



UNIVERSITAS
INDONESIA

Yudha Pratista Sadika

FMIPA

Student Handbook

Undergraduate Program

Faculty of Mathematics and Natural Sciences
Universitas Indonesia

2024
EDITION

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FOREWORD

Praise and gratitude to the Almighty for His blessings and guidance, allowing the compilation of the Student Handbook of Undergraduate Program of the Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI). This Student Handbook is prepared as a reference for new students and prospective students to understand the important aspects of FMIPA UI.

FMIPA UI, established on December 21, 1960, has grown into one of the leading centers for education, research, and development of science in Indonesia. As a faculty with a long-standing tradition of producing high-quality graduates, FMIPA UI remains committed to providing excellent education that is relevant to the advancement of science and the needs of society.

FMIPA UI consists of various departments, each with its strengths and unique contributions to the field of natural sciences. We provide facilities that support the learning and research activities of students, including classrooms, laboratories, and academic services.

This book serves as the academic guide for Undergraduate Program students, which includes a brief history of the establishment of FMIPA UI, an overview of supporting units, the faculty and department profiles, as well as the academic systems and regulations. The regulations and rules are based on the Rector's Decree and Curriculum Decree for each Study Program. We hope that this guidebook will provide a clear and comprehensive overview of various aspects of campus life and assist students in navigating their academic journey at FMIPA UI. Welcome, and may all students make the most of the opportunities to grow and achieve success.

We would like to express our deepest gratitude to all those who have contributed to the preparation of this academic guidebook. Thanks to the lecturers, academic staff, and administrative personnel who provided valuable information and insights. We also appreciate the hard work of the editorial team who dedicated themselves to ensuring that this book is well-prepared and serves as a useful guide for all students.

Depok, 6 December 2024

Dean

The image shows a circular official stamp of Universitas Indonesia (UI) on the left, with the text 'UNIVERSITAS INDONESIA' and 'FMIPA' visible. To the right of the stamp is a handwritten signature in blue ink, which appears to be 'Dede Djuhana'.

Prof. Dede Djuhana, Ph.D.

TABLE OF CONTENTS

	Pages
Foreword	3
Table of Contents	4
CHAPTER 1. FACULTY AND DEPARTMENT PROFILE	
1.1. Brief History of FMIPA UI	8
1.2. Vision and Mission	9
1.3. General Objective	10
1.4. Core Values of Universitas Indonesia	10
1.5. Organizational Structure	11
1.6. Study Program	21
1.7. Accreditation	22
1.8. Department Profile	24
CHAPTER 2. FACILITIES AND CAMPUS LIFE	
2.1. Facilities	37
2.2. Faculty Administrative Center (PAF)	38
2.3. Central Library of Universitas Indonesia	39
2.4. Computer Sciences and Network	40
2.5. Student Welfare	40
2.6. Student Organizations	43
2.7. Applied Science Institute (LST)	44
2.8. Rules of Campus Life	44
CHAPTER 3. ACADEMIC SYSTEM AND REGULATION	
3.1. The Objective of Education	50
3.2. Implementation of the Undergraduate Program	50
3.3. Student Intake Policy	51
3.4. Semester Credit Unit (SKS)	51
3.5. Grade Point	52
3.6. Administrative and Academic Registration	52
3.7. Academic Calendar	53
3.8. Course Schedule	53

3.9. Student's Academic Status	54
3.10. Academic Advisor	55
3.11. Filling Out the Study Plan (IRS)	57
3.12. Academic Status of Empty	58
3.13. Study Load and Study Period	59
3.14. Curriculum	60
3.15. Merdeka Belajar Kampus Merdeka (MBKM)	61
3.16. Final Assignment	62
3.17. Final Assignment Supervisor	62
3.18. Learning Process	63
3.19. Evaluation of Learning Outcomes	64
3.20. Administration of Learning Process	69
3.21. Graduation and Predicate	72
3.22. Uploading Scientific Works	73
3.23. Credit Transfer and Credit Earning	73
3.24. Academic Leave, Inactive, and Studying Outside Universitas Indonesia	73
3.25. Dropped out Criteria Evaluation	75
3.26. Intermediate Semester	76
3.27. Similarity Test for Disertation Manuscript	76
3.28. Study Program Profile and Curriculum	
a. Undergraduate Program in Mathematics	77
b. Undergraduate Program in Statistics	81
c. Undergraduate Program in Actuarial Science	86
d. Undergraduate Program in Physics	91
e. Undergraduate Program in Chemistry	96
f. Undergraduate Program in Biology	102
g. Undergraduate Program in Geography	107
h. Undergraduate Program in Geophysics	111
i. Undergraduate Program in Geology	115
CHAPTER 4. RESEARCH AND COMMUNITY SERVICE	
4.1. Research	122
4.2. Community Service	123

4.3. Symposium and Webinar Series	124
CHAPTER 5. ALUMNI	
5.1. Alumni	126

CHAPTER 1

Faculty and Departments Profile

A thick yellow graphic element consisting of a horizontal bar at the bottom, a diagonal line rising from the right side of the bar, and a horizontal line extending to the right from the top of the diagonal line.

1.1 Brief History of FMIPA UI

The history of FMIPA UI can not be separated from great historical establishment of the Universitas Indonesia. At the beginning of Universitas Indonesia establishment, FMIPA known as the Faculty of Exact and Natural Sciences (FIPIA), based in Bandung. In line with the development of UI are concentrated in the nation's capital, faculty are released into one of the faculty which is managed by the Institute of Technology Bandung (ITB), which opened in 1959.

Furthermore, the Universitas Indonesia planned FIPIA establishment based in Jakarta. It is also based on the plan of the Ministry of Education, Culture and when it is asked for advice from several experts at the Universitas Indonesia.

The first step taken by the committee FIPIA formation after the meeting is to call several experts of exact and natural sciences who teaches at the Faculty of Agriculture and Faculty of Veterinary Medicine, Universitas Indonesia in Bogor, and in FIPIA ITB. The experts include Drs. S.A. Manus (Geology, UI-Bogor); Dra. Sri Sabani Soemartono (Botany, UI-Bogor); Dr. S. Somadikarta (Zoology, UI-Bogor); Prof. Dr. Ir. Soemantri Brodjonegoro (Chemistry ITB); Prof. Dr. Ping Ong Hok (Physics, ITB); Drs. Isjrin Noerdin (Chemistry, ITB); Drs. E. Noerhadi (Botany, ITB); and Mahargo Suprpto, Mag. Scient. (Zoology, ITB). The experts are willing to help and contribute to be the teaching staff as well as his/her thoughts on FIPIA to be established at the Universitas Indonesia, Jakarta.

On December 21, 1960, the Minister of Education, Culture issued Decree No. 108 049/U.U. dated on the establishment of Faculty of Exact and Natural Sciences at the Universitas Indonesia, Jakarta. Prof. dr. G.A. Siwabessy later appointed as the first Dean FIPIA-UI.

The first academic year of FIPIA UI was 1961/1962 based on a Dean's Decree No. 06/D/UP/61 dated June 29, 1961. This letter was signed in Jakarta by Prof. dr. G.A. Siwabessy and by Prof. Dr. Soedjono D. Poesponegoro which then assign the first batch student admissions committee. The committee consists of four persons, namely Drs. Lauw Soan Keng, Dr. S. Somadikarta, B. Sudarsono, M.Sc., and Erman Natadidjaja, B.Sc. Furthermore FIPIA-UI in Jakarta started academic activities in the academic year 1961/1962 with the opening of 4 (four) majors, namely: the Department of Mathematics, Department of Physics, Department of Chemistry, and Department of Biology.

The number of students enrolled at that time was 52, 4 students from the Department of Mathematics, 6 students from the Department of Physics, Department of Chemistry 28 students, and 14 students of the Department of Biology. Each department is led by a Head of Department. At that time the head of the Department of Mathematics is Ir. F.J. Inkiriwang, Head of the Department of Physics is Budi Sudarsono, M.Sc, Head of the Department of Chemistry are Drs. Soan Lau Keng, and Head of the Department of Biology is Dr. S. Somadikarta.

Academic activities in FIPIA-UI in the early establishment run by 24 non-permanent teaching staff and assisted by 10 administrative staff. The whole academic activities except the Department of Biology, centered at the Eijkman Institute (Ministry of Health) at Jln. Diponegoro 69. While the Department of Biology academic activities held in Bogor together with the Faculty of Agriculture and Faculty of Veterinary Medicine, Universitas Indonesia. Starting September 1, 1963, the Faculty of Agriculture and Faculty of Veterinary Medicine, Universitas Indonesia has become Bogor Agricultural University, but Department of Biology lectures held in Bogor, and then the Office of the Department of Biology FIPIA UI which was originally located along the Zoology Section office moved to the UI Faculty Bogor Zoological Museum, Jl. Ir. H. Juanda No. 3. In the academic year 1968, the Department of Biology no longer accept students on the first level, while the completion of study for older students was funded by the framework of cooperation between IPB and UI with the National Institute of Biology LIPI (now the Research Center for Biology LIPI) Bogor. After the Department of Biology FIPIA UI moved to Jakarta in 1975, three years later in the academic year 1978 Department of Biology ready again to accept new students and academic activities was held at UI Salemba 4, Jakarta.

In 1965, FIPIA-UI opens new department, the Department of Pharmacy. Two years later in 1967, the Department of Geography UNPAD, which the academic activities run in the Directorate of Army Topographic in Jalan Dr. Wahidin Jakarta, turned into the Department of Geography FIPIA UI. Thus in 1967 FIPIA-UI already has six department, namely the Department of Mathematics, Department of Physics, Department of Chemistry, Department of Biology, Department of Pharmacy and Department of Geography. Teaching and learning activities which previously disperse around Jakarta (Jl. Diponegoro 69, Salemba 4, and Jl. Dr. Wahidin), and in Bogor, in 1975 all the department moved in the UI campus Salemba Jakarta. In 1982 Faculty of Exact and Natural Sciences (FIPIA) then became Faculty of Mathematics and Natural Sciences (FMIPA) based on Government Regulation No.27 of 1981, dated August 14, 1981 (State Decree No.41). Regulation is then reinforced by Presidential Decree 44 of 1982, dated September 7, 1982 on the organizational structure of the Universitas Indonesia. Along with the construction of the new campus of Universitas Indonesia, in July 1987 FMIPA UI moved to its present location in Depok, West Java.

1.2 Vision and Mission

Vision

Making FMIPA UI a superior center for knowledge and innovation in the fields of science and mathematics, capable of competing internationally and contributing to Indonesia's development.

Mission

1. Becoming a motor for increasing the quality and quantity of Tridharma activities in higher education that are innovative, high quality and beneficial to society;
2. Creating an academic environment that is collaborative, synergistic, transparent and accountable;
3. Improve/strengthen the academic atmosphere; and
4. Making FMIPA UI a center for the best talent in the fields of mathematics and science that has competitiveness and is able to contribute to sustainable development.

1.3 General Objectives

FMIPA UI has the following general objectives:

1. To improve academic quality in order to produce excellent education and graduates through innovative teaching methods and curriculum development;
2. To build an efficient, accountable, and integrated governance system;
3. To implement consistent academic quality assurance and governance by conducting periodic academic audits;
4. To enhance the quality and quantity of research and innovation through scientific publications and innovative works to support sustainable development;
5. To become a key networking/reference point for science faculties at the national and regional levels to build the institution's reputation;
6. To improve human resource quality through recruitment, education, and training for faculty members and educational staff; and
7. To increase financial capacity through the implementation of educational programs, research, innovation, community service, and asset management to strengthen operational costs and investment.

1.4 Core Values of Universitas Indonesia

In realizing its vision and mission, FMIPA UI, as part of the Universitas Indonesia, upholds the following values of ethics and behavior:

- | | |
|-------------------------------------|---|
| 1. Kejujuran (Honesty) | 6. Kebersamaan (Togetherness) |
| 2. Keadilan (Just and Fair) | 7. Keterbukaan (Transparency) |
| 3. Keterpercayaan (Trustworthiness) | 8. Kebebasan Akademik (Academic Freedom) |
| 4. Kemartabatan (Dignity) | 9. Kepatuhan pada aturan (Compliance to Laws) |
| 5. Tanggung Jawab (Accountability) | |

1.5 Organizational Structure

The organizational structure of FMIPA UI is based on the Dean's Decree of the Faculty of Mathematics and Natural Sciences, Universitas Indonesia, Number: 167/SK/F3.D/UI/2022, concerning the Organizational Structure of the Faculty of Mathematics and Natural Sciences, Universitas Indonesia 2022-2025. The organizational structure of FMIPA UI provides a clear division of responsibilities, as well as the framework used to achieve the faculty's objectives.

Faculty Leaders	
Dean	: Prof. Dede Djuhana, Ph.D.
Vice Dean for Academic, Research, and Student Affairs	: Prof. Dr.rer.nat. Budiawan
Vice Dean for Resources, Venture, and General Administration	: Prof. Dr. Tito Latif Indra, S.Si., M.Si.
Head of Academic Quality Assurance Unit	: Dr. Denny R. Silaban
Manager for Academic Affairs	: Rika Tri Yunarti, S.Si., M.Eng., Ph.D.
Manager for Student Affairs	: Dr. Dewi Susiloningtyas, M.Si.
Manager for Research and Community Services	: Dr. Dipo Aldila, S.Si., M.Si.
Manager for Partnership, Venture & Alumni	: Dr. Lukmanda Evan Lubis, M.Si., F.Med.
Manager for General Affairs	: Mohammad Hidayat, S.Sos.
Manager of Human Resources	: Fakhrrur Rizqi, S.Sos.
Head of Secretariat	: Erning Setiyono, M.Si.

Council of Professor	
Chairman of the Council of Professors (Professor of Chemistry)	: Prof. Dr. Sumi Hudiyono. PWS
Secretariat of the Council of Professors (Professor in the Field of Electro-Chemical Photo Sciences)	: Prof. Dr. Jarnuzi Gunlazuardi
Professor of Biological Sciences	: Prof. Dr. Soekarja Somadikarta
Professor of Chemistry	: Prof. Drs. Ridla Bakri, M.Phil., Ph.D
Professor of Biological Sciences	: Prof. Dr. Drs. Wibowo Mangunwardoyo, M.Sc
Professor of Chemistry	: Prof. Dr. Usman Sumo Friend Tambunan, M.Sc
Professor of Physical Sciences	: Prof. Dr. Terry Mart
Professor of Physical Sciences	: Prof. Dr. A. Harsono, M.Sc.
Professor of Physical Sciences	: Prof. Dr. Drs. Anto Sulaksono, M.Si
Professor of Biological Sciences	: Prof. Dr. Jatna Supriatna M.Sc
Professor of Physical Sciences	: Prof. Dr. Rer.nat. Rosari Saleh
Professor of Chemistry	: Prof. Dr. Yoki Yulizar, S.Si., M.Sc.
Professor of Chemistry	: Prof. Dr. Ivandini T. Anggraningrum, S.Si., M.Si.

Professor of Geophysical Sciences	: Prof. Dr. rer. Nat. Abdul Haris
Professor of Physical Sciences	: Prof. Dr. Azwar Manaf, M.Met.
Professor of Physical Sciences	: Prof. Dr. techn. Djoko Triyono, M.Si.
Professor in Computational Mathematics	: Prof. Alhadi B., S.Si., M.Kom., Ph.D.
Professor of Statistics	: Prof. Dr. Dra. Titin Siswantining, D.E.A
Professor of Materials Science	: Prof. Dr. Vivi Fauzia, S.Si., M.Si.
Professor of Biological Sciences	: Prof. Dr. Drs. Abinawanto, M.Si.
Professor in the Field of Chemical Toxicology and Hazardous Chemicals	: Prof. Dr. Rer. Nat. Budiawan
Professor of Remote Sensing and Environmental Sciences	: Prof. Dr. Muhammad Dimyati, M.Sc.
Professor in the Field of Polymer Physical Chemistry	: Prof. Dr. Dra. Helmiyati, M.Si.
Professor in the field of Ecophysiology of Marine Biota	: Prof. Dr. Dra. Noverita Dian Takarina, M.Sc.
Professor of Graph Theory and Combinatorics	: Prof. Dra. Kiki Ariyanti Sugeng, M.Si., Ph.D.
Professor of Integrative Cellular and Molecular Biology	: Prof. Anom Bowolaksono, Ph.D.
Professor in the Field of Systematics and Utilization of Microalgae	: Prof. Dr. Dra. Nining Betawati Prihantini, M.Sc.
Professor of Inorganic Network Materials Science	: Prof. Yuni Krisyuningsih, S.Si., M.Sc., Ph.D.
Professor of Materials Science	: Prof. Dede Djuhana, M.Si., Ph.D.
Professor in the Field of Systematics and Prospects of Microorganism	: Prof. Dra. Wellyzar Sjamsuridzal, M.Sc., Ph.D.
Professor in the Field of Animal Conservation Science	: Prof. Dr. Luthfiralda Sjahfirdi, M.Biomed,

Faculty Academic Senate (SAF)

Dean	: Prof. Dede Djuhana, Ph.D.
Head of Academic Senate	: Prof. Dra. Wellyzar Sjamsuridzal, M.Sc.Ph.D.
Secretariat of Academic Senate	: Adi Wibowo, S.Si., M.Si., Ph.D.
- Department of Mathematics	
Head	: Prof. Alhadi Bustamam, S.Si., M.Kom., Ph.D.
Members	: Prof. Kiki Ariyanti, M.Si., Ph.D.

- : Dr. Drs. Suryadi, M.T.
- **Department of Physics**
 - Head : Dr. Djati Handoko, S.Si., M.Si.
 - Members : Muhammad Aziz Majidi, S.Si., M.Si., Ph.D.
 - : Dr.rer.nat. Imam Fachruddin, M.Si.
- **Departments of Chemistry**
 - Head : Asep Saefumillah, S.Si., M.Si., Ph.D.
 - Members : Bayu Ardiansah, S.Si., M.Si., D.Sc.
 - : Iman Abdullah, S.Si., M.Si., Ph.D.
- **Departments of Biology**
 - Head : Prof. Anom Bowolaksono, Ph.D.
 - Members : Dra. Andi Salamah, M.Agr., Ph.D.
 - : Dr.rer.nat. Mufti Petala Patria, M.Sc.
- **Departments of Geography**
 - Head : Prof. Dr. Drs. Supriatna, M.T.
 - Members : Dr. Triarko Nurlambang, M.A.
 - : Adi Wibowo, M.Si., Ph.D.
- **Members of the University Academic Senate**
 - Vice Professor Lecturers : Prof. Dr. Muhammad Dimyati, M.Sc.
 - : Prof. Yuni Krisyuningsih, S.Si., M.Si., Ph.D.
 - Vice Non-Professor : Prof. Dra. Wellyzar Sjamsuridzal, M.Sc., Ph.D.
 - Lecturers : Prof. Dra. Ariadne L. Juwono, M.Eng., Ph.D.

