Degree as educational background.

CHAPTER III
EDUCATION SYSTEM

Universitas Brawijaya has formally adopted the Semester Credit System, stipulated by the Chancellor's Decree Number 22/SK/1917 dated May 3, 1976.

A. Study Load Credit Score

1. Semester Credit Score for lectures

SCS is a system credits held in semester time units. The score of one-semester credit unit in a lecture is determined based on the activity load which includes all activities per week as follows:

a. Students
   1) Fifty minutes of scheduled face-to-face events with lecturers, for example in the form of lectures, seminars and so on.
   2) Sixty minutes of structured academic activity, namely study activities that are not scheduled but planned by the lecturer, for example doing homework or solving problems.
   3) Sixty minutes of independent academy activities, namely activities that must carry out to explore, prepare for, or other objectives of an academic assignment, such as reading reference books.

2. Semester Credit Score for Practical Work, Research and Fieldwork

The score of one-semester credit unit with completion of activities for two to five hours per week for one semester or a total of 32 to 80 hours per semester.

a. Semester Credit Score for Practical Work in the Laboratory

The one semester credit unit score is the workload in the laboratory as much as two to three hours per week for one semester.

b. Semester Credit Score for Research and Thesis Preparation

The score of one-semester credit unit is the research task load of three to four hours a day for one month, where one month is considered the equivalent of 25 working days.

c. Semester Credit Score for Field Work and similar like this

For field work and matching like this, the score of one-semester credit unit is the field workload of four to five per week for one semester.

3. Study Load in Semester

In determining the study load for one semester, it is necessary to pay attention to individual abilities based on the study results in the previous semester as measured by the parameters of the Grade Point Average (GPA).

Based on the Grade Point Average (GPA) it can be calculated as follows:

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

which are:

IP : Grade Point Average (GPA) can be in the form of semester achievement index or cumulative achievement index.

K : the number of credits for each course.

NA : the final score 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 GPA achieved in that semester, the study load is calculated in the following semester.

4. Success Evaluation of Undergraduate Program Study

The success of student studies is indicated by the Grade Point Average (GPA), which is written in numbers.

a. Evaluation of Study Success of Undergraduate Program

Evaluation of the success of the end-of-semester studies is carried out at the end of each semester, covering the courses that students take in that semester. The results of this evaluation are mainly used to determine the study load that may be taken in the following semester based on the following conditions:

Semester GPA obtained	Study load in the semester
>3.00	22-24 credits
2.50-2.99	19-21 credits
2.00-2.49	16-18 credits
1.50-1.99	12-15 credits
<1.50	12-credits

b. Evaluation of Success Study of First Year

Students are allowed to continue their studies if they fulfill the following requirements:

Year	Minimum credits	Minimum GPA
I	20	2,00
II	48	2,00
III	72	2,00
IV	96	2,00

c. Evaluation of Study Success at the End of Study of Undergraduate Program

The number of credits that must collect to complete undergraduate studies is a minimum of 144 credits, including thesis/other assignments and has fulfilled the following requirements:

1) Grade Point Average (GPA) of at least 2,00.
2) The D/D+ score does not exceed 10% of the total credit load, except for certain courses that are not allowed to obtain a D/D+ score.
3) There is no E score.
4) Pass the undergraduate exam.

d. Study Period Limits

Undergraduate program must be completed within no more than seven effective years (excluding academic leave for a maximum of 2 semesters), starting from the time the student is registered as a student or for students who are not re-registered without the permission of the Rector, it will still be counted as a study period.

Students who surpass the limit 4 years of study period will be applied in accordance progressive tuition fee with the applicable provisions.

B. Short Semester Program

Short Semester Program is a lecture program that is carried out during semester breaks to improve the grades of the courses taken to increase the cumulative grade point average (GPA) and shorten the study period. This program is in the form of face-to-face activities, structured, independent assignments and final exams. The organizing faculty carry out the timing and implementation. Students can participate in the short semester if the value of the course's maximum taken is C+. The final grade of the courses taken in the short semester is a maximum of B +.

C. Final Project

The final project to complete the undergraduate program education at the Faculty of Animal science, Universitas Brawijaya, education held using the Semester Credit System. It ends with a final examination in scientific papers in the sector of knowledge written based on scientific principles based on applicable guidelines. The final project consists of two kinds, namely Field Practice and Thesis. Thesis is the final assignment of a scientific paper which contains based on research results. Students who have national and international scientific achievements, this can be used as a substitute for a thesis with the applicable procedures.

D. Study Completion

The deadline for a student's study period mark by the implementation of the judicium for the student concerned.

Requirements for joining the judicium are regulated separately in the Dean's Decree.

CHAPTER IV
GUIDELINES FOR IMPLEMENTING OUTCOME BASED EDUCATION (OBE)

A. Introduction

The initial awareness of the insufficient quality of education is felt from the lack of role of Indonesian human resources in global activities, even in their own country. It is in regard with the ability to produce products, the ability to innovate, and the ability to work that are less competitive than other countries, even within the ASEAN communities. It can be seen that our human resources are innovating to only keep up with the developments made by developed countries so as not to be left behind. The mentality of being followers makes us never in front of other nations, being in the middle at best if not in behind, making it difficult for us to become a reference in various fields of life. Realizing this matter, the government created the Indonesian National Qualifications Framework (KKNI) in 2012, aiming to equalize the capabilities of Indonesian human resources with other countries from various professional and expertise sectors with a minimum standard of learning outcomes. Efforts that have been made to date have been to achieve this learning outcomes standard, which of course requires enormous efforts from all stakeholders, especially higher education.

The paradigm chosen by Universitas Brawijaya (UB) to achieve resource capabilities beyond the existing standards (KKNI and SNPT) is by implementing Outcome Based Education (OBE), focusing on classrooms or learning activities to determine what students should achieve (Graduate

Learning Outcomes), so that the mentality of lifelong learning in the real world can be achieved for the sake of oneself, the environment and the world. Output Based Education (OBE) will be easy to conceptualize, but difficult to define. OBE can first be distinguished from traditional educational methods by combining three elements: educational theory, a systematic structure for education, and a specific approach to its learning practices.

Outcomes-Based Education (OBE) focuses and organizes everything in the education system concerning what is essential for all students to be successful at the end of their learning experience. This means starting from a clear picture of what is important for the students to be able to achieve certain abilities, then organizing the curriculum and its instructions, and designing assessments to ensure that the learning process has occurred and can be measured and proven at the end of the learning process. In this case, Universitas Brawijaya follows the National Higher Education Standards which consist of 8 education sector standards, namely:

1. Graduates' competency standards
2. Learning content standards
3. Learning process standards
4. Learning assessment standards
5. Lecturers and educational staff standards
6. Learning facilities and infrastructure standards
7. Learning management standards; and
8. Learning financing standards.

Fulfillment of the OBE paradigm is carried out by meeting these standards in order toachieve superior accreditation, and

international accreditation.

B. Legal Basis

In implementing the OBE paradigm in the curriculum, UB refers to the following laws andregulations:

1. Law number 12 of 2012 concerning Higher Education;
2. Presidential Regulation number 8 of 2012 concerning Indonesian National Qualifications Framework;
3. Minister of Education and Culture Regulation number 73 of 2013 concerning Application of Indonesian National Qualifications Framework in the field of Higher Education;
4. Minister of Education and Culture Regulation number 3 of 2020 concerning National Higher Education Standards;
5. Universitas Brawijaya Regulation number 1 of 2017 concerning Universitas Brawijaya Quality Standards;
6. Guidelines for Higher Education Curriculum Development in the Industrial Era 4.0, Ministry of Research Technology and Higher Education in 2019;
7. Freedom of Learning Guide Book – Freedom Campus, Ministry of Education and Culture in 2020;
8. ASEAN Qualifications Reference Framework 2014.

C. Purpose

One of the considerations of issuing a law on higher education is to improve the nation's competitiveness in the face of globalization in all fields; higher education is expected to contributein developing science and technology and producing

intellectuals, scientists and/or professionals who are cultured and creative, tolerant, democratic, strong in character, and dare to defend the truth for the benefit of the nation. Therefore, Universitas Brawijaya must take part in fulfilling theexpectation which is bestowed by the law.

The Higher Education Law states that the existence of higher education aims to:

1. Develop students' potential to become human beings who believe in God Almighty and have noble, healthy, knowledgeable, creative, independent, skilled, competent, and cultured characters for the benefit of the nation;
2. Produce graduates who master science and/or technology to meet national interests and increase national competitiveness;
3. Produce science and technology through research that takes into account and applies humanities values which is beneficial for the progress of the nation, as well as the advancement of civilization and the wellbeing of mankind; and
4. The realization of community service based on reasoning and research products that are useful in advancing general wellbeing and educating the nation.

To achieve the goals (a) and (b), SNPT establishes educational standards by meeting the 8 existing standards. In order to achieve these goals, the OBE paradigm is used so that it achieves success. Currently UB has a higher quality standard than SNPT as the implementation of the law mandate.

In the field of education, UB has a goal: to produce graduates

with academic ability and entrepreneurial spirit who are professional, independent, hard worker, disciplined, noble, and insightful with the latest technology so that they can compete, and excel at national and international levels. Thus, the OBE paradigm is chosen so that all directions of the learning process are for future reach. With the goal that is oriented towards the future, all UB academicians must be able to prepare everything to face problems that may occur far in the future.

D. Education Concept 0f OBE

The OBE concept prepares students to recognize their potential and be ready to live their life and work in line with self-development process.

There are three important factors in regard with the achievement of OBE, namely:

1. Course Learning Outcomes (CPMK), are learning achievements that are specific to the course which includes attitudes, skills and knowledge formulated based on several Graduates Learning Outcomes targeted by the course;
2. Graduates Learning Outcomes (CPL), are abilities possessed by each Study Programme graduate which is an internalization of attitudes, mastery of knowledge and skills in accordance with the level of Study Programme obtained through the learning process;
3. Study Programme Educational Objectives (TPP), are statements that describe the career and professional achievements prepared by the Study Programme to be

achieved by graduates within the first few years after graduation and must be measureable.

Consequently, discussions on cutting-edge science and technology must be prepared for the purposes of the OBE. Lecturers and all academicians must be aware of this. If lecturers are awareof their roles, then the scope of knowledge discussed must be able to prepare students to study in the context of future scientific prospects at least 5 years after they graduate, or approximately ten years from when students start studying in the university. Currently, most of the lecturers have understood the OBE principles, but are still need to be given insight in terms of follow-up of OBE in daily practice and its evaluation. The Study Programmes at UB are of course expected to immediately be able to meet the highest level of OBE implementation as shown in Table 4. Fulfillment at level 4 or 5 is needed to achieve superior accreditation or international accreditation.

Table 4. OBE implementation level

OBE	Outcomes	Curriculum	Planning assessment	Outcome's assessment	Continuous Quality Assurance Improvement
Level 1	√				
Level 2	√	√			
Level 3	√	√	√		

Level 4	√	√	√	√	
Level 5	√	√	√	√	√

E. OBE Curriculum

In the current globalization era, the world of education is facing challenges to produce human resources who are able to play a global role. The impact of globalization is characterized by the flow of people, information, technology, capital, ideas, and images. This situation causes changes in some values of community life and changes in the demands of the world of work for university graduates. The challenges faced by graduates in facing the impact of globalization are that graduates are expected to have competencies in accordance with the demands of scientific development, technology and art, the world of work, profession, and personality development which instills cultural characteristics.

Referring to its development, there was a change in the curriculum for higher education in Indonesia in early 1990s. It switched from focusing on solving internal university problems with a target of mastery of science and technology (Decree of the Minister of National Education No. 056/U/1994) to curriculum that emphasized educational process which referred to cultural context and human development in a comprehensive and universal way. This curriculum had a target to produce graduates who have cultural insight and able to play a role in the international world. The signs for a new curriculum that was more adaptive to the aforementioned conditions were then stipulated and outlined in the Minister of National Education Decree No. 232/U/2000 regarding

Guidelines for Higher Education Curriculum Development and Student Learning Outcomes Assessments which were then completed in the Minister of Education Decree No. 045 /U/2002 concerning Higher Education Core Curriculum replacing the Minister of Education Decree No. 056 /U/1994. The Higher Education Curriculum was originally referred to as the Content-Based Curriculum (KBI), later changed to the Competency-Based Curriculum (KBK). The objective of the Minister of National Education Decree No. 232/U/2000 was to provide freedom for each university in developing curriculum according to their respective interests and potentials. Furthermore, it aimed to respond the growing demands for competency of national university graduates, especially in facing global competition, so that alumni could be competitive in the era offree competition.

Higher education as one of the national components that produces graduates is required to increase its quality by developing the KBK (Competencies Based Curriculum) system in accordance with the Indonesian National Qualifications Framework (KKNI), through the policy of Presidential Regulation Number 8 of 2012, which emphasizes more on exploring the potential of graduates as individuals who are able to compete in the world of work both at national and international levels. Furthermore, this regulation has been translated into the Minister of Education and Culture Regulation Number 73 of 2013 concerning the Application of the Indonesian NationalQualifications Framework in the field of Higher Education and the Minister of Research, Technology, and Higher Education Regulation Number 44 of 2015 concerning National Higher Education Standards, which

is revised into Regulation of the Minister of Education and Culture Number 3 of 2020. These regulations are in line with the OBE curriculum. The difference between the OBE curriculum and the curriculum design based on the Regulation of the minister of Research, Technology, and Higher Education Number 44/2015 is the process of determining Learning Outcomes (LO) of Study Programme. Before OBE, the study programme LO was originally based on the Indonesian National Qualifications Framework (KKNI) principles, which was determined based on (1) attitude, (2) knowledge, (3)) general skill, and (4) special skill. Then, to adapt with OBE, the LO need to be added with the learning outcomes of Study Programmes which are generally determined by international accreditation institutions. Measurable Study Programme objectives and Study Programme graduates' profiles (graduate attributes) are determined by each Study Programme. Therefore, all Study Programmes in UB are required to adapt their curriculum to this approach.

The curriculum at Universitas Brawijaya is the main basis for the implementation of academic, professional, specialist and vocational education towards achieving learning outcomes in accordance with the standards of Universitas Brawijaya graduates. The curriculum is a set of plans and regulations regarding the content and learning materials, as well as delivery and assessment methods to ensure the achievement of graduate competencies. Therefore, curriculum is used as the main reference for each Study Programme in planning and controlling the teaching and learning process. Department leader functions as a human resource manager so that the

Study Programme can run effectively and efficiently and remains in the corridor of quality, both in the process and expected outcomes. Thus, the curriculum must be ratified by the Rector in accordance with the results of the Faculty Senate Meeting, and then the curriculum document is verified by the Institute of Educational Development and Quality Assurance (LP3M) Universitas Brawijaya. The curriculum of Study Programmes in UB should be prepared based on the vision and mission of UB in order to produce highly competent graduates in line with the needs of communities and the development of science, technology, and/or arts. The stages of preparing the Study Programme curriculum can be seen in Figure 1.

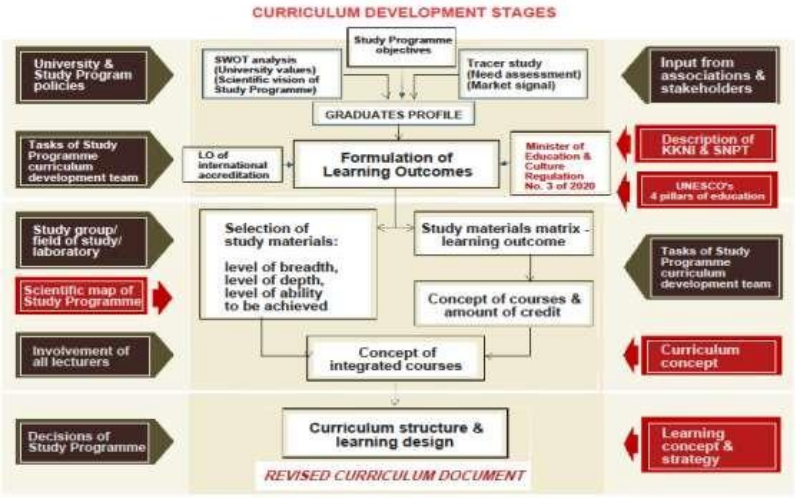


Figure 1. Stages of Curriculum Development Process (Modified from Sumber Endrotomo, DIKTI Curriculum Team)

Curriculum of a Study Programme includes a unified arrangement of courses for all levels to enable students to obtain the outcomes set by the Study Programme. The composition of courses is adjusted to the development of student understanding in related fields of study. Each course is required to have a Semester Lesson Plan (RPS) in accordance with a certain credit load (semester credit units), and to have a learning process portfolio. The curriculum provides specific characteristics of a Study Programme and provides a complete picture of study materials, requirements, and general guidance in carrying out the educational process. The process of developing a Study Programme curriculum in UB is required to follow the steps presented in Figure

1. The scope of the Study Programme curriculum is required to follow the template prepared bythe Institute of Educational Development and Quality Assurance (LP3M) Universitas Brawijaya. Curriculum serves as an instrument for shaping students' scientific mindset, skills and personality. Therefore, the curriculum must encourage the fulfillment of the required Study Programme learning outcomes in the form of knowledge and understanding, cognitive skills, special skills(including practical or professional skills), transferable skills, the need for employment and/or further study, and personality development. The process of developing a Study Programmecurriculum at UB is required to follow the steps presented in Figure 1.

F. Characteristics and Planning of OBE Learning Process

In accordance with the Minister of Education and Culture

Regulation No. 03 of 2020 concerning National Higher Education Standards, Universitas Brawijaya is required to carry out the standard of the learning process, which is the minimum criterion regarding the implementation of learning process in Study Programmes to obtain graduate learning outcomes. Learning process standards include: (a) characteristics of the learning process; (b) planning of the learning process; (c) implementation of the learning process; and (d) student learning load.

The characteristics of the learning process consist of interactive, holistic, integrative, scientific, contextual, thematic, effective, collaborative, and student-centered. **Interactive** means that the graduate learning outcomes are achieved by prioritizing a two-way interaction process between students and lecturers. **Holistic** means that the learning process encourages the formation of a comprehensive and broad mindset by internalizing local and national excellence and wisdom. **Integrative** means that the graduate learning outcomes are achieved through an integrated learning process to meet the overall graduate learning outcomes in a single program through an interdisciplinary and multidisciplinary approach. **Scientific** means that the graduate learning outcomes are achieved through a learning process that prioritizes scientific approach so that an academic environment is created on the basis of a system of values, norms and scientific principles and upholds religious and national values. **Contextual** means that the graduate learning outcomes are achieved through a learning process that is tailored to the demands of the ability to solve problems in accordance with the field of expertise. **Thematic** means that

the graduate learning outcomes are achieved through a learning process that is adjusted to the scientific characteristics of the Study Programme and is linked to real problems through a transdisciplinary approach. **Effective** means that the graduate learning outcomes are achieved effectively by emphasizing the internalization of the study materials properly and correctly in an optimum period of time. **Collaborative** means that graduate learning outcomes are achieved through a shared learning process that involves interaction between individual learners to produce a capitalization of attitudes, knowledge, and skills. **Student-centered** means that graduate learning outcomes are achieved through a learning process that prioritizes the development of student creativity, capacity, personality and needs, as well as developing independence in seeking and finding knowledge.

The learning process planning must be prepared for each course and presented in the Semester Lesson Plan (RPS), which is determined and developed by the lecturers independently or together in a group of the same area of expertise in the Study Programme. RPS in UB contains at least: (a) name of Study Programme, name and code of courses, semester, semester credit units, and names of lecturers; (b) graduate learning outcomes targeted by courses; (c) abilities aimed at each stage of learning to meet graduate learning outcomes; (d) study materials related to the targeted abilities; (e) forms and methods of learning; (f) time provided to achieve the ability at each stage of learning; (g) students' learning experience which is manifested in a description of the assignments that they have to do for one semester; (h) criteria, indicators, and assessment elements; and (i) a listof references.

Learning planning related to students' research must refer to the Research Standards mentioned in UB Quality Standards. Learning planning related to students' community service must also refer to the Community Service Standards mentioned in UB Quality Standards. Learningplanning related to students' research and community service is regulated by each faculty accordingto their scientific characteristics.

G. Implementation of OBE

The implementation of the OBE-based learning process generally takes place in the form of interactions between lecturers, students, and learning resources in a particular learning environment that has been designed properly. In addition, the OBE-based learning process in each course must also be implemented according to the Semester Lesson Plan (RPS). The learning process through curricular activities must be carried out systematically and structurally through various courses and with measurable learning load. The characteristic of OBE implementation is in the assessment process on students' abilities. The OBE-based learning process is implemented through a series of curricular activities that use effective learning methods in accordance with the characteristics of the courses to achieve certain abilities specified in graduate learning outcomes.

There are a lot of OBE-based learning methods that can be chosen for the implementation of learning in courses, which include: group discussions, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, or other learning methods, which effectively facilitate the fulfillment of Graduate

Learning Outcomes (CPL). Each course can use one or a combination of several learning methods and be accommodated in severalforms of learning process. Therefore, the forms of learning process can be:

a. Lecture;
b. Responses and tutorials;
c. Seminar;
d. Practicum, studio practice, workshop practice, field practice; work practice
e. Research, design or development;
f. Military training;
g. Student exchange;
h. Internship;
i. Entrepreneurship; and/or
j. Another form of community service.

The learning process of research, design or development must be added as a form of learning for Diploma IV Programmes, Undergraduate Programmes, Profession Programmes, Master Programmes, Specialist Programmes, and Doctoral Programmes. The form of learning process is under the guidance of lecturers in the context of developing attitudes, knowledge, skills, authentic experiences, and improving community wellbeing and national competitiveness.

Different from research learning, community service learning must only be added as a form of learning for Diploma IV Programmes, Undergraduate Programmes, Professional Programmes, and Specialist Programmes. However, same with research learning, this community service learning is also a student activity under the guidance of lecturers in utilizing science and technology to support community wellbeing and

educate the nation.