Departments

The following are list of Head of Department:

- Mathematics : Prof. Alhadi B., S.Si., M.Kom., Ph.D.
- Physics : Dr. Djati Handoko, S.Si., M.Si.
- Chemistry : Asep Saefumillah, S.Si., M.Si., Ph.D.
- Biology : Prof. Anom Bowolaksono, Ph.D.
- Geography : Prof. Dr. Drs. Supriatna, M.T.

Undergraduate Study Program

The following are list of Head of Study Program

- Undergraduate Program in Mathematics : Dr. Hengki Tasman
- Undergraduate Program in Statistics : Dr. Dra. Yekti Widyaningsih, M.Si.
- Undergraduate Program in Actuarial Science : Dr. Suci Fratama Sari, M.Si.
- Undergraduate Program in Physics : Anawati, Ph.D
- Undergraduate Program in Chemistry : Muhammad Ridwan, M.Eng., Ph.D.
- Undergraduate Program in Biology : Astari Dwiranti, M.Eng., Ph.D.

Undergraduate Program in Geography	: Dr. Iqbal Putut Ash Shidiq, S.Si., M.Sc.
Undergraduate Program in Geology	: Reza Syahputra, Ph.D.
Undergraduate Program in Geophysics	: Dr. Eng. Supriyanto

Graduate Study Program

The following are list of Head of Study Program

Master Program in Mathematics	: Prof. Dr. rer. nat. Hendri Murfi, S.Si., M.Kom.
Master and Doctoral Program in Physics	: Adhi Harmoko Saputro, S.Si., M.Kom., Ph.D.
Master and Doctoral Program in Materials Science	: Dr. Budhy Kurniawan R., M.Si.
Master and Doctoral Program in Chemistry	: Aminah, M.Sc., Ph.D.
Master and Doctoral Program in Biology	: Dr. Dra. Dian Hendrayanti, M.Sc.
Master Program in Geography	: Dr. Hafid Setiadi, M.T.
Master Program in Marine Science	: Dr.rer.nat. Yasman
Master Program in Medical Physics	: Prof. Supriyanto Ardjo Pawiro, M.Si., Ph.D.

FACULTY LEADERS



Prof. Dede Djuhana, Ph.D.
Dean FMIPA UI



Prof. Dr.rer.nat Budiawan
Dean for Academic, Research, and Student
Affairs



Prof. Dr. Tito Latif Indra, S.Si., M.Si.
Vice Dean for Resources, Venture, and General
Administration



Dr. Denny R. Silaban, M.Kom.
Head of Academic Quality
Assurance Unit



Dr. Dewi Susiloningtyas, M.Si.
Manager of Student Affairs



Rika Tri Yunarti, S.Si., M.Eng., Ph.D.
Manager of Education Affairs



**Dr. Dipo Aldila, S.Si.,
M.Si.**

Manager of Research and
Community Service



**Dr. Lukmanda Evan
Lubis, M.Si., F.Med.**

Manager of Cooperation,
Venture, and Alumni



**Mohammad Hidayat,
S.Sos.**

Manager of General and
Facilities



Fakhrur Rizqi, S.Sos.
Manager of Human Resources



Erning Setiyono, M.Si.
Head of Secretariat

DEPARTMENTS LEADERS

Department of Mathematics



**Prof. Alhadi B., S.Si.,
M.Kom., Ph.D.**
Head of Department of
Mathematics



Dr. Hengki Tasman
Head of Study Program of
Undergraduate of
Mathematics



**Dr. Dra. Yekti
Widyaningsih, M.Si.**
Head of Study Program of
Undergraduate of Statistics



**Dr. Suci Fratama Sari,
M.Si.**
Head of Study Program of
Undergraduate of Actuarial
Science



**Prof. Dr. rer. nat.
Hendri Murfi, S.Si.,
M.Kom.**
Head of Study Program of
Master of Mathematics

Departments of Physics



**Dr. Djati Handoko, S.Si.,
M.Si.**
Head of Department of Physics



Anawati, M.Sc., Ph.D.
Head of Study Program of
Undergraduate of Physics



**Adhi Harmoko Saputro, S.Si.,
M.Kom., Ph.D.**
Head of Study Program of Master
and Doctoral of Physics Sciences



**Prof. Supriyanto Ardjo
Pawiro, M.Si., Ph.D.**
Head of Study Program of
Master of Medical Physics



**Dr. Budhy Kurniawan
R., M.Si.**
Head of Study Program of
Master and Doctoral of
Materials Science

Department of Chemistry



**Asep Saefumillah, S.Si.,
M.Si., Ph.D.**

Head of Department of
Chemistry



**Muhammad Ridwan,
M.Eng., Ph.D.**

Head of Study Program of
Undergraduate of Chemistry



Aminah, M.Sc., Ph.D.

Head of Study Program of
Master and Doctoral of
Chemistry

Department of Biology



**Prof. Anom Bowolaksono,
Ph.D.**

Head of Department of Biology



**Astari Dwiranti,
M.Eng., Ph.D.**

Head of Study Program of
Undergraduate of Biology



**Dr. Dra. Dian
Hendrayanti, M.Sc.**

Head of Study Program of
Master and Doctoral of Biology



Dr. rer.nat. Yasman

Head of Study Program of
Master of Marine Science

Department of Geography



**Prof. Dr. Drs. Supriatna,
M.T.**
Head of Department of
Geography



**Dr. Iqbal Putut Ash
Shidiq, S.Si., M.Sc.**
Head of Study Program of
Undergraduate of Geography



Dr. Hafid Setiadi, M.T.
Head of Study Program of
Master of Geography

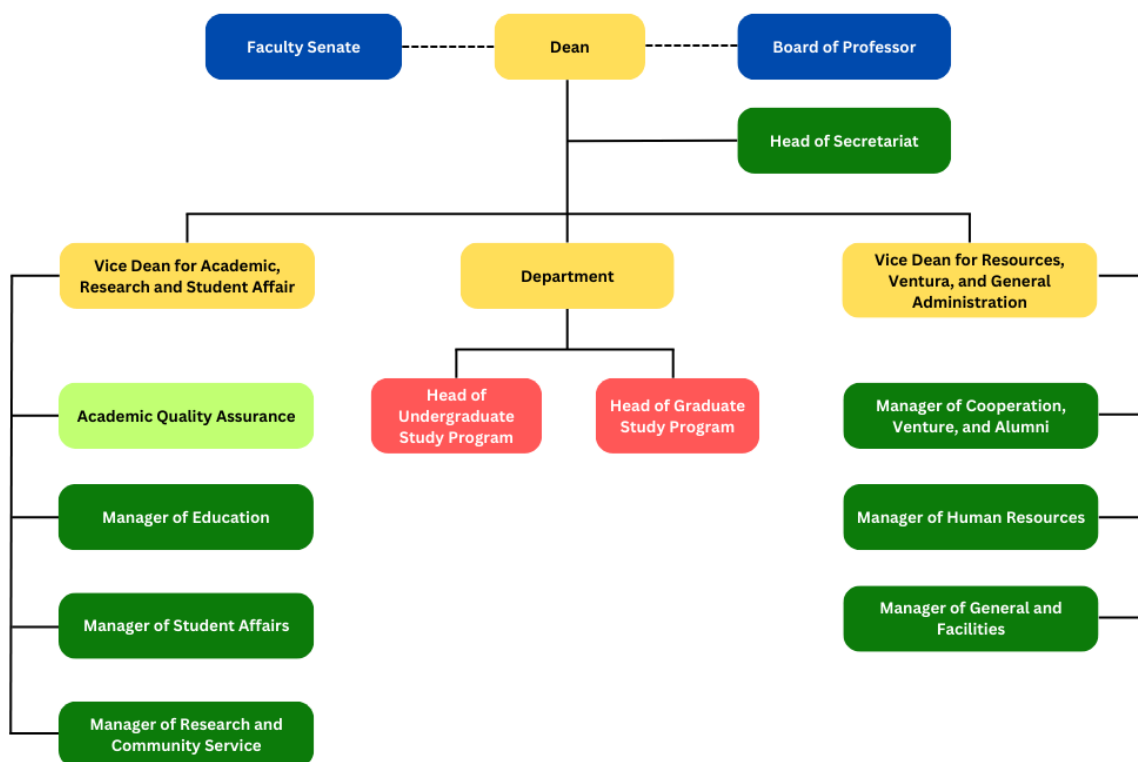
Study Program of Geosciences



Dr. Eng. Supriyanto
Head of Study Program of Undergraduate
of Geophysics



Reza Syahputra, Ph.D.
Head of Study Program of
Undergraduate of Geology



Organizational Structure of FMIPA UI

1.6 Study Program

FMIPA UI currently manages 5 departments and 21 study programs::

Program	Department of Mathematics	Department of Physics	Department of Chemistry	Department of Biology	Department of Geography	Study Program of Geosciences
Undergraduate	- Mathematics - Statistics - Actuarial Sciences	Physics	Chemistry	Biology	Geography	- Geology - Geophysics
Master	Mathematics	- Physics Science - Material Science - Medical Physics	Chemistry	- Biology - Marine Science	Geography	
Doctoral		- Physics Science - Material Science	Chemistry	Biology		

1.7 Accreditation

a. National Accreditation

The National Board of Accreditation for Higher Education (BAN-PT) and Indonesian Accreditation Agency for Higher Education in Natural and Formal Sciences (LAMSAMA) have awarded the following accreditation level for all study programs in the Faculty of Mathematics and Natural Sciences:

Study Program	Accreditation Year	Accreditation Level	Accreditation Board
Undergraduate Program			
Mathematics	2023	Unggul (Excellent)	LAMSAMA
Statistics	2022	Unggul (Excellent)	LAMSAMA
Actuarial Science	2023	Unggul (Excellent)	LAMSAMA
Physics	2023	Unggul (Excellent)	LAMSAMA
Chemistry	2020	Unggul (Excellent)	BAN-PT
Biology	2023	Unggul (Excellent)	LAMSAMA
Geography	2023	Unggul (Excellent)	LAMSAMA
Geophysics	2022	Baik Sekali (Very Good)	LAMSAMA
Geology	2022	Baik Sekali (Very Good)	LAMSAMA
Master Program			
Mathematics	2022	Unggul (Excellent)	LAMSAMA
Physics	2019	A	BAN-PT
Materials Science	2022	Unggul (Excellent)	BAN-PT
Chemistry	2023	Unggul (Excellent)	LAMSAMA
Biology	2020	A	BAN-PT
Marine Science	2022	Unggul (Excellent)	LAMSAMA
Geography	2023	Unggul (Excellent)	BAN-PT
Medical Physics	2022	Baik (Good)	LAMSAMA
Doctoral Program			
Physics	2021	Baik (Good)	BAN-PT
Materials Science	2024	Unggul (Excellent)	BAN-PT
Chemistry	2020	Unggul (Excellent)	BAN-PT
Biology	2023	Unggul (Excellent)	LAMSAMA

b. International Accreditation

- **AUN-QA**

AUN-QA (ASEAN University Network - Quality Assurance) is an institution that assesses the academic quality of a study program. The purpose of this assessment is to improve the quality of the study program being assessed. As an effort to improve quality, 4

undergraduate study programs at FMIPA UI have participated in AUN-QA accreditation, with the following results:

Study Program	Accreditation Year	Verdict
Undergraduate Program of Chemistry	2012	More than adequate
Undergraduate Program of Mathematics	2018	More than adequate
Undergraduate Program of Physics	2018	More than adequate
Undergraduate Program of Biology	2018	More than adequate

- **RSC**

RSC (The Royal Society of Chemistry) is the world's leading chemistry society, aiming to advance excellence in the chemical sciences. Through accreditation, the RSC promotes good practices in chemistry education at universities, and ensure that future chemical scientists are knowledgeable and competent. The results of the RSC accreditation of the Department of Chemistry, FMIPA UI are as follows:

Study Program	Validity Period	Verdict
Undergraduate Program of Chemistry	2018 – 2023	Partially accredited
Master Program of Chemistry	2022 – 2027	Fully accredited

- **ASIIN**

Akkreditierungsagentur für Studiengänge der Ingenieurwissenschaften, der Informatik, der Naturwissenschaften und der Mathematik (ASIIN) is an international accreditation institution originating from Germany. There are 4 FMIPA UI Undergraduate Study Programs that are ASIIN accredited.

Study Program	Accreditation Year
Undergraduate Program of Mathematics	2022
Undergraduate Program of Physics	2022
Undergraduate Program of Biology	2022
Undergraduate Program of Geography	2022

1.8 Department Profile

Established in 1960 with 4 department, currently FMIPA UI Manages 5 departments:

Mathematics, Physics, Chemistry, Biology, and Geography.

Department of Mathematics

The Department of Mathematics was established in 1961, alongside the Departments of Physics, Chemistry, and Biology. Currently, the Department of Mathematics occupies a 4-story building in the FMIPA UI Depok Campus. Since 2017, the Department of Mathematics has had four study programs: the Bachelor's Program in Mathematics, Statistics, Actuarial Science, and the Master's Program in Mathematics.

In carrying out its duties, the Department of Mathematics at UI is led by a Head of Department. Currently, the Department of Mathematics has four study programs: the Bachelor's Program in Mathematics, the Bachelor's Program in Statistics, and the Master's Program in Mathematics. The Bachelor's Program in Actuarial Science was established in 2017 and began accepting new students in 2018. Each study program is led by a Program Coordinator.

Vision

To become a leading institution in the field of mathematics and its applications, capable of playing a role at the global level.

Mission

1. To implement the Tri Dharma activities to produce outstanding graduates from the Department of Mathematics, FMIPA UI, who are competitive at the global level;
2. To develop an academic atmosphere and research culture for the advancement of mathematics and its applications, leading to innovations and solutions that contribute to national development; and
3. To provide contributions and take an active role in the development of mathematics and its applications at the global level.

Academic staffs of Department of Mathematics

No	Name	Expertise
1	Prof. Alhadi Bustamam, Ph.D	Bioinformatics
2	Al Haji Akbar Bachtiar, S.Si., M.Sc., Ph.D.	
3	Arman Haqqi Anna Zili, M.Si.	Mathematics Computation
4	Bevina Desjwiandra Handari, Ph.D	Mathematics Computation
5	Dr. Debi Oktia Haryeni, S.Si., M.Si.	

6	Dr. Denny Riama Silaban, M. Kom.	Computer Science
7	Dr. Dian Lestari, DEA	Applied Mathematics
8	Dr. Dipo Aldila	Biomathematics
9	Fida Fathiyah Addini, M.Si.	
10	Fevi Novkaniza, M.Si.	Statistics
11	Gatot Fatwanto Hertono, Ph.D	Mathematics Computation
12	Gianinna Ardaneswari, S.Si., M.Si.	
13	Dr. Helen Burhan, M.Si	Mathematics
14	Herolistra Baskoroputro, S.Si., M.Si., Ph.D.	
15	Prof. Dr.rer.nat. Hendri Murfi, M.Kom.	Mathematics Computation
16	Dr. Hengki Tasman	Applied Mathematics
17	Dra. Ida Fitriani, M.Si.	Statistics
18	Prof. Dr. Kiki Ariyanti Sugeng	Combinatoric
19	Kurnia Susvitasari, S.Si., M.Sc., Ph.D.	
20	Maulana Malik, M.Si.	Statistics
21	Mila Novita, M.Si.	Actuarial Science
22	Muhammad Imran, S.Si., M.Sc.	
23	Dr. Nahlia Rakhmawati, M.Si.	
24	Dra. Nora Hariadi, M.Si.	Mathematics
25	Nurma Ayu Wigati S. Subroto, S.Kom., M.Kom	
26	Putri Zahra Kamalia, S.Si., M.Si., Ph.D.	
27	Rahmat Al Kafi, S.Si., M.Si.	
28	Dr. Rahmi Rusin, M.Sc. Tech.	Applied Mathematics
29	Dr. Sarini Abdullah, M.Stat.	Statistics
30	Sindy Devila, M.Si	Actuarial Science
31	Siti Aminah, M.Si.	Computer Science
32	Siti Nurrohmah, M.Si.	Statistics
33	Suci Fratama Sari, M.Si.	Actuarial Science
34	Dr. Suryadi MT, M.T.	Informatics
35	Prof. Dr. Titin Siswantining, DEA	Statistics
36	Dr. Dra, Yekti Widyaningsih, M.Si.	Statistics
37	Dr. Yudia Satria, M.T.	Informatics
38	Prof. Dr. Zuherman Rustam, DEA	Mathematics Computation

Department of Physics

The Department of Physics, FMIPA Universitas Indonesia, has a long history and tradition in education and research since its establishment through the Decree of the Minister of Education and Culture of the Republic of Indonesia No. 108.094 dated December 21, 1960. As of 2021, the Department of Physics has opened 6 (six) study programs: the Bachelor's Program in Physics, the Master's Program in Physics, the Master's Program in Materials Science, the Master's Program in Medical Physics, the Doctoral Program in Physics, and the Doctoral Program in Materials Science. In addition to occupying a 4-story building within the FMIPA UI Depok Campus, the Department of Physics also conducts lectures at the UI Salemba Campus.

Vision

To become a leading institution in the field of physics and its applications, capable of playing a role at the global level.

Mission

1. To conduct research activities that contribute to the development of physics and its applications at the global level;
2. To carry out physics education and its applications to produce graduates who are competitive globally; and
3. To carry out community service activities through educational outreach, dissemination, and the utilization of the results of physics research and its applications.

Currently, the Department of Physics offers six study programs, as can be seen on the website <https://physics.ui.ac.id>.

The six study programs are:

1. Undergraduate Program in Physics
2. Master Program in Physics
3. Master Program in Materials Science
4. Master Program in Medical Science
5. Doctoral Program in Physics
6. Doctoral Program in Materials Sciences

Academic staffs of Department of Physics

No	Name	Expertise
1	Prof. Dr. Anto Sulaksono	Nuclear Physics
2	Prof. Dr.rer.nat. Rosari Saleh	Material Physics
3	Prof. Dr. Terry Mart	Theoretical Nuclear and Particle Physics

4	Prof. Dr. Azwar Manaf	Material Physics
5	Dr. Adam Badra Cahya, B.Sc., M.Sc.	Theoretical Physics
6	Adhi Harmoko Saputro, S.Si., M.Kom., Ph.D.	Computer Science
7	Dr.rer.nat. Agus Salam, S.Si., M.Si.	Nuclear Physics
8	Dr. Akbar Azzi, S.Si., M.Si.	Medical Physics
9	Anawati, S.Si., M.Sc., Ph.D	Material Physics
10	Dr.Eng. Anjar Taufik Hidayat, M.Sc.	
11	Dr. Ar Rohim, S.Si., M.Sc.	
12	Prof. Dr. Ariadne Lakshmidevi	Material Physics
13	Dr. Drs. Arief Sudarmaji, M.T.	Material Physics
14	Dr. Budhy Kurniawan, M.Si.	Condensed Matter Physics
15	Prof. Dr. Dede Djuhana	Material Physics
16	Dr. sc. hum. Deni Hardiansyah	Medical Physics
17	Dr. Djati Handoko, S.Si., M.Si., CertDA.	Instrumentation Physics
18	Prof. Dr. techn. Djoko Triyono	Condensed Matter Physics
19	Dr. Dwi Seno Kuncoro Sihono, S.Si., M.Si.	Medical Physics and Biophysics
20	Efta Yudiarsah, M.Si., Ph.D	Condensed Matter Physics
21	Ferry Anggoro Ardy Nugroho, M.Sc., Ph.D.	
22	Handika Satrio Ramadhan, Ph.D	Theoretical Nuclear and Particle Physics
23	Dr. Imam Fachruddin, S.Si., M.Si.	Nuclear Physics
24	Isom Mudzakir, S.Si., M.Si.	Instrumentation Physics
25	Januar Widakdo, S.Si., M.Si., Ph.D. CertDA.	
26	Kristina Tri Wigati, S.Si., M.Si.	Medical Physics
27	Dr. Lukmanda Evan Lubis, M.Si., F.Med.	Medical Physics
28	Dr.rer.nat Martarizal	Instrumentation Physics
29	Drs. Mohammad Syamsu Rosid, M.T. Ph.D.	
30	Muhammad Aziz Majidi, S.Si., M.Si., Ph.D	Material Physics
31	Nisa Nashrah, Ph.D.	

32	Dr. Nur Ika Puji Ayu, S.T.	
33	Dr. Prawito Prajitno	Instrumentation Physics
34	Dr. Santoso Soekirno	Instrumentation Physics
35	Dr. Seno Aji, S.Si., M.Sc.	Instrumentation Physics
36	Prof. Supriyanto Ardjo Pawiro, Ph.D	Medical Physics
37	Surya Darma, M.Si.	Instrumentation Physics
38	Syahril Siregar, S.Si., M.Sc., Ph.D.	
39	Prof. Dr. Vivi Fauzia	Material Physics
40	Dr. Eng. Yunus Daud, Dipl.Geotherm. Tech. M.Sc.	Geophysics

Department of Chemistry

The Department of Chemistry was established in 1960 (with the Decree of the Minister of Education, Teaching, and Culture of the Republic of Indonesia, No. 108094/UU dated December 21, 1960). The admission of new students took place in September 1960 under the Faculty of Mathematics and Natural Sciences - Universitas Indonesia (FIPIA-UI). The Department of Chemistry launched the Master's Program in Chemistry (S2) in 1993 (Decree of the Directorate General of Higher Education, Ministry of Education and Culture of the Republic of Indonesia No. 577/DIKTI/KEP/1993) and the Doctoral Program in Chemistry (S3) in 2001 (Decree of the Director General of Higher Education, Ministry of National Education of the Republic of Indonesia No. 77/DIKTI/KEP/2001).

Vision

To become a center of excellence in chemistry education and research, capable of contributing to the development of science and technology at the national and international levels.

Mission

1. To produce graduates who are competitive at the national and international levels and able to adapt to changes and developments in science and technology;
2. To develop high-quality study programs that play a role in advancing the field of Chemistry and its applications; and
3. To contribute to solving chemical problems in society, particularly in urban areas.

Academic staffs of Department of Chemistry

No	Name	Expertise
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1	Prof. Dr. Sumi Hudiyo PWS	Biochemistry
2	Prof. drs. Ridla Bakri, M.Phil., Ph.D	Inorganic Chemistry
3	Prof. Dr. Ivandini T. Anggraningrum	Electrochemistry
4	Prof. Dr. Yoki Yulizar	Physics Chemistry
5	Prof. Dr. Helmiyati	Physics Chemistry
6	Prof. Dr. Jarnuzi Gunlazuardi	Analytic and Environmental Chemistry
7	Prof. Dr. Yuni Krisyuningsih	Inorganic Chemistry
8	Prof. Dr.rer.nat. Budiawan	Toxicology Chemistry
9	Dr.rer.nat. Agustino Zulys	Inorganic Chemistry
10	Aminah, M.Sc., Ph.D.	Inorganic Chemistry
11	Asep Saefumilah, S.Si., M.Si., Ph.D.	Analytic Chemistry
12	Dr. Bayu Ardiansah, S.Si., M.Si.	Organic Chemistry
13	Dewangga Oky Bagus Apriandanu, M.Si., Ph.D.	
14	Dita Arifa Nurani, S.Si., M.Sc. M.Si.	Analytic Chemistry
15	Dyah Utami Cahyaning Rahayu, S.Si., M.Si.	Organic Chemistry
16	Iman Abdullah, S.Si., M.Si., Ph.D.	Material Science
17	Dr. Isnaini Rahmawati, S.Si., M.Si.	
18	Muhammad Ridwan, S.Si., M.Si., Ph.D.	Organic Chemistry
19	Munawar Khalil, S.Si., M.Eng.Sc., Ph.D.	Advanced Nanomaterials
20	Dr. rer.nat. Noverra M. Nizzardo, S.Si., M.Sc.	Organic Chemistry
21	Rika Tri Yunarti, M.Eng., Ph.D	Inorganic Chemistry
22	Samira Husen Alamudi, S.Si., Ph.D.	
23	Dra. Sri Handayani, M.Biomed.	Biochemistry
24	Tuti Wukirsari, M.Agr., Ph.D	Organic Chemistry
25	Dr. Yulia Mariana Tesa Ayudia Putri, S.Si., M.Si.	
26	Zico Alaia Akbar Junior, S.Si., M.Sc., Ph.D.	

Department of Biology

The Department of Biology, FMIPA UI, will be 64 years old in 2024. It is one of the five departments within the Faculty of Mathematics and Natural Sciences (FMIPA) at Universitas Indonesia. As of 2024, the Department of Biology has built a conducive academic atmosphere, supported by very adequate facilities and infrastructure. The department is supported by faculty members with expertise in the fields of zoology, botany, and microbiology, and conducts research in five research groups: WILD (Wild and Sustainable Landscape), MSP (Microbial Systematics and Prospecting), CEEB (Community Ecology and Environmental Biology), CeMBioS (Cellular and Molecular Mechanisms in Biological Systems), and MeCE (Metabolomics and Chemical Ecology). These research groups provide learning and research experiences that meet the graduate profiles of Undergraduate, Master, and Doctoral students in Biology.

Vision

As a center of excellence for biodiversity conservation education and research that supports the development of human resources that are able to play a role and compete at the national and international levels.

Mission

playing an active role in developing Biology, especially in the scope of biodiversity conservation through the implementation of sustainable education, research, and community service development in accordance with advances in science and technology.

The Department of Biology currently manages 4 study programs, as can be seen on the website <https://biologi.ui.ac.id>. The four study programs are:

1. Undergraduate Program of Biology
2. Master Program of Biology
3. Doctoral Program of Biology
4. Master Program of Marine Science

Academic staffs of Department of Biology

No	Name	Expertise
1	Prof. Dr. Jatna Supriatna, M.Sc.	Conservation Biology
2	Prof. Anom Bowolaksono, M.Sc., Ph.D	Reproductive and Developmental Biotechnology
3	Prof. Dr. Abinawanto, M.Si.	Reproductive Biology and Genetics
4	Prof. Dr. Noverita Dian Takarina, M.Sc.	Marine Biology
5	Prof. Dr. Dra. Nining Betawati Prihantini, M.Sc	Phycology/ Algology

6	Prof. Dra. Wellyzar Sjamsuridzal, M.Sc., Ph.D	Mycology
7	Prof. Dr. Luthfiralda Sjahfirdi, M. Biomed.	Reproductive behavior and Physiology
8	Dr. Ade Irma Elvira, S.P., M.Sc.	
9	Afiatry Putrika, M.Si.	Plant Taxonomy and Ecology
10	Andi Eko Maryanto, M.Si.	Conservation Genetics
11	Dr. Dra. Andi Salamah	Plant Molecular Mechanism
12	Astari Dwiranti, M.Eng. Ph.D	Molecular and Cellular Biology
13	Dr. Dian Hendrayanti, M.Sc.	Systematic and Ecology of Microalgae
14	Dimas Hario Pradana, M.Si	Ornithology
15	Drs. Erwin Nurdin, M.Si	Ecology
16	Fadhillah, S.Si., M.Agr., Ph.D	Reproductive Physiology
17	Dr. Fitriyaningsih, S.Si., M.Eng.	Bacterial diversity, systematic, and prospecting
18	Drs. Iman Santoso, M. Phil	Applied Microbiology
19	Dr. Mazytha Kinanti Rachmania, S.Si., M.Si.	
20	Dr. Mega Atria, M.Si.	Plant Taxonomy
21	Dr.rer.nat. Mufti Petala Patria, M.Sc.	Marine Ecology
22	Niarsi Merry Hemelda, M.Si.	Plant – Microbe Interaction
23	Dr. Nova Anita, S.Si., M. Biomed	Reproductive Physiology
24	Dr. Dra. Noviar Andayani, M.Sc.	Conservation Genetics
25	Dr. Oriza Savitri Ariantie, S.Pt., M.Si.	
26	Dr. Dra. Ratna Yuniati, M.Si.	Plant Ecophysiology
27	Dr. Retno Lestari, S.Si., M.Si.	Plant Molecular Genetics
28	Dr. Riani Widiarti, S.Si., M.Si.	Marine Biology
29	Saifudin, S.Si., M.Si.	Plant Development
30	Dra. Sitaresmi, M.Sc.	Environmental Microbiology
31	Tety Maryenti, M.Sc., Ph.D.	
32	Dr. Upi Chairun Nisa, S.Si., M.Agr.Sc.	Biology of Reproduction
33	Dr. Windri Handayani, S.Si., M.Si.	Plant Compound Biorospecting
34	Dr.rer.nat. Yasman, M.Sc.	Metabolomics and chemical ecology

Department of Geography

Judging from its history, the establishment of the Geography Department of FMIPA UI in the 1950s was pioneered by the Indonesian Army, in this case General Gatot Subroto, which was motivated by the desire to provide experts in map making and analysis for military purposes. Therefore, it is not surprising that since its inauguration on November 27, 1959, all lecture activities were held at the Geography Institute Building of the Indonesian Army Topography Service (Jantop) located on Jl. Dr. Wahidin No. 11, Gunung Sahari, Central Jakarta before being moved to the UI Salemba Campus in 1976. At that time, the study programs opened were only intended for undergraduate education. The number of students who registered in the first batch was more than 100 people. At that time, the Geography Department was under the management of the Faculty of Exact and Natural Sciences, Padjajaran University (FIPIA-Unpad) in Bandung. It was only in 1966 that the management of the Geography Department was transferred to the Faculty of Mathematics and Natural Sciences, University of Indonesia (FMIPA - UI) based on the Decree of the Director General of Higher Education, Ministry of Education and Culture Number 79 dated October 8, 1966.

Vision

As a Center of Excellence in Geography that is recognized nationally and is able to play an active role at the global level.

Mission

1. organizing higher education activities in geography based on competence and research;
2. organizing research activities for the development of applied science and research;
3. organizing community service activities to improve the standard and quality of life of the Indonesian people and humanity; and
4. organizing the best service activities in the fields of education, research and community service.

The Department of Geography has two study programs:

1. Undergraduate Program of Geography
2. Master Program of Geography

Academic staffs of Department of Geography

No	Name	Expertise
1	Prof. Dr. Muhammad Dimyati	Agronomy Geography
2	Prof. Dr. Tito Latief Indra, SSi, M.Si.	Hydrogeology
3	Prof. Dr. Supriatna, M.T.	Remote Sensing
4	Adi Wibowo, S.Si., M.Si., Ph.D	Geographic Information System

5	Andry Rustanto, S.Si., M.Sc.	Physical Geography
6	Dra. Astrid Damayanti, M.Si.	Physical Geography
7	Dr. Dewi Susiloningtyas, S.Si., M.Si.	Regional Asian Geography
8	Dr.rer.nat. Eko Kusratmoko, M.S.	Hydrogeography
9	Dr. Hafid Setiadi, S.Si., M.T.	Urban Geography
10	Dr. Hayuning Anggrahita, S.Si., M.S.M	Human Geography
11	Dr. M. Iqbal Putut Asshidiq, S.Si., M.Sc.	Geographic Information System
12	Jarot Mulyo Semedi, S.Si., M.Sc.	Geographic Information System
13	Kuswantoro, S.Si., M.Sc	Hydrogeography
14	Dr. Mangapul P. Tambunan, S.Si., M.Si.	Geomorphology
15	Dr.Eng. Masita Dwi Mandini Manessa, S.Si., M.Si., M.Eng	
16	Nurokhmah Rizqyhandari, S.Si., M.Si.	Human Geography
17	Pranda Mulya Garniwa, S.Si., M.Si., Ph.D.	
18	Revi Hernina, M.Sc.	Physical Geography
19	Riza Putera Syamsuddin, M.Si.	
20	Dr. Rokhmatuloh, M.Eng.	Remote Sensing
21	Satria Indratmoko, M.Sc.	
22	Dr. Taqyuddin, M.Hum	Cultural Geography
23	Dr. Tjong Giok Pin, S.Si., M.Si	Remote Sensing
24	Dr. Triarko Nurlambang, M.A.	Economy Geography
25	Dra. Widyawati, MSP	Human Geography
26	Nurul Sri Rahatiningtyas, M.Si	Physical Geography
27	Dra. Ratna Saraswati, MS	Physical Geography

Department of Geoscience

The Chancellor of the University of Indonesia received a mandate from the Director General of Higher Education through the Letter of the Acting Director General of Higher Education No. 358/E.E2/DT/2014 to organize 2 (two) S1 Study Programs directly related to earth sciences, namely the Study Program of Geophysics and the Study Program of Geology. In 2015, both study programs were temporarily placed under the Faculty of Mathematics and Natural Sciences (FMIPA). In the long-term plan, these two programs will become part of a new department at FMIPA UI, namely the Department of Geosciences. The government has mandated that both study

programs meet the need for human resources capable of managing natural resources in a sustainable and environmentally friendly manner, mitigating the potential for natural disasters whose frequency is continuously increasing, and developing geotourism potential as a means of preserving the uniqueness and diversity of geological phenomena in Indonesia. The demand from society and industry for geology and geophysics graduates has been quite high. The development of exploration for conventional energy sources (such as oil, gas, and coal), non-conventional energy sources (such as CBM and shale gas), as well as renewable energy (such as geothermal) has driven the industry's high demand for earth science graduates like geologists and geophysicists.

- **Undergraduate Program in Geophysics**

Vision

To become an outstanding Bachelor's Program in Geophysics in the field of earth sciences, capable of contributing to the development of Indonesian society and gaining a reputation at the Southeast Asian level

Mission

1. Carrying out quality Tridharma activities in the field of geophysics and relevant to national and global challenges.
2. Producing high-quality Geophysics graduates who are integrated, moral, socially sensitive, and capable of competing at the national and global levels;
3. Organizing the management of the Undergraduate Geophysics Study Program that is oriented towards quality and accountability to support the vision of FMIPA and the vision of the Universitas Indonesia.

- **Undergraduate Program in Geology**

Vision

Becoming a superior Geology Study Program and being able to play a role at the Southeast Asian level to advance earth science and sustainable development

Mission

1. Carrying out the Tridharma of Higher Education activities to produce graduates of the Geology Undergraduate Study Program as future leaders who are professional, intelligent, moral, have social sensitivity and are superior in competing globally.
2. Developing an active learning atmosphere and current research in the field of geology to produce innovations and solutions that are beneficial to society and support national development and resilience
3. Providing contributions and active roles in the development of science and innovation in the field of geology.

Academic staffs of Study Program of Geosciences (Geophysics and Geology)

No	Name	Expertise
1	Prof. Dr.rer.nat. Abdul Haris	Seismic
2	Prof. Dr. Bambang Soegijono, M.Si.	
3	Agus Riyanto, M.Si.	Seismic
4	Anne Meylani Magdalena Sirait, S.Si., M.Si., Ph.D	
5	Asri Oktavioni Indraswari, M.T.	Petroleum Geoscience
6	Ayunda Aulia Valencia, S.T., M.T.	
7	Dyah Nindita Sahdarani, M.Energy	Geothermal Energy Technology
8	Felix Mulia Hasudungan Sihombing, S.T., MMinRes	
9	Iskandarsyah, S.Si., M.Si.	
10	Dr. Muhammad Bisri Mustofa, S.Pd., M.Si.	
11	Octria Adi Prasodjo, M.T.	Reservoir Geoscience Engineering
12	Dr. Reza Syahputra, ST, M.Si.	Reservoir Geophysics
13	Rezky Aditiyo, M.T.	Petrophysics
14	Dr. Eng. Supriyanto, S.Si., M.Sc.	Geophysics
15	Dr. Twin Hosea Widodo Kristyanto, M.T.	Geoenviromental

CHAPTER 2

Facilities and Campus Life



2.1 Facilities

FMIPA UI has 13 buildings that stand on $\pm$ 11 ha of land. There are six department buildings, an integrated lecture building, one basic laboratory building, two integrated laboratories: the basic science laboratory and multi-discipline integrated laboratory, student facilities, and the faculty main administrative building.

A. Study Room

The main lecture building consists of 4 floors; the ground floor has one large lecture hall Prof. Dr. Soemantri Brodjonegoro and the remaining 2, 3 and 4th floors have 17 classrooms. All classrooms are equipped with CCTV and tools that support teaching and learning processes such as air conditioner, LCD TV, sound system, and LCD projectors. In addition to the main lecture hall, there are also some lecture rooms spread across five departments. The main lecture building is also accessible for handicapped persons.

B. Laboratories

FMIPA UI provides a range of research laboratories equipped with resources to support student research and innovation across various disciplines. These laboratories are designed to facilitate hands-on learning, experiments, and collaborative research projects. The labs are equipped with advanced instruments and tools to help students deepen their knowledge, develop practical skills, and contribute to cutting-edge research in their respective fields.

C. Hall and Meeting Room

Lecture halls are equipped with advanced audiovisual systems to accommodate large classes and events, while meeting rooms provide a more intimate setting for seminars, workshops, and faculty or student meetings. Additionally, multipurpose rooms offer flexible spaces for group work, discussions, and other collaborative activities. These facilities are designed to be accessible, equipped with modern technology, and comfortable to foster a productive and inclusive academic environment for students, faculty, and staff. The hall and meeting in FMIPA UI such as Prof. Dr. Soemantri Brodjonegoro Hall, Prof. Dr. G.A Siwabessy Hall, Multidisciplinary Research Lab Hall, Dean's Meeting Room, and Meeting Room of Multidisciplinary Research Lab.

D. Other facilities

The campus also has other supporting facilities such as a Mosque, Cafeteria, and convenience store, vehicle parking areas, sports facilities, restaurants, Bank Syariah Mandiri (BSM) and Automatic Teller Machine

(ATM). Academic services for students are provided at the Faculty Administrative Centre (PAF).