The form of the aforementioned learning process can be done inside and outside the Study Programme. The form of learning process outside the Study Programme is a learning process whichconsists of:

a. Learning in other Study Programmes at the same university;
b. Learning in the same Study Programmes at different universities;
c. Learning in other Study Programmes at different universities; and
d. Learning at non-university institutions.

However, currently, the learning process in other Study Programmes is implemented only for Undergraduate Programmes and applied Undergraduate Programmes which are non-health sector programmes. It is in accordance with freedom of learning policy issued by the Ministry of Education and Culture.

H. OBE Assessment

Assessment is a process to identify, collect, and prepare data to evaluate the achievement of student learning outcomes. Effective assessment usually uses direct measurement, indirect measurement, quantitative measurement, and qualitative measurements that are relevant in accordance with the measured outcomes. Appropriate sampling methods may also be used as partof the assessment process. Assessment is also a systematic collection, review, and use of information about educational programs with the aim of improving student learning and development.

In accordance with the Minister of Education and Culture Regulation No. 03 of 2020, Universitas Brawijaya is obliged to carry out learning assessment standards, which are the minimum criteria for assessing student learning processes and outcomes in order to meet graduate learning outcomes. The assessment process and student learning outcomes include: (a) assessment principles; (b) assessment techniques and instruments; (c) assessment mechanisms and procedures; (d) assessment implementation, (e) assessment report; and (f) student graduation.

UB lecturers are obliged to carry out the principles of assessment in an integrated manner, which include educational, authentic, objective, accountable, and transparent principles. **Educational principle** is an assessment that motivates students to be able to: (a) improve planning and learning methods; and (b) achieve graduate learning outcomes. **Authentic principle** is an assessment that is oriented towards a continuous learning process and learning outcomes that reflect student abilities during the learning process. **Objective principle** is an assessment based on standards agreed upon between lecturers and students and is free from the influence of the assessor's subjectivity and the ones being assessed. **Accountable principle** is an assessment which is carried out in accordance with clear procedures and criteria, agreed upon at the beginning of the lecture, and understood by students. **Transparency principle** is an assessment whose proceduresand results of the assessment can be accessed by all stakeholders.

Assessment techniques performed by lecturers include observation, participation, performance, written tests, oral

tests, and questionnaires. Assessment instrument is a process assessment in the form of a rubric and/or a portfolio or a design. Attitude assessment employs observational assessment techniques. Assessment of mastery of knowledge, general skills, and specific skills is carried out by selecting a technique or combination of various techniques and instruments applied by the lecturers. The final result of assessment is integration between various techniques and instruments used in the assessment.

Assessment mechanism consists of, at least, the following activities: (a) preparing, conveying, agreeing on stages, techniques, instruments, criteria, indicators, and assessment weighting in accordance with the lesson plan; (b) carrying out the assessment process in accordance with the stages, techniques, instruments, criteria, indicators, and assessment weighting that refers to assessment principles, (c) providing feedback and opportunities to question the results of the assessment to students; and (d) documenting the assessment of student learning processes and outcomes accountably and transparently.

Lecturer assessment procedure includes planning, providing assignment, observing performance, returning the results of observations, and giving final grades. The assessment procedure at the planning stage can be carried out through a gradual assessment and/or reassessment. The implementation of the assessment is carried out in accordance with the lesson plan, namely measuring the Course Learning Outcomes (CPMK), which is an aggregation of the Sub-Course Learning Outcomes (Sub-CPMK). The assessment can be carried out by: (a) a lectureror a team of lecturers; (b) a lecturer or a team of

lecturers and involving students; and/or (c) a lecturer or a team of lecturers and involving relevant stakeholders. The forms of assessment can be seen in Table 5.

Table 5. Example of assessment and learning forms

Assessment Forms	**Forms of learning that are probable for assessment**
Essay	
Essay exam	Answers to questions, and accuracy form the answer structure
Open book	Like an essay exam, but with limited use of memory, and also based on the coverage/breadth of answers
Assessment Forms	**Forms of learning that are probable for assessment**
Take-home assignment	Read a wide range, connect, organize, and see the implementation
Objective Test	
Multiple choice	Recognition, strategies, comprehension
Directed results	Hierarchy of understanding
Performance Assessment	

Practicum	Real work skills
Seminar, presentation	Communication skills
Poster	Concentration on relevance and applicability
Interview	Interactive response
Interview of critical Incidents	Reflection, application, feeling of relevance
Project	Application, skills in research
Journal review	Reflection, application, feeling of relevance
Case study	Application, professional skills
Portfolio	Reflection, creativity, desired results
Rapid assessment (large group)	
Map of concept	Coverage, relationship
Venn diagram	Relationship
Answers in one or three minutes on paper	Level of understanding, selection of relevance
Short answer	Retrieving information, coverage
Notes to friends	Holistic understanding, application, reflection

Each course learning outcome is then aggregated by the Study

Programme to be used to measure the achievement of Graduate Learning Outcomes (CPL) which is reported to the Dean every year. However, in terms of the implementation of assessment for the Subspecialty Programme, Doctoral Programme, and Applied Doctoral Programme, it is mandatory to include external assessors from different universities.

The appropriate form of assessment must be based on the indicators of Course Learning Outcomes (CPMK). Lecturers and students are expected to have the same view of the assessment model. Thus, the process of creating the same perceptions of the targeted CPMK must be done from the start in hope that if students already know it, they can arrange independent learning models that are suitable for their learning methods. Examples of assessment and learning forms can be seen in Table 4. The preparation of questions, assignments, and examinations carried out by the lecturer should be in line with the following characteristics:

a. Valid: the validity of the questions is tested
b. Relevant: in accordance with competence/outcome
c. Specific: not biased
d. Representative: representing elements of competence
e. Balanced: in accordance with the complexity of learning materials
f. Open: in accordance with the RPS agreed upon by the lecturers and students

I. OBE Portfolio Documents

Full implementation of the OBE requires continuous improvement, and consequently requires a mechanism for

regular feedback. The results of the feedback are used by the lecturers for the evaluation of the lecture which is described in the course portfolio.

The course portfolio is made by the lecturer at the end of each running semester. This portfolio is a tool to see the extent to which the learning outcomes are achieved by students in the class. It will also be aggregated at the Study Programme level to see the extent to which the Study Programme learning outcomes are achieved. This assessment of achievement becomes evaluation material for the Study Programme for necessary corrective actions.

The lecture portfolio format is a description consisting of:

i. Introduction and objective of the course
ii. Description of the course
iii. Learning method
iv. Learning media
v. Learning Evaluation and its assessment tools
vi. Statistics describing class conditions
vii. Students' feedback
viii. Short syllabus of the course
ix. Semester Lesson Plan
x. Reflection and solution to the problems at hand
xi. Attachments required

Learning evaluation section which takes place continuously throughout the semester is necessary to determine (1) conformity level of course material with Semester Lesson Plan (RPS), (2) participation level of lecturers and students, (3) percentage of grade distribution, (4) achievement of quality of course completion, and (5) evaluation per study materials if needed, to explain the

applied learning mechanism.

J. Learning Innovations in OBE

The learning process created by the lecturer must be able to meet certain characteristics, which consist of interactive, holistic, integrative, scientific, contextual, thematic, effective, collaborative, and student-centered characteristics. Thus, the lecturer must prepare himself and the material to be able to bring out these characteristics in the learning process.

UB lecturers are welcomed to use learning methods that can be selected for the implementation of learning in courses as described in sub chapter 4.8. The method chosen requires a lecturer to make innovations that will benefit his students. For this purpose, supporting facilities will be prepared by the faculties and departments.

The characteristics of the learning process and learning method used should be dynamic and reflected in the portfolio of courses after their implementation, thus they cannot be set statically and must follow developments that occur during the learning process; therefore, innovation must be developed continuously.

K. OBE Quality Assurance

Internal Quality Assurance System (SPMI) is a systemic activity of higher education quality assurance conducted autonomously by every university to control and improve the implementation of higher education in a planned and sustainable manner. The purpose of quality assurance is to maintain and improve the quality of higher education in a sustainable manner, which is carried out internally to realize

the vision and mission of the university, as well as to meet the needs of stakeholders through the implementation of Three Pillars (Tridarma) of Higher Education. Internal Quality Assurance is an important factor in getting to a quality university. This can be carried out internally by the university, controlled and audited through accreditation activities carried out externally by the National Accreditation Board (BAN) of Higher Education or other institutions. So, the objectivity of the assessment of maintenance and improvement of academic quality on an ongoing basis in a university can be realized.

UB has implemented quality assurance since the establishment of the Quality Assurance Center in 2005, and since then has implemented a quality assurance cycle known as OSDAT (Figure2). To run SPMI, UB implements steps called "quality assurance cycle", namely OSDAT, which stands for:

i. Developing a quality assurance **Organization** (O)
ii. Developing a **System** (policies, documents in the form of SPMI standards, SPMI manuals,SPMI Forms) (S)
iii. The system is run / **Do** (socialization and work reference) (D)
iv. Conducting an internal quality **Audit** (A)
v. **Follow-up** (T)

However, with the issuance of the Minister of Research, Technology, and Higher Education Regulation number 62 of 2016 concerning Higher Education Quality Assurance Systems, UB changes the quality assurance cycle and follows a cycle consisting of 5 stages (Determination, Implementation, Evaluation, Control and Standard Improvement) or more commonly referred toas the PPEPP Cycle (Figure 3). Based on

the Internal Quality Assurance System Guidelines issuedby the Ministry of Research, Technology and Higher Education, the PPEPP cycle consists of:

1. Determination is an activity of setting standards set by higher education.
2. Implementation is an activity carried out in order to comply with the standards.
3. Evaluation is an activity to compare the implementation outputs with predetermined standards.
4. Control is an activity of analyzing the causes of non-achievement and/or deviation in the implementation of standards to take corrective action.
5. Improvement is a standard improvement activity so that it is higher than the predetermined standard.

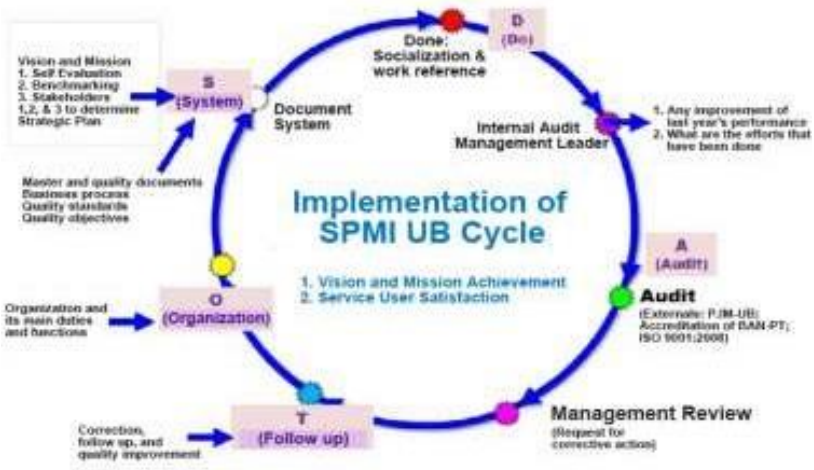


Figure 2. Implementation of SPMI UB cycle before 2016 (OSDAT)
(Source: website of PJM UB, http//pjm.ub.ac.id)

Figure 3. Implementation of SPMI UB cycle starting in 2016 (PPEPP)

(Source: Presentation entitled “Improving Higher Education Quality through Implementation of Quality Assurance Systems (SPMI and SPME)” by Prof. Dr. Mansyur Ramly at Wiraraja University Sumenep (2015))

Quality assurance in OBE curriculum is aimed at monitoring Continuous Quality Improvement (CQI), which can be seen in Figure 4. Each Study Programme is formed by determining its mission and vision, which then becomes the basis for determining Study Programme Educational Objectives (TPP), which then becomes the basis for determining Graduate Learning Outcomes (CPL), and will then be implemented in detail in Course Learning Outcomes (CPMK). Therefore, each Study Programme in UB must determine Course Learning Outcomes (CPMK) every semester. It is then assessed, analyzed, then improved so as to develop the CPMK. Next, the Study Programme also do the same process with Graduate Learning Outcomes (CPL).It is based on the results of a graduate tracer survey, which is then assessed, analyzed, and improved so as to perfect the CPL. In addition, each Study Programme also conducts assessments, analysis, and improvements at least once every 4 years to perfect the Study Programme Educational Objectives (TPP). It is usually conducted after a graduate tracer study has been done to graduates who graduated 5-10 years ago from the Study Programme.

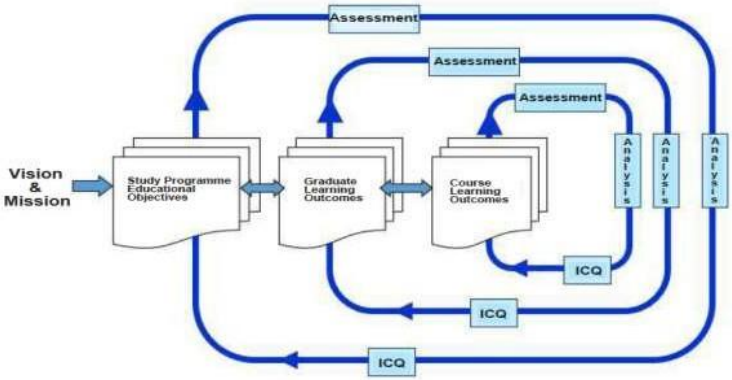


Figure 4. Implementation of the quality assurance cycle in OBE curriculum

Source: Haris Wahyudi and Ignatius Agung Wibowo (2018), Innovation and Implementation of Outcome-Based Education (OBE) and Washington Accord in the Mechanical Engineering Study Programme of Mercu Buana University, Journal of Mechanical Engineering Vol. 07, No. 2, June 2018.

Furthermore, the corrective actions in regard with the improvement of courses and accreditation of Study Programmes, along with the steps taken, that can be seen in Figures 5 - 7.

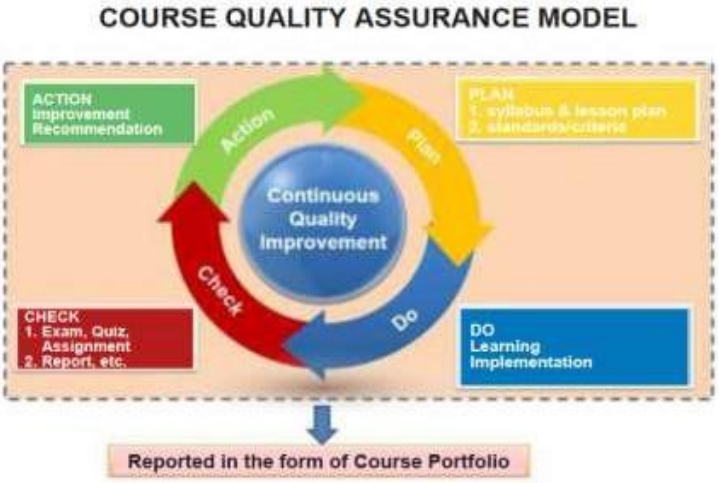


Figure 5. Implementation of quality assurance model in courses
(Source: Presentation entitled "Quality Assurance for Outcomes Based Education" by Dr. Ir. Pepen Arifin (SPM ITB) at Workshop on Curriculum Development with Outcomes Based Education Paradigm, ITB West Hall, July 16-17, 2018).

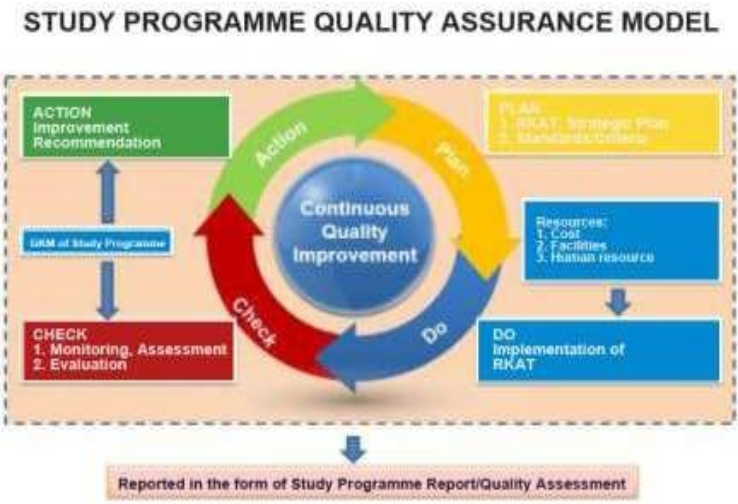


Figure 6. Implementation of quality assurance model in Study Programme

(Source: Presentation entitled "Quality Assurance for Outcomes Based Education" by Dr. Ir. Pepen Arifin (SPM ITB) at Workshop on Curriculum Development with Outcomes Based Education Paradigm, ITB West Hall, July 16-17, 2018.

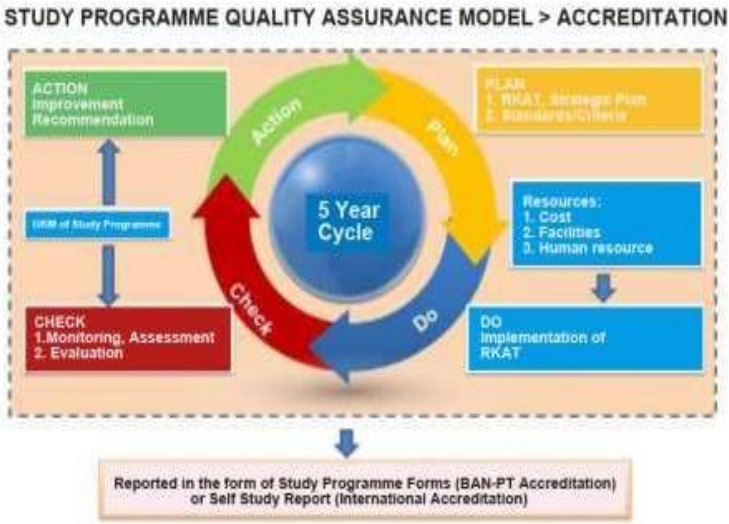


Figure 7. Implementation of quality assurance model in Study Programmefor accreditation purpose

(Source: Presentation entitled "Quality Assurance for Outcomes Based Education" by Dr. Ir. Pepen Arifin (SPM ITB) at Workshop on Curriculum Development with Outcomes Based Education Paradigm, ITB West Hall, July 16-17, 2018).

CHAPTER V
'FREEDOM TO LEARN'

A. Introduction

The need for higher education by today's society is to prepare students to face the challenges of life in the career world. Because of the various paths to success that exist today, each individual needs to have learning outcomes derive from experiencing various education systems. Higher education does not just strive for the achievement of learning outcomes, education must prepare students to think critically with the values of life and choose the opportunities they need to succeed in their chosen path. For this reason, the learning process can range from learning with a "whereverand whenever" approach, personal approach, flexible mode of learning, "peer and mentor", appropriate applications, modules, and project-based learning (Figure 8).

To meet this need, the Ministry of Education and Culture, through *Permendikbud* (Decree of the Ministry of Education and Culture) No. 3 of 2020 on National Higher Education Standards, stipulates the Policy for 'Freedom to Learn'-*Kampus Merdeka* (Independent Campus). This policy empowers students to study 3 semesters outside their study programme. Through this programme,students are given broad opportunities to enrich and develop their knowledge and skills in the real world according to their interests and values. This strategy provides a mechanism for preparing adaptive and versatile graduates with strong nationalism and leadership. To respond to this policy, UB undertakes a learning transformation to equip and prepare its graduates to become a

superior generation, adaptable and ready to face the challenges of their time, without negating the local wisdom of the nation. The system of 'Freedom to Learn' is designated for an undergraduate programme, vocational education programme, specialists, and applied vocational programme. By the direction of the Ministry of Education and Culture, this 'Freedom to Learn' is not designed for professional and specialists programme at the Faculty of Medicine, the Faculty of Dentistry, and the Faculty of Veterinary Medicine of UB.

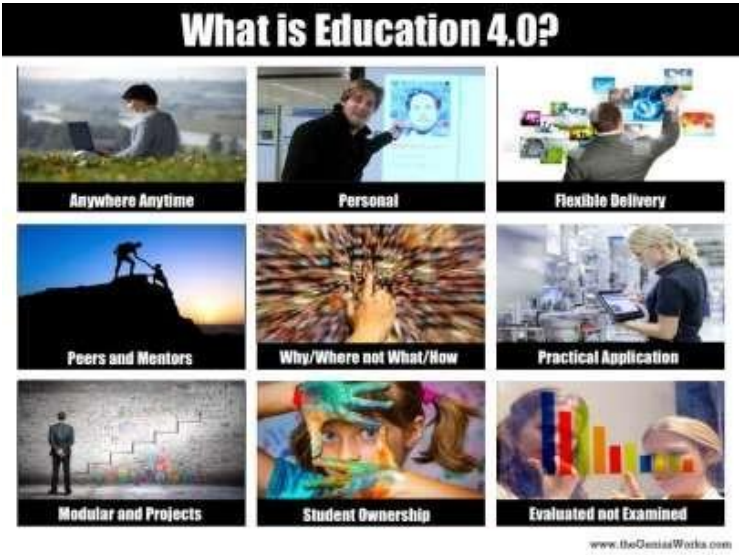


Figure 8. Education in the Industrial Age 4.0

B. Legal Bases

The 'Freedom to Learn' is one of the policies affirmed by the Minister of Education and Culture, through *Permendikbud* (Decree of the Ministry of Education and Culture) No. 3 of

2020. In this policy, students are given the right to study three semesters outside of the study programme. This programme is the mandate of various regulations/ legal foundations for higher education to improve the quality of learning and higher education graduates. The legal basis for implementing the Three Semester Learning Rights policy programme outside the Study Programme includes thefollowing:

1. Law Number 20 of 2003, on the National Education System.
2. Law Number 12 the Year 2012, on Higher Education.
3. Law Number 6 of 2014 on Villages.
4. Government Regulation Number 04 of 2014, on the Implementation of Higher Education and Management of Higher Education.
5. Presidential Decree number 8 of 2012, on KKNI.
6. Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020, on National Higher Education Standards.
7. Decree of the Minister of Villages, Development of Disadvantaged Areas, and Transmigration Number 11 of 2019, on Priority for the Use of Village Funds in 2020.
8. Decree of the Minister of Villages, Development of Disadvantaged Areas, and Transmigration Number 16 of 2019, on Village Deliberations.
9. Decree of the Minister of Villages, Development of Disadvantaged Areas, and Transmigration Number 17 of 2019, on General Guidelines for Development and Empowerment of Village Communities.
10. Decree of the Minister of Villages, Development of

Disadvantaged Areas, and Transmigration Number 18 of 2019, on General Guidelines for Village Community Assistance.