2.2 Faculty Administrative Center (PAF)

Academic administrative services for all academic programs in FMIPA UI are managed by PAF. The services provided for students include academic records, change of grades from lecturers, academic transcripts, registration, absence of leave, enrollments and letter of reference letter. The working hour is at 08.00 to 16.00 from Monday to Friday, at the ground level in Main Building. There are several applications that helpful for student services that provide in several unit of FMIPA UI, as follows:

A. SIPA

SIPA (Sistem Informasi Persuratan Akademik) is an online academic service platform designed to streamline and simplify administrative processes at the FMIPA UI from Education Work Unit. Through SIPA, students can easily manage various academic-related tasks, such as submitting requests for transcripts, letters of recommendation, apply the requirements for taking Diploma and Transcript, and other official documents, as well as tracking the status of their applications. This system helps ensure efficient communication between students and academic administration, providing a convenient and accessible way to handle academic correspondence and documentation in a secure, digital format. SIPA aims to improve the overall student experience by reducing paperwork and processing time.

SIPA Link: <https://sipa.sci.ui.ac.id>

B. SAINTIS

SAINTIS (Sistem Administrasi Kemahasiswaan) is the integrated student activity administration system that simplifies and streamlines various academic and administrative from Student Affairs Work Unit. Through SAINTIS, students can easily access to submission of student activities file and provide the submission status.

SAINTIS Link: <https://sci.ui.ac.id/id/saintis/>

C. SIPRAS

SIPRAS (Sistem Informasi Peminjaman Ruang dan Fasilitas) is an online platform that allows students to easily reserve and manage the use of university spaces and facilities for academic or extracurricular activities. Through SIPRAS, students can book classrooms, meeting rooms, seminar halls, and other campus facilities for study groups, events, workshops, and meetings. The system provides a user-friendly interface to check availability, submit requests, and track booking statuses, ensuring a streamlined and efficient process for

accessing university resources. SIPRAS helps optimize facility usage and supports students in organizing and managing their academic and campus-related activities with greater ease and convenience.

SIPRAS Link: <https://sipras.sci.ui.ac.id>

D. IT Services

FMIPA UI provides services to support students throughout their academic journey. New students can register for a Single Sign-On (SSO) account, which provides access to various university applications and services with a single secure login. Through IT Services, students can also register for Office 365, allowing them to use Microsoft Office applications, cloud storage, and collaborative tools for academic activities. Additionally, students can apply for an FMIPA UI email account. For online learning and meetings, students can also log in to the Zoom service to participate in virtual classes, seminars, and group discussions.

IT Services Link: <https://sci.ui.ac.id/layanan-it-support/>

2.3 Central Library of Universitas Indonesia

For the library and other information resources, there is central library at UI campus, The Central Library of University of Indonesia, called The Crystal of Knowledge consists of 8 floors, but the library only occupies the first four floors. The remaining floors (5th-8th) consist of meeting rooms and an auditorium with a building area of 33,000 m². The new building was first used in 2011 and is one of the largest libraries in Asia.

The library is located at a walkable distance from the train stations. The operational hours of the UI library are from Monday to Friday (08.30 –19.00) (for internet room and cubicles from 08.30 - 21.00 WIB) and Saturday to Sunday (09.00-16.00). Every month, the librarian actively informs students and staff about the subscribed e-journals through e-mail. All UI students are automatically registered as members of the UI Library. However, students still need to activate the UI Library account (username and password) to gain access to digital collections in <http://lib.ui.ac.id>. Activation is done in IT Service Counter at 1st Level Library Lounge.

The UI Library staff are incorporated into three sections (divisions): Public Administration and Facilities, Library Services, Knowledge Management Section. Visitors can also take advantage of both physical and virtual facilities by utilizing e-services through the UI Library website (lib.ui.ac.id) and e-mail. For computer facilities, there are 70 PCs in the Internet space, 72 PCs for the staff, 10 PCs for interns, printing and receiving of theses, 35 OPAC PCs, one PC for the presence and activities of two PCs for registration.

The information system in the library is based on electronic information technology, i.e., there is a digital library or an online information system. With

this system, visitors to the library or its website can conduct electronic searches and download directly all available collections, such as books, magazines, non-books, electronic journals, electronic books, and some creations, which are produced by all civitas academica of the Universitas Indonesia. Some references related to science and technology can also be accessed online.

2.4 Computer Sciences and Network

Universitas Indonesia has an Internet connection with a bandwidth of 5.8 Gbps that serves the Depok and Salemba campuses. Each user is allocated 5 Mbps of Internet bandwidth. The inter-building connection within the MIPA (Faculty of Mathematics and Natural Sciences) has a bandwidth capacity of 1 Gbps, while the connection between FMIPA and the UI Data Center has a capacity of 10 Gbps. In terms of infrastructure, the university is equipped with distribution switches, attendance servers, fiber-optic networks (FO), LAN, and Wi-Fi networks. All members of the academic community (students, faculty, and staff) have unlimited free access to the internet and are provided with unique usernames (SSO Login) by the Directorate of Systems and Information Technology (DSTI). Additionally, the university has developed several information systems to support academic and administrative activities, as well as facilitate university management. These systems are likely integrated with the university's IT infrastructure, helping streamline processes such as student registration, grading, course management, and internal communications.

Users who experience issues with the use of these facilities can report or request assistance from the DSTI UI through the following services:

Email	:	support@ui.ac.id
Website	:	https://dsti.ui.ac.id
Working Hours	:	Monday – Friday, 08.00 – 16.00 WIB
Address	:	UI Campus Depok 2nd Floor, Old Library Building (Next to the ITTC building) UI Campus Salemba 1st Floor, IASTH Building (Above BNI Bank)

2.5 Student Welfare

1. Universitas Indonesia Mosque

- Ukhuwah Islamiyah (UI) Mosque Depok located in the UI Depok Campus. Established on 28 January 1987.
- Arif Rahman Hakim (ARH) Mosque Salemba is located at the UI Salemba Campus. It was established on November 10, 1967.

2. Campus Bus

To serve the transportation needs of students within the campus, Universitas Indonesia provides campus buses, also known as "Bis Kuning" (Yellow Buses). These buses operate on the following routes during their operating hours:

Monday – Friday : 06.54 – 21.30 WIB

Saturday : 06.50 – 16.10 WIB

The Yellow Bus (Bus Kuning) operates on two different routes:

Blue	UI Dormitory, Menwa, UI Station, Faculty of Psychology, Faculty of Social and Political Sciences, Faculty of Humanities, Faculty of Economics and Business, Faculty of Engineering, Vocational Studies, Pusgiwa (Student Activity Center), Faculty of Mathematics and Natural Sciences, Faculty of Nursing, Faculty of Public Health, Health Sciences Cluster, Balairung/Pondok Cina Station, UI Mosque, Faculty of Law
Red	UI Dormitory, Menwa, UI Station, Faculty of Law, Balairung/Pondok Cina Station, Health Sciences Cluster, Faculty of Public Health, Faculty of Nursing, Faculty of Mathematics and Natural Sciences, SOR (Sport Facilities)/PNJ (Politeknik Negeri Jakarta), Vocational Studies, Faculty of Engineering, Faculty of Economics and Business, Faculty of Humanities, Faculty of Social and Political Sciences, and Faculty of Psychology

Bikun Tracker Link: <https://bikun.ui.ac.id>

3. Health Facilities

Universitas Indonesia has 2 (two) the health facilities that can be used by students and other academic staff are as follows:

a. UI Hospital

UI Hospital is one of the health facilities available for students to check their health. It was officially opened in 2019 with a Green Hospital concept, focusing on environmental friendliness and patient safety. UI Hospital is also open to the general public for health check-ups.

b. UI Makara Satellite Clinic

The UI Makara Satellite Clinic is specifically a health service center for students and the general public. It is located within the Universitas Indonesia campus areas in Depok and Salemba. Several services are available at the clinic:

	Specialty Clinic	Day	Working Hours
	General	Monday – Thursday	08.00 – 18.00 WIB

UI Makara Satellite Clinic, Depok		Friday	09.00 – 18.00 WIB
		Friday	08.00 – 12.00 WIB
	Dentistry	Monday – Thursday	08.00 – 16.00 WIB
		Friday	09.00 – 16.00 WIB
	Counseling	Monday – Thursday	08.00 – 18.00 WIB
		Friday	08.00 – 18.00 WIB
	Maternal and Child Health	Tuesday & Thursday	08.00 – 12.00 WIB
UI Makara Satellite Clinic, Salemba	General	Monday, Wednesday, & Friday	09.00 – 15.00 WIB

4. Sports Facilities

Universitas Indonesia and FMIPA provide several sports facilities that can be used by students and other academic staff as follows as:

a. UI Stadium

Stadium UI is one of the facilities provided to all members of the University of Indonesia academic community. The UI Stadium includes a Soccer Field and Running Track, and is available for extracurricular activities that foster student potential and achievement. With synthetic grass for the football field and rubber for the athletic track, the stadium provides a safer environment for practice and competition. This is intended to promote a positive, competitive spirit as well as sportsmanship among students.

b. Felfest UI

Another sports facility is Felfest UI, or the Felicity Festival UI, which offers sports amenities such as a swimming pool, a golf driving range, and archery. Additionally, Felfest provides meeting points, lakeside gathering areas, and both indoor and outdoor spaces that can be used for events such as weddings. These facilities are also available to the public.

c. SOR UI

SOR UI is a sports facility used by students for extracurricular activities. It consists of futsal, basketball, and volleyball courts. SOR UI is also equipped with supporting facilities such as toilets, showers, changing rooms, a prayer room, and stairs and ramps for accessibility, supporting students with disabilities.

d. Gymnasium UI

The Gymnasium UI is an indoor sports facility that includes volleyball and badminton courts. It is often used for inter-faculty volleyball and badminton competitions within the university

e. FMIPA UI Field

The FMIPA UI Field is a sports facility located within the Faculty of Mathematics and Natural Sciences (FMIPA). It is commonly used for basketball, futsal, and other sports activities, serving as a venue for various student sports events

5. UI Dormitory

Universitas Indonesia Dormitory (Asrama UI) is a residential facility provided by the University of Indonesia to support the housing needs of its students. The dormitory aims to provide a comfortable, safe, and conducive environment for studying, while also encouraging interaction and integration among students from diverse backgrounds.

UI Dormitory is located within the UI Depok campus, specifically in the Kukusan area, near the Kukusan Teknik Gate (Kutek). This strategic location provides easy access to various faculties and other campus facilities

6. Student Guidance and Counseling (BKM) UI

The Student Affairs Unit of FMIPA UI provides a platform for students to consult and resolve various issues, whether academic, family-related, or personal. For students who require BKM (Student Counseling and Guidance) services, they can contact the designated BKM counselor. This psychological assistance is offered in the form of counseling and guidance to help students navigate their challenges effectively.

2.6 Student Organizations

The Student Organizations at FMIPA UI serve as platforms for students to develop their potential outside of academic activities. These organizations are designed to support the formation of character, leadership skills, teamwork, and creativity through various activities that involve social, intellectual, and talent aspects. The following are the student organizations within FMIPA UI:

1. Students Executive Body (BEM) FMIPA UI

The student executive organization at the faculty level, responsible for implementing work programs and activities aimed at supporting students' self-development, advocacy, community service, and facilitating the needs of FMIPA UI students. BEM also acts as a liaison between students and the faculty or university administration.

2. Students Representative Body (BPM) FMIPA UI

The student legislative body at FMIPA UI, which functions as a supervisory entity for the performance of BEM and other student organizations. BPM is responsible for creating regulations, providing recommendations, and channeling students' aspirations to the relevant authorities.

3. Department Student Association (HMD) FMIPA UI

Department-based student organizations that focus on the development of students' interests, talents, and skills in specific fields. These organizations offer activities such as seminars, training, competitions, and social events. FMIPA UI has six Student Association.

- a. Student Association of Department of Mathematics FMIPA UI
- b. Student Association of Department of Physics FMIPA UI
- c. Student Association of Department of Chemistry FMIPA UI
- d. Student Association of Department of Biology FMIPA UI
- e. Student Association of Department of Geography FMIPA UI
- f. Student Association of Department of Geosciences FMIPA UI

2.7 Applied Science Institute (LST)

Superior human resources are a necessity that must be had to support current development activities. The University of Indonesia, as a university, certainly has a very significant role in creating superior human resources, namely as a producer of change agents who are able to design, encourage and pioneer change.

In order to support the University of Indonesia in achieving its vision and mission, the Faculty of Mathematics and Natural Sciences established the LST (Applied Science Institute). This institution focuses on consulting, training, laboratory testing and certification services to support industrial and development activities with increasingly complex challenges.

2.8 Rules of Campus Life

a. Rules of Conduct

All of FMIPA UI members should behave as follows:

1. Comply with the applicable regulations in FMIPA UI in particular, and legislation in general;
2. Honest in the process of education, research, write a paper, and in performing other actions concerning the name of the university;
3. Polite in dress and behave;
4. Disciplined and be ethical in every activity; and
5. Maintain the integrity of the university and himself.

All of FMIPA UI members is not allowed to do things as follows:

1. Abusing the name, emblem, and all forms of FMIPA UI attributes;

2. Faking or abusing a letter or document FMIPA;
3. Inhibit or interfere with the ongoing activities of FMIPA UI;
4. Entering, tried to enter or use and transfer illegally rooms, buildings and other facilities owned or under the supervision of FMIPA UI;
5. Refusing to leave or hand back room, building or other facilities owned or under the supervision of FMIPA UI used illegally;
6. Littering or damaging rooms, buildings, and other facilities owned or under the supervision of FMIPA UI;
7. Beatings, torture, suppression, defamation, and causes damage to the other party;
8. Cause or attempt to cause disorder and division in the campus FMIPA UI; and
9. Using the means and funds owned by or under the supervision of FMIPA UI irresponsibly.

b. Sanctions

Violation of the above rules, which is done by every member of FMIPA UI may be subject to one or more of the following administrative sanctions:

1. Strikes and/or warnings oral/written;
2. The obligation to replace all damage and or loss thereof;
3. The ban follows the academic activities and the activities of FMIPA UI (suspension); and
4. May be dismissed or expelled by FMIPA UI.

c. Provisions of Sanctions

1. The sanction given by the Rector to a person, after hearing the considerations of Offence Settlement Committee (P3T2);
2. Dean/Head of Institution/Director was authorized by the Rector to provide initial action/temporary, in the form of suspensions, fines, warnings written/verbal for its member who violate while the final decision of the Rector apply;

d. Implementation of Rules Campus Life

- Rights and Duties of FMIPA UI members

1. FMIPA UI member has the right to life that is safe, orderly and peaceful in shades of academic life on campus;
2. Residents FMIPA UI obliged to realize, maintain and preserve the atmosphere is safe, orderly and peaceful in shades academic campus environment;
3. Residents FMIPA UI shall comply with the rules / regulations applicable in campus and or regulatory/statutory provisions in general

- **Behavior Patterns**

1. Residents of FMIPA UI must be honest and responsible in the implementation of academic activities or associated with learning or other academic activities;
2. Citizens of FMIPA UI should behave and speak good words with attention and uphold the norms/ethics/etiquette based customs Indonesian life, in association with one another;
3. Residents of FMIPA UI should dress modestly according to the circumstances and purposes at the time or in the event he is being attended/participated.
4. Residents of FMIPA UI should be able to discipline themselves in accordance with the norms in force, in all aspects of life both inside and outside the campus
5. Residents of FMIPA UI prohibited from conducting activities that directly/indirectly may result in misuse of the name, emblem and any attributes of the university;
6. Residents of FMIPA UI prohibited littering or damaging the room, building or other facility under the supervision/control/ownership university;
7. Residents of FMIPA UI prohibited master, use/exploit and/or transfer the room, building or other facility under the supervision / control/ownership university;
8. Residents of FMIPA UI forbidden refused to leave or hand back room, building or other facility under the supervision/control/ ownership university;
9. Residents are prohibited from FMIPA UI beatings, torture, physical and psychological pressure to the UI Department of Mathematics fellow citizens or others, defamation of a person/institution, noise and/or troublemakers as well as things that may cause harm to others;
10. Cause or attempt to cause disorder and disunity unity FMIPA UI fellow citizens;
11. Using the facilities, infrastructure and/or funds belonging to or under the management and supervision of the university is not responsible.

- **Provisions of Sanctions**

FMIPA UI member who proved to have violated rules of campus life, imposed against sentenced as a sanction for such actions;

- a. The Rector in time 14 (fourteen) days after receiving the P3T2 report, then study and consider the recommendations proposed and further

provides sanctions: slight, moderate or severe, according to the level of violations that has been done;

- Slight sanction: Reprimand or written warning;
 - Moderate sanction: (i) Compulsory replace / damage losses resulting from his actions, (ii) disallowance to follow academic or other universities activities;
 - Severe sanction: revoked his capacity as a citizen of FMIPA UI;
- b. Dean/director/Chairman of the institution while waiting for the Rector authorized to act early/temporary form of verbal warning/written, suspension or fines, for citizen of FMIPA UI in organizational units are reasonably suspected to have violated rules of campus life.

e. Non-academic Discipline

FMIPA UI seeks to provide a supportive learning environment active in the process of learning and research, and free from coercion and discrimination. FMIPA UI desire to interaction based on honesty and integrity among students and academic staff. The problems of clan, pedigree, skin color, sex, age, social status, religion or race be expected will not to have varieties of academic interaction view each person the same degree, dignity, and dignity. Violence in any form could not be justified. The principle realized by students set various rights and obligations, where the behavior and treatments that are not in accordance with that principle specified in detail.

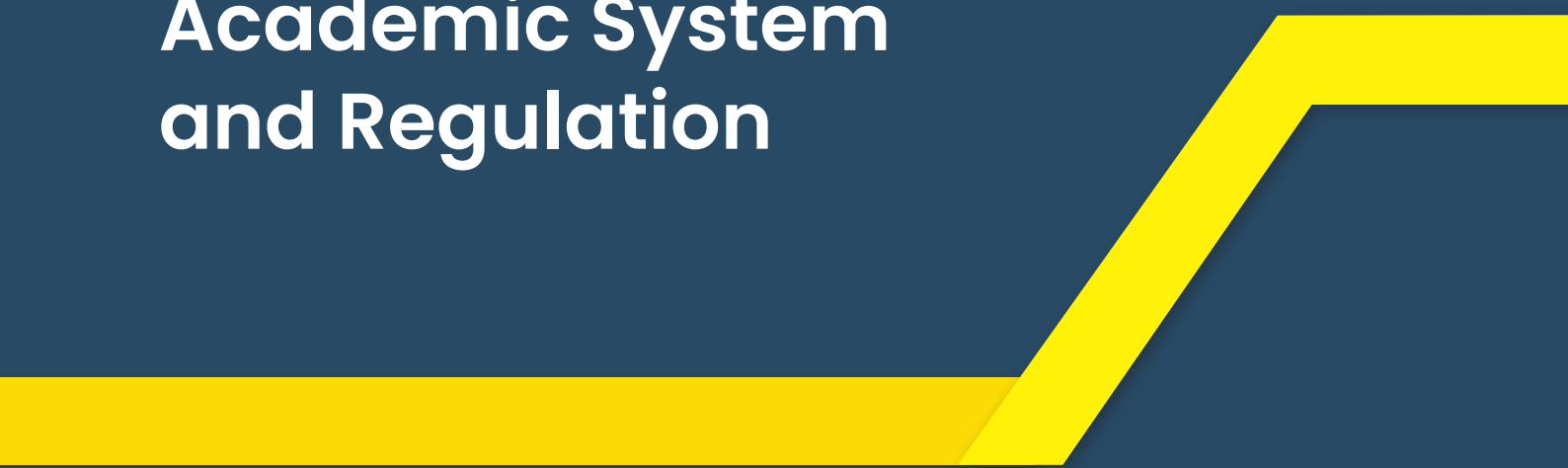
- **Student's Rights and Responsibilities:**

1. Students could be participated in formulating and apply the wisdom of the faculty of academic problems that affect , non-academic , and student organizations
2. Freedom of discussion and expressing opinions could be guaranteed if each members of the academic faculty to respect and guarantee the freedom of others in discussions and express opinions.
3. Demonstrations in accordance with applicable law permitted on the condition does not interfere with the rights of others and does not interfere with the function of the faculty.
4. Consistency and fairness are guaranteed as far as that can be investigated by FMIPA UI.
5. Confidentiality of data is guaranteed student.
6. FMIPA UI has a commitment to ensure safe conditions in the teaching-learning process.
7. Access to facilities on faculty by the provisions of the faculty that aims to protect the safety and interests of students.

- **Discipline Violations and Enforcement Procedures**
 1. Students are not allowed in any way interfere with the activity or service of the faculty, which including the teaching, research, learning, administration, meetings, and public services.
 2. Students are not allowed to harass and / or threaten anyone in any form, or even create conditions that threat the health, safety, and welfare of others and himself.
 3. Students are not allowed to enter or stay in the room and / or facilities in faculty/department without formal authority.

CHAPTER 3

Academic System and Regulation



The academic system and academic regulations refer to the Rector's Decree No. 1 of 2024 concerning the Implementation of the Undergraduate Program.

3.1. The Objective of Education

The Undergraduate program aims to prepare students to become intellectuals and/or scientists who are culturally aware, capable of entering and/or creating job opportunities, and able to develop themselves into professionals. The Undergraduate program is designed to produce graduates with learning outcomes in accordance with level 6 of the Indonesian National Qualifications Framework (KKNI) as follows:

- a. able to apply their field of expertise by utilizing knowledge, technology, and/or the arts in problem-solving and able to adapt to the situations they encounter;
- b. able to understand the theoretical concepts of a particular field of knowledge in general and the theoretical concepts of specific areas within that field in depth, as well as being able to formulate solutions to procedural problems;
- c. able to make decisions accurately based on the analysis of information and data, and able to provide guidance in selecting various alternative solutions independently or in groups; and
- d. responsible for their own work and can be entrusted with responsibility for achieving organizational work results.

The Undergraduate Program is organized to produce graduates with Learning Outcomes in accordance with the Graduate Profile of each Study Program, as approved by the Faculty Academic Senate.

3.2. Implementation of the Undergraduate Program

1. The faculty organizes the Undergraduate Program in the form of a Study Program, the implementation of which must:
 - a. Has an operating permit;
 - b. Has valid accreditation;
 - c. Has an academic quality assurance system, and
 - d. Has a minimum number of permanent lectures and qualification in accordance with regulations.
2. The opening of new Undergraduate study program must follow the requirements and procedures applicable at UI.
3. The implementation of Undergraduate Program uses Indonesian as the main language of instruction.
4. The Undergraduate Program can be pursued through international mobility programs, Double Degree or Dual Degree programs, or Joint Degree programs, in accordance with the applicable regulations.
5. The Undergraduate program is designed to educate graduates who have at least completed senior high school (SMA) or its equivalent.

6. UI organizes an Accelerated Program (Fast Track) for the following levels:
 - a. Bachelor's to Master; and
 - b. Bachelor's to Doctoral.
7. In order to participate in the Fast-Track Program as referred to in statement (6), students must meet the requirements in accordance with the regulations.
8. The Undergraduate Program is attended by students registered in the Academic Registration in a semester.
9. The Undergraduate Program may be conducted in the form of Distance Learning (PJJ) in accordance with the applicable regulations.
10. The Undergraduate Program is not allowed to be conducted through distance learning methods.
11. The implementation of the Undergraduate Program is based on the semester system specified in the Academic Calendar each year.
12. The establishment, closure, merging, and renaming of study programs within the Undergraduate Program are carried out in accordance with the applicable regulations.

3.3. Student Intake Policy

The admission of new students to the Undergraduate program at the Universitas Indonesia (UI) can be done through three main pathways: SNBP, SNBT, and SIMAK. The SNBP (Seleksi Nasional Berdasarkan Prestasi) is an invitation-based pathway given to high school students (SMA/MA/SMK) with the best academic achievements. Meanwhile, SNBT (Seleksi Nasional Berdasarkan Tes) is a selection pathway that uses a nationwide written exam administered by LTMPT, which tests students' academic abilities in the fields of science, social studies, and language. The SIMAK (Seleksi Masuk UI) pathway is an independent selection process organized by UI itself, offering an exam for students who do not go through the SNBP or SNBT pathways, with test materials tailored to the chosen study program.

3.4. Semester Credit Unit (SKS)

Faculty of MIPA UI is started to applied the education with Semester Credit Unit (SKS) since the academic year 1984/1985 with regard Law No. 2 of 1989 on National Education System, Government Regulation No. 60 of 1999 on Higher Education and the Minister Decree no. 232/U/2000 about Guidelines for Higher Education Curriculum Development and Student Learning Outcomes Assessment no.045/U/2002 about Higher Education Core Curriculum.

Academic activities in FMIPA Universitas Indonesia are held in a variety of ways such as lectures, assignments, practical work, seminars, lab, and research for thesis/dissertation writing. All educational activities that must be undertaken by each student to earn a degree are contained within the academic loads and measured in units of semester credit (SKS). Semester Credit Unit which is

henceforth shortened to SKS is a measurement of recognition for the learning experience obtained by students in one semester.

One credit in the forms of lecture, response and tutorial learning, consists of:

- a. 45 (forty-five) hours per Semester; and
- b. held in 16 (sixteen) weeks.

3.5. Grade Point

Grade point (Indonesian acronym: IP) is a measurement of the academic performance of a student, which is the weighted average of the scores obtained by the student. Grade point is calculated every end of the semester by multiplying the number of course grade point value by weighting the value of each course, divided by the total credit value of the courses taken. Grade Point is used to determine the maximum academic load that the student may take in the upcoming semesters.

3.6. Administrative and Academic Registration

1. Students must complete both Administrative Registration and Academic Registration.
2. Applicants who have been declared successful in the selection process must complete the Administrative Registration and Academic Registration for the relevant semester according to the schedule set by UI.
3. Administrative Registration is done by paying tuition fees through the payment methods specified by UI.
4. Academic Registration is done by filling out the Study Plan (Indonesian acronym: IRS).
5. Administrative and Academic Registrations are done according to the scheduled that has been regulated by the Academic Calendar of the Universitas Indonesia.
6. Study Plan is cancelled if the tuition fee has not been paid until the end of payment period.
7. Students who are allowed to pay through installments, but have not completed the payment until the end of semester, cannot perform academic registration in the subsequent semester
8. Students can perform academic registration after the education arrears has been paid.
9. In certain cases, the UI work unit responsible for educational affairs may grant discretion regarding Academic Registration for students as referred to in statement (8).
10. The students of Undergraduate program are not allowed to be enrolled in more than one study program.
11. If it is found that a student is enrolled in more than one study program as referred to in statement (10), the head of the UI work unit responsible for

educational affairs will send a warning letter to the student to immediately choose their preferred study program, with a copy sent to the Dean.

12. The written notification of the student's choice, as referred to in statement (11), must be submitted to the Dean no later than 20 (twenty) working days from the date of the written warning letter issued by the head of the UI work unit responsible for educational affairs.
13. If the choice of study program is not submitted by the deadline as referred to in statement (12), UI will determine the student's choice of study program and set the academic status to "withdrawn" from the other study program.

3.7. Academic Calendar

1. Academic Calendar is a guideline that has to be obeyed by the Faculty, Study Program, and the Academic Civitates of the Universitas Indonesia implementing the Tri Dharma (Three Pillars) of Higher Institutions.
2. Academic Calendar as referred to in (1) is issued 1 (once) in a year with the Rector Decree, and includes at least:
 - a. The Registration period, selection examination, announcement of selection results, registration (administrative and academic) for new students;
 - b. Schedule of the initial activities for new students;
 - c. Schedule for administrative and academic registrations for old students;
 - d. Schedule of the courses;
 - e. Period of examination and announcement of examination results;
 - f. Due date of graduate determination and graduation day registration;
 - g. Schedule of Semester Internal Evaluation (Indonesian acronym: EVISEM) and Yearly Internal Evaluation (Indonesian acronym: EVITAH).

3.8. Course Schedule

1. At the beginning of each semester, the Faculty/ School and Study Program decides the schedule of the courses to implement a curriculum.
2. The schedule of the courses covers:
 - a. Name of courses and classes;
 - b. Type of class;
 - c. Coordinator of each course and the person-in-charge of each class;
 - d. Days and Hours of the Courses;
 - e. Course venues/rooms;
 - f. Lecturers; and
 - g. Medium of Instructions.
3. A course can be taught in several classes.
4. Courses with a Special Course status held by the Study Program have their own schedules regulated separately.
5. The information for Special Course activities must include at least:

- a. type of guidance;
- b. supervisor; and
- c. title.

3.9. Student's Academic Status

1. In each semester, a student may have certain academic status, namely:
 - a. Active, which means the status of student is active when they have completed both Administrative Registration and Academic Registration, and are actively participating in academic activities;
 - b. Empty, which means the status of student has not carried out Administrative Registration and/or Academic Registration as determined by the Rector;
 - c. Inactive, which means the status of student has carried out Administrative Registration without Academic Registration.
 - d. Academic Leave, which means the status of student does not do any academic activity for 1 (one) or 2 (two) Semesters at with the approval of the Dean due to the student's request;
 - e. Studying Outside the University, which means the status of student who carries out academic activities outside the university is acknowledged by the Universitas Indonesia;
 - f. Overseas, which means the status of student who carries out academic activities abroad is acknowledged by the Universitas Indonesia;
 - g. Sanction, which means the status of student is not permitted to participate any academic activity for 1 (one) or several semesters as determined by the Rector;
 - h. Graduated; which means the status of student has fulfilled all the academic and administrative requirements to be promoted as a Doctor; or
 - i. Withdrawn; which means the status of student who does not continue their studies due to being declared as having discontinued studies, resigned, or passed away as determined by the Rector.
2. Academic Status of Sanction as referred to in statement (1) letter (g) will not be counted as a component in the Evaluation of Learning Outcomes, but it will still be considered as part of the student's study period.
3. Students participating in academic activities outside of UI may be classified as having status of Overseas status or Studying Outside the University, depending on the specific program and arrangements recognized by UI.
4. The academic status of sanction referred to in statement (1) letter (g) is imposed due to violations of UI's code of ethics, based on recommendations from the committee responsible for resolving the code of ethics violations.

3.10. Academic Advisor

1. Every student has an Academic Advisors (Indonesian acronym PA) who is designated/assigned by the Study Program.
2. The academic advisor for Undergraduate program students is a permanent lecturer with at least a Master's degree.
3. The duties of the Academic Advisor include:
 - a. Guiding students in preparing their study plans and providing consideration for selecting course to be taken;
 - b. Providing consideration to students regarding the number of credits that can be taken;
 - c. Approving the student's IRS in the academic information system; and
 - d. Providing assistance, guidance, and advice to students for the smooth progress of their studies.
4. If the academic advisor is unable to carry out their duties, the person in charge of the study program will temporarily take over the academic advisor's responsibilities.
5. Approval of the IRS in the event that the academic advisor is unable to carry out their duties, as referred to in statement (4), will be carried out by the vice dean responsible for academic affairs.
6. The implementation of the academic advisor's duties is one of the components in the evaluation of faculty performance.

a. Purpose Academic Guidance

1. Facilitate the delivery of education for students
2. Assist students in:
 - Understand the characteristics of the education system
 - Understanding the educational administration
 - Implement the learning process well
3. Develop good study habits so that a process of self-reliance in learning activities

b. Requirements Academic Advisors

Academic Advisors (PA) is a permanent teaching staff has the duty and authority to provide academic guidance to students during their study group. An Academic Advisor is expected to:

1. Understanding well the procedure of providing education based on a curriculum that applies.
2. Understanding the rules and regulations that have been determined to accelerate the implementation of education.
3. Provide scheduled time for consultation with students being mentored

c. Implementation Guidance Academic

- Before semester

1. Students fill out the Study Plan (IRS) according to the curriculum applicable for them. The number of credits (*sks*) that is allowed to be taken is adjusted to the GP of the last semester a student is active, excluding Short Semester.
2. The maximum number of credits (SKS) that can be taken by Undergraduate Program students:
 - a. in the first and second semesters, a maximum of 20 (twenty) credits; and
 - b. in the third semester and subsequently, a maximum of 24 (twenty-four) credits.
3. In special case where a student is on the verge of dropping-out, the Vice Dean based on the proposal by the Person-in-charge/Head of Study Program can consider to allow the student to take *sks* more than the maximum number allowed as regulated in (3).
4. The maximum number of credits (SKS) that can be taken during the Interim Semester is 9 (nine) credits.
5. IRS cannot be approved by the Academic Advisor if students:
 - Taking a course that has the same schedule as another course;
 - Taking a course that has prerequisites students have not met;
 - Taking more credits than allowed;
 - Taking a course that has enrollees more than the available capacity.
6. When IRS is rejected, students are obligated to revise and submit it again for approval.
7. IRS that cannot be approved by the Academic Advisor is sent to the Vice Dean to be determined further.
8. The Vice Dean can approve a problematic IRS, unless the problems are related to inter-Faculty courses.
9. To settle the problems related to (8), the Faculty can coordinate with the host Faculty to add more capacity to the respective courses.
10. The names of students will not be recorded in a course's attendance list if the IRS is not yet approved.
11. Students whose names are not in a course's attendance list are not allowed to attend the course, take the examination, and other activities in the respective course.
12. When an IRS still has problems, students can still attend classes but they are required to settle all problems by the end of IRS revision period (add and drop) at the latest.

13. If the students as mentioned in (12) still carry out activities in the course without settling their IRS problems, then the score they obtain cannot be recorded to their academic histories Academic Advisor cannot approve IRS troubled students.

- **During the semester**

Provide consultation to students if a spot of trouble, and if it is deemed necessary to continue the case to be able to obtain guidance and counselling services. Problem often encountered students are:

1. Adjustment in learning activities.
2. Social relations are troubled, either by parents, relatives, boarding houses landlady, friends, faculty, staff, or the milieu.
3. Health, both physical and spiritual (mental).
4. Economics, for example, the inability to pay tuition in full, the inability to buy/copy textbook required, etc.

- **End of semester**

1. Academic Advisor can monitor the progress of student achievement of learning outcomes on-line guidance through SIAK NG.
2. Academic Advisor helps Head of the Study Program in evaluating the success of a student's study guidance as stated in the academic regulations.
3. In this period is expected to Academic Advisor gives special attention to students who are exposed to evaluation or almost/have crossed the line of study.
4. Academic Advisor check all the requirements that must be met before students submit final decision.
5. Academic Advisor then approve the academic transcript and a student petition to take Final Exam.

3.11. Filling Out the Study Plan (IRS)

1. Academic registration is done by filling out the Study Plan (Indonesia acronym: IRS) through the academic information system according to the applicable curriculum for the student.
2. The number of credits (SKS) that can be taken is adjusted based on the GPA of (Indonesia acronym: IPS) in the student's last semester with active academic status, excluding the inter-semester period.
3. In the case of a curriculum organized in a package system, the number of credits that can be taken in each semester is based on the package listed in the curriculum.
4. The maximum number of credits (sks) that must be taken includes:

- a. in the first and second semesters, a maximum of 20 (twenty) credits; and
 - b. in the third semester and subsequently, a maximum of 24 (twenty-four) credits.
5. The maximum number of credits (sks) that a student can take in each semester consists of:

The Semester Grade Point Average (IPS) of the previous semester	The maximum number of credits (sks) that can be taken.
< 2,00	12
2,00 – 2,49	15
2,50 – 2,99	18
3,00 – 3,49	21
3,50 – 4,00	24

6. In cases where a student is at risk of Dropped Out Criteria, the Vice Dean responsible for academic affairs may consider allowing the student to take a maximum of 24 (twenty-four) credits based on the proposal of the Study Program Coordinator.
7. The maximum number of credits that can be taken during the Intermediate Semester is 9 (nine) credits.
8. The IRS is filled out by the student and approved by the academic advisor.

3.12. Academic Status of Empty

1. Students who do not carry out the Administrative Registration and Academic Registration will receive the academic status of empty for the current semester, and their study period will be counted.
2. Academic status of the student with empty as referred to in statement (1) are not required to pay tuition fees.
3. Academic status of the student who have empty for 2 (two) consecutive semesters will automatically be given the status of withdrawn from the university.
4. Academic status of the student with empty but wishing to regain to active may carry out Administrative Registration and Academic Registration with the following mechanisms and requirements:
 - a. still meeting the academic requirements;
 - b. obtaining approval from the Faculty/School and a recommendation from the head of the unit at the UI level responsible for academic affairs;
 - c. submitting a request for payment permission to the head of the UI unit responsible for financial affairs and being subject to a late registration fee, as stipulated in the Rector's Regulation on Tuition Fees at Universitas Indonesia;
 - d. paying tuition fees; and

- e. reporting to the vice dean/vice director of the school responsible for academic affairs to carry out Academic Registration.
5. Requests for changes in academic status as referred to in (1) must be submitted no later than 8 (eight) weeks from the start of the semester.

3.13. Study Load and Study Period

A. Study Load

1. The Study Load of the Undergraduate Program at least 144 (one hundred forty four) credits (sks).
2. The Study Load as stated in statement (1) in Compulsory and Elective Courses can be obtained through the mechanism of Credit Transfer and/or Credit Earning.
3. The study load for the Final Assignment is between 4 (four) to 6 (six) credits (sks).
4. The calculation of Study Load in block, module, or other forms of systems can be determined according to the needs in achieving the Learning Outcomes as per the National Standards for Higher Education (SN Dikti).
5. The fulfillment of the learning load in the learning process, as expressed in credits, is carried out in the form of lectures, recitations, tutorials, seminars, practical sessions, practice, studio work, research, design, development, Final Projects, student exchanges, internships, entrepreneurship, community service, and/or other forms of learning activities.
6. The forms of learning as referred to in statement (1) are carried out through the following activities:
 - a. guided learning;
 - b. structured assignments; and/or
 - c. independent learning.
7. The form of learning through guided learning as referred to in statement (2) letter (a) is conducted in the following face-to-face formats:
 - a. offline;
 - b. online;
 - c. blended; and/or
 - d. hybrid.