11. 'Freedom to Learn' Guide Book - *Kampus Merdeka* (Independent Campus). Directorate General of Higher Education Ministry of Education and Culture 2020.

C. AIM

The purpose of the 'Freedom to Learn' Guidelines is to fulfil the obligations of UB to allow students the right to study in three semesters outside the study programme. Students are given the opportunity to decide on an approach to the learning process based on their character and learning styles, assisted by a lecturer so that the Study Programme Learning Outcomes can be accomplished more effectively and successfully, be more ready and responsive to the needs of the times, and to prepare graduates as potential future leaders of the nation who are superior and have personality. Experimental learning programmes with diverse pathway are structured as a way for students to develop their potential interests and talents.

D. Policy Focus

5.4.1 Policy Focus

Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020 Article 4, states that "National Education Standards consist of: (a) standards of competency for graduates; (b) standards of learning content; (c) standards of learning process; (d) standards of education assessment; (e) standards of lecturers and educational staff; (f)

standards of facilities and infrastructure; (g) standards of management; and (h) standards of learning financing". There was a change in education process standards compared to the previous Decree of the Ministry of Research and Technology No. 44 of 2015 on National Higher Education Standards.

Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020, in Article 9: "Graduates of Diploma 4 and undergraduate programmes have at least mastered in detail the theoretical concepts of certain fields of knowledge and skills in general and the theoretical concepts of special parts in the field of knowledge and skills."; and Article 10 "The standard of the learning process is the minimum criterion regarding the implementation of learning in the study programme to obtain graduate learning outcomes". This shows that Learning Outcomeplays a role as a focus for the achievement of study programmes, following the notion of Outcome-Based Education.

Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of2020, Article 11 underlines the need for study programmes to make improvements toward the learning design to be more successful in accomplishing the learning outcomes of the study programme, provided that this article asserts "Student-centred, as referred to in paragraph (1), states that the learning outcomes of graduates are achieved through a learning process that prioritizes the development of student creativity, capacity, personality, and needs, as well as developing independence in seeking and finding knowledge ". Article 14 (3) affirms the need for innovative learning methods, which states: "Learning methods as referred to in paragraph (2) which can be selected for the

implementation of the learning forms include: group discussions, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, or other learning methods, which can significantly improve the accomplishment of graduate learning outcomes". Likewise, the form of learning is also challenged to be more innovative as outlined in Article 14 (5) that "The form of learning as referred to in paragraph (4) can be in the form of: (a) lectures; (b) responses and tutorials; (c) seminars; (d) practicum, studio practice, workshop practice, field practice, work practice; (e) research, design ordevelopment; (f) military training; (g) student exchange; (g) an internship; (h) entrepreneurship; and/ or, (i) other forms of community service".

Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020, in Article 14 (6) indicates that the Final Project is mandatory for students not only in the form of research but also in the form of designing or development, as follows. "The form of learning is research, design, or development. as referred to in paragraph (5) letter **e** must be addedas a form of learning for diploma four education programmes, undergraduate programmes, professional programmes, master programmes, applied master programmes, specialist programmes, and doctoral programmes and applied doctoral programmes". It is further governedin Article 14(7): "The mode of learning in the form of research, design or development as referredto in paragraph (6) is a student activity under the guidance of lecturers in the sense of the development of attitudes, knowledge, skills, authentic experiences and the improving of the welfare of the

community and national competitiveness.”.

Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020, in Article 14 (8) emphasizes that Community Service is required for students, which states: “The form of Community Service as referred to in paragraph (5) letter **j** must be added as learning forms for diploma four programmes, undergraduate programmes, professional programmes, and specialist programmes”. Implementation of Community Service must be supervised by lecturers asstated in Article 14 (9): “The community service as referred to in paragraph (8) is a student activity under the supervision of lecturers to utilize science and technology to advance community welfareand enrich the life of a nation”.

Decree of the Minister of Education and Culture of the Republic of Indonesia Number 3 of2020, regulates student for ‘Freedom to Learn’ in Article 15, as follows:

1. The form of learning as referred to in Article 14 paragraph (5) can be carried out within the study programme and outside the study programme.
2. The form of learning outside the Study Programme as referred to in paragraph (1) is a learningprocess consisting of:
   a. Learning in other study programmes within the same university;
   b. Learning in the same study programme at different universities;
   c. Learning in other study programmes at different universities; and
   d. Learning in non-tertiary institutions.
3. The learning process outside the Study Programme as

referred to in paragraph (2) letter **b**, letter **c**, and letter d is carried out based on a cooperation agreement between the Tertiary Education Institution and the Tertiary Education Institution or other related institutions and the course results are converted through the transfer mechanism of semester credit units. (Credits).

a. The learning process outside of the Study Programme as referred to in paragraph (2) is an activity within the programme that can be approved by the Ministry and / or Higher Education Leaders.
b. The Learning Process outside of the Study Programme as referred to in paragraph (2) is carried out under the supervision of the lecturer.
c. The learning process outside of the Study Programme as referred to in paragraph (2) letter **c** and letter **d** is implemented only for undergraduate programmes and applied undergraduate programmes outside the health sector "

Article 18:

1. Fulfilment of the period and study load for undergraduate students or applied undergraduate programmes as referred to in Article 17 paragraph (1) letter **d** can be carried out by:
   a. Attend the entire learning process in the Study Programme at Higher Education according to the period and learning load; or
   b. Attend the learning process in the Study Programme to fulfil the required part of the study period and load and the rest attend the learning process outside

the Study Programme as referred to in Article 15 paragraph (1) and paragraph (2).

2. Tertiary Education Institutions are required to facilitate the fulfilment of the period and the load of the Learning process as referred to in paragraph (1).
3. Facilitation by the Tertiary Education Institution to accomplish the learning period and load in the Learning process as referred to in paragraph (1) letter **b** in the following manner:
   a. at least 4 (four) semesters and no longer than 11 (eleven) semesters constitute Learning in the Study Programme;
   b. 1 (one) semester or the equivalent of 20 (twenty) semester credit units is learning outside the Study Programme within the same tertiary institution; and
   c. Maximum of 2 (two) semesters or equivalent to 40 (forty) semester credit units are:
      - Learning in the same study programme at different universities;
      - Learning in different study programmes at different universities; and / or
      - Learning outside of the universities.

5.4.2 Outcome Based Education and 'Freedom to Learn'

Universities tend to have difficulties due to the regulation and rigid administrative procedures which are not flexible in the application of the KKNI (Indonesian National Qualifications Framework) and the National Standard for Higher Education. To achieve perfect Learning Outcomes under the OBE (Outcome Based Education) paradigm, it is essential to have

high flexibility and adaptability that are not constricted by strict regulations that must be enforced and coached during the learning process to achieve the Learning Outcomes throughout the learning process. This is vital because the Learning Outcomes are very much determined by the accomplishments of each individual who builds his or her competence based on the talents that already exist in the learning process.

'Freedom to Learn' that has emerged in *Permendikbud* (Decree of the Ministry of Education and Culture) No. 3 of 2020 is expected to be able to modify regulations to promote the achievement of *KKNI* (Indonesian National Qualifications Framework) and *SN Dikti* (National Higher Education Standard). 'Freedom to Learn' occurs in the standard of the learning process, which includes a minimum of 4 (semester) and a maximum of 11 (eleven) semesters of learning withiin the study programme. One semester or the equivalent of 20 (twenty) credits shall be taken outsidethe Study Program at the same tertiary institution; and a maximum of 2 (two) semesters or the equivalent of 40 (forty) credits is: (1) Studying in the same Study Program at various tertiary institutions; (2) Learning in different programs of study at different universities; and/or (3) Learning outside access to the higher education institution.

Implementation of this would require adjustments based on the current circumstances. UB is attempting to adopt the 'Freedom to Learn' Guide Book-*Kampus Merdeka*, which must be tailored to the actual conditions in UB so that the option of the 'Freedom to Learn' procedure can eventually be established and the *CPL* (learning outcomes) that has been documented so far in the curriculum of each programme of

study can be achieved.

E. The Implementation of 'Freedom to Learn' Programme at Universitas Brawijaya (UB)

The actualization of the implementation of the 'Freedom to Learn' depends on the circumstances of the UB Study Program and all those participating in the learning activities. Planning has to be carried out very carefully so that the *CPL* (learning outcomes) can be measured in the required assessment. Faculties, departments, and study programmes must work together to ensure that the CPL is feasible and that the degree of performance can be measured.

5.5.1 UB Standard for the 'Freedom to Learn' Program

UB standards for Freedom to Learn are as follows:

1. The study load of educational programmes for the undergraduate academic programme is at least 144 credits and a maximum of 160 credits.
2. General Courses of 8 credits:
   a. Religion (2 credits).
   b. Pancasila Education (2 credits).
   c. Civics (2 credits).
   d. Indonesian Language (2 credits).
3. University Content Courses of 14 credits:
   a. Thesis (6 credits).
   b. Community Service (4 credits).
   c. Internship (2 credits).
   d. English (2 credits).
4. The Study Programme Compulsory Courses are maximum of 90 credits if there is an interest/concentration, then (a) the Study Programme

Compulsory Courses of a maximum of 66 credits, (b) the Interest/Concentration Compulsory Courses are required to be of 24credits.

5. The Study Programme Elective Courses of minimum 28 credits + Internship of 4 credits are obligated for those who do not enrol the 'Freedom to Learn' outside University
6. An internship may be made as an elective course instead of a compulsory one at the level of the Study Programme so that 4 credits are allocated to the elective course.
7. 'Freedom to Learn' options for 1 semester, 2 semesters, and 3 semesters
   a. Can take credits in various study programmes within the same university for 1 semester or equal to 20 credits.
   b. Can take credits from outside of University for a maximum of 2 semesters or equal to 40credits.

5.5.2 Distribution of Credits of Curriculum

To enact Article 18 of the *Permendikbud* (Decree of the Ministry of Education and Culture) No. 3 of the 2020 UB encourages the option of 8 pathways for 'Freedom to Learn'. UB provides the opportunity for students to learn via 'Freedom to Learn' Program by choosing 6 options of educational paths, i.e.:

1. Regular programme
2. 'Freedom to Learn' Programme for 1 semester in UB
3. 'Freedom to Learn' Programme for 1 semester outside UB

4. ‘Freedom to Learn’ Programme for 2 semesters inside and outside UB
5. ‘Freedom to Learn’ Programme for 2 semesters outside UB
6. ‘Freedom to Learn’ Programme for 3 semesters

The determination is based on the completion of the study period and the workload in the learning process. The specifics of the credits accompanying the option are as follows:

1. The total credits load (semester credit units) during the study for undergraduate programmes is a minimum of 144 credits and a maximum of 160 credits
2. The total credits load for General Compulsory Courses is 8 credits (Religion 2 credits, Pancasila 2 credits, Citizenship Education 2 credits, and Indonesian Language 2 credits)
3. The total credits load for Compulsory University Courses is 14 credits (2 credits of English, 2 credits of Entrepreneurship, 4 credits of Community Service (PKM), and 6 credits of Final Project or Thesis)
4. The total credits load for Study Programme Compulsory Courses is a maximum of 90 credits. Ifthe Study Program has Specialization/Concentration, the total credits load consists of:
    a. Maximum 66 credits for Study Programme Compulsory Courses.
    b. 24 credits for Compulsory Concentration Major Courses.
5. The total credits load for Study Programme Elective Courses is at least 28 credits + Internship 4 compulsory credits for those who do not enrol ‘Freedom to Learn’

outside of the Study Program, or Elective Courses at least 32 credits for Study Program that do not require Internship.

6. The total credits load of the elective pathways of 'Freedom to Learn' Programme:

a. Regular programme

- Minimum of 32 credits for Study Programme Elective Courses, or
- Minimum of 28 credits for Study Programme Elective Courses + 4 credits for Internshipfor 1 - 1.5 months

b. 1 semester of 'Freedom to Learn' Programme at UB (20 credits)

- 12 credits consisting of 8 credits of General Compulsory Courses, 2 credits ofentrepreneurship, and 2 credits of English
- 8 credits of Elective Courses from other Study Programme
- at least 24 credits outside of 'Freedom to Learn' or a minimum of 20 credits for Study Programme Courses + 4 credits for Internship

c. 1 semester of 'Freedom to Learn' Programme outside of UB (20 credits)

- 14 credits as an option out of the 8 'Freedom to Learn' paths
- 6 credits for Final Project / Thesis
- At least 18 credits outside of 'Freedom to Learn' for Study Programme Elective Courses

d. 2 semesters of 'Freedom to Learn' Programme

inside and outside of UB (40 credits)

- 1 semester of 20 credits for 'Freedom to Learn' outside of the Study Programme within the University, consisting of 8 credits of General Compulsory Courses + 2 credits of entrepreneurship + 2 credits of English + 8 credits of other courses
- 1 semester of 20 credits for 'Freedom to Learn' outside of the University, consisting of 14credits as an option out of the 8 'Freedom to Learn' paths + 6 credits of Final Project/ Thesis
- At least 10 credits for Study Programme Elective Courses outside 'Freedom to Learn'

e. 2 semesters 'Freedom to Learn' Programme outside of UB

- 34 credits of two options out of the 8 'Freedom to Learn' paths
- 6 credits of Final Project / Thesis

f. 3 semesters of 'Freedom to Learn' Programme

- 1 semester of 15-20 credits for 'Freedom to Learn' outside of the Study Programme within the University, consisting of 8 credits of General Compulsory Courses + 2 credits of entrepreneurship + 2 credits of English + at least 3 credits of other courses
- 2 semesters of 40 credits for 'Freedom to Learn' outside of the University, consisting of 34credits as an option out of the 8 'Freedom to Learn' paths+ 6 credits of Final Project/ Thesis

7. Implementation of Community Service (PKM) is carried out in between the fourth and Fifth semesters

8. 1-semester implementation of ‘Freedom to Learn’ outside of the Study Programme within the University can be enacted by distributing and dividing the credits into several semesters
9. 1 semester of ‘Freedom to Learn’ outside of the university can be implemented after the 6th semester
10. 2 semesters of ‘Freedom to Learn’ outside of the university can be implemented after the 5th semester
11. 2 semesters of ‘Freedom to Learn’, consisting of 1 semester outside of the study program within the university (can be enacted by distributing and dividing the credits into several semesters) and 1 semester outside of the university (can be enacted after the 6th semester)
12. 3 semesters of ‘Freedom to Learn’, consisting of 1 semester outside of the Study Programme within the university (can be enacted by distributing and dividing the credits into several semesters and 2 semesters outside the university (can be implemented after the 5th semester)

The distribution of the credit load details for each semester with the 8 ‘Freedom to Learn’
paths choices is shown in Figure 9.

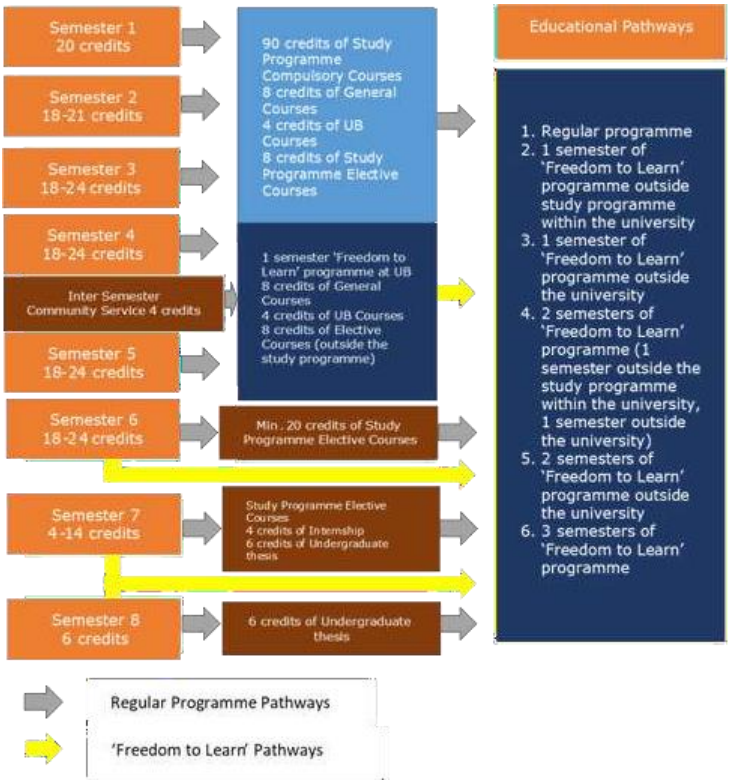


Figure 9. The distribution of credit loads each semester with the 'Freedom to Learn' pathways

F. The Elective Pathways Within The Educational System

5.6.1 Regular Programme

The choice of a regular program path is the educational process that is carried out at the level of the Study Programme, except for the Community Service, the

Internship, and the Final Project that is carried out outside the UB. The scheme and details of the credit load during the study are as follows:

a. The total credits load during the study for the undergraduate programme is a minimum of 144 credits and a maximum of 160 credits;
b. Total credits load for General Compulsory Courses 8 credits (Religion 2 credits, Pancasila 2 credits, Citizenship 2 credits, and Indonesian Language 2 credits) from Semester 1 to 5.
c. The credit load for Compulsory University Courses of English is 2 credits held in semesters 1 to 5.
d. The total credits load for the Study Programme Compulsory Courses is a maximum of 90 credits. If there is a Specialization / Concentration in the Study Program, the total credits load shall consist of: maximum 66 credits for the Compulsory Subjects for the Study Programme and 24 credits for the Compulsory Subjects Concentration Interest from semester 1 to 5
e. The credit load for University Content Courses of Entrepreneurship is 2 credits and is carried out in semester 4 or 5
f. The credit load for University Content Courses of Community Service (*PKM*) 4 credits is carried out in the *Semester Antara* (Intermediate semester)
g. The minimum credit load for the Study Programme Elective Courses is at least 32 credits or the total credits load for the Study Programme Elective Courses is at least 28 credits + Internship 4 credits

held in semester 5 to 7

h. Thesis load for University Content Courses of Final Projects or Thesis 6 credits carriedout in the 7th and or 8th semester

The distribution of credits for the regular programme can be seen in Table 6 and Figure 10. Table 6. The distribution of credits for regular programme

Sem	MKWU	MKWUB	MKWPS	MKPPS	MKPLPS	PKM	PKL	MBLUB	Thesis	Total
1	8	2	10							20
2			21							21
3			21							21
4		2	19							21
Antara						4				4
5			19	2						21
6				21						21
7				5			4		6	15
8										0
Total	8	4	90	28	0	4	4	0	6	144

Notes: 1. MKWU: General Compulsory Courses, 2. MKWUB: UB Compulsory Courses, 3. MKWPS: Study Programme Compulsory Courses, 4. MKPPS: Study Programme PS Elective, 5. PKM: Community Service, 6. PKL: Internship, 7. MBLUB: 'Freedom to Learn' outside UB.

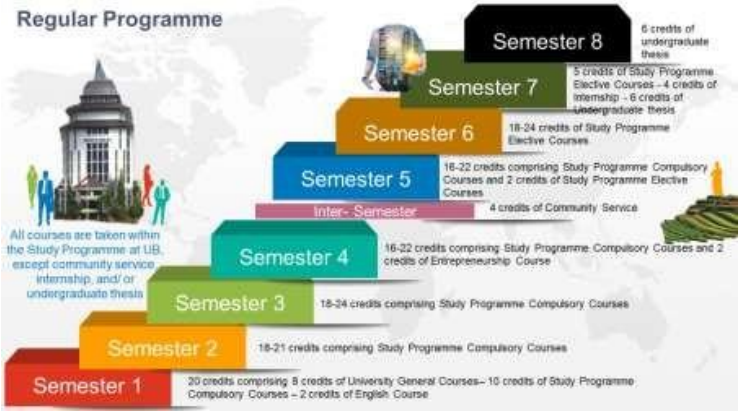


Figure 10. Regular Programme

5.6.2 1 semester of 'Freedom to Learn' Programme at UB

1 Semester of 'Freedom to Learn' Programme at UB is an educational process, besides being incorporated in the Study Programme, and there are also 20 credits taken from different Study Programmes at UB. Community Service, Internship, and Final Project are conducted outside of UB. The scheme and details of the credit load during the study are as follows:

a. The total credits load during the study for undergraduate programs is a minimum of 144 credits and a maximum of 160 credits.
b. Implementation of 1 semester of 'Freedom to Learn' Program outside the Study Programme at UB can be enacted by distributing and dividing the credits into several semesters
c. The total credits load for General Compulsory Courses 8 credits (2 credits of Religion, 2 credits of Pancasila, 2 credits of Citizenship, and 2 credits of

Indonesian Language) implemented/taken outside The Study Programme at UB in semester 1 to 5

d. the credit load for Compulsory University Course of English is 2 credits implemented/taken outside the Study Programme at UB in semester 1 to 5
e. A total load of credits for the Study Programme Compulsory Courses is a maximum of 90 credits. f there is a Specialization / Concentration in the Study Programme, the total credit load shall consist of: maximum 66 credits for the Compulsory Courses for the Study Programme and 24 credits for the Compulsory Courses Interest from semester 1 to 5
f. The credit load for University Compulsory Course of Entrepreneurship is 2 credits and in semester 4 or 5
g. The credit load for University Content Course of Community Service (PKM) is 4 credits on the Semester Antara (intermediate semester)
h. The credit load of taking courses outside the Study Programme within UB is 8 credits held in semester 3 to 6
i. The minimum credit load for the Study Programme Elective Courses is at least 24 credits or the total credits load for the Study Programme Elective Courses at least 20 credits + Internship of 4 credits in semester 5 to 7
j. Credit load for University Content Course of Final Projects or Thesis (6 credits) carried out on 7th and 8th semester

The distribution of credits for 1 semester of 'Freedom to Learn' path outside the Study Programme within UB can be seen in

Table 7 and Figure 11.

Table 7. The distribution of credits for 1 semester of 'Freedom to Learn' path outside the StudyProgramme within UB

Sem	MKWU	MKWUB	MKWPS	MKPPS	MKPLPS	PKM	PKL	MBLUB	Thesis	Total
1	8	2	10							20
2			21							21
3			21							21
4		2	19							21
Antara						4				4
5			19	2						21
6				13	8					21
7				5			4		6	15
8										0
Total	**8**	**4**	**90**	**20**	**8**	**4**	**4**	**0**	**6**	**144**

Notes: 1. MKWU: General Compulsory Courses, 2. MKWUB: UB Compulsory Courses, 3. MKWPS: Study Programme Compulsory Courses, 4. MKPPS: Study Programme Compulsory Courses, 5. MKPLPS: External Elective Courses, 6. PKM: Community Service, 7. PKL: Internship, 8. MBLUB: 'Freedom to Learn' outside UB, Internship can be substituted by Study Programme Elective Courses.

20 credits are taken outside of the Study Programme within University and can be distributed in several semesters.

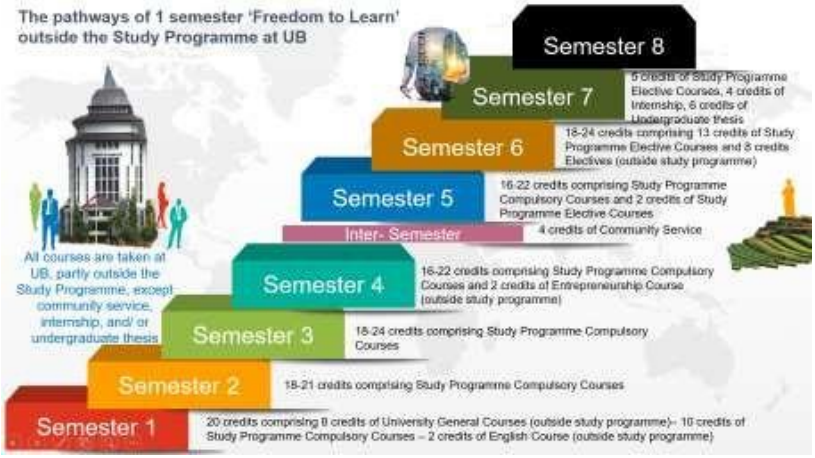


Figure 11. The pathways of 1 semester 'Freedom to Learn' programme at UB

5.6.3 1 semester of 'Freedom to Learn' Programme outside UB

The choice of 1-semester independent study outside UB is an educational process that is carried out within the study program and carried out outside UB (20 credits) coupled with Community Service (PKM) activities. The scheme and details of the credit load during the study are as follows:

a. The total credits load during the study for undergraduate programs is a minimum of 144 credits and a maximum of 160 credits.
b. The total credits load for General Compulsory Courses 8 credits (2 credits of Religion, 2 credits of Pancasila, 2 credits of Citizenship, and 2 credits of Indonesian Language) implemented/taken outside the Study Programme within UB in semesters 1 to 5.

c. The credit load for Compulsory University Courses of English is 2 credits held/taken outside the Study Programme within UB in semesters 1 to 5.
d. A total load of credits for the Study Program Compulsory Courses is a maximum of 90 credits. If there is a specialization/concentration in the Study Programme, the total credit load is of a maximum of 66 credits for the Study Programme Compulsory Courses and 24 credits for the Compulsory Concentration Interest Courses from semester 1 to 5.
e. The credit load for Compulsory University Courses of Entrepreneurship of 2 credits and is carried out in the 4th or 5th semester.
f. The credit load for Compulsory University Courses of Community Service/PKM of 4 credits is carried out in the intermediate semester.
g. The minimum credit load for the Study Programme Elective Courses is 18 credits and is held in semester 5 to 6
h. A load of 20 credits can be taken as one of the options of the 'Freedom to Learn' with the Final Project carried out in the 7th or 8th semester outside UB (If the 'Freedom to Learn' approved is less than 20 credits, then the remaining credits are substituted by taking the Study Program Elective Courses)

The distribution of credits for the 'Freedom to Learn' outside UB can be seen in Table 8 and Figure 12.

Table 8. Distribution of credits for 1 semester 'Freedom to Learn' Programme outside UB

Sem	MKWU	MKWUB	MKWPS	MKPPS	MKPLPS	PKM	PKL	MBLUB	Thesis	Total
1	8	2	10							20
2			21							21
3			21							21
4		2	19							21
Inter-sem						4				4
5			19	2						21
6				16						16
7							4	10		20
8									6	0
Total	**8**	**4**	**90**	**18**	**0**	**4**	**4**	**10**	**6**	**144**

Notes: 1. MKWU: General Compulsory Courses, 2. MKWUB: UB Compulsory Courses, 3. MKWPS: Study Programme Compulsory Courses, 4. MKPPS: Study Programme Elective Courses, 5. MKPLPS: Elective Courses Outside Study Programme, 6. PKM: Community Service, 7. PKL: Internship 8. MBLUB: 'Freedom to Learn' outside UB.
20 credits taken outside UB

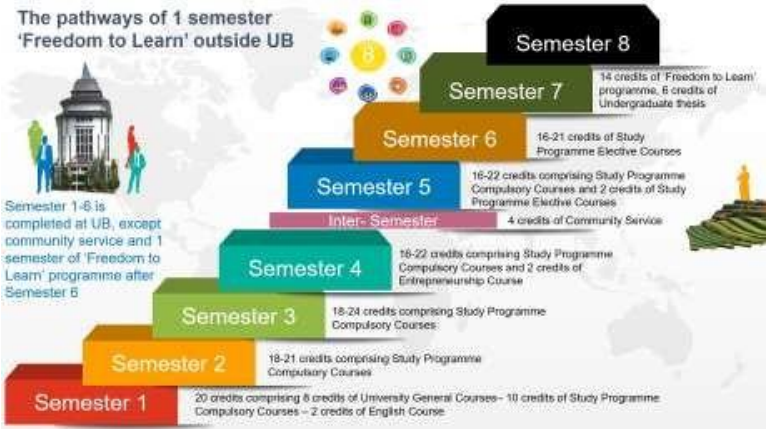


Figure 12. The pathways of 1 semester 'Freedom to Learn' programme outside UB

5.6.4 2 Semesters of 'Freedom to Learn' Programme (1 semester in UB and 1 semester outside UB)

The choice of 2 semesters of 'Freedom to Learn' (1 semester in UB and 1 semester outside UB) is a learning process of 20 credits implemented/taken from different StudyProgrammes withinUB and 20 credits held outside UB and complemented by Community Service (*PKM*)). The scheme and details of the credit load during the study are as follows:

a. The total credits load during the study for undergraduate programs is a minimum of 144 credits and a maximum of 160 credits
b. The implementation of 1 semester of 'Freedom to Learn' outside the Study Programme within the

University can be enacted by distributing and dividing the credits into several semesters

c. The total credit load for General Compulsory Courses 8 credits (2 credits of Religion, 2 credits of Pancasila, 2 credits of Citizenship, and 2 credits of Indonesian Language) implemented/taken outside of the Study Program within UB in semesters 1 to 5
d. Credit load for Compulsory University Course of English 2 credits implemented/taken outside the Study Programme within UB in semesters 1 to 5
e. The total credit load for the Study Programme Compulsory Courses is a maximum of 90 credits. If in the Study Program there is a Specialization / Concentration, the total credit load consists of: Maximum 66 credits for the Study Programme Compulsory Courses and 24 credits for Compulsory Courses Concentration Interest is carried out from semester 1 to 5
f. The credit load for Compulsory University Courses of Entrepreneurship 2 credits is carried out in semester 4 or 5
g. The credit load for Compulsory University Courses of Community Service (4 credits) is carried out in the intermediate semester.
h. The minimum credit load for the Study Programme Elective Courses is 10 credits in semester 5 and / or semester 6
i. The credit load of taking courses outside the Study Programme within UB is 8 credits held in semester 3 to 6

j. A load of 20 credits can be taken as one of the options of the 'Freedom to Learn' with the Final Project carried out in the 7th or 8th semester outside UB (If the 'Freedom to Learn' approved is less than 20 credits, then the remaining credits are substituted by taking the Study Program Elective Courses)

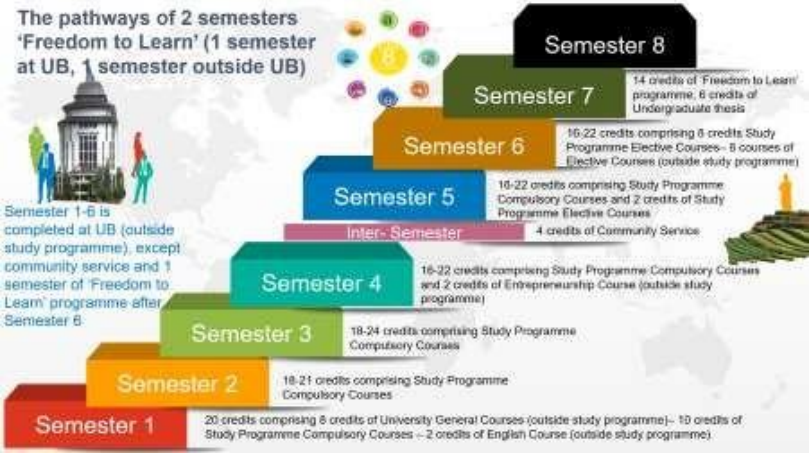
The distribution of credits of the 'Freedom to Learn' for 2 semesters (1 semester outside the Study Programme within UB and 1 semester outside UB) can be seen in Table 9 and Figure 13.

Table 9. Distribution of credits for 2 semesters 'Freedom to Learn' Programme (1 semester outside the study programme within UB and 1 semester outside UB)

Sem	MKWU	MKWUB	MKWPS	MKPPS	MKPLPS	PKM	PKL	MBLUB	Thesis	Total
1	8	2	10							20
2			21							21
3			21							21
4		2	19							21
Antara						4				4
5			19	2						21
6				8	8					16
7							4	10		20
8									6	0
Total	**8**	**4**	**90**	**10**	**8**	**4**	**4**	**10**	**6**	**144**

Note: 1. MKU: General Courses, 2. MKUB: UB Courses, 3. MKWPS: Study Programme Compulsory Courses, 4. MKPPS: Study Programme Elective Courses, 5. MKPLPS: Elective Courses Outside Study Programme, 6. PKM: Community Service, 7. PKL: Internship, 8. MBLUB: 'Freedom to Learn' outside UB.

20 credits taken outside of the study programme within the



University can be enacted in several semesters 20 thesis taken outside UB are integrated.

Figure 13. The pathways of 2 semesters 'Freedom to Learn' programme (1 semester in UB and 1semester outside UB)

5.6.5 2 Semesters of 'Freedom to Learn' Programme outside UB

'Freedom to Learn' Program that allows students to study for 2 semesters outside UB refersto an educational process in which 40 credits as well as Community Service (PKM) are carried out outside UB and the rest credits are taken in the study Programme. The scheme and details of the credits that need to be taken during the study are as follow:

a. The total credits for undergraduate Programme are a minimum of 144 and a maximum of 160 credits.

b. The total credits for the University General Courses are 8 credits (Religion 2 credits, Pancasila Education 2 credits, Civics 2 credits, and Indonesian Language 2 credits) which are taken in the 1st semester to the 5th semester outside the students' study programme but still within UB.
c. The credits for English as a University Content Course are 2 credits that are taken in the 1st semester to the 5th semester outside the students' study programme but still within UB.
d. The total credits for Study Programme Contents Courses are a maximum of 90 credits. When the Study Programme applies a Specialization/ Concentration system, the total credits consist of a maximum of 66 credits for Study Programme Contents Courses and 24 credits for Specialization/ Concentration Courses, which are carried out from the 1st semester to the 5th semester.
e. The credits for Entrepreneurship as a University Content Course are 2 credits that are carried out in the 4th or 5th semester.
f. The credits for Community Service as a University Content Course are 4 credits that are carried out in semesters break / short semester
g. The credits for Study Programme Elective Courses are not mandatory
h. A total of 40 credits for 2 semesters outside UB is integrated with students' final project/assignment as a manifestation of 'Freedom to Learn'. It is offered in two options; whether it is taken in the 6th and 7th

semesters or in the 7th and 8th semesters (in a case that the total credits of 'Freedom to Learn' is only acknowledged to be less than 40 credits, the rest credits should be replaced by Study Programme Elective Courses)

The credit distribution of the 'Freedom to Learn' Program for 2 semesters outside UB is
presented in Table 10 and Figure 14.

Table 3. Distribution of credits for 2 semesters 'Freedom to Learn' Programme outside UB

Sem	MKWU	MKWUB	MKWPS	MKPPS	MKPLPS	PKM	PKL	MBLUB	Thesis	Total
1	8	2	10							20
2			21							21
3			21							21
4		2	19							21
Semester Break/ Short semester						4				4
5			19							19
6							4	16		20
7								14	6	20
8										0
Total	**8**	**4**	**90**	**0**	**0**	**4**	**4**	**30**	**6**	**146**

Note: 1. MKWU: University General Courses, 2. MKWUB: University Content Courses, 3. MKWPS: Study Programme Contents Courses, 4. MKPPS: Study Programme Elective Courses, 5. MKPLPS: Non-Study Programme Elective Courses, 6. PKM: Community Service, 7. PKL: Internship Programme, 8. MBLUB: 'Freedom to Learn' outside UB.
40 credits taken outside UB.

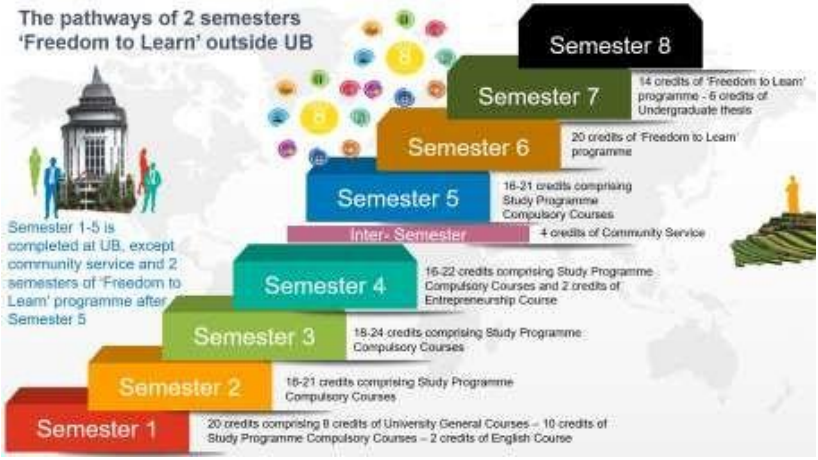


Figure 14. The pathways of 2 semesters 'Freedom to Learn' programme outside UB

5.6.6 3 Semesters of 'Freedom to Learn' Programme (1 semester in UB and 2 semesters outside UB)

The choice of 3 semesters 'Freedom to Learn' Educational Pathway refers to an educational process in which 20 credits are taken from other study programmes in UB, 40 credits are carried out outside UB, topped up by Community Service (PKM), and the rest credits are carried out in the study programme. The scheme and details of the credits that need to be taken during the studyare as follow:

a. The total credits for undergraduate programme are a minimum of 144 and a maximum of 160 credits.

b. Implementation of 1 semester of 'Freedom to Learn' outside the students' study programme within a university can be done throughout several semesters.
c. The total credits for the University General Courses are 8 credits (Religion 2 credits, Pancasila Education 2 credits, Civics 2 credits, and Indonesian Language 2 credits) which are taken in the 1st semester to the 5th semester outside the students' study Programme but still within UB.
d. The credits for English as a University Content Course are 2 credits that are taken in the 1st semester to the 5th semester outside the students' study programme but still within UB.
e. The total credits for Study Programme Contents Courses are a maximum of 90 credits. When a Study Programme applies a Specialization / Concentration system, the total credits consist of a maximum of 66 credits for Study Programme Contents Courses and 24 credits for Specialization / Concentration Courses, which are carried out from the 1st semester to the 5th semester.
f. The credits for Entrepreneurship as a University Content Courses are 2 credits that are carried out in the 4th semester or the 5th semester.
g. The credits for Community Service as a University Content Courses are 4 credits that are carried out in semesters break / short semester.
h. The credits taken outside the students' study programme within UB are of a minimum 3 credits

and maximum 8 credits, which are carried out from the 3rd to the 5th semester.

i. The credits for Study Programme Elective Coursess are not mandatory.

j. A total of 40 credits for 2 semesters outside UB is integrated with students' final project/assignment as a manifestation of 'Freedom to Learn'. It is offered in two options; whether it is taken in the 6th and 7th semester or in the 7th and 8th semester (in a case that the total credits of 'Freedom to Learn' is only acknowledged to be less than 40 credits, the rest credits should be replaced by Study Programme Elective Courses)

The credits' distribution of 'Freedom to Learn' Educational Pathway for 3 Semesters (1 semester within UB and 2 semesters outside UB) can be seen in Table 11 and Figure 15.

Table 4. Distribution of credits for 3 semesters 'Freedom to Learn' Programme

Sem	MKWU	MKWUB	MKWPS	MKPPS	MKPLPS	PKM	PKL	MBLUB	Thesis	Total
1	8	2	10							20
2			21							21
3			21							21
4		2	19		3					24
Inter-Sem						4				4
5			19		5					24
6							4	16		20
7								10		20
8									6	0
Total	**8**	**4**	**90**	**0**	**8**	**4**	**4**	**10**	**6**	**154**

Note: 1. MKWU: University General Courses, 2. MKWUB: University Content Courses, 3. MKWPS: Study Programme

Contents Courses, 4. MKPPS: Study Programme Elective Courses, 5. MKPLPS: Non-Study Programme Elective Courses, 6. PKM: Community Service, 7. PKL: Internship Programme, 8. MBLUB: 'Freedom to Learn' outside UB.

20 credits taken outside the student's study programme but still within UB throughout several semester

40 credits integrated to Skripsi (undergraduate thesis) taken outside UB

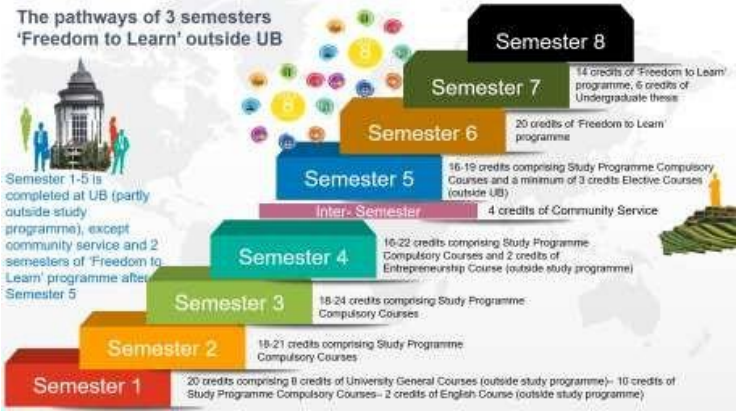


Figure 15. The pathways of 3 semesters 'Freedom to Learn' programme

G. Implementation of 'Freedom To Learn' Programme

5.7.1 Forms of Activities

There are eight (8) choices of forms of 'Freedom to Learn' activities outside the university in regard with Permendikbud No.3 of 2020 Article 15 paragraph 1 (Figure 16). UB prepares the eight forms of the learning activities outside the university with the explanation and conditions asshown in Table 12.

Figure 16. Forms of 'Freedom to Learn' Activities in UB

Table 12. Explanation and conditions applied for the forms of 'Freedom to Learn' activitiesoutside UB

No.	Activities	Elaboration	Terms
1	Internship Programme /JobTraining	Internships at companies, non-profit foundations, multilateral	Supervised by a lecturer orteacher

		organizations, government institutions, and startups.	
2	Teaching assistance at schools	Teaching activities in elementary, middle, and high schools for several months. The schools can be in urban or remote locations.	This programme will be facilitated by the Ministry of Education and Culture
3	Research	Academic research activities, either in science or social and humanities that can be done for a research institution such as LIPI / BRIN, LAPAN, NASA, or universities outside UB	Supervised by a lecturer orteacher
4	Humanity/ Voluntary Project	Social activities for a foundation or humanitarian organization approved by Higher Education, either in Indonesia or abroad	- Examples of formal organizations that can be approved by the Chancellor: Indonesian Red Cross, Mercy Corps, and others

			- Supervised by a lecturer or teacher
5	Entrepreneurial Activities	Students establish entrepreneurial activities independently proven by explanations or proposals of the entrepreneurial activities and supported by proof of consumer transactions or employee salary records.	Supervised by a lecturer orteacher
6	Independent Project/ Study	Students can create a project basedon a certain social topic that is feasible to be executed in collaboration with other students.	Supervised by a lecturer orteacher

7	Rural Area Development	Social projects to help people in rural or remote areas to work out on their economy, infrastructure, and others.	- Can be done in collaboration with village officials (village heads), BUMDes, Koperasi, or other village organizations. - Supervised by a lecturer or teacher
8	Student Exchange	Take classes or semesters at foreign and domestic universities, based on a cooperation agreement that has been made by the Government.	The grades and credits taken at non-UB universities will be acknowledged by each university.