B. Study Period

1. The duration of the Undergraduate Program curriculum is designed to last for 8 (eight) semesters.
2. The maximum study period for Undergraduate students is 14 (forty) semesters.
3. The study period as referred to in statement (3) is calculated based on all academic statuses prior to graduation or withdrawal.

4. Study programs conducted in collaboration with foreign universities, the study load and curriculum period may be structured differently from the provisions in Rector's Regulation.

3.14. Curriculum

1. The Undergraduate Program curriculum is designed to achieve the Graduate Learning Outcomes in accordance with the National Standards for Higher Education (SN Dikti).
2. The Undergraduate Program curriculum must implement Outcome-Based Education (OBE).
3. The overall Graduate Learning Outcomes are achieved through courses and learning activities that keep pace with developments in knowledge and support graduates' success in their professional fields.
4. Curriculum changes are made after the curriculum duration has been implemented, based on the results of the curriculum evaluation.
5. The results of the curriculum evaluation and curriculum changes must be approved by the SAF (Faculty Senate of Academic Affairs).
6. The curriculum structure of the study program at the Undergraduate level consists of:
 - a. compulsory courses; and
 - b. elective courses.
7. The students of Undergraduate program must pass all compulsory courses and a number of elective courses taken, which are included in the study program's curriculum structure.
8. Each student may choose a combination of:
 - a. compulsory courses and elective courses within the same study program;
 - b. compulsory courses and a set of courses selected from other study programs/faculties; or
 - c. compulsory courses and a set of learning activities that are equivalent in credit weight (sks).
9. The combination chosen by the student, with the number of credits that can be taken, must be within the study load limits.
10. The equivalent study load in the form of credits (sks) for compulsory courses must be at least 84 (eighty-four) credits.
11. The equivalent study load in the form of credits (sks) can be provided for groups of elective courses required to obtain a Bachelor's degree.
12. The equivalent study load in the form of credits (sks) for compulsory courses and elective courses within the study program, as referred to in statements (7) and (8), does not apply to study programs in the health sciences field.

3.15. Merdeka Belajar Kampus Merdeka (MBKM)

1. The students of Undergraduate program are entitled to participate in the MBKM program.
2. The procedures and requirements for implementing MBKM are regulated in the Rector's Regulation on Merdeka Belajar Kampus Merdeka.
3. The fulfillment of the study period and study load for Bachelor's program students can be carried out in as follows:
 - a. Participating in the entire learning process within the study program at the university, according to the study period and study load; or
 - b. participating in the learning process within the study program to fulfill part of the study period and study load, while the remaining part is completed through learning activities outside the study program.
4. The faculty/study program must facilitate the implementation of fulfilling the study period and study load in the learning process as referred to in statement (3).
5. The faculty/study program facilitates the fulfillment of the study period and study load in the learning process as referred to in statement (4) with the following requirements:
 - a. At least 4 (four) semesters are part of the learning process within the Study Program;
 - b. 1 (one) semester or equivalent to 20 (twenty) credits is the learning process outside the Study Program at the same higher education institution; and
 - c. At most 2 (two) semesters or equivalent to 40 (forty) credits are:
 1. learning in a different study program at the same university;
 2. learning in the same or a different study program at a different university; and/or
 3. learning outside the university.
6. The implementation of the MBKM program has the following schemes:
 - a. Fast-track Program;
 - b. major-Minor Program; or
 - c. forms of learning activities outside the Study Program as outlined in the applicable policies.
7. The selection of the MBKM implementation scheme must be consulted with the Academic Advisor.
8. Further provisions regarding the implementation of the Fast Track Program, as referred to in point (6) letter a, are regulated in guidelines approved by the Rector.
9. Further provisions regarding the implementation scheme of MBKM in the form of the Major-Minor Program, as referred to in point (6) letter (b), are regulated in guidelines approved by the Rector.

10. Double Degree, Dual Degree, or Joint Degree Program must use a curriculum that is at least 50% the same as the Bachelor's Program curriculum and produce graduates with the same Graduate Learning Outcomes.
11. The Forms of MBKM Learning Activities are:
 - a. Student Exchange;
 - b. Internship/Work Practice
 - c. Teaching Assistance at Educational Institutions;
 - d. Research;
 - e. Humanitarian Project;
 - f. Entrepreneurial Project;
 - g. Independent Study/Project;
 - h. Village Building Project/Community Service Program; and
 - i. State Defense Training.

3.16. Final Assignment

1. Students in the Undergraduate Program are required to complete a Final Assignment in the form of a scientific paper.
2. The scientific paper referred to in statement (1) may be in the form of a thesis, prototype, project, or other similar forms of Final Assignment.
3. The assessment of the Final Project is carried out by examiners appointed by the Dean.
4. The examination team referred to in statement (4) consists of:
 - a. Examiners; and
 - b. Final Assignment Supervisor.

3.17. Final Assignment Supervisor

1. The Final Assignment as a Special Course can be taken after completing all required courses.
2. The preparation of the Final Project is done under the guidance and evaluation of the supervisor of Final Assignment.
3. If necessary, the number of Final Project advisors for 1 (one) student may be up to two (2) advisors.
4. The Supervisor of Final Assignment consist of:
 - a. main supervisor; and/or
 - b. second supervisor.
5. Requirements for the main supervisor:
 - a. Permanent lecturer at UI;
 - b. Holds at least a Master's degree; and
 - c. Has expertise relevant to the Final Assignment.
6. Requirements for the second supervisor:
 - a. Permanent or non-permanent lecturer at UI, or an expert from another institution; and

- b. Has expertise relevant to the Final Project topic.
- 7. The Person in Charge of organizing/Head of Study Program assigns Final Assignment supervisors to accompany a student based on the advisor's area of expertise and workload.
- 8. The assignment of Final Project advisors is determined by the Dean.
- 9. The assignment of experts from other institutions, as referred to in statement (6) letter a, is determined by the Dean.
- 10. To ensure the quality of supervision, the workload of the lecturer as the main supervisor for structured research related to the preparation of the Final Assignment, whether in the form of a thesis, dissertation, design/art work, or other forms, is determined by considering the student-to-faculty ratio. The specific provisions regarding this are regulated in the Final Project Guidelines approved by the Rector.
- 11. Lecturer can only accept new students for guidance if they meet the requirements and evaluation criteria set by the Faculty and have received approval from the UI unit responsible for educational affairs.
- 12. The person in charge of organizing/Head of the Study Program is responsible for periodically monitoring the supervision process.
- 13. If the supervision process is not proceeding effectively and systematically, the person in charge of organizing /Head of the Study Program may propose the replacement of the Final Assignment Supervisor.
- 14. Guidance by the main advisor, as referred to in statement (4) letter a, is conducted at the UI campus or online in a structured manner, at least 4 (four) times within 1 (one) semester, and must be recorded in the academic information system.

3.18. Learning Process

- 1. Assessment of the learning process refers to the activities aimed at evaluating the planning and implementation of the learning process, with the goal of improving the learning process.
- 2. Assessment of the learning process as stated in (1) is conducted by the lecturer(s) and/or the team of lecturers responsible for the course, in coordination with the unit managing the study program.
- 3. The entire learning process is improved and continuously enhanced by the study program based on evaluations of the following aspects:
 - a. learning activities in each cohort;
 - b. number of active students in each cohort;
 - c. Curriculum Study Period;
 - d. Student study completion period; and
 - e. the employability rate of graduates in the world of work.

3.19. Evaluation of Learning Outcomes

1. Evaluation of learning process is carried out periodically according to the curriculum.
2. Evaluation of learning process for each course is done every semester.
3. Evaluation of Learning Outcomes must be carried out in accordance with the regulations at both the UI level and the Faculty level.
4. The form and assessment criteria for the Evaluation of Learning Outcomes are outlined in the Course Teaching Design Book (Indonesia acronym: BRP) for each course.
5. Any form of cheating by students during the Evaluation of Learning Outcomes process will be subject to sanctions as per the applicable regulations.
6. Evaluation of Learning Outcomes for students participating in academic programs at partner foreign universities will follow the regulations in place at the partner institutions.
7. Further provisions regarding the mechanism for Credit Transfer (Credit Transfer) and grade conversion during study at partner foreign universities, as referred to in point (6), are regulated in the guidelines approved by the Rector.
8. Evaluation of Learning Outcomes for a course is carried out by a Lecturer or a team of Lecturer to monitor the process and progress of student learning.
9. Evaluation of Learning Outcomes is conducted based on the principles of being valid, reliable, transparent, accountable, fair, objective, and educational.
10. Evaluation of Learning Outcomes is carried out with reference to assessment standards that set the minimum criteria for evaluating student learning outcomes to ensure they meet the required graduate competency standards.
11. Student learning assessment consists of formative assessment and summative assessment.
12. Formative assessment aims to:
 - Monitor the progress of student learning;
 - Provide feedback to help students meet their learning outcomes;
 - Improve the learning process.
13. Summative assessment aims to evaluate students' learning achievements as the basis for determining course completion and program graduation, based on the fulfilment of Graduate Learning Outcomes.
14. Summative assessment may take the form of written exams, oral exams, project assessments, assignment evaluations, competency tests, and/or other similar forms of assessment.
15. Both formative and summative assessments will be conducted according to the assessment mechanisms established by UI.
16. The assessment mechanisms will be communicated to students.
17. The evaluation of student learning outcomes for a course is expressed in the following forms:
 - a. Grade Point Average (GPA); or

- b. Pass or Fail status.
- 18. The evaluation of learning outcomes expressed as a GPA will be represented by the following letter grades: A, A-, B+, B, B-, C+, C, D, and E.
- 19. The minimum passing grade for each course and for the Thesis/Final Assignment is B.
- 20. To convert the scores from number values to letter values and the weighting of the values of the letters, the following is used as the guideline:

Score Range	Letter Value	Weighting of Letter Value
85 - 100	A	4.00
80 - < 85	A-	3.70
75 - < 80	B+	3.30
70 - < 75	B	3.00
65 - < 70	B-	2.70
60 - < 65	C+	2.30
55 - < 60	C	2.00
40 - < 55	D	1.00
00 - < 40	E	0

- 21. Evaluation of learning outcomes in the form of Pass or Fail) may be used for courses that:
 - a. Involve activities outside the classroom; and/or
 - b. Use summative assessments in the form of competency tests.
- 22. Lecturers are required to enter the course grades into the academic information system according to the schedule set in the Academic Calendar.
- 23. Lecturers who do not enter the grades for all students in their courses by the end of deadline for entering courses will be given sanctions.
- 24. Grade revisions can be made to correct errors in grading, but they must be submitted by no later than the middle of the following semester.
- 25. The procedure for revising grades is as follows:
 - a. The lecturer submits a written request for grade revision to the Dean or the Vice Dean responsible for academic affairs;
 - b. If the revision request is approved, the Faculty/School will process the grade revision in the academic information system; and
 - c. The Dean or Vice Dean who handles of academic affairs will report the grade revision to the UI work unit that handles educational affairs for verification and confirmation.
- 26. There is no grade revision for students who have been declared to have completed their studies.

27. Special Courses that extend beyond the end of the semester will be given the code BS (Indonesia acronym: Belum Selesai/Unfinished) and will not be counted toward credit, Semester Grade Point Average (GP), or Cumulative Grade Point Average (GPA)
28. Credit Transfer will be conducted in accordance with the guidelines approved by the Rector.
29. If the final grade of a student cannot be determined because the evaluation components are incomplete, the student will be given the code I (Incomplete), and this will not be included in the IPS. The grade must be changed to E (Fail) no later than 1 (one) month after the grade submission deadline.
30. If a student fails to meet the minimum attendance requirement for academic activities in a semester, their grade will be given the code T (Indonesia acronym: Tidak Mengikuti/Not Attended), and this will be included in the IPS with a weight of 0.
31. If a student retakes a course, the final grade for that course will be based on the most recent grade obtained.
32. If a student is granted official permission to be inactive during a semester, all courses they are enrolled in will be removed and recorded as a Inactive Academic Status.
33. The result of learning achievement assessment for each semester is expressed in the GP.
34. The result of learning achievement assessment at the end of the study period is expressed in the GPA
35. GP calculation does not include courses with the grade code BS.
36. GPA calculation includes all courses taken at UI with a minimum grade of B, starting from the first semester up to the last semester, excluding courses with grade codes BS and I.
37. GP and GPA are only calculated based on the average grade of courses that use the Grade Point Average (GPA) evaluation.
38. The result of the summative evaluation is reported by UI to the Directorate General of Higher Education (Indonesia acronym: PD Dikti).
39. Further provisions regarding the calculation of IPS (Semester Grade Point Average) and IPK (Cumulative Grade Point Average) as referred to in statements (35) and (36) are regulated in the guidelines approved by the Rector.

Examination Rules

General Regulations

a. Class Attendance

1. Students must come to class on time. The lecturer has the right and authority to bar any student who is late from entering the class.
2. Students are required to attend their class at all times.

3. Students who are absent without explanation more than 25% from all scheduled classes for each course shall not be allowed to attend their Final Examination (state in Rector's Decree No. 012A/SK/R/UI/2007 article 13 point 4). Unless he or she can provide evidence that the reason of absence is acceptable as per university regulation.
4. Students will be given permission and not marked absent for the following reasons:
 - a. To attend to family emergencies, death in the family
 - b. When hospitalized or ill or recuperating from illness as shown by a valid Medical Certificate
5. Students who would like to attend extracurricular activities organized by the university should ask permission from the Vice Rector I who will then consider the request and act accordingly. Vice Rector I has the right and authority to disallow or disapprove any request in the interest of the student and the university.

b. Make-Up Exam (Indonesian terminology: Ujian Susulan)

Students who are unable to conduct the exam at the prescribed time due to several reasons such as scholastic events, medical condition, death of a family member or other unavoidable circumstances may request make-up exams with different problem given by the lecturer.

Please note the following conditions carefully:

1. Request for make-up exams must be submitted to the lecturer no later than three (3) working days after the date of the prescribed examination.
2. Attach supporting documents such as your doctor's statement/parent's statement or a valid permission letter from Vice Rector 3 if you are attending an event for the university.
3. Make-up exam is not a right and permission is only given in exceptional circumstances. The Lecturer and Head of Study Program has the right to deny the student's request if fail to provide sufficient evident on the circumstances that prevented you from sitting the examination on the prescribed date.
4. Students are not allowed to defer a make-up exam. Failing to attend a make-up exam will automatically grant a ZERO (0) score on the exam.

c. Exam results

1. Students have the right to get a corrected exam file and the scores no later than 2 (two) weeks after the examination.
2. Lecturers or a team of lecturers are required to examine the exam and notify students of the test scores no later than 2 (two) weeks after the implementation.

3. Lecturers or a team of lecturers have the authority for the final exam scores while still considering the elements of academic objectivity and integrity.
4. Students have the right to ask the components of the value of the course to the lecturer or the lecturer team concerned.
5. Students have the right to file an appeal for the final score 3 days (3x24 hours) after the score is announced by the lecturer or lecturer team to SIAK NG.

d. Grade Appeal

Students who object to the final grade of a course are given the right of appeal to obtain clarification of the grades obtained.

The provisions for filing an appeal are as follows;

1. an appeal may be filed for reasons that the distribution of the value of a course is not distributed according to the normal reference standard assessment system; or
2. students feel disadvantaged due to delays in inputting grades by the lecturer to SIAK NG so that all grades in one class get B.
3. an appeal for the final score is made within 3 days (3x24 hours) after the lecturer or team of lecturers publish the score to SIAK NG.
4. students may only appeal grades based on checking the exam file that has been corrected by the lecturer or team of lecturers with the answer key and are not allowed to compare grades based on the grades of friends.
5. an appeal is submitted to the lecturer of the course (by filling out an appeal form) with the approval of the Head of the Study Program.

e. Cheating in examinations

Students who cheat in the learning evaluation process as referred to in the Rector's Regulation No. 4 of 2024, are categorized as follows:

- Moderate Violations
 1. Copying assignments or exam answers from another student and submitting them as their own work.
 2. Providing assignments or exam answers to another student to be used as their own work.
- Serious Violations
 1. Intentionally assisting another student.
 2. Collaborating with external parties outside the examination room.
 3. Impersonating an exam participant or being impersonated by another party.

The following sanctions will be applied:

- Moderate Violations
 1. A written warning or reprimand.

2. Retaking the entire course.
 3. Reduction of grades/assessment scores related to the violation that impacts the student's graduation.
 4. Prohibition from participating in academic and non-academic activities for a certain period.
 5. Delay of student rights.
 6. Cancellation of grades for one or more courses.
 7. Prohibition from attending classes/exams for at least one (1) year; and/or
 8. Prohibition from representing the University in any extracurricular activities or from running for a position in any student group or organization at Universitas Indonesia.
- Serious Violations
1. Sanctions may be imposed if the violation is intentional or repeated.
 2. Prohibition from attending classes/exams for at least three (3) years.
 3. Declaration of failure to graduate.
 4. Cancellation of the student's thesis if they are an active student, with an obligation to rewrite the thesis with a new topic. For graduates, the academic degree may be revoked.
 5. Dismissal from the student status without honor.
 6. Revocation of the degree if the student has graduated from a study program.
 7. Revocation of a degree may be considered for students who commit fraud while enrolled at UI, and also if discovered after graduation, for fraudulent behavior involving the use of faculty and/or university attributes, transcripts, or other graduation certificates.