H. Internship Programme /Job Training

Internship Programme/ Job Training refers to 1-2 semesters of internship activities that provides sufficient experience for

students, and that enable the students to have direct learning in the workplace (experiential learning). During the internship, students will get hard skills (technicalskills, complex problem solving, analytical skills, etc.), as well as soft skills (professional / work ethics, communication, cooperation, etc.). Meanwhile, the industry gets talents that, whenever appropriate, can be recruited immediately, thereby reducing costs of recruitment and initial training/ induction. Students who are familiar with the workplace will be more resilient in entering the work life and careers. Through this activity, industrial problems will connect to universities sothat lecturers can update their teaching and learning materials and conduct research with more relevant topics. UB implements an integrated industrial apprenticeship with the final project. Thus, UB is responsible for:

a. preparing students' departure.
b. assigning lecturers as supervisors who will guide the students from campus during the internships.
c. arranging lecturers as supervisors' visit to the apprenticeship, whenever possible, for
d. monitoring and evaluation.
e. enabling lecturers as supervisors and internship supervisors to assess students' performance

during the internship including their final assignments.

I. Teaching assistance at schools

This activity provides opportunities for students who have an interest in education to participate in teaching and broaden their knowledge by becoming teachers in educational units. This form also helps increasing equity in the quality of

education as well as relevance of primary, secondary, and higher education to keep up with the world. Therefore, UB will be responsible for:

a. providing opportunities for students to take part in school teaching programmes organized by the Ministry of Education and Culture (Kemendikbud).
b. providing information about school data as determined by the Ministry of Education and Culture
c. providing lecturers as advisors to provide assistance, training, monitoring, and evaluation of the teaching activities conducted by students in the schools.
d. transferring the hours of the voluntary teaching activities into credits.

J. Research

This activity aims at improving students' quality research. Further, the student experience in a large research project is expected to topically strengthen the research talent pool. Students can get competence in research through direct mentoring by researchers at research institutes/ study centers. This form will improve the ecosystem and quality of research in laboratories and research institutions in Indonesia by providing research resources and regenerating researchers from an earlyage. In this case, UB is responsible for:

a. collaborating with research institutes / laboratories.
b. giving students the right to participate in the selection and evaluation of research programmes in research institutes / laboratories outside the campus.
c. providing lecturers as advisors to provide assistance, supervision, and assessment in collaboration with supervisors in research institutions / laboratories.

d. conducting a final evaluation and equalizing research activities in institutions / laboratories to

be transferred as students' credits.

K. Humanity/ Voluntary Project

The goal of humanity/voluntary project activities is to prepare excellent students who uphold humanity values in carrying out their duties based on religion, morals, and ethics. In addition, it is also to train students to have social sensitivity to explore and carefully observe existing problems to provide solutions according to their respective interests and expertise. In this activity, UB is responsible for:

a. cooperating with the Ministry of Education and Culture as well as humanitarian organizations both at the national and international levels to organize programmes based on national and international agendas (such as MDGs, health, population, and so on),
b. directly assigning students to work on humanitarian projects in the event of an emergency humanitarian disaster,
c. organizing volunteer selection/recruitment for humanitarian projects,
d. ensuring that the humanity / volunteer projects performed by students run according to their main objectives,
e. providing lecturers as advisors to monitor and evaluate humanity / volunteer projects carried out by students,
f. transferring the hours of humanity / volunteer project into credits.

L. Entrepreneurial Activities

This activity aims at providing students with entrepreneurial interests to initiate business with some supervision. Moreover, this activity will reduce problems related to the increasing intellectual unemployment among scholars. Therefore, UB is responsible for:

a. providing a startup business incubation center for students,
b. providing an integrated entrepreneurial learning system with direct practice,
c. provide training, mentoring, and guidance, from lecturers and entrepreneurship experts,
d. linking student businesses to the market,
e. providing lecturers as advisors to students,
f. transferring the entrepreneurial activities into credits earned by students.

M. Independent Project/ Study

The objectives of this activity are (1) realizing students' ideas in developing innovative products, (2) organizing research and development-based education (R&D), and (3) increasing student achievement in national and international events. In this case, UB is responsible for: providing lecturers as advisors for independent projects proposed by students

a. facilitating the formation of an independent project team consisting of students across study programmes and across faculties
b. organizing academic considerations on the feasibility of the proposed independent project

c. providing lecturers as advisors whose expertise is in line with the proposed independent project topic
d. organizing guidance, mentoring, and training during the process of realization of an independent project run by students
e. conducting evaluations and assessments for students' independent projects to be transferred into credits.

N. Rural Area Development

The purpose of this activity is to provide professional experience in the field of community development and empowerment so that students can be optimal generation. In addition, students can develop their fields of knowledge and interests with the final output in the form of written, audio-visual, and other student final reports. The presence of students in the village / rural area for6-12 months is expected to be able to assist programme planning activities, ranging from assessing village potential, problems and challenges in the development of the village, setting development priorities, designing programmes, designing infrastructure, empowering communities, managing BUMDes, supervising development, to monitoring and evaluation. In this case, UB is responsible for:

a. conducting cooperation with the Ministry of Rural Affairs and PDTT, as well as the Ministry of Education and Culture in implementing project programmes in villages or cooperating directly with local governments for the implementation of project programmes in villages.
b. managing student registration and placement to destination villages.

c. assigning lecturers as supervisors who will guide students from campus during their activities.
d. monitoring and evaluating by sending supervisors to make visits in the village.
e. dispatching students.
f. conducting assessments (done by lecturers as supervisors in collaboration with supervisors from the village) on projects carried out by students.

O. Student Exchange

This activity means studying across campuses (domestic and overseas), living together with host family or in dormitories in the host campus to broaden students' knowledge about Unity in Diversity so that inter-cultural and inter-ethnic solidarity will be stronger. Further, this activity is expected to promote friendships between regions, ethnicities, cultures, and religions, to increasingthe spirit of national unity and integrity. This activity is also aimed at organizing transfer of knowledge to cover the disparities in education either among domestic universities or between domestic and foreign universities. Therefore, UB is responsible for:

a. establishing cooperation with domestic and foreign universities or with scientific consortiums to organize credit transfers that students can participate in.
b. providing certain allocation for inbound and outbound students (reciprocal).
c. organizing a student exchange selection system that fulfills the principles of justice for students.
d. controlling the implementation of student exchanges.

e. assessing and evaluating the results of student exchange activity to be recognized as student credits.

Faculty is responsible for:

1. providing a list of faculty level courses that can be taken by students across study programmes.
2. providing cooperation documents (MoU / SPK) with relevant partners. The study programme is responsible for:
3. arranging or adjusting the curriculum to fit with the implementation of 'Freedom to Learn'

model.

1. facilitating students who will take courses across-study programme within the university.
2. offering courses and requirements needed by students from other study programme and from other universities who want to study in the study programme.
3. conducting courses matching between courses offered at the study program and courses / activities carried out in other the study program and other universities.
4. providing online courses as an alternative for students whose credits earned from other study programmes and other university have not reached the required numbers.

Students are obliged to:

1. plan together with the Academic Supervisor about courses / programmes to be taken outside the study programme.
2. register to a programme of activities that is conducted outside the study programme.
3. fulfill all requirements to join the programme of activities conducted outside the study programme, including selection process if any.

4. joining the programme of activities conducted outside the study programme by obeying all terms in the academic handbook.

The aforementioned purposes of each form of the 'Freedom to Learn' activities can be adopted into Activity Learning Outcomes and will be matched with Course Learning Outcomes (CPMK). Due to diverse academic fields from various study programmes, a careful review of the 2020 National Higher Education Standard Learning Outcomes is needed.

5.7.2 Credit Arrangement

Each credit is defined as "hours of activity", not "hours of study". The definition of "activities" is learning in the classroom, job training (internships), student exchanges, rural area development projects, entrepreneurial activities, research, independent projects/ studies, voluntary project and teaching assistance. All types of selected activities must be guided by lecturers (the lecturer is determined by UB).

The list of the aforementioned "activities" that can be taken by students in a maximum of 3 semesters can be selected from: (a) programmes determined by government, (b) programmes approved by the university counselor. Students can earn credits from university other than UB for a maximum of 2 semesters (equivalent to 40 credits) and to add up, they can earn credits from different study programmes in UB for a maximum of 1 semester (equivalent to 20 credits). The calculation of the credits for off-campus learning is equivalent to 170 (one hundred and seventy) minutes per week per semester. In general, the equivalent weight of the 'Freedom to

Learn' - Free Campus activities can be grouped into 3 forms, namely:

1. free form based on the distribution of Learning Outcomes
2. structured form based on equivalent courses
3. mixed form 1 and 2

5.7.3 Courses offered for other study programmes

One of the main programmes in *Kampus Merdeka* is the right to study up to 3 semesters outside the study programme comprising 1 semester study by taking courses from other study programme within a university and 2 semesters study to earn credits from activities carried out outside the university. To follow up, UB provides an opportunity for students to take courses from other study programme in UB by providing several elective courses across study programmes.

Learning activities across study programmes in UB are expected to support the achievement of student learning outcomes as stated in curriculum structure of the study programme. The number of credits earned from other study programme is 20 credits. Here is the mechanism of the implementation of across study programmes:

1. study programme designs a curriculum that can facilitate students to take courses in other study programmes
2. study programme determines and offers courses that can be taken by students from other study programmes
3. study programme regulates the quota of participants who take the across study programmescourses offered

4. students submit and get approval from the Academic Supervisor to take courses from other study programmes
5. students participate in learning activities in other study programmes in accordance with therules applied by the study programmes providing the course
6. List of across study programmes courses can be accessed in https://drive.google.com/file/d/1rXTWXvvZaIiBix-JzzN6PtUhjitNpwCu/view?usp=sharing

P. Quality Assurance of 'Freedom To Learn' Programme

5.8.1 Policy and Manual of Internal Quality Assurance System

a. UB provides documents of Internal Quality Assurance System (SPMI) policy and manuals for Kampus Merdeka Programme, which is integrated with the existing quality assurance system;
b. The SPMI policy and the manual for the SPMI for Kampus Merdeka Programme that have been determined must be disseminated and made public.

5.8.2 Quality Compliance

To ensure quality compliance of the implementation of the 'Freedom to Learn' – Kampus Merdeka policy for the programme of "the right to study for three semesters outside the study programme", it is necessary to determine several types of qualities that need to be taken into account, including:

a. Learning quality standards consisting of competence, learning content, process, assessment, lecturers and supervisors, facilities and infrastructure, management,

financing;

b. The quality of student competencies;
c. Implementation quality;
d. Quality of internal and external guidance processes;
e. Quality of facilities and infrastructure for implementation;
f. Quality of reporting and presentation of results.
g. Quality of assessment.

Some of the recommended criteria for activities outside of campus to maintain quality and at the same time fulfill credit are shown in Table 13.

Table 13. Criteria for Off-Campus Activities

No.	Activities	Criteria for 20 credits compliance (20 credits)
1.	Internship Programme /Job Training	1. The level of proficiency required for the internship must be equivalent to that of a bachelor's level; 2. Students become part of a team and are actively involved in team activities; 3. Students get input related to performance achievement every 2 months; 4. Students must deliver a presentation at the end of the internship to one of the company leaders.

2.	Teaching assistance atschools	1. Determining targets to be achieved during the activity (e.g., improving students' numerical abilities, etc.) and evaluating their achievement at the end of the activity.
3.	Research	1. The type / topic of research (level of difficulty) must be in accordance with the undergraduate level; 2. Students must be actively involved in formulating research proposals and the final report / presentation of research results.
4.	Humanity / Voluntary Project	1. Dedicated to 1 or 2 main projects, with a focus on solving social problems (eg lack of health personnel in the area, inadequate sanitation, lack of energy in the area); 2. Providing manpower assistance to ease the burden ofdisaster victims; 3. Result in a real impact at the end of the activity (for example being a medical worker in the middle of an epidemic)

5.	Entrepreneurial Activities	1. Have a business plan and targets (short and long term). 2. Successfully achieved sales targets in accordance with the business plan targets set at the beginning; 3. The growth of human resources in the company is in accordance with the business plans.
6.	Independent Project/ Study	1. The type (level of difficulty) of independent study must match the undergraduate level; 2. The topic of independent study is not currently offered in the college curriculum / study programme; 3. Students develop independent objectives along with curriculum design, lesson plans, types of final projects, etc. that must be achieved at the end of the study;

7.	Rural Area Development	1. Dedicated to 1 or 2 main projects, with a focus on increasing the entrepreneurial capacity of the community, UMKM, or BUM Desa 2. Solving social problems (e.g., lack of health workers in the village, inadequate sanitation development) 3. Result in a real impact at the end of the activity (e.g., more adequate village irrigation, village cooperatives generate more profit, sufficient energy)

5.8.3 Characteristics of the Learning Process

All of the aforementioned activities must be accompanied by a supervisor whose responsibility is to facilitate students in carrying out the chosen activities. Further, the supervisor must ensure that the learning process is expected to fulfill the characteristics of the learning processin UB Quality Standards, which consist of: 1) interactive, 2) holistic, 3) integrative, 4) scientific, 5)
contextual, 6) thematic, 7) effective, 8) collaborative, and 9) student-centered.

5.8.4 Implementation of the Assessment and Evaluation

Each faculty has a formal mechanism to evaluate and monitor students periodically. To ensure the quality of the programme, monitoring and evaluation are carried out starting from the

preparation, implementation, and assessment stages. In addition, monitoring and evaluation of the implementation of the learning process includes characteristics, planning, implementation, learning process, and student learning load to obtain graduate learning outcomes. Assessment / evaluation is one of a series of activities to improve quality, performance and productivity in implementing industrial apprenticeship programmes. The focus of evaluation is on individual students, namely the achievements achieved in the implementation of internships by students. From the evaluation,information about what has been achieved and what has not been achieved by students during the activity will be obtained. The evaluation can provide information related to what abilities studentshave achieved during the programme. In addition, a review of the value or implications of the programme results can be carried out. Through evaluation, assessment whether the programme is suitable to be implemented to improve student competence can be performed.

5. Assessment Principles

Assessment in the implementation of the 'Freedom to Learn' – Kampus Merdeka policy for the programme of "the right to study for three semesters outside the study programme" refers to the 5 (five) principles according to SNPT, namely educational, authentic, objective, accountable, and transparent which is carried out in an integrated manner.

6. Assessment Aspects and Techniques

In line with the assessment principles, the aspects assessed in implementing 'Freedom to Learn' – Kampus Merdeka policy

for the programme of “the right to study for three semesters outside the study programme” are at least as follows:

1. attendance at preparation events and implementation;
2. discipline and responsibility in carrying out tasks;
3. attitude;
4. ability to carry out tasks;
5. ability to write reports.

Meanwhile, the assessment techniques consist of: 1) observation, 2) participation, 3) performance, 4) written test, 5) oral test, and 6) questionnaire. The assessment instrument consists of: 1) assessment of the process in the form of a rubric, and / or; 2) assessment of results in the form of a portfolio, or 3) design work.

1. Assessment Procedure and Implementation

In accordance with the sustainability principle, the assessment in the implementation of the ‘Freedom to Learn’ – Kampus Merdeka policy for the programme of "the right to study for three semesters outside the study programme” is carried out during the activity (process assessment) and at the end of the activity (product assessment) in form of activity report. The process assessment is carried out by means of observation (personality and social) as the main technique. Meanwhile, the product assessment is carried out using reports made by students at the end of the implementation of the programme. The assessment is conducted by assistants from third parties related to activities taken by students and lecturers as supervisors from UB. The implementation of the assessment covers the following elements:

a. having an appraisal plan contract,

b. carrying out an assessment according to the contract or agreement,
c. providing students with feedback and opportunities to question the results,
d. having documentation of process assessment and student learning outcomes,
e. having a procedure that includes the planning stage, assignment or question assignment activities, performance observation, returning observation results, and giving final grades,
f. reporting the assessment in form of student success qualifications in taking a course in the form of letters and numbers,
g. having evidences of plans and having carried out a process of improvement based on the results of the assessment monitoring and evaluation.

In addition to the above components, UB requires the faculty to create a system in form of online survey to know 1) students satisfaction index towards the education process and 2) partner/ user satisfaction index regarding the quality of freedom in learning activities taken for 1 semester outside the university, which is measured from their experience and assessment of having the students in their institution. This can be used to get feedback from students as a means of evaluation for UB in developing the next programme.

CHAPTER VI
CURRICULUM

A. Legal Foundation

Higher Education within the Ministry of Research and Technology refers to PMRD No. 44/2015 regarding national higher education standards and Presidential Regulation No. 8/2012 concerning the Indonesian National Qualifications Framework (KKNI). Following this decision, the levels of academic education qualification consist of undergraduate programs, master programs, and doctoral programs.

The learning process results always refer to the learning outcomes standard set by the Indonesian Animal Science Higher Education Leadership Forum (FPPTPI) in 2015 and contained in the FPPTPI academic text agreed in Padang, 2016. In principle, students require to achieve 4 main components, namely attitudes, knowledge, general competence, and information specified in the sector of animal science.

B. Curriculum Implementation

Animal Science Study Program, Faculty of Animal Science, Universitas Brawijaya, formulates learning outcomes based on the Indonesian National Qualifications Framework (KKNI). Graduates of Animal Science expect to apply the knowledge and technical skills that support the profile of the Bachelor of Animal Science as knowledge applicants, managers, entrepreneurs and community leaders who have good communication skills and lifelong learning. Competencies of Bachelor of Animal Science which is formulating in the table of learning outcomes are emphasizing on:

1. Main competencies (basic and technical skills).

2. Supporting competencies (mastering informatics technology and having good behavior).

The main competencies include basic science (natural and social knowledge) and technical expertise (livestock science, breeding, feeding, management, handling of livestock products, socio-economics). Supporting competencies include proficiency in informatics engineering, writing reports and presentations, further including communication and entrepreneurial skills and problem-solving in the sector of animal science. Graduates also can achieve master's and doctoral levels or work in research institutions.

Learning gains formulated as follows:

STUDY PROGRAM'S LEARNING OUTCOMES

No	Learning Outcomes	
1	Attitude	Believe in one God based on Pancasila, social justice, andintegrity.
2	Attitude	Contribute to the improvement and development of quality of lifelocally and globally.
3	Attitude	Aware on animal welfare and halal issue.
4	Knowledge	Capable to develop knowledge and comprehensive mindsetbased on animal science and industry.
5	Knowledge	Capable to analyses the development and implementation of technology through humanities, ethical, and scientific value to provide appropriate solutions and ideas.

6	Knowledge	Proficient in biology, physiology, nutrition, breeding, and farmmanagement, as well as its implementation in animal science.
7	Skill (General)	Capable to perform independent, standard, measurable, effective,efficient, and sustainable work.
8	Skill (General)	Capable to perform effective teamwork and a self-evaluation.
9	Skill (General)	Capable to effectively communicate the thought, concept, implementation, and analysis in oral and written form, nationally and internationally.
10	Skill (General)	Actively contribute to the learning process and discussion.
11	Skill (General)	Demonstrate good capability to be independent as well asteamwork to identify and analyses problems.
12	Skill (Special)	Capable to ethically design and perform experiments, analyzing, and interpreting data to provide sustainable problem-solving in animal science.
13	Skill (Special)	Capable to implement technology in animal science to increase productivity, efficiency, quality, and sustainability based on breeding, nutrition, processing, management, as well as organizing an entrepreneurship concept and a sustainable production system.

COURSES RECONSTRUCTION

Summary of Credit Points Distribution According to the

Regulation of Minister of Education and Culture of the Republic of Indonesia No. 3 of 2020.

No.	Criteria	Adjustment of Credit Points
1	General Courses (Religion, Civic, Pancasila, andIndonesian, with 2 credit points of each)	8
2	University's Compulsory Courses (English, Entrepreneurship, Community Service, and Thesis)	14
3	Study Program's Compulsory Courses	90
4	Fieldwork Practice	4
5	Elective Courses	28
	Total Credit Points	144

General Courses

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Religion	2	0
2	Civic	2	0
3	Pancasila	2	0
4	Indonesian	2	0
	Total Credit Points = 8	8	0

University's Compulsory Courses

No.	Course Title	Credit Points	
		Lecture	*Practical Work*
1	English	2	0
2	Entrepreneurship	2	0
3	Community Service	0	4
4	Thesis	0	6
	Total Credit Points = 14	4	10

Study Program's Compulsory Courses

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Biology in Animal Science	2	0
2	Biochemistry in Animal Science	2	0
3	Microbiology in Animal Science	2	0
4	Practical Work of Basic Animal Science (Biology, Biochemistry, and Microbiology)	0	3
5	Animal Anatomy and Physiology	2	0
6	Animal Welfare	2	0
7	Animal Science Engineering	2	0
8	Practical Work of Animal Anatomy and Physiology, Animal Welfare, and Animal Science Engineering	0	3
9	Basic Animal Products Technology	2	1

10	Basic Animal Nutrition and Feed Science	2	0
11	Forage Science and Management	2	0
12	Practical Work of Basic Animal Nutritionand Feed Science and Forage Science and Management	0	2
13	Genetics	2	0
14	Institutional and Marketing of Raw andProcessed Animal Products	2	0
15	Statistics	2	0
16	Animal Reproduction Science	2	1
17	Animal Products Handling	2	0
18	Quality Control	2	0
19	Practical Work of Animal Products Handling and Quality Control	0	2
20	Ruminant Nutrition and Feed	2	0
21	Meat Animal Science and Management	2	0
22	Practical Work of Meat Animal Industry (Meat Animal Nutrition and Feed and MeatAnimal Science and Industry)	0	2
23	Animal Breeding	3	0
24	Animal Reproduction Management andArtificial Insemination	2	0

25	Practical Work of Animal Breeding andReproduction (Animal Breeding and Animal Reproduction Management andArtificial Insemination)	0	2
26	Extension and Communication in AnimalScience	2	0
27	Animal Production Economics	2	0
28	Sociology in Animal Science	2	0
29	Practical Work of Animal Science Socio-Economics (Production Economics, Extension, and Communication)	0	2
30	Feed Industry and Technology	2	0
31	Dairy Animal Science and Management	2	0
32	Practical Work of Dairy Animal Industry (Dairy Animal Science and Managementand Feed Industry and Technology)	0	2
33	Poultry Science and Management	2	0
34	Poultry Nutrition and Feed	2	0
35	Practical Work of Poultry Industry (PoultryScience and Management and Poultry Nutrition and Feed)	0	2
36	Animal Products Technology	2	1
37	Entrepreneurship	2	0

38	Research Methodology	2	0
39	Animal Industry System	2	1
40	Miscellaneous Animal Science andManagement	2	1
41	Experimental Design	1	1
	Total Credit Points = 90	64	26

Elective Courses

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Dairy Processing Industry	2	1
2	Meat Processing Industry	2	1
3	Egg Processig Industry	2	1
4	Animal By-Products Processing Industry	2	1
5	Honeybee Products Processing Industry	2	1
6	Ruminant Nutrition	2	1
7	Non-Ruminant Nutrition	2	1
8	Feed Programming	2	1
9	Business Economics	2	1
10	Extension Programs Planning and Evaluation	2	1
11	Village Community Development	2	1

12	Animal Agribusiness	2	1
13	Animal Business Planning and Evaluation	2	1
14	Miscellaneous Animal Technology	2	1
15	Feedlot Management	2	1
16	Dairy Animal Industry Management	2	1
17	Animal Reproduction Technology	2	1
18	Animal Breeding Management	2	1
19	Animal Waste Processing	2	1
20	Animal Slaughterhouse	2	1
21	Poultry Breeding Farm and HatcheryScience and Industry	2	1
22	Integrated Farming System	2	1

COURSES DISTRIBUTION

1st Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Civic	2	0
2	Pancasila	2	0
3	English	2	0
4	Basic Management	2	0
5	Biology in Animal Science	2	0
6	Biochemistry in Animal Science	2	0
7	Microbiology in Animal Science	2	0
8	Indonesian	2	0
9	Practical Work of Basic Animal Science (Biology, Biochemistry, and Microbiology)	0	3
	Total Credit Points = 19	16	3

2nd Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Religion	2	0
2	Animal Anatomy and Physiology	2	0
3	Animal Welfare	2	0

4	Animal Science Engineering	2	0
5	Practical Work of Animal Anatomy and Physiology, Animal Welfare, and Animal Science Engineering	0	3
6	Basic Animal Products Technology	2	1
7	Basic Animal Nutrition and Feed Science	2	0
8	Forage Science and Management	2	0
9	Practical Work of Basic Animal Nutritionand Feed Science and Forage Science and Management	0	2
	Total Credit Points = 20	14	6

3rd Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Genetics	2	0
2	Institutional and Marketing of Raw andProcessed Animal Products	2	0
3	Statistics	2	0
4	Animal Reproduction Science	2	1
5	Animal Products Handling	2	0
6	Quality Control	2	0

7	Practical Work of Animal Products Handling and Quality Control	0	2
8	Ruminant Nutrition and Feed	2	0
9	Meat Animal Science and Management	2	0
10	Practical Work of Meat Animal Industry (Meat Animal Nutrition and Feed and MeatAnimal Science and Industry)	0	2
	Total Credit Points = 21	16	5

4th Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Animal Breeding	3	0
2	Animal Reproduction Management andArtificial Insemination	2	0
3	Practical Work of Animal Breeding andReproduction (Animal Breeding and Animal Reproduction Management andArtificial Insemination)	0	2
4	Extension and Communication in AnimalScience	2	0
5	Animal Production Economics	2	0

6	Sociology in Animal Science	2	0
7	Practical Work of Animal Science Socio-Economics (Production Economics, Extension, and Communication)	0	2
8	Feed Industry and Technology	2	0
9	Dairy Animal Science and Management	2	0
10	Practical Work of Dairy Animal Industry (Dairy Animal Science and Managementand Feed Industry and Technology)	0	2
	Total Credit Points = 21	15	6

Intermediate Semester (Compulsory)

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Community Service	0	4
	Total Credit Points = 4		

5th Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Poultry Science and Management	2	0

2	Poultry Nutrition and Feed	2	0
3	Practical Work of Poultry Industry (PoultryScience and Management and Poultry Nutrition and Feed)	0	2
4	Animal Products Technology	2	1
5	Entrepreneurship	2	0
6	Research Methodology	2	0
7	Animal Industry System	2	1
8	Miscellaneous Animal Science andManagement	2	1
9	Experimental Design	1	1
	Total Credit Points = 21	15	6

6th and 7th Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Elective Courses (Can be Replaced withIndependent Learning)	28	
2	Fieldwork Practice (Can be Replaced withIndependent Learning)	4	
3	Thesis (Can be Replaced with Independent Learning)	6	

8th Semester

No.	Course Title	Credit Points	
		Lecture	Practical Work
1	Thesis (Continued from 7th Semester)	0	6
	Total Credit Points = 6	0	6

COURSES DESCRIPTION

1. Civic

   1.1. *Brief Description*

   This course contains topics about:

   1) History of civic education.
   2) Human rights, which includes recognition of the same dignity and rights as human living in the world.
   3) Rights and obligations of Indonesian citizens, which includes the process of nation and state, rights, and obligations.
   4) State defense, which includes the meaning and implementation of state defense.
   5) Democracy, which includes the concepts of democracy and democracy in the Unitary State of the Republic of Indonesia.

6) Archipelago insight, which includes the philosophy and implementation of the archipelago insight in realizing national unity and integrity.
7) National resilience, which includes the concept and function of national resilience in the life of the nation and state.
8) National strategic politics, covering the material nature of state politics and the nature of the art and political science of national development.

1.2. *Course Learning Outcomes*

After taking this course, the students will have:

1) Insights into state awareness for state defense.
2) Mindsets, attitudes, and behaviors for the love of the homeland.
3) National insight and national and state awareness to form national resilience.
4) Comprehensive and integral patterns of attitudes and mindsets in aspects of national life.

2. Pancasila

2.1. *Brief Description*

This course provides a basic understanding of the basic concepts of Pancasila asthe basis for the philosophy of the state and all matters related to the existence and manifestation of the values of Pancasila in the life of society, nation, and state in every field of development. This course will discuss about:
Introduction to course

1) Pancasila in studies
2) History of the Indonesian nation
3) Pancasila as the state basis
4) Pancasila as the state ideology
5) Symbols of Pancasila
6) Pancasila as a philosophical system
7) Pancasila as an ethical system
8) Practicing Pancasila (analysis of the nature of Pancasila)

2.2. *Course Learning Outcomes*

After taking this course, the students are able to understand the basic concepts of Pancasila as the basis for the state philosophy and all matters related to the existence and manifestation of the values of Pancasila in the life of society, nation, and state in every field of development.

3. English

3.1. *Brief Description*

This course discusses about:

1) English grammar.
2) Idioms and popular terms in agricultural science in a broad sense.
3) Procedures for translating English articles into Indonesian for animal science.
4) English conversation techniques.

3.2. *Course Learning Outcomes*

After taking this course, the students will have knowledge, understanding, and communication skills in English.

4. Basic Management

4.1. *Brief Description*

This course will discuss about concepts, principles, techniques, processes, and management systems. In its application, it uses a philosophical foundation, theory, and the formation of professional skills based on managerial competence, as well as social and ethical responsibility, both locally, nationally and internationally.

4.2. *Course Learning Outcome*

After taking this course, the students will have an up to date mindset and action pattern for the development and problem solving in decision making in the field of business organizations/profit-oriented companies, as well as government and non- profit organizations.

5. Biology in Animal Science

5.1. *Brief Description*

This course will discuss about:

1) Anatomy and function of intra-cellular materials.
2) The concept of somatic and gamete cells division.
3) The concept of metabolism, cellular growth and development, and respiration.
4) Photosynthesis in plants.
5) Structure and function of genetic material.

6) Anatomy and function of various tissues.
7) General adaptation principles of animals.
8) Animal taxonomy.
9) Introduction of microscopic tools used in observation at a microscopic scale.
10) Standard operational procedure for biological observation in a laboratory.

5.2. *Course Learning Outcome*

After attending this course, the students will be able to:

1) Understand and identify the anatomy and physiology of cells and tissues in plants and animals.
2) Understand plant and animal taxonomy.
3) Understand the various kinds of microscopes and how to use them.

6. Biochemistry in Animal Science

6.1. *Brief Description*

This course will discuss about:

1) Biomolecular components (carbohydrates, proteins, lipids, and nucleic acids) in living things.
2) Chemical reactions that occur in living things.
3) Biochemical terminology, principles, and basic information on chemical structures.
4) The

properties of cellular components and their relationship to structure andfunction.

5) Interrelationship of metabolic pathways (carbohydrates, proteins, lipids, nucleic acids, vitamins, minerals, and enzymes) and biochemical reactions.
6) Evaluation of biochemical data.

6.2. *Course Learning Outcome*

After attending this course, the students will be able to analyze the causes of problems or phenomena that occur in animal and be able to understand the relationship between carbohydrate, protein, and lipid metabolism.

7. Microbiology in Animal Science

7.1. *Brief Description*

This course will discuss about:

1) Various types, roles, and functions of microbes in life with case examples on the body and animal products that can affect the quality of life of the animal and consumers.
2) Methods of identification, culture, and counting the number of microbes in amedium.
3) Cleanliness and care for the environment.
4) Introduction of equipment and materials required for microbiological observation.
5) Standard operational procedure in the field of microbiological analysis.

7.2. *Course Learning Outcome*

After attending this course, the students will be able to:

1) Understand the role and function of microbes in animal and their benefits to increasethe added value of animal products.
2) Have basic knowledge of microbiology laboratory techniques.
3) Having the ability to identify, analyze, and communicate, both oral and written, aboutthe results of an observation in the field of microbiology in animal science.

8. Indonesian
   8.1. *Brief Description*

   This course discusses grammar, use of correct Indonesian spelling, procedures for writing scientific articles, making reports, and discussing using correct Indonesian.

   8.2. *Course Learning Outcome*

   After attending this course, the students will have an understanding, sensitivity, accuracy, and skills to use Indonesian, both in discussions and in writing scientific papers.

9. Practical Work of Basic Animal Science (Biology, Biochemistry, and Microbiology)
   9.1. *Brief Description*

This course contains practical work of basic science that have been explained in the courses of biology, biochemistry, and microbiology in animal science.

9.2. *Course Learning Outcome*

After taking this course, the students will have:

1) Basic laboratory skills in the fields of biology, biochemistry, and microbiology inanimal science.
2) Skills to identify, analyze the results, and interpret data based on biology, biochemistry, and microbiology in animal science.

10. Religion

10.1. *Brief Description*

This course is designed to provide knowledge about:

1) The One Almighty God and divinity, which includes faith, piety, and divinityphilosophy.
2) Human, which includes human nature, dignity, and responsibility.
3) Moral, which includes the implementation of faith and piety in the daily life.
4) Science and technology, which includes faith, knowledge, acts, the obligation to search and practice knowledge, and responsibility toward nature and environment.
5) Harmony between religious communities, which includes religion is a blessing foreveryone and the nature of togetherness in religious plurality.

6) Society, which includes the role of religious communities in realizing civil society and the responsibility of religious communities in realizing human rights.
7) Culture, which includes the responsibility of religious communities in realizing critical thinking, working hard, and being fair.
8) Politics, which includes the contribution of religion in political life.
9) Law, which includes awareness to obey God's laws and the enforcement of fairlaws.

10.2. *Course Learning Outcomes*

After taking this course, the students will be able to:

1) Have intellectual abilities based on the greatness of God Almighty.
2) Having a character based on the One Almighty God.
3) Upholding humanity and protect the environment.

11. Animal Anatomy and Physiology

11.1. *Brief Description*

This course discusses about the anatomy and function of organs, the cardiovascular system, respiration, hormonal, musculature and growth, digestion, reproduction and lactation, excretion and body water balance, as well as adaptation and the environment.

11.2. Course Learning Outcome

After taking this course, the students will be able to understand the anatomy and basic functions of organs and systems that occur in animal, and be able to explain the production process (growth, lactation, and work), nutrition, reproduction, and adaptation to increase animal productivity and reproduction.

12. Animal Welfare

12.1. *Brief Description*

This course will discuss about the behavior and characteristics of various animals. This course also discusses the concept of handling in the business of meat animals, dairy animals, poultry, and miscellaneous animals based on animal welfare, starting from the housing system, rearing management, transportation, to the slaughter of various animals.

12.2. Course Learning Outcome

After completing this course, the students are able to:

1) Raise animals in accordance with their behavior that ensures the animal welfare.
2) Design animal production management based on their behavior and animal welfare.
3) Design handling management during transportation, sales, to slaughter according to the animal welfare.

13. Animal Science Engineering

13.1. *Brief Description*

This course discusses the types of equipment/machinery used in the poultry, dairy cattle, and beef cattle industries, ranging from machines used in poultry houses, modern hatcheries, feedmill, milking, and milk and meat processing. This course will also introduce the digitization of modern animal industry equipment.

13.2. Course Learning Outcome

After taking this course, students will be able to:

1) Understand the types of equipment/machinery used in the poultry, dairy cattle, andbeef cattle industries.
2) Understand the benefits of machines in the poultry houses, hatcheries, feedmill, milking, and milk and meat processing.
3) Understand the equipment digitization in the various animal industries.

14. Practical Work of Animal Anatomy and Physiology, Animal Welfare, and Animal Science Engineering

14.1. *Brief Description*

This course discusses practical work of animal anatomy and physiology, animal welfare, and animal science engineering.

14.2. *Course Learning Outcome*

After taking this course, the students will be able to:

1) Identify the anatomy and physiology of various animals underlying growth, nerves, blood flow, digestion, and reproduction.
2) Identify animal behavior in order to run animal business according to animal welfare.
3) Understand about equipment in the animal industry.
4) Understand the digitization of equipment and machinery in the animal industry.

15. Basic Animal Products Technology

15.1. *Brief Description*

This course discusses the changes in raw materials into food (food processing), techniques related to processing, and development of production scale.

1) Knowledge of the factors that potentially cause damage to milk, meat, eggs, leatherand by-products, and honeybee products and their processed products.
2) Optimization of animal product handling technology, stability of animal product quality, and its relation to food safety and damage.
3) Management of handling, storage, and shelf-life determination.

15.2. *Course Learning Outcome*

After attending this course, the students will have:

1) Ability to add value to animal products and basic skills in processing techniques.

2) Knowledge and techniques for analyzing the quality of processed animal products.
3) Understand and are skilled about environmentally-friendly animal product processing.

16. Basic Animal Nutrition and Feed Science

16.1. *Brief Description*

This course discusses:

1) Anatomy of the digestive tract and the digestive process in animals.
2) Type, use, function, metabolism, and symptoms of deficiency of nutrients.
3) Types, anti-nutritional substances, storage, and damage of feed ingredients.
4) Formulating feed and calculating feed requirements in an animal business.

16.2. Course Learning Outcome

After completing this course, the students will be able to:

1) Understand and can explain the digestive system of the ruminant and non-ruminantanimals.
2) Understand and can explain the types, uses, functions, symptoms of deficiency, and basic metabolism of nutrients, which include protein, carbohydrates, fats, vitamins, and minerals.
3) Understand and can explain the constituent fractions of nutrients.

4) Understand and be able to explain the quality of feed ingredients based on physical, chemical, biological, and economical properties.

17. Forage Science and Management

17.1. *Brief Description*

This course will discuss about the types, adaptation, production potential, production determinant, and management of forage production. This course also discusses the production of forage to meet the requirement of meat and dairy animalson an industrial scale.

17.2. Course Learning Outcome

After completing this course, the students will be able to:

1) Identify the types, adaptations, and production potential of forage.
2) Cultivate and manage forage as a source of animal feed.
3) Calculating the requirement of forage for meat and dairy animals industry.

18. Practical Work of Basic Animal Nutrition and Feed Science and Forage Science and Management

18.1. *Brief Description*

This course contains practical work of basic animal nutrition and feed science and forage science and management.

18.2. Course Learning Outcome

After taking this course, the students will be able to identify and analyze feed ingredients and be able to manage the forage cultivation.

19. Genetics

19.1. *Brief Description*

This course discusses the history and development of genetics, Mendel's Law and the pattern of monohybrid inheritance, dihybrid inheritance patterns, Mendel's Law deviations (lethal genes and gene interactions), genetic material (chromosomes, genes, RNA, and DNA), abnormalities due to chromosomal abnormalities, gender probability theory, sex linkage (sex linkage and sex influenced heredity), sequencing and crossing over, alleles and multiple genes, the basics of genetic engineering and the basis of population genetics, and the current developments of molecular genetics for improvement of genetic quality and animal breeding programs.

19.2. Course Learning Outcome

After attending this course, the students will master the science of genetics and the genetic characteristics that underlie animal breeding and improvement of the genetic quality of animals using conventional and molecular approaches.

20. Institutional and Marketing of Raw and Processed Animal Products

20.1. *Brief Description*

This course discusses the aspects of institutional and marketing of raw and processed animal products, which include planning and making a business plan in accordance with each applied technology and related regulations.

20.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand the institutional and marketing aspects of raw and processed animalproducts.
2) Carry out planning and business processes in accordance with animal commodities and their products.
3) Developing products based on business analysis with appropriate development methods and by utilizing related science and technology.

21. Statistics

21.1. *Brief Description*

This course will discuss about the function and role of statistics, continuous random probability distribution, types of regression and correlation, and the use of the current statistical analysis programs in animal science study.

21.2. Course Learning Outcome

After attending this course, the students will be able to:

1) Understand the role and function of statistics used in the animal science.
2) Analyze data by applying statistical methods to analyze linear regression andcorrelation.
3) Use the current statistical program applications.

22. Animal Reproduction Science

22.1. *Brief Description*

This course discusses changes in the physiology of spermatozoa while inside the male and female reproductive tracts in natural fertilization, stages of estrus, libido, endocrinology during the estrus cycle, embryonic development, gestation, parturition, and the role of hormones in gestation and parturition. This course will also discuss

about the physiology of egg formation and production, embryo development during the hatching process, and the application of sexing in day-old-chicks to support the poultryindustry.

22.2. Course Learning Outcome

After attending this course, the students will be able to:

1) Understand natural fertilization, embryonic development, gestation, parturition, and the role of

hormones in gestation and parturition.

2) Identify the stages of estrus, libido, diagnosing gestation, and parturition.
3) Undestand and identify the development of reproductive physiology in poultry and embryonic development during the hatching process.

23. Animal Products Handling

23.1. *Brief Description*

This course will discuss various technologies used in the processing of raw animal products into food (food processing) and its latest developments.

23.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand the various technologies used in the processing and preservation ofanimal products.
2) Apply this knowledge to solve problems regarding animal products.
3) Work in groups and convey their ideas.

24. Quality Control

24.1. *Brief Description*

The scope of this course is in the field of feed and animal products, quality control for feed ingredients, feed products, materials for processing animal products, and processed animal products. This course will discuss about:

1) Definition of quality, classification, quality components, quality policy, which includes Codex, ISO-9000, Indonesian National Standard for animal products and their processed products, and Good Manufacturing Practices (GMP).
2) Hazard analysis and critical control point (HACCP) system and HACCP Plan.
3) Halal product guarantee system.
4) Assessment of halal, expired, organoleptic food quality control, and quality control of raw materials and processed products.
5) Control of halal quality of animal products.

24.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Mastering the theoretical concepts of quality control in the feed industry and standardizing the quality of animal products.
2) Develop GMP and standard operational procedures (SOP) in animal industry.
3) Develop and implement HACCP in animal industry.
4) Determine the critical point of halal food products from animals.
5) Determine the shelf life of the product and carry out an organoleptic analysis.
6) Understand the halal quality control of animal products.

25. Practical Work of Animal Products Handling and Quality Control

25.1. *Brief Description*

This course contains practical work on the animal products handling and quality control.

25.2. Course Learning Outcome

After taking this practical work, the students will be able to:

1) Solve problems regarding animal products handling and quality control.
2) Develop and implement GMP, SOP, HACCP, and halal standard in animal industry.

26. Ruminant Nutrition and Feed

26.1. *Brief Description*

This course discusses the anatomy of the digestive tract of ruminant animals (cattle, goats, and sheep), the process of feed fermentation in the forestomach by microbes, nutrient metabolism and absorption of metabolites along the digestive tract, types of feed ingredients, and feed formulation for ruminant animals at different physiological stages.

26.2. Course Learning Outcome

After completing this course, the students will be able to:

1) Describe the digestion process and nutrient metabolism in ruminant animals.
2) Understand the methods of optimizing feeding management to increase efficiency and prevent disturbances of nutrient metabolism in ruminant animals.
3) Formulate feed for ruminant animals according to their physiological stages.

27. Meat Animal Science and Management

27.1. *Brief Description*

This course will discuss about:

1) The role of meat animal in providing meat for the community.
2) Government policies in meat animal farming.
3) Various breeds of meat animals.
4) Growth and development of beef cattle and the factors that influence it.
5) Measurement of body condition scores related to management and judging.
6) Animal production systems and evaluation of carcass production.
7) Rearing management, housing, and environment.

27.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Describe the characteristics of the various breeds of meat animals.
2) Applying the theory of growth and development of meat animals and growth improvement techniques (compensatory growth and growth promotion).
3) Determine the body condition score and judging in relation to management.
4) Implementing multiple production systems.
5) Carry out routine management related to the raising of meat animals.
6) Drawing of plans and construction of meat animal's housing.
7) Explain the laws and regulations related to meat animal production.

28. Practical Work of Meat Animal Industry (Meat Animal Nutrition and Feed and Meat Animal Science and Industry)

28.1. *Brief Description*

This course contains practical work on the meat animal industry, which includes nutrition and animal feed, science and management of meat animal, animal slaughterhouse, and handling of animal products.

28.2. Course Learning Outcome

After taking this practical work, the students will be able to:

1) Formulate feed and arrange feeding systems for meat animal according to theirphysiological stages.
2) Planning a management system for meat animal according to their physiologicalstages.
3) Identify the cuts of meat.
4) Understand how to slaughter animals according to animal welfare and halalstandard.