3.20. Administration of Learning Process

1. The Semester Score List (Indonesian acronym: DNS) provides information about:
 - a. The student identity;
 - b. Academic Advisor;
 - c. Faculty;
 - d. Study Program;
 - e. Education level;
 - f. Course code;
 - g. Course name;
 - h. number of credits taken;
 - i. number of credits earned;
 - j. score letters;
 - k. Semester Grade Point (GP); and

1. Cumulative Grade Point (GPA).
2. The Semester Score List (DNS) may be published in the printed form based on the request of students according to needs.
3. The official Semester Score List (DNS) is the one signed by the officer who is in charge of the educational administration at the Faculty level.

a. Academic History

1. The academic history records all academic activities of a student chronologically, from the moment they first enroll as a student at UI until they either graduate or leave the institution.
2. The academic status of a student for each semester is recorded in the academic history.
3. The academic history as a source of information for the student, academic advisor, and study program about the student's academic progress.
4. The academic history can be issued for specific purposes upon the student's request.
5. The academic history issued for the purposes stated in (4) must be authenticated by the Vice Dean of the Faculty responsible for educational affairs.
6. UI issues the Diploma along with the Academic Transcript and SKPI (Surat Keterangan Pendamping Ijazah/Diploma Supplement).

b. Diploma

1. Diploma is given to students who have been declared graduated from a Study Program.
2. Diploma provides information as follows:
 - a. national Diploma number;
 - b. University emblem;
 - c. name of University;
 - d. accreditation decision number of the university and/or study program;
 - e. higher education program;
 - f. name of the study program;
 - g. full name of the diploma holder;
 - h. place and date of birth of the diploma holder;
 - i. student ID number;
 - j. national identity number in Indonesia (Indonesia acronym: NIK) for Indonesian students or passport number for international students;
 - k. title awarded along with its abbreviation;
 - l. date, month, and year of graduation;
 - m. place, date, month, and year of diploma issuance;

- n. Name and position of the head of the higher education institution who is authorized to signs the diploma;
 - o. university stamp; and
 - p. photo of the diploma owner.
3. The national diploma number that stated in (2) letter (a) uses a number issued by the PIN integrated with PD Dikti.
 4. The diploma is issued only once for each student who has graduated.
 5. UI is not responsible for diplomas that are not collected by graduates within one (1) year from the date of issuance.
 6. In cases where the diploma has not been issued by UI, the Faculty may issue a certificate of graduation.
 7. The diploma may be translated into English.
 8. Of the diploma is loss or damage, the diploma owner may request a certificate of replacement diploma.
 9. The procedure for issuing the diploma and certificate of replacement diploma is regulated in the guidelines approved by the Rector.
 10. The head of the UI work unit responsible for academic affairs signs and legalizes the certificate of replacement diploma on behalf of the Rector.
 11. The diploma will be awarded when the student has completed administrative obligations and has paid the tuition fees.

c. Academic Transcript

1. Academic Transcript is given to students who have been declared graduated from a Study Program.
2. Academic Transcript contain at least:
 - a. Name;
 - b. Student ID number;
 - c. Place and date of birth;
 - d. Previous education;
 - e. Education level;
 - f. Study program;
 - g. List of courses, including course codes;
 - h. Letter grades;
 - i. Number of credits required;
 - j. Number of credits obtained;
 - k. Cumulative GPA;
 - l. Dissertation title;
 - m. Diploma number; and
 - n. Graduation date.
3. All courses taken by students, including those students retake and have obtained through credit transfer are recorded in the Academic Transcript.
4. Academic Transcript is published using Indonesian and English language.

5. The Academic Transcript is issued once for each student who has graduated.
6. The Director of Education, on behalf of the Rector, signs the academic transcript and official copy of the academic transcript.
7. If Academic Transcript is lost or damaged, the owner may request a copy of the Academic Transcript.
8. The Academic Transcript will be awarded when the student has completed administrative obligations and has paid the tuition fees.

d. Diploma Supplement (Surat Keterangan Pendamping Ijazah)

1. Diploma Supplement is given to students who have been declared graduated from a Study Program.
2. Diploma Supplement contains the information as follows:
 - a. Diploma Supplement number;
 - b. the symbol and name of university;
 - c. name of Study Program;
 - d. identity of Diploma Supplement owner (name, place and date of birth);
 - e. level of qualifications, competence and access to higher education;
 - f. achievements and/or awards obtained;
 - g. student activities that have been participated in; and
 - h. date, month, and year of Diploma Supplement issued.
3. Diploma Supplement is issued in both Indonesian and English.
4. Diploma Supplement is signed by the head of the UI work unit that handles academic affairs.

3.21. Graduation and Predicate

1. Undergraduate Program students are declared to have completed their studies based on the graduation determination meeting at the UI level, chaired by the leader of the UI unit responsible for educational affairs, and the graduation determination meeting at the Faculty level, chaired by the Dean.
2. Graduation Determination Meeting may be held 2 (two) times in 1 (one) semester based on the academic calendar.
3. Students of Undergraduate Program are declared graduated if they meet the following prerequisites:
 - a. Registered as active student both administratively and academically in respective semester;
 - b. Not exceeding the maximum Study Period stipulated by the Universitas Indonesia;
 - c. Having completed all administrative obligations, including returning all borrowed library/laboratory collections; and
 - d. Having completed all academic obligations and/or assignments that have become their responsibility in accordance with the curriculum regulated

for the Study Program with GPA greater than or equal of 2,00 (two point zero zero).

4. Graduation after taking/completing a Undergraduate Program can be awarded with consisting of levels:
 - a. satisfactory;
 - b. very satisfactory;
 - c. with honor (*cum laude*); and
 - d. with the highest honor (*summa cum laude*).
5. GPA as the basis for determination of graduation predicate of a Undergraduate Program is:
 - a. 2,76 – 3,00 = satisfactory;
 - b. 3,01 – 3,60 = very satisfactory;
 - c. 3,61 – 3,90 = with honor (*cum laude*); atau
 - d. 3,91 – 4,00 = with the highest honor (*summa cum laude*).
6. The predicate of graduation with honors (*cum laude*) or the highest honors (*summa cum laude*) awarded to graduates of Undergraduate Programs with the following provisions:
 - a. have completed studies not exceeding the Curriculum Study Period;
 - b. have consecutive active Academic Status; dan
 - c. have not repeated any courses.
7. If a Undergraduate Program student obtains a Cumulative Grade Point Average (IPK) of 3.61 (three point six one) to 4.00 (four point zero zero) but does not meet the requirements as stated in statement (6), the student will receive the graduation predicate "Very Satisfactory".

3.22. Uploading Scientific Works

Undergraduate program students are required to upload their scientific work to the UI library repository at the end of their study period, in accordance with the applicable regulations.

3.23. Credit Transfer and Credit Earning

Students may apply for Credit Transfer and/or Credit Earning for credits earned from learning activities recognized by UI.

3.24. Academic Leave, Inactive, and Studying Outside Universitas Indonesia

a. Academic Leave

1. Academic Leave is granted for a maximum duration of 2 (two) semesters, either consecutively or non-consecutively.
2. The period of leave is counted as part of the student's study period.
3. Students who are granted Academic Leave are not permitted to participate in academic activities.

4. Academic Leave may be granted to students who have participated in academic activities for at least 2 (two) semesters, except for special reasons.
5. The request for Academic Leave must be submitted by the student to the Dean before the Administrative Registration period, by filling out the available form at the Faculty.
6. If the Academic Leave request, as stated in (5), is approved by the Dean, the faculty's academic information system operator will update the student's Academic Status to "Academic Leave" before the Administrative Registration period ends.
7. The tuition fees for the semester for students who request Academic Leave, as stated in (5) and (6), are regulated by the Rector's Regulation regarding Student Tuition Fees at Universitas Indonesia.
8. In granting approval for leave, as stated in (5) and (6), the Dean must send a copy of the approval to the Vice Rector responsible for academic affairs and the Vice Rector responsible for financial affairs.

b. Inactive

1. In certain cases, students who have obtained an Active academic status may request a change in their status to Inactive.
2. Inactive academic status is counted as part of the student's Study Period.
3. Students with inactive academic status are not permitted to participate in academic activities.
4. Further provisions regarding the reasons for changes in academic status as stated in (1) are regulated in the guidelines approved by the Rector.
5. The request for a change in academic status to Inactive must be submitted by the student to the Dean, using the form available at the Faculty.
6. If the request for a change in academic status, as stated in (5), is approved by the Dean, the academic information system operator at the Faculty will update the student's status to Inactive and IRS will be cancelled.
7. The tuition fees for the semester for students who request a change to Inactive status, as stated in (5) and (6), are non-refundable.
8. In providing approval for the change of academic status, as stated in (5), the Dean must send a copy of the approval to the Vice Rector responsible for academic affairs and the Vice Rector responsible for financial affairs.

c. Studying Outside the Universitas Indonesia

1. Students who are studying outside the Universitas Indonesia for at least 1 (one) semester obtain the status Studying Outside the Universitas Indonesia.
2. Students who are studying outside the Universitas Indonesia conduct administrative registration by paying the tuition fee whose amount is in

accordance with the applicable provisions and protocols of tuition fee payment.

3. Academic Status as regulated in the stated (1) is given to students who are studying outside the Universitas Indonesia to take part in the Universitas Indonesia programs in the form of:
 - a. Student Exchange Program;
 - b. visit; or
 - c. other programs that are acknowledged by the University.
4. The Study Period of students while they are carrying out their Studies Outside the University is accounted as student with Active status.

3.25. Dropped out criteria evaluation

1. The Undergraduate Program student is considered to have dropped out criteria as follows as:
 - a. in the evaluation of learning outcomes after the first 2 (two) semesters, the student fails to earn at least 24 (twenty-four) credits with a minimum grade of C;
 - b. in the evaluation of learning outcomes after the first 4 (four) semesters, the student fails to earn at least 48 (forty-eight) credits with a minimum grade of C;
 - c. In the evaluation of learning outcomes after the first 6 (six) semesters, the student fails to earn at least 72 (seventy-two) credits with a minimum grade of C;
 - d. In the evaluation of learning outcomes after 8 (eight) semesters, the student fails to earn at least 96 (ninety-six) credits with a minimum grade of C;
 - e. In the evaluation of learning outcomes after 10 (ten) semesters, the student fails to earn at least 120 (one hundred twenty) credits with a minimum grade of C;
 - f. At the end of the study period, the student fails to complete all learning requirements in accordance with the curriculum with a minimum grade of C; or
 - g. not carrying out Administrative Registration and Academic Registration for 2 (two) consecutive semesters.
2. In certain cases, the Faculty may establish policies related to the evaluation of learning outcomes with specific prerequisites and criteria.
3. The Faculty policies referred to in statement (2) are implemented with prior approval from the relevant UI unit responsible for educational affair.
4. If a student receives Credit Transfer upon admission, the evaluation for Dropped Out is regulated in guidelines approved by the Rector.
5. Undergraduate Program students may be declared as having Dropped Out Criteria in the following cases:

- a. having administrative issues;
 - b. being sanctioned for academic violations;
 - c. being sanctioned for violations of UI's code of ethics; and/or
 - d. being declared unfit to continue studies based on health considerations from an institution recognized by UI.
6. The academic status of Dropped Out for a Undergraduate Program student is proposed by the Head of the Study Program to the Dean, who then submits it to the Rector for approval.
 7. The Rector determines the Dropped Out status for the Undergraduate Program student as referred to in statement (6).

3.26. Intermediate Semester

1. The duration of the learning process for the Intermediate Semester (Term-3) is 8 (eight) weeks, equivalent to 16 (sixteen) face-to-face sessions, including the Mid-Semester Exam and Final Exam.
2. The Intermediate Semester may be held if necessary.
3. The Intermediate Semester cannot be the final semester of study.
4. The courses offered during the Interim Semester are limited to those provided by each Faculty/Study Program.
5. Special Courses may be held during the Intermediate Semester.
6. The minimum number of participants required for the implementation of courses as stated in (4) and (5) is determined based on considerations of implementation efficiency.
7. Students who are eligible to attend courses during the Intermediate Semester must meet the following requirements:
 - a. Be registered as an active student in the previous odd semester (Term-2);
 - b. Have at least one semester of study remaining until the next even semester (Term-1) of the academic year;
 - c. Register as a participant in the Intermediate Semester courses; and
 - d. Complete the payment of the Interim Semester tuition fees.
8. Courses offered during the Intermediate Semester can be added or canceled no later than the second week after the start of the semester.
9. The tuition fees for the Intermediate Semester are determined by each Faculty and set by the Rector.
10. The recap of course grades in the Intermediate semester period will be administrated in the same period.

3.27. Similarity Test for Thesis Manuscript

In order to guarantee the quality of thesis manuscripts, to build student academic integrity, prevent plagiarism, and implement 9 UI values, starting from the academic year 2019, all thesis manuscripts must pass the similarity test using Turnitin.

The implementation procedure is as follows:

1. Students who register for the final examinations are required to perform a similarity test to their thesis manuscripts.
2. Similarity test is carried out on the entire contents of the thesis manuscript starting from the introduction to the conclusion.
3. The similarity test can be performed in one of the following two ways:
 - a. Send an email request for a similarity test to the Knowledge Editing and Plagiarism section of the UI Central Library (lpp.lib@ui.ac.id) by attaching a softcopy of the thesis manuscript. Test results can generally be obtained within 24 hours.
 - b. Using the UI Authentic System (<http://otentik.ui.ac.id/>)
4. Acceptable similarity test results are not more than 20% in total or similarity to the main source is not more than 5%.
5. When submitting a hardcopy of thesis to be tested, students are required to submit acceptable similarity test results to the related Study Program as one of the requirements for the thesis defense.
6. If in certain cases the conditions for the similarity test results in point 4 are difficult to fulfill, the thesis examination can be carried out by including information from the Supervisor approved by the Head of the Study Program. The Thesis Examination Team will decide whether the thesis can be accepted or need further paraphrasing to fulfill point 4.

3.28. Study Program Profile and Curriculum

a. Undergraduate Program in Mathematics

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Mathematics
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono Department of Mathematics, D Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Excellent (Unggul) by LAMSAMA Accredited by ASIIN
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	To become an outstanding Undergraduate program in Mathematics in the fields of mathematics and data science, capable of playing a role at the national and global levels to advance science and sustainable development.

8	Mission	1. To produce excellent mathematics graduates who are capable of contributing at the national and global levels. 2. To enhance the academic atmosphere and research culture within the study program for the advancement of mathematics and data science. 3. To contribute to supporting sustainable development through the application of mathematics and data science.
9	Graduate Profile	Academic: Able to disseminate competent knowledge in mathematics and data science in accordance with academic ethics. Research Assistant: Able to actively contribute to determining solutions to problems through scientific research in the fields of mathematics and data science. Practitioner: Able to apply knowledge in mathematics and data science, as well as technological skills that support problem-solving.
10	Graduate Learning Outcomes	The Undergraduate Program in Mathematics at FMIPA UI is a study program that develops skills as a complement to the facilities and infrastructure of classrooms, studios, and laboratories (classification B2). The Graduate Learning Outcomes of the Bachelor of Mathematics Program at FMIPA UI are as follows: 1. Able to demonstrate behavior that reflects sensitivity, concern, and the values of UI regarding environmental and societal issues within the framework of Indonesian nationalism based on Pancasila. 2. Able to use Indonesian and/or English, both orally and in writing, effectively for academic and non-academic activities.

		3. Able to design solutions to problems at both individual and group levels, demonstrating cognitive skills for critical, logical, creative, and innovative thinking, as well as intellectual curiosity. 4. Able to apply basic principles of physics, chemistry, and biology in solving problems. 5. Able to evaluate mathematical and data science theories with/without using information technology in solving mathematical/empirical problems. 6. Able to design solutions to problems using mathematics, data science, and a multidisciplinary approach, with/without information technology.
11	Study Period and Credit (SKS)	4 (four) year and 144 (one hundred forty four) credits (SKS)

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	104
	Faculty	8	
	Department	32	
	Study Program	54	
Elective Courses - Merdeka Belajar		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600003	English	2	UIGE600007	Integrated Personality Development Skills	6
UIGE600004	Religion	2	SCPH601110	Basic Physics	2
SCBI601112	General Biology	2	SCMA601005	Calculus 2	3
SCST601001	Introduction of Data Science	2	SCMA601006	Linear Algebra 1	3
SCMA601001	Logic and Sets	3	SCMA601007	Numerical Methods	3
SCMA601002	Calculus 1	3	SCMA601010	Discrete Mathematics	3
SCMA601003	Elementary Linear Algebra	2			

SCMA601047	Algorithms and Programming	2			
SCMA601048	Practical in Algorithms and Programming	1			
SCMA601049	Practical in Basic Mathematics	1			
Total Credits in Semester 1		20	Total Credits in Semester 2		20
Total Credits until Semester 1		20	Total Credits until Semester 2		40

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCST601002	Mathematical Statistics 1	3	SCST602003	Mathematical Statistics 2	4
SCMA602008	Analysis 1	4	SCMA602014	Vector Calculus	2
SCMA602009	Calculus 3	3	SCMA602016	Graph Theory	3
SCMA602011	Mathematical Programming	3	SCMA602017	Data Science	3
SCMA602012	Data Structures	3	SCMA602020	Analysis 2	4
SCMA602013	Ordinary Differential Equations	3	SCMA602051	Partial Differential Equations	3
SCMA602050	Practical in Ordinary Differential Equations	1	SCMA602052	Practical in Partial Differential Equations	1
Total Credits in Semester 3		20	Total Credits in Semester 4		20
Total Credits until Semester 3		60	Total Credits until Semester 4		80

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCCH601101	General Chemistry	2		Elective Courses / MBKM	20
SCMA603015	Analytic Geometry	3			
SCMA603022	Algebra	4			
SCMA603023	Complex Functions	4			
SCMA603024	Mathematical Modeling	3			
Total Credits in Semester 5		16	Total Credits in Semester 6		20
Total Credits until Semester 5		96	Total Credits until Semester 6		116

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCMA604021	Research Methods	2	SCMA604000	Thesis	6
	Elective Course / MBKM	20			
Total Credits in Semester 7		22	Total Credits in Semester 8		6
Total Credits until Semester 7		138	Total Credits until Semester 8		144

Resume	Study Program Compulsory Course	104
	Elective Course/MBKM	40
	Total Study Load	144

4. List of Elective Courses

No	Code	Courses	SKS
1	SCMA603125	Topology	3
2	SCMA603126	Stochastic Differential Equation	3
3	SCMA603127	Operations Research	3
4	SCMA603128	Computational Intelligence	3
5	SCMA603129	Algorithm Design and Analysis	3
6	SCMA603130	Linear Algebra 2	3
7	SCMA603131	Cryptography	3
8	SCMA603132	Parallel Computing	3
9	SCMA603133	Numerical Mathematics	3
10	SCMA603134	Numerical Stochastic Differential Equations	3
11	SCMA603135	Dynamic Systems	3
12	SCMA603136	Optimization on Networks	3
13	SCMA603137	Special Topic 1	3
14	SCMA603138	Special Topic 2	3
15	SCMA604139	Functional Analysis	3
16	SCMA604140	Measure Theory and Integration	3
17	SCMA604141	Optimal Control Theory	3
18	SCMA604142	Computation Theory	3
19	SCMA604143	Bioinformatics	3
20	SCMA604144	Biomathematics	3
21	SCMA604145	Special Topic 3	3
22	SCMA604146	Special Topic 4	3
Total			66

b. Undergraduate Program in Statistics

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Statistics
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono Department of Mathematics, D Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Excellent (Unggul) by LAMSAMA
6	Graduate Title	Bachelor of Statistics (S.Stat.)
7	Vision	To become a nationally and internationally reputable undergraduate statistics program, contributing to the field of statistics with a strong foundation in statistical theory and data science, excelling in applied fields such as health, industry, and government, and recognized as a reference for research and

		development in the field of statistics for health in Asia by 2035..
8	Mission	1. To contribute to the development of statistics and data science and their applications through education, research, and community service activities. 2. In the field of education, to innovate in processes, develop learning materials, and strategies that keep up with technological developments and current issues relevant to daily life. 3. In the field of research, to actively contribute to the development of statistical theory and data science and their applications through multidisciplinary, internationally recognized research involving academic, industrial, and governmental partners. 4. In the field of community service, to actively address societal needs, particularly in policies related to health and industry, by utilizing research findings based on statistics and data science and developing various public service programs.
9	Graduate Profile	1. Academic: Able to disseminate knowledge of statistics. 2. Research Assistant: Someone capable of designing and conducting research to provide solutions to real-world problems using statistical and data science competencies at the level of Junior Expert Researcher, including (but not limited to) roles such as research and development staff in companies, research assistants in research institutions, and marketing researchers. 3. Data and Business Analyst: Someone with the competence to provide recommendations and considerations in the field of pure or applied statistics, including (but not limited to) roles such as (Bio)statisticians, data scientists, population analysts, quality control & assurance

		specialists, and business intelligence professionals. 4. Entrepreneur (Statpreneur): Someone with sufficient knowledge and skills, and the ability to design strategies to foster creativity and innovation in establishing or developing businesses or job fields, especially those related to data science and statistics.
10	Graduate Learning Outcomes	1. Able to demonstrate behaviour that reflects sensitivity, concern, and the values of UI regarding environmental and societal issues within the framework of Indonesian nationalism based on Pancasila. (A5). (Attitude) 2. Able to use Indonesian and/or English, both orally and in writing, effectively for academic and non-academic activities (C3). (General Skills). 3. Able to design solutions to problems at both individual and group levels, demonstrating cognitive skills for critical, logical, creative, and innovative thinking, as well as intellectual curiosity (C6). (General Skills) 4. Able to apply basic principles of physics, chemistry, biology, and/or mathematics to solve science-related problems (C3). (Knowledge). 5. Has a strong grasp of basic mathematical and statistical concepts as the foundation for understanding and applying statistical methods and data science. 6. Has the skills to design and implement data collection processes through surveys, simple experiments, or the use of relevant databases to solve real-world problems. 7. Able to design and apply data processing, analysis, and decision-making processes using conventional statistical methods. 8. Able to design data processing, analysis, and decision-making processes using modern statistical methods. 9. Able to master skills related to technology, its use, and its potential for sustainable development.