29. Animal Breeding

29.1. *Brief Description*

This course discusses the relevance of livestock breeding, the formation of livestock breeds, the Hardy-Weiberg equilibrium, the changes in gene frequency and genotypes, qualitative traits in livestock breeding, quantitative traits (population statistical characteristics), phenotypic expression of genes (additives, dominant, and epistatic), understanding of genetic parameters, the principle of selection, the selection methods of one trait, the selection methods of more than one trait, inbreeding and outbreeding, the current development of livestock breeding based on conventional and molecular methods adapted to industrial requirement for beef cattle, dairy, poultry, andthe use of information technology in livestock breeding.

29.2. Course Learning Outcome

After taking this course, students will be able to:

1) Understand the basic principles of livestock breeding, which includes genetic parameters,

selection, genetic progress, and regulation of the breeding system.

2) Make calculations/analyzes about the genetic potential of livestock, population genetic parameters, and genetic progress due to selection.
3) Apply basic livestock breeding techniques practically in the field.
4) Implementing livestock breeding and selection programs.

30. Animal Reproduction Management and Artificial Insemination

30.1. *Brief Description*

This course discusses reproductive management in animal science to increase reproductive efficiency and improve the genetic quality of animals. Topics of this course include management of accelerated puberty, breeding, sires and dams selection as donors and recipients, liquid and frozen semen production, artificial insemination in smallholder farms and the livestock industry, breeding and artificial insemination recordings, and breeding evaluation.

30.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand reproductive management in animal science to increase reproductive efficiency and improve the genetic quality of animals.
2) Understand the management of accelerated puberty,

breeding, selection of sires and dams as donors and recipients, liquid and frozen semen production, artificial insemination in smallholder farms and the livestock industry, breeding and artificial insemination recordings, and breeding evaluation.

3) Evaluate spermatozoa quality, apply artificial insemination techniques in several types of animals, and evaluate the success of artificial insemination.

31. Practical Work of Animal Breeding and Reproduction (Animal Breeding and Animal Reproduction Management and Artificial Insemination)

31.1. *Brief Description*

This course contains practical work in animal breeding, animal reproduction management, and artificial insemination.

31.2. Course Learning Outcome

After taking this practical work, the students will be able to:

1) Understand the livestock selection system for sires and dams.
2) Understand the semen storage for cattle, goats, and poultry.
3) Have skills in semen quality evaluation.
4) Have skills in semen dilution, cooling, and freezing.
5) Understand and have skills in artificial insemination in goats and poultry.

32. Extension and Communication in Animal Science

32.1. *Brief Description*

This course discusses the concept of extension, the concept of farmer behavior, communication concepts and theories, innovation concepts, adoption and diffusion, program concept and evaluation, extension in animal science extension, and communication of science and technology results in animal science.

32.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand the concept of extension in animal science.
2) Understand the adoption and innovation in animal science.
3) Understanding andragogy as an adult learning method specifically intended forlearners of animal science extension.
4) Able to plan and evaluate the extension.

33. Animal Production Economics

33.1. *Brief Description*

This course provides knowledge related to macro and micro economic concepts and theories, cost structure, demand, and their application to the animal business and industry.

33.2. Course Learning Outcome

After taking this course, students will be able to:

1) Understand the concepts and theories of micro and macro economics, especially inthe animal business and industry.
2) Conduct analysis of various economic phenomena in the animal business andindustry.
3) Contribute in providing alternative solutions to problems related to economic problems, especially in the animal business and industry.
4) Generate and communicate ideas related to the animal business and industry.

34. Sociology in Animal Science

34.1. *Brief Description*

This course will discuss sociology in the form of theory and practice, especially inrural and industrial communities so that students can communicate the development of science and technology in the field of animal science to the community.

34.2. Course Learning Outcome

After attending this course, the students will be able to implement the science and technology in animal science that pays attention to humanities in accordance with scientific principles, procedures, and ethics in order to produce solutions in the field ofanimal science.

35. Practical Work of Animal Science Socio-Economics (Production Economics, Extension, and Communication)

35.1. *Brief Description*

This course contains practical work in the preparation of materials for extension, either in conventional format or by using use information technology, and being able to do extension to the community.

35.2. Course Learning Outcome

After attending this practical work, the students will be able to:

1) Prepare materials and conducting conventional and digital education in animalscience.
2) Able to communicate about the animal industry system and the results of scienceand technology in animal science to the community.

36. Feed Industry and Technology

36.1. *Brief Description*

This course will discuss the characteristics and structure of feed ingredients (forage, agricultural waste, and concentrates), feed processing technology (physical, chemical, and biological approaches), utilization of agro-industrial by-products, and feed additive manufacturing technology.

36.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand and explain the characteristics of forage, agricultural waste, andconcentrates.
2) Applying physical, chemical, and biological processing technology according to the feed characteristics.
3) Evaluating the results of feed processing technology.

37. Dairy Animal Science and Management

37.1. *Brief Description*

This course discusses about dairy animal breeds, milk science (components, physical, chemical, and microbiological characteristics), mammogenesis, lactogenesis, galactopoesis, milk biosynthesis, factors that affect the quantity and quality of milk, dairy cows rearing management (calves, heifers, lactation, and dry periods), lactation dynamics, dairy animal health care, regulations and laws on dairy animals, establishment of dairy farming, procurement of dairy animals, and regulations for handling of dairy animal waste.

37.2. Course Learning Outcome

After taking this course, students will be able to:

1) Understand the different types of dairy animals from the tropics and subtropics.
2) Understand and analyze milk and colostrum.
3) Understand and explain the development and

function of the udder glands.

4) Understand and explain the factors that affect milk quantity and quality.
5) Understand, analyze, and apply efficient and profitable dairy management from calf period to lactation and dry period.
6) Understand and apply the SOP of milking correctly.

38. Practical Work of Dairy Animal Industry (Dairy Animal Science and Management and Feed Industry and Technology)

38.1. *Brief Description*

The materials provided are practical work in the dairy farming system (*Good Dairy Farming Practice*), milking, and evaluation of milk quality. In addition, there are also practical work in the feed formulations and feeding systems according to the physiological stages of dairy animals. This practical work also discusses the implementation of technology used in processing raw material of animal products intofood.

38.2. *Course Learning Outcome*

After taking this practical work, the students will be able to:

1) Formulate feed and arrange feeding systems for dairy animals according to their physiological stages.
2) Plan and implement a management system for dairy animals (good dairy farming practice),

milking, and evaluation of milk quality.

3) Implement the technology used in the processing of animal products.

39. Community Service

39.1. *Brief Description*

This course include planning, implementing, evaluating, and reporting programs compiled with supervisors for practical activities in certain villages/areas. This course contains the activities of preparing proposals until reporting the activity results.

39.2. Course Learning Outcome

After completing this course, the students will be able to:

1) Identify problems to be resolved in certain villages/areas.
2) Have management or technological skills to solve problems in certainvillages/areas.
3) Write a proposa l/activity plan and present the results of community service properlyand correctly.

40. Poultry Science and Management

40.1. *Brief Description*

This course discusses the introduction of poultry commodities (chickens, ducks, and other domesticated birds) which includes the characteristics of poultry breeds, hatching system (industrial scale), growth system, housing systems and its role in poultry physiology, poultry rearing

systems (starter, grower, and finisher), as well as chicken housing system and ventilation and blower arrangements that support chicken productivity. In addition, this course will also discuss about the regulations and laws related to the poultry industry, including the establishment of poultry farming, import/export of poultry products and their processed products, and regulations on waste disposal.

40.2. Course Learning Outcome

After completing this course, the students will be able to:

1) Understand how to raise poultry on a small-scale farming system and industrial scale with environmentally-friendly approach.
2) Design housing and facilities and infrastructure for poultry farming on a small andindustrial scale.
3) Understand the legislation on the establishment and implementation of the poultryfarming industry.

41. Poultry Nutrition and Feed

41.1. *Brief Description*

This course discusses the anatomy of poultry digestive tract, nutrient metabolism and absorption along the digestive tract, factors that affect feed requirements, types offeed ingredients, and feed formulations for poultry.

41.2. Course Learning Outcome

After completing this course, the students will be able to:

1) Describe the process of digestion and nutrient metabolism in poultry.
2) Understand the methods of optimizing feed management to increase efficiency and prevent disruption of feed metabolism in poultry.
3) Formulate feed according to the physiological status of poultry.

42. Practical Work of Poultry Industry (Poultry Science and Management and Poultry Nutrition and Feed)

42.1. *Brief Description*

This course is practical work in poultry science and management, poultry breeding industry, and poultry nutrition and feed.

42.2. Course Learning Outcome

After taking this practical work, the students will be able to:

1) Understand the legislation for the establishment of the animal feed industry.
2) Planning and implementing poultry breeding.
3) Formulate feed and feeding systems according to the poultry physiological stage.

43. Animal Products Technology

43.1. *Brief Description*

This course discusses various technologies used in processing raw material of animal products into food and

its latest developments.

43.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand the various technologies used in the processing and preservation ofanimal products.
2) Apply this knowledge to solve problems in animal products processing.
3) Have the ability to work in groups and convey ideas.

44. Entrepreneurship

44.1. *Brief Description*

This course will discuss about motivation for entrepreneurship, leadership, organizing, communicating, identifying business opportunities, risk management, and creating a business plan.

44.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Have a mental attitude, behavior, and entrepreneurship character, and are able to organize and communicate in groups.
2) Integrate entrepreneurial values, leadership, and communication in entrepreneurship learning models.
3) Make a simple business plan in animal science.

45. Research Methodology

45.1. *Brief Description*

This course encompass understanding in compiling a research proposal, researchreports, and scientific papers in animal science. This course will discuss about the preparation of the research background, identification and formulation of problems, research objectives and advantages, hypotheses, literature review, research framework, research methods and research operational, selection of experimental designs and data analysis, results and discussion, conclusions and suggestions, and references, as well as writing scientific papers to be published in the journals.

45.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand the guidelines for writing scientific papers and have theoretical and practical skills on how to prepare experimental research proposals in the laboratory and in the field as well as observational research.
2) Have the ability to compile scientific papers including background, problem identification, literature review, research methodology, results and discussion, conclusions and suggestions, and references.

46. Animal Industry System

46.1. *Brief Description*

This course discusses the livestock industry system from upstream to downstream, which consists of meat animals, dairy animals, poultry, and miscellaneous animals. This course will also discuss all technology and management aspects in an industry so that it becomes an integral concept or plan.

46.2. Course Learning Outcome

After taking this course, the students will be able to plan and understand the system of the meat animal, dairy animal, poultry, and miscellaneous animal industries.

47. Miscellaneous Animal Science and Management

47.1. *Brief Description*

This course covers the science and management of honeybees, silkworms, and rabbits. This course will discuss the introduction of the type of miscellaneous animals, anatomy, life cycle, colony, characteristics, and behavior of miscellaneous animals, breeding, reproduction, feed, management, and disease prevention of miscellaneous animals, introduction of miscellaneous animals products (honey, propolis, royal jelly, bee pollen, cocoons, meat, and fur), and handling by-products and waste of miscellaneous animals.

47.2. Course Learning Outcome

After completing this course, the students are able to:

1) Understand the farming of bees, silkworms, and

rabbits and their derivativeproducts.

2) Apply production technology and quality identification of bees, silkworms, andrabbits and their derivative products for efficient and sustainable production.

48. Experimental Design

48.1. *Brief Description*

This course will discuss about experimental designs that will be used for research in animal science (animal nutrition and feed science, animal production, socio-economics of animal science, and animal product technology), analyzing data from observations/simulations using appropriate experimental designs, both using parametric and non-parametric data, as well as qualitative and quantitative data.

48.2. *Course Learning Outcome*

After taking this course, the students will be able to:

1) Understand the several experimental designs used for research in animal science.
2) Analyze data by applying appropriate statistical methods and experimental design, using an experimental design program application.

49. Field Work Practice

49.1. *Brief Description*

This course contains the activities of preparing proposals and field work practices in a company that studies management, starting from planning, organizing, actuating,and controlling. Furthermore, students also must compile field work reports in groups and explain the results in the examination forum.

49.2. Course Learning Outcome

After completing this course, students will be able to:

1) Understand the management of a unit in a company which includes planing, organizing, actuating, and controlling.
2) Have supportive skills for managerial activities in the company.
3) Write proposals and results of field work practice and present the results properlyand correctly.

50. Thesis

50.1. *Brief Description*

This activity is carried out by students with the guidance of a lecturer which contains activities in compiling proposal, conducting research, compiling thesis manuscript, conducting seminar, and thesis examination.

50.2. Course Learning Outcome

After completing this course, students will be able to:

1) Compiling proposals, conducting research, and

compiling research report, with the guidance of a lecturer.

2) Present and explain the research results in the thesis examination forum.

51. Internship

51.1. *Brief Description*

Internship is conducted on the animal science-related industries for 6 months. Activities begin with creating a proposal, submitting permit, implementing internship according to the program and schedule approved by the supervisors, internship results seminar, and examination. The students are guided by supervisors from the Faculty of Animal Science and field supervisors from the industries. Internship supervisors are lecturers who have received a certificate or assignment letter from the dean, while field supervisors are those appointed by the company.

51.2. Course Learning Outcome

After taking this course, the students will be able to:

1) Understand the managerial in the industry according to the internship topic.
2) Have skills in accordance with the topic of the internship.
3) Analyze the internship results.
4) Create reports and present internship results.

CHAPTER VII
EDUCATION ADMINISTRATION

A. Academic Handbook

This Academic Handbook is provided before the academic year begin, and contains an academic calendar that regulates lecture time, re-registration, academic activities, Dies Natalis, graduation and ceremonial activities and student affairs, an explanation of the semester credit system, educational objectives of undergraduate programs, regulations regarding lectures, exams, evaluation of study and student mutations (can be accessed online at www.fapet.ub.ac.id).

B. Implementation of Credit System Administration

1. Registration Preparation
   Include the list of names of academic advisors and mentored students, instructions for filling out Study Plan Card, Study Plan Alteration Card, Course Cancellation Card and Study Results Card.
2. Study Plan Cards
   Study Plan Card can be filled online after completing the administrative requirements. Determination of the study plan is carried out with the guidance and consultation of academic advisor lecturer who are determined based on students' previous semester achievements and grade-point, study plan card must be approved by the academic advisor lecturer before submitted to the Academic Administration Office. If there is a change in the study plan, it must be completed before the end of the first week.

3. Lectures, Seminars, Practicum and others.
   Students are required to attend lectures, seminars, practicums and similar academic activities in accordance with their study plan in an orderly and regular manner according to the regulations. The schedule of lecture and practicum is set by the faculty.

4. Implementation of course exams
   The midterm and final semester exams are held by the committee appointed by the Dean.

5. Scoring Administration
   Consists of a study result card consisting of test scores along with the Grade Point Average of the semester, with the provision of 5 copies for academic advisors, parents/academic guardians of the faculty and Universitas Brawijaya Computer Center.

C. Students Registration

Aiming at academic discipline, recording of active students in lectures and activities on campus.

1. Types of Administration
   a. Administrative Registration
      1. Administrative registration is for students that have registered status as a student of the UB Faculty of Animal Science, both for new and old students.
      2. New students registration in accordance with the requirements that have been registered online. Student that does not meet the specified

requirements then it cannot be accepted, other than that if the new student does not re-register it is considered resigned. Students who falsify their information can be canceled from registration and expelled from UB and there is no extension for registration time.

3. Requirements for online registration in UB's academic system, one of which is to pay tuition fees every semester, but if the student is not registered on the academic web and is not listed on the leave list, student must receive permission from the rector. There is no extension for registration time.

2. Academic Registration

Academic registration is done through filling out and validating the Study Plan Card, Study Plan Alteration Card, Course Cancellation Card, and consultation on study plan with the academic advisors.

D. Terms of Payment for Educational Development Contribution (Tuition Fee)

Students are required to pay tuition fees which are made at the beginning of the odd and even semester. Students who are not re-registered with the Rector's permission are still have to pay tuition fees. The nominal amount of tuition fees is determined by the Rector's Decree.

E. Student Identity Card

Student Identity Card is given as an evidence of being registered as a student of Universitas Brawijaya and given

after completing registration.

F. Student Mutations

Student mutation is alterations in student status which includes academic and administrative status. Mutations consist of:

1. Academic leave of at least 1 semester and a maximum of 2 semesters. Applications for leave are submitted to the Rector, accompanied by acceptable reasons and known by the Dean and parents / guardians / student institutions concerned, no later than 1 (one) week since the closing of academic registration.
2. Students study assignments from government or private agencies in accordance with applicable requirements.
3. UB students that registered to other universities (must be approved by the Rector with a copy of the Dean), students who have moved to other universities cannot be accepted back in UB.
4. Dropping out of college. For students who do not meet the academic evaluation qualifications for the first to fourth years and the Rector issues a college dropout decree.
5. If a student dies, the Dean reports to the Rector
6. Students can be terminated permanently or temporarily if they violate the provisions of the Rector's Decree Number: 044/SK/ 1985 concerning the Rules of (Keluarga Besar) UB, as well as other provisions that apply in UB

G. Transfer of Students to Universitas Brawijaya

1. Terms

a. Acceptable transfer students are:
   Undergraduate programs students that have attended education continuously for at least 4 semesters and a maximum of 6 semesters and have collected:
   1) For 4 semesters, 72 credits with a GPA of at least 2.75
   2) For 6 semesters, 108 credits with a GPA of at least 2.75
b. Derived from State Universities that have the same suitability for the field of study and program.
c. Not dropped out students because they do not meet academic requirements in previous university .
d. Never violated the previous university regulations.
e. Approved to transfer from the original university.
f. The Dean of the Faculty of Animal Science stated in writing his willingness to accept.

2. Procedures for Submitting a Transfer Application

The procedure for applying for a transfer is as follows:

a. Application for transfer is submitted in writing to the Rector of UB with a copy to the Dean of the Faculty of Animal Science.
b. The application must attach the conditions in point 1.

3. Time of Transfer Application Submission

Application to transfer must be received by UB no later than 1 (one) month before the beginning of the new academic year (odd semester).

H. Transfer of Students among Faculties at Brawijaya University

Must in accordance with the requirements that have been set in UB's academic guidelines which consist of requirements, procedures for submitting a transfer application and the time of submitting the transfer application.

I. Undergraduate Graduation

Students who pass the undergraduate examination are required to attend graduation and are entitled to receive a certificate that was submitted at the time of graduation

J. Academic Ability Assessment

1. General Provisions

   g. Academic ability assessment activities are carried out through structured assignments, quizzes, midterm exams, final semester exams and practical assessment activities to determine the final grade with a certain value.

2. Value and Final Score

   h. The value of a course assessment activity is determined according to the balance of the activity material with the subject matter as a whole in one semester.

   i. The final score for assessing the academic ability of a course is determined by the formula:

$$\sum_{i=1}^{n} Bt_i.Nt_i + Bq_i.Nq_i + Bm.Nm + Ba.Na + Bp.Np$$

NA = ……..

$$\sum_{i=1}^{n} Bt_i + Bq_i + Bm + Ba + Bp$$

with explanation :

Bt_i is the value of the i^{th} structured assignment.

Bq_i is the value of the i^{th} quiz

Bm is the the mid-semester test score

Ba is the final semester test score

Bp is of the practicum score

Nti, Nqi, Nm, Na, Np are the values of each academic activity. The proportions for each component are as follows:

1) Courses with practicum

a) Quiz or structured tasks: 5-10%Practicum : 20-30%

c) Mid-Semester examination : 30-35%

d) Final Semester Examination : 30-35%

2) Non-practium Courses

a) Quiz : 5-10%

b) Structured tasks : 20-30%

c) Mid-Semester Examination : 30-35%

d) Final Semester Examination : 30-35%

j. The final value as referred to in point 2 is a numeric value and is converted to letter value provided that:

Numerical Scoring	Alphabetical Scoring	Value

> 80 – 100	A	4
> 75 – 80	B+	3,5
> 69 – 75	B	3
> 60 – 69	C+	2,5
> 55 – 60	C	2
> 50 – 55	D+	1,5
> 44 – 50	D	1
0 – 44	E	0

K. Retakes The Module

The regulations relating to retaking modules are aimed to improve incomplete learning outcomes. The students are eligible to retake the module when their final score is lower than B. The retaking modules are conducted at the next regular semester. The final score of retaking module is A.

L. Academic Sanctions

Academic sanctions are imposed on students who violate academic provisions:

7. Students who take less than 80% of the lectures, are not allowed to take the final semester exams for the subject concerned.
8. Students who cancel a course after the Mid-Semester Examination, that course are still taken into account to determine their GPA.
9. Students who cheat in the exam.
10. Students who take other students' exams and / or students whose exams are taken by others will be subject

to sanctions for cancellation of the original course exams in the semester concerned.

11. Students who make changes to KRS illegally will be sanctioned to KRS cancellation for all courses in the semester concerned.

12. Students who make changes in grades illegally will be sanctioned to a maximum suspension of 2 (two) semesters and will not be counted as a terminal.

13. Students who commit these violations when accompanied by threats of violence or giving of something, or promises or tricks will be santioned to being expelled from the Faculty.

14. Students who are found to have cheated in the thesis writing, then the entire semester study plan concerned is canceled.

M. Study Evaluation

Conducted to determine whether students are determined to continue their studies or stop as students. Study evaluation is carried out at the end of semester 2, the end of semester 4 and the end of semester 8 and the maximum study limit. Students who are declared to have no requirements to continue the next academic process are not allowed to carry out further registration. The requirements referred to are regulated in separate rules.

N. Imposing Academic Sanctions

Sanctions given to students for violations as stipulated in point J are determined by the Dean.

CHAPTER VIII
RULES OF THE (KELUARGA BESAR) UNIVERSITAS BRAWIJAYA

A. Rights and Obligations

Students Rights

1. Recieve education and teaching in accordance with the study program it demands.
2. Participating in every student activity organized and approved by the Faculty and University.
3. Obtain and use every available facility according to the ways and conditions that apply.
4. Convey suggestions and opinions in a constructive manner in accordance with applicable regulations and the norms of decency, politeness and in accordance with the personality and philosophy of the Indonesian people.

Students Obligations

1. Together with all academicians to develop the system of life as a scientific community with a culture, Pancasila moral and Indonesian personality.
2. Strengthen and maintain a sense of oneness among fellow UB's big family.
3. Assist and participate actively in every implementation of curricular, co-curricular and extra-curricular programs.
4. Maintaining integrity as a graduate candidate as well as being obedient and loyal to every applicable regulation in UB.

B. Social Manners and Responsibilities

1. Social manners within the Universitas Brawijaya campus are based on the principles of kinship, upholding harmony and balance in accordance with Pancasila.
2. The big family of UB has the responsibility to maintain the good name of the alma mater and a conducive atmosphere for the implementation of the teaching process widely is a shared responsibility.

C. Violation of the Rules

1. Performing act that undermine the good name and dignity of the alma mater / UB community (the big family)
2. Undermine the obligations of University or Faculty officials in carrying out their duties and positions.
3. Acting abusive and exceed the authority.
4. Acting arbitrarily and unfairly towards both subordinates and fellow officials.
5. Leaking job secrets and / or state secrets.
6. Carry out illegal levies in any form in carrying out their duties for personal or group interests.
7. Refuse assignments from their superiors.
8. Obstruct, complicate the implementation of academic and non-academic activities that have been determined by the University / Faculty.
9. Interfering in educational administration and other matters without the legitimate authority of the University / Faculty.

10. Perform vandalism, cheating and falsifying legal letters / documents.
11. Performs actions that violate decency in attitudes, words, writings and pictures.
12. Misusing the name, symbol, sign of UB.
13. Using rooms, buildings and other facilities belonging to UB illegally without permission.
14. Extortion, gambling, carrying and abusing drugs is prohibited on the UB campus
15. Spread writings and ideas that are prohibited by the government
16. Pitting one another and inciting among UB's academic community
17. And others that are prohibited by the prevailing laws and regulations

D. Sanctions

1. The big family who commit violations may be sanctioned.
2. The form of sanctions can be:
    a. Warning
    b. Compensation for damages incurred and or payment of fines.
    c. Suspension.
    d. Prohibition of participating in all academic activities or as activities for a certain time or forever.
    e. Revocation of rights or dismissal as a member of the UB Family.

E. Committee for Violation Consideration

1. The big family who commit violations will be placed by the Committee for Violation Consideration which is formed by a Rector's Decree.
2. Membership of this committee consists of academic staff who are appointed by the Rector or Faculty Deans, for a term of 2 (two) years.
3. Committee for Violation Consideration submits the results of this disciplinary inspection to the Rector, which the final decision will be given.

F. Additional Provisions

1. The big family who commit violations are given the right to defend themselves to the Rector, either verbally or in writing before the Rector gives a final decision.

CHAPTER IX
ACADEMIC ADVISORS

Academic Advisors are lecturers who provide assistance in the form of academic advice to students, according to their study program based on students' abilities, so that the study program is completed properly.

1. Duty & Rensponsibility

Academic Advisors are responsible of:

a. Provide information about 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 learning attitudes and proper freedom in learning in which will develop independency as an expert.

d. Provide recommendations about the level of student learning success for certain purposes.

e. Helping students in developing their personalities towards the realization of whole Indonesian people who have insight, think and behave in accordance with the values of Religion, Pancasila, customs and others.

f. Helping students develop insight into scientific learning independently throughout their lives.

g. Provide a warning about the academic evaluation of students whose GPA for 2 consecutive semesters is less than 2 (two) and credits achieved less than 20 credits.

2. At the beginning of each semester academic registration, Academic Advisors is obliged to carry out the following

tasks:

a. Check and validate the Study Plan Card and responsibility for the existence of its contents.
b. Determine the validation of credits number that students can take in the semester concerned with due observance of applicable regulations.
c. Researching and giving approval to semester studies prepared by students in the Study Plan Card.
d. In deciding the amount of study will be taken, Academic Advisors is obliged to provide sufficient explanation for the decision so that students can be aware of and accept the decision attentively.

3. In carrying out its duties based on the rules, Academic Advisors sre obliged to observe the learning outcomes on each semester for:
    a. The students individually or in groups
    b. All students of the faculty / department concerned in groups for the relevant or previous year generation.
4. Academic Advisors can request assistance from other work units (including Guidance and Counseling) in the context of advising.
5. Advisory activities in the academic field were coordinated by Vice Dean I, while in non-academic matters were coordinated by Vice Dean III.
6. Every Academic Supervisor must always pay attention to the Code of Ethics for Campus Life.
7. Advisory administration is developed through lists and cards. The types and uses of these lists and cards must be

understood by the Academic Advisor.

a. List is defined as:
   1) List of student names.
   2) Student lectures attendance list.
   3) List of test scores.

b. Card is defined as:
   1) Study Plan Card (KRS) which records all courses programmed (taken by the student concerned) in each semester.
   2) Study Plan Alteration Card which records all alterations or changes in study taking after the consultation is held.
   3) Study Result Card which records the scores obtained by students for the courses programmed in Study Plan Card.
   4) Student personal / academic development card which is used to record student personal data.
      a) Within the limits of possibility as well as efficiency considerations, the types of cards as mentioned in point 7.b can be printed / made into one card.
      b) Each faculty can develop other lists and cards, apart from those mentioned in numbers 7a and 7b.

8. Others
   a. Each academic advisors is required to report their assignments periodically, each semester to the faculty leadership.
   b. Faculty Leaders must pay attention to the rights of

Academic Advisors

CHAPTER X
STUDENT ETHICS FACULTY OF ANIMAL SCIENCE UNIVERSITAS BRAWIJAYA

A. Appearance

1. Dress neatly in all circumstances and times while on campus
2. Hair, clothes and shoes are neatly arranged and not excessive
3. Wear proper shirts that are neat and polite
4. For men, wear proper long pants, not jeans that are colorful and are also not torn / hollow.
5. For women, wear long pants or skirts
6. Muslim female students are encouraged to wear head scarf
7. Wear formal shoes that are appropriate for use in the office or campus

B. Attitude

1. Have good ethics and mutual respect for fellow students, faculty leaders, lecturers, employees and everyone we meet
2. Speak good speech when communicating with lecturers and employees
3. Be courteous and loyal to each other to fellow students
4. Respect employees and lecturers in interacting with them
5. Ask permission to enter the room if there are already lecturers or staff in the room

6. Comply with academic rules and other rules relating to the implementation of education on campus.
7. Be wise and careing towards the environment, and do not smoke in the campus building or do other activities / actions that damage oneself and / or disturb others and the environment.

C. Performance

1. Use time as efficiently as possible, try to avoid excessive jokes on campus that can disturb others and reduce the performance of oneself, groups or others.
2. Use the campus internet / wifi facilities only for learning purposes or those related to campus assignments.
3. Work hard, discipline and be honest in all circumstances, and motivated to progress in achievement.
4. Have a high sense and spirit in scientific study and research
5. Always build work in groups and actively participate in groups.
6. Try to always work professionally and apply the knowledge and technology that is owned for society and the environment
7. Maintain good dignity of the the alma mater and speak out for the greatness of the alma mater campus.

D. Sanctions

Students who violate Student Ethics can be subject to

penalties in the form of:

1. Warning and / or guidance
2. Not getting academic services for a specified time
3. Proposed to be expelled as a student of the Faculty of Animal Science, Universitas Brawijaya.

CHAPTER XI
SAPTA PRASETYA ALUMNI FACULTY OF ANIMAL SCIENCE UNIVERSITAS BRAWIJAYA

1. Be devoted to God Almighty, and strive to carry out religious obligations in daily life;
2. Upholding human morals and respecting others;
3. Always follow the development of modern science and technology in animal science field;
4. Work hard, honest and discipline at work;
5. Be critical and smart in dealing with tasks and problems;
6. Upholding and always maintaining the good name and dignity of the alma mater;
7. Always collaborate at work and always maintain the ethics between colleagues and family in the alma mater.

LIST OF LECTURERS OF
FACULTY OF ANIMAL SCIENCE
UNIVERSITAS BRAWIJAYA

No.	NAMA	NIP	No. HP	Email
1	Prof.Dr.Ir. HENDRAWAN SOETANTO , M.Rur.Sc.	195306021980031003	085815861545	hendrawan07@ub.ac.id
2	Prof.Dr.Ir. LUQMsAN HAKIM ,MS.	195012131980021002	0818382918	lhakim_gs@yahoo.com
3	Prof.Dr.drh. PRATIWI TRISUNUWATI , MS.	194806151977022001	08123304876	pratiwi_trisunuwati@yahoo.com
4	Prof.Dr.Ir. ZAENAL FANANI , MS.	195812121986011001	08123247135	prof_zaenalfanani@yahoo.co.id
5	Prof.Dr.Ir. SITI CHUZAEMI , MS.	195305141980022001	0818533582	schuzaemi@ub.ac.id schuzaemi@gmail.com
6	Prof.Dr.Ir. WORO BUSONO , MS.	195604031981031002	08123384996	wbusono@yahoo.com
7	Prof.Dr.Ir. MUHAMMAD NUR IHSAN , MS.	195306121981031002	081334387104	m_nur_ihsan@yahoo.com
8	Prof.Dr.Sc.Agr. Ir. SUYADI , MS.	196204031987011001	085646547179	suyadi@ub.ac.id
9	Prof.Dr.Ir. TRINIL SUSILAWATI MS.	196211121987012001	085933014546	trnil_susilawati@yahoo.com
10	Prof.Dr.Ir. BUDI HARTONO , MS.	196001281987011001	08156895246	budihartono@yahoo.com
11	Prof.Dr.Ir. HARTUTIK , MP.	195606031982032001	08123353006	hartutik_nmt@yahoo.co.id
12	Prof.Dr.Ir. IFAR SUBAGIYO , M.Agr.St.	195604151982031003	0811366457	ifars@ub.ac.id
13	Prof. Dr. Ir. KUSMARTONO	195904061985031005	08123582887	kusmartono_anc@yahoo.com
14	Prof.Dr.Ir. MOCHAMMAD JUNUS , MS.	195503021981031004	081333298790	junusbrawijaya@yahoo.com

15	Prof. Dr. Ir. DJALAL ROSYIDI , MS.	195909271986011002	08123380703	djalal_tht@ub.ac.id
16	Dr.Ir. IRDAF , M.Si.	196104081986031002	081332906161	Illusi60_@yahoo.co.id
17	Dr.Ir. NURUL ISNAINI , MP.	196603061990022001	087890197256	roelisy03@yahoo.com
18	Dr.Ir. OSFAR SJOFJAN M.Sc.	196004221988111001	0818217354	osfarjan@yahoo.com
19	Dr.Ir. HARY NUGROHO , MS.	195211071981031002	081334510267	nugroho_hy@yahoo.com
20	Dr. Ir. PURWADI , MS.	196006161987011001	08123387092	purwadi_fpt@ub.ac.id
21	Dr.Ir. AGUS BUDIARTO , MS.	195708251983031002	08123351057	agusfpt@yahoo.co.id
22	Dr.Ir. PUGUH SURJOWARDOJO , MP.	195712161984031001	0341 8123449, 081334158420	puguh.surjowardojo@gmail.com puguh.surjowardojo@ub.ac.id
23	Dr.Ir. MOCH. NASICH , MS.	195511061983031001	081334004745	nasich@ub.ac.id m.nasich@yahoo.com
24	Dr.Ir. EDHY SUDJARWO , MS.	195706291984031001	0817383689	edhysudjarwo@yahoo.co.id
25	Dr.Ir. SUCIK MAYLINDA , MS.	195609281981032003	08113601466 / 08179658415	sucik_m@live.com
26	Dr.Ir. UMI WISAPTININGSIH SUWANDI , MS.	195610151981032001	08125223780	uminingsih56@yahoo.com
27	Dr.Ir. SRI WAHJUNINGSIH , M.Si.	196401101988022001	08123267314	yuningyuning208@yahoo.com
28	Ir. MANIK EIRRY SAWITRI , MS.	195909071986012001	0816557310	manikeirrysawitri@yahoo.com
29	Dr.Ir. VERONICA MARGARETA ANI NURGIARTININGSIH , M.Sc.	196406231990022001	081334548795	vm_ani@yahoo.com vm_ani@ub.ac.id
30	Dr. MUHAMMAD HALIM NATSIR , S.Pt., MP.	197112241998021001	08125240280	emhanatsir@ub.ac.id
31	Ir. M.B. HARIYONO , MS.	195804071986011001	081334729189	hariyonomb@yahoo.com

32	Dr.Ir. MUHARLIEN , MP.	195712051986012001	081233405494	harlien_nad@yahoo.com
33	Ir. ENDANG SETYOWATI , MS.	195211061979032001	0818385338	end.setyo@gmail.com
34	Dr.Ir. GATOT CIPTADI , DESS.	196005121987011001	0817380560	ciptadi@yahoo.com
35	Ir. HERMANTO , MP.	196105111987011001	08123307775 / 0811362705	hermanto@ub.ac.id
36	Dr.Ir. IMAM THOHARI , MP.	195902111986011002	08125226635 & 08885552388	itohfptub@gmail.com
37	Dr.Ir. HERNI SUDARWATI , MS.	195402271983032001	08123304975	herni_32@yahoo.co.id
38	Dr.Ir. LILIK EKA RADIATI , MS.	195908231986092001	0341715734 / 085755200404	Lilieks_pdi@yahoo.com Lilik.eka@ub.ac.id
39	Ir. SUPRIH BAMBANG SISWIJONO , MS.	195806101985031003	081388024840	suprih@ub.ac.id
40	Dr.Ir. MASHUDI , M.Agr.Sc.	196105191988021001	08125243025	mashudichot@yahoo.co.id
41	Dr.Ir. BAMBANG ALI NUGROHO , MS.DAA.	196104141986031004	0811369216	bamalnug@yahoo.com
42	Dr.Ir TRI EKO SUSILORINI , MP.	195807111986012001	081334461450	tesusilorini@yahoo.co.id
43	Dr.Ir. EKO WIDODO , M.Agr.Sc.	196310021988021001	081233054326	eko.widodo@ub.ac.id ekowidodo_ub@gmail.com
44	Dr.Ir. KUSWATI , MS.	195807111986012002	08125205345	kuswati_bx44@yahoo.com
45	Ir. HARI DWI UTAMI , MS., M.AppL.Sc., Ph.D.	196103111986012001	081335614445	hmamiek@yahoo.co.uk hrdwutami4@ub.ac.id
46	ABDUL MANAB , S.Pt.,MP.	197008281997021001	08170535017	manabub2@yahoo.com
47	Dr. Ir. MUSTAKIM , M.P	195806041987031002	085257234632	mustakimfptub@gmail.com
48	Ir. TRIANTI DJOHARJANI , M.Agr.St.	195507031981032001	0818535775	trianti_djohar@yahoo.com

49	Ir. ARIS SRI WIDATI , MS.	196009211986012001	08179605512	widatias@gmail.com
50	Ir. PRIYO SUGENG WINARTO , MA.	196107281988021001	08125209265	pswinarto@gmail.com
51	Ir. NUR CHOLIS , M.Si.	195906261986011001	08123305992	ncholis1@yahoo.com
52	Dr. Ir. MARJUKI , M.Sc.	196306041989031001	08123352241	marjuki4663@yahoo.com
53	Drh. ROSITAWATI INDRATI , M.P.	195905291986012001	081252606091	rindrati64@gmail.com rosita29@ub.ac.id
54	Dr.Ir. IRFAN H.DJUNAIDI. , M.Sc.	196506271990021001	087859668004	irjuna@ub.ac.id
55	Dr.Ir. SRI MINARTI , MP.	196101221986012001	0817386132	mienunibraw@yahoo.com
56	KHOTHIBUL UMAM AL AWWALY , S.Pt.,M.Si.	197403141999031004	08123317148	aak_umam@ub.ac.id
57	Dr. SITI AZIZAH , S.Pt., M.Sos., M.Commun	197506121998032001	081615613143	iza.amir@yahoo.com siti.azizah@ub.ac.id
58	Ir. ENY SRI WIDYASTUTI , MP.	196004021986032002	081216912832	enysriwidyastuti@yahoo.co.id
59	Dr. drh. MASDIANA CHENDRAKASIH PADAGA , M.App.Sc.	195602101984032001	081334148696	masdianapadaga@ub.ac.id
60	Dr. AGUS SUSILO , S.Pt., MP.	197308201998021001	08123396609	agussusilo@ub.ac.id agussusilo1973@yahoo.co.id
61	Ir. HANIEF EKO SULISTYO , MP.	196201061988021002	0817389190	hestyo97@yahoo.co.id
62	Ir. SITI NURUL KAMALIYAH , MP.	196304041988022001	08123303363	snkamaliyah@ub.ac.id
63	ACHADIAH RACHMAWATI , S.Pt., M.Si	197604112003122001	0811363950	achadiahr@ub.ac.id
64	Dr. HERLY EVANUARINI , S.Pt., MP.	197501102008012003	081331666844	Herly_evanuarini@yahoo.com
65	HENI SETYO PRAYOGI , S.Pt., M.Asc	197802262005011001	0817013353 (0341) 8631219	hsprayogi@yahoo.com

66	Dr. Ir. ITA WAHJU NURSITA , M.Sc.	196305081988022001	08123305991	iwnursita@yahoo.com
67	DEDES AMERTANINGTYAS , S.Pt., MP.	197404302008012007	081334235213	dds_amertaningtyas@yahoo.com
68	HELI TISTIANA , S.Pt., MP.	197408262008122001	08123322232	helly_satwa@yahoo.co.id
69	ADELINA ARI HAMIYANTI , S.Pt., MP.	197602212008122001	081802691940	adelina_arihamiyanti@yahoo.co.id
70	FIRMAN JAYA , S.Pt., MP.	198203082010121001	081334656604	firmanjaya@ub.ac.id
71	EKO NUGROHO , S.Pt.,M.Sc.	198005142005011001	081358129419	eko_nug@ub.ac.id
72	FIRMANSYAH TRI SAPUTRA , S.Pt., MP.,	198708052014041002	082143648985	firmansyahtrisp@yahoo.com
73	RINI DWI WAHYUNI , S.Pt., M.Sc..	198004062005012002	081216896616	rinidwi_w@ub.ac.id
74	AULIA PUSPITA ANUGRA YEKTI S.Pt., MP., M.Sc	198605202015042004	081223344945	aulia_pay@yahoo.com
75	ASWAH RIDHOWI , S.Pt., M.P., M.Sc	198710272015041002	085655580892	dhowi_fapetub@yahoo.co.id
76	AHMAD WINDU BAHARI , S.Pt., M.P., M.Sc.	198806162015041001	085659889556	ahmad.windu@yahoo.com
77	ASRI NURUL HUDA S.Pt., MP., M.Sc	198809192015042004	085649818007	asrifapet@gmail.com
78	ARTHARINI IRSYAMMAWATI , S.Pt., MP.	197710162005012002	0818536881	artharini_19@ub.ac.id
79	IRIDA NOVIANTI , S.Pt., M.Agr.Sc	198111242005012002	081252056379	i_novianti@ub.ac.id
80	ANIE EKA KUSUMASTUTI , S.Pt., MP., M.Sc.	198005292005012001	085852791079	anieeka@ub.ac.id
81	RIZKI PRAFITRI , S.Pt. MA	198207152005022001	0818537507	rizkiprafitri@yahoo.com
82	WIKE ANDRE SEPTIAN, S.Pt, M.Si	2016079005042001	081336641117	Andre_ipb12@yahoo.com
83	POESPITASARI HASANAH N,S.Pt, MP	2016079005042001	085755769993	Poespitasari_ndaru@yahoo.com
84	FRITA YULI NUNINGTYAS,	2016078707182001	081249519071	Tyasfrita@yahoo.co

	S.Pt, M.Sc, MP			.id
85	RIA DEWI ANDRIANI, S.Pt, M.Sc	2016078605202001	082245459688	Andriani_rd@gmail.com
86	MULIA WINIRSYA APRILIYANI, S.Pt, MP	2016078804102001	085655771790	Muliaapriliyani@ub.ac.id
87	PREMY PUSPITAWATI , S.Pt, MP	2016079012052001	085645240301	Premypuspita@gmail.com
88	NANANG FEBRIANTO, S.Pt, MP	2016078502071001	081333889333	nanangfebri21@yahoo.com
89	JAISY AGHNIARAHIM P S.Pt, MP	2016079103212001	081944811138	Jaisyaghniatamara@gmail.com
90	AWANG TRI SATRIA, S.Pt., ME	2016098305241001	085230670056	Awangtriasatria@gmail.com

ACADEMIC HANDBOOK TEAM FACULTY OF ANIMAL SCIENCE UNIVERSITAS BRAWIJAYA MALANG

Supervisor	: Prof.Dr.Sc.Agr.Ir. Suyadi, MS.,IPU. (Dean)
Head of Team	: Dr.Ir. M. Halim Natsir, S.Pt.,MP.,IPM. (Vice Dean I)
Members	: Prof.Dr.Ir.Budi Hartono,MS.,IPU. (Vice Dean II)
	Dr. Agus Susilo , S.Pt., MP., IPM., (Vice Dean III)
	Dr.Ir.Sri Minarti,MP.,IPM. (Head of Animal Science Study Program)
	Dr.Ir. Imam Thohari , MP., IPM. (Secretary of Animal Science Study Program)
	Dr.Ir.Mashudi, M.Agr.Sc.,IPM. (Head of the Animal Nutrition and Feed Section)
	Dr.Siti Azizah, S.Pt,M.Sos,M.Commun (Head of the Animal Science Social Economy Section)
	Dr.Ir. Mustakim , M.P., IPM (Head of Animal Scince Product Technology Section)
	Dr.Ir.Tri Eko Susilorini, MP (Head of Animal Production Section)