		10. Able to solve problems based on data and collaborate with other fields as part of lifelong learning behavior.
11	Study Period and Credit (SKS)	8 (eight) semester and 144 (one hundred forty four) credits (SKS)

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	104
	Faculty	8	
	Department	32	
	Study Program	54	
Elective Courses - Merdeka Belajar		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCCH601101	General Chemistry	2	SCMA601005	Calculus 2	3
SCMA601001	Logic and Set	3	SCMA601006	Linear Algebra I	3
SCMA601002	Calculus 1	3	SCMA601007	Numerical Methods	3
SCMA601003	Elementary Linear Algebra	2	SCPH601110	Basic Physics	2
SCMA601047	Algorithm and Programming	2	SCST601002	Mathematical Statistics 1	3
SCMA601048	Practical in Algorithm and Programming	1	UIGE600007	Integrated Personality Development Skills	6
SCMA601049	Practical in Basic Mathematics	1			
SCST601001	Introduction to Data Science	2			
UIGE600003	English	2			
UIGE600004	Religion	2			
Total Credits in Semester 1		20	Total Credits in Semester 2		20

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCAC602022	Risk Modeling 1	3	SCMA602008	Analysis 1	4
SCBI601112	General Biology	2	SCST602009	Multivariate Analysis	3
SCST602003	Mathematical Statistics 2	4	SCST602010	Practical in Multivariate Analysis	1
SCST602004	Data Exploration and Visualization	2	SCST602011	Design of Experiment	3

SCST602005	Linear Models	3	SCST602012	Survival Model	3
SCST602006	Nonparametric Statistics	3	SCST602013	Database for Data Science	2
SCST602007	Matrix Theory for Statistics	2	SCST602014	Forecasting Methods	3
SCST602008	Sampling and Survey Design	3	SCST602015	Practical in Statistics Methods	1
Total Credits in Semester 3		22	Total Credits in Semester 4		20

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCST603017	Statistical Computation	2		Elective Courses / MBKM	20
SCST603018	Categorical Data Analysis	3			
SCST603019	Data Mining & Business Intelligence	2			
SCST603020	Practical in Data Mining & Business Intelligence	1			
SCST603021	Deep Learning	2			
SCST603022	Practical in Deep Learning	1			
SCST603023	Stochastic Modeling 1	3			
	Elective Course/MBKM	3			
Maximum Total Credits in Semester 5		17	Maximum Total Credits in Semester 6		20

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCST603016	Research Methods	2	SCST603024	Final Project	6
	Elective Courses / MBKM	17			
Total Credits in Semester 7		19	Total Credits in Semester 8		6

Resume	University Compulsory Course	10
	Faculty Compulsory Course	8
	Department Compulsory Course	32
	Study Program Compulsory Course	54
	Total of Compulsory Courses	104
	Elective Courses / MBKM	40
	Total Study Load	144

4. List of Elective Courses

NO	Code	Courses Name	SKS	Prerequisite Courses
1	SCST603125	Entrepreneurship	3	-
2	SCST603126	Spatial Statistics	3	Advanced Linear Models

NO	Code	Courses Name	SKS	Prerequisite Courses
3	SCST603127	Advanced Linear Models	3	Linear Models
4	SCST603128	Introduction to Probability Theory	3	Mathematical Statistics 1
5	SCST603129	Soft Skills for Data Science	3	Logic and Set Theory
6	SCST603130	Bayesian Statistics & Modern Statistical Methods	3	Linear Models, Mathematical Statistics 2
7	SCST603131	Quality Control Statistics	3	Mathematical Statistics 1
8	SCST603132	Introduction to Machine Learning Theory	3	Data Mining & Business Intelligence, Mathematical Statistics 2
9	SCST603133	Mathematical Statistics 3	3	Mathematical Statistics 2
10	SCST603134	Digital Data Collection Methods	3	Unstructured Data Analysis
11	SCST603135	Psychometrics	3	Linear Models
12	SCST603136	Probability Theory	3	Introduction to Probability Theory
13	SCST604137	Official Statistics	3	-
14	SCST604138	Introduction to Statistical Consulting	3	Linear Models, Data Mining and Business Intelligence, Sampling and Survey Design
15	SCST604139	Biostatistics	3	Introduction to Data Science
16	SCST604140	Social and Population Statistics	3	-
17	SCST604141	Genomic Data Science	3	Mathematical Statistics 1
18	SCST604142	Internship	3	-
19	SCST604143	Econometrics	3	Linear Models
20	SCST604144	Stochastic Models 2	3	Stochastic Models 1
21	SCST604145	Special Topics 1	3	Linear Models
22	SCST604146	Special Topics 2	3	Bayesian Statistics and Modern Statistical Methods
23	SCST604147	Special Topics 3	3	Linear Models
24	SCST604148	Special Topics 4	3	Linear Models
25	SCST604149	Special Topics 5	3	Stochastic Models 1
Total			75	

c. Undergraduate Program in Actuarial Science

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Actuarial Science
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono Department of Mathematics, D Building

		Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Unggul (Excellent) by LAMSAMA
6	Graduate Title	Bachelor of Actuarial (S.Aktr.)
7	Vision	To become an undergraduate program in Actuarial Science that contributes to the development of Actuarial Science and its applications based on data science in the insurance and financial industries, and is reputable at both the national and international levels.
8	Mission	1. To produce graduates with a deep understanding of Actuarial Science, strong analytical skills, and the ability to solve problems in Actuarial Science in accordance with academic and professional ethics. 2. To produce graduates who are competitive at both the national and global levels. 3. To conduct research and innovation in Actuarial Science and data science to generate new knowledge that can make significant contributions to the development of the insurance and financial industries. 4. To engage in community service activities independently or in cooperation with various organizations to ensure that the community's needs related to Actuarial Science are met.
9	Graduate Profile	PL-1 - Junior Actuary: A certified professional with knowledge and skills in mathematics, computation, statistics, data science, and economics, used to evaluate and manage life risks and other financial risks according to professional ethics. PL-2 - Academic: An individual with expertise in Actuarial Science who is responsible for disseminating knowledge, assisting in research activities, and providing

		academic guidance in accordance with academic ethics. PL-3 - Risk Analyst: A professional capable of evaluating various financial risks faced by companies or entities, including market risk, credit risk, and operational risk.
10	Graduate Learning Outcomes	1. Able to use Indonesian and/or English, both orally and in writing, effectively for academic and non-academic activities (C3). 2. Able to demonstrate behavior that reflects sensitivity, concern, and the values of UI regarding environmental and societal issues within the framework of Indonesian nationalism based on Pancasila (A5). 3. Able to apply basic principles of physics, chemistry, and biology to solve problems related to Actuarial Science (C3). 4. Able to apply theoretical concepts in mathematics, computation, statistics, and data science to problems related to Actuarial Science (C3). 5. Able to analyze economic, accounting, and financial problems related to Actuarial Science (C4). 6. Able to choose the appropriate model to solve problems related to Actuarial Science (C4). 7. Able to design solutions to Actuarial Science problems through the use of data science and information technology, in accordance with academic and professional ethics (C6). 8. Able to formulate recommendations and alternative solutions for problems related to Actuarial Science based on risk and financial analysis (C6). 9. Able to enhance intellectual abilities independently and critically, and develop oneself as a lifelong learner to adapt in the field of Actuarial Science (C6).
11	Study Period and Credit (SKS)	8 (eight) semester, credits minimum 144 (one hundred forty four) SKS

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	104
	Faculty	8	
	Department	32	
	Study Program	54	
Elective Courses - Merdeka Belajar		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600004	Religion	2	UIGE600007	Integrated Personality Development Skills	6
UIGE600003	English	2	SCPH601110	Basic Physics	2
SCCH601101	General Chemistry	2	SCMA601006	Linear Algebra 1	3
SCBI601112	General Biology	2	SCMA601005	Calculus 2	3
SCMA601001	Logic and Set	3	SCMA601007	Numerical Methods	3
SCMA601003	Elementary Linear Algebra	2	SCST601001	Introduction to Science Data	2
SCMA601002	Calculus 1	3			
SCMA601047	Algorithm and Programming	2			
SCMA601048	Practical in Algorithm and Programming	1			
SCMA601049	Practical in Basic Mathematics	1			
Total Credits in Semester I		20	Total Credits in Semester II		19
Total Credits until Semester I		20	Total Credits until Semester II		39

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCMA602008	Analysis 1	4	SCST602003	Mathematical Statistics 2	4
SCST601002	Mathematical Statistics 1	3	SCST602005	Linear Models	3
SCAC602002	Advanced Calculus	2	SCAC602024	Financial Mathematics 2	3
SCAC602023	Introduction to Differential Equations	2	SCAC602022	Risk Modeling 1	3
SCAC602033	Actuarial Optimization	2	SCAC602004	Life Contingencies 1	3

SCAC602020	Financial Mathematics 1	3	SCAC602005	Stochastic Models 1	3
SCAC602031	Data Science	3			
Total Credits in Semester III		19	Total Credits in Semester IV		19
Total Credits until Semester III		58	Total Credits until Semester IV		77

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCST602012	Survival Models	3		Elective Courses	20
SCST602014	Forecasting Methods	3			
SCAC603028	Risk Modeling 2	3			
SCAC603035	Practical in Risk Modeling	1			
SCAC603027	Life Contingencies 2	3			
SCAC603030	Investment Theory	3			
SCAC603032	Advanced Linear Models	3			
Total Credits in Semester V		19	Total Credits in Semester VI		20
Total Credits until Semester V		96	Total Credits until Semester VI		116

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCAC603036	Research Methods	2	SCAC604040	Final Assignment	6
	Elective Courses	20			
Total Credits in Semester VII		22	Total Credits in Semester VIII		6
Total Credits until Semester VII		138	Total Credits until Semester VIII		144

Resume	Study Program Compulsory Course	104
	Elective Course	40
	Total Study Load	144

4. List of Elective Courses

NO	CODE	COURSE NAME	SKS
1	SCAC602134	Risk Management	3
2	SCAC602105	Machine Learning	3
3	SCAC602141	Actuarial Career Insights	2
4	SCAC603116	Microeconomic Theory	3
5	SCAC603118	Macroeconomic Theory	3
6	SCAC603115	Accounting 1	3
7	SCAC603109	Pension Fund Theory	3
8	SCAC603137	Casualty and Health Insurance	3
9	SCAC603101	Stochastic Models 2	3
10	SCAC603138	Practical in Actuarial Software	2
11	SCAC604117	Accounting 2	3
12	SCAC604112	Professional Internship	3
13	SCAC604119	Derivative Financial Modeling	3
14	SCAC603113	Special Topic 1	3
15	SCAC604114	Special Topic 2	3

16	SCAC604139	Special Topic 3	3
Total			46

d. Undergraduate Program in Physics

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Physics
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono Department of Physics, F Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Excellent (Unggul) by LAMSAMA Accredited by ASIIN
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	To become a center of education and research in the field of Physics and Applied Physics that is excellent, competitive, and capable of solving problems and challenges at the national and global levels, aiming to achieve excellence in Southeast Asia.
8	Mission	1. To maintain and strengthen excellence in education and research in the field of Physics and Applied Physics. 2. To improve internal management that encourages active and productive involvement of faculty members and students to enhance scientific activities and scholarly works in the fields of Physics and Applied Physics at national and international quality levels. 3. To actively participate in providing services as a manifestation of the devotion and contribution of Physics and Applied Physics to society. 4. To prepare graduates who are ready to compete in the global market.
9	Graduate Profile	The science graduate who is able to think critically and creatively with a strong understanding of Physics, to build a professional career and pursue further education at higher levels, in the field of Physics or related fields
10	Graduate Learning Outcomes	Main Learning Outcomes

		1. Apply classical and modern Physics concepts to general Physics problems. 2. Apply mathematical methods to solve Physics problems analytically and computationally. 3. Apply concepts from one of the following fields of Physics or Applied Physics: a. Nuclear & Theoretical Particle Physics b. Material Physics c. Condensed Matter Physics d. Instrumentation Physics e. Medical Physics & Biophysics 4. Formulate Physics problems and solutions, and interdisciplinary science and mathematics problems critically, creatively, and innovatively. 5. Explain the basic principles of experiments, apply Physics measurement methods, analyze results correctly, and practice safety in the workplace and the environment. 6. Summarize basic knowledge in science and technology. 7. Apply Physics knowledge to society and practical life, as well as identify and adapt to new developments. 8. Develop and deepen the knowledge acquired in the undergraduate program continuously, and be capable of pursuing graduate and doctoral education. 9. Demonstrate attitudes and skills that support success in working, capable of working in teams, and participating in community activities. 10. Understand the basic elements of the Indonesian and English languages in the field of Physics specifically, and science and technology generally. 11. Solve simple scientific problems and present them orally and in writing. Supporting Learning Outcomes (Interdisciplinary) 1. Able to build insight into the latest developments in science and technology related to Physics. 2. Able to operate and utilize information and communication technology. 3. Able to process and interpret data.
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		4. Describe phenomena, findings, and contemporary and cutting-edge science and technology topics. 5. Study advanced instruments that support their work. 6. Able to understand strategies for continuous learning. 7. Able to apply good time management. 8. Apply effective learning and working methods. 9. Implement standard operating procedures. 10. Prepare a complete work plan. 11. Able to use oral and written language in both Indonesian and English effectively for academic and non-academic activities.
11	Study Period and Credit (SKS)	8 (eight) semester, credits minimum 144 (one hundred forty four) SKS

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	104
	Faculty	6	
	Study Program	88	
Elective Courses / MBKM		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCPH601101	Basic Physics 1	4	SCPH601201	Basic Physics 2	4
SCPH601102	Basic Physics 1 L.E	1	SCPH601202	Basic Physics 2 L.E	1
SCPH601103	Mathematical Methods in Physics 1	4	SCPH601203	Mathematical Methods in Physics 2	3
SCBI601112	General Biology	2	SCPH601204	Electronics 1	2
SCCH601101	General Chemistry	2	SCPH601205	Electronics I L.E	1
SCMF600002	Introduction to Data Science	2	SCMF600001	Basic Mathematics	2
UIGE600004	Religion	2	UIGE600006	Integrated Personality Development Skills	6
UIGE600003	English	2	SCPH601201	Basic Physics 2	4
Total Credits in Semester 1		19	Total Credits in Semester 2		19
Total Credits until Semester 1		19	Total Credits until Semester 2		38

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCPH602103	Mathematical Methods in Physics 3	4	SCPH602201	Electromagnetic Field I	3
SCPH602107	Vibrations and Waves	2	SCPH602202	Statistical Physics	4
SCPH602101	Modern Physics	3	SCPH602206	Classical Mechanics	4
SCPH602102	Advanced Physics L.E	2	SCPH602204	Computational Physics	4
SCPH602108	Thermodynamics	3	SCPH602205	Modern Optics	2
SCPH602104	Electronics II	2	SCPH602203	Mathematical Methods in Physics 4	2
SCPH602105	Electronics II L.E	1			
SCPH602106	Measurement Physics	2			
Total Credits in Semester 3		19	Total Credits in Semester 4		19
Total Credits until Semester 3		57	Total Credits until Semester 4		76

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCPH603101	Electromagnetic Field 2	3	SCPH603202	Quantum Physics 2	3
SCPH603102	Quantum Physics 1	4	SCPH603201	Fluid Dynamics	2
SCPH603103	Introduction to Solid State Physics	3		Elective Course/MBKM	14
SCPH603104	Introduction to Nuclear Physics	3			
SCPH603101	Elective Courses/MBKM	6			
Total Credits in Semester 5		19	Total Credits in Semester 6		19
Total Credits until Semester 5		95	Total Credits until Semester 6		114

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCPH604101	Research Project	2	SCPH604201	Thesis	6
	Elective Courses/MBKM	17	SCPH604202	Seminar	2
				Elective Course/MBKM	3
Total Credits in Semester 7		19	Total Credits in Semester 8		11
Total Credits until Semester 7		133	Total Credits until Semester 8		144

Resume	University Compulsory Courses	10
	Faculty Compulsory Courses	6
	Study Program Compulsory Courses	88
	Total of Compulsory Courses	104
	Elective Courses/MBKM	40

	Total Study Load	144
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4. List of Elective Courses

No.	Code	Course Name	SKS	Semester*
1	SCPH604102	Relativistic Quantum Mechanics	4	Term-1
2	SCPH604103	General Relativity	4	Term-1
3	SCPH604104	Advanced Computational Physics	3	Term-1
4	SCPH604105	Scattering Theory	3	Term-2
5	SCPH604106	Nuclear and Particle Physics	3	Term-2
6	SCPH604107	Angular Momentum Concept	3	Term-2
7	SCPH604108	Relativistic Quantum Field Theory	4	Term-2
8	SCPH604109	Introduction to Material Science	4	Term-1
9	SCPH604110	Applied Materials Physics	3	Term-2
10	SCPH604111	Materials Characterization Method	4	Term-1
11	SCPH604112	Special Topics in Advanced Materials	4	Term-2
12	SCPH604113	Materials for Energy	3	Term-1
13	SCPH604114	Materials for Environment	3	Term-2
14	SCPH604115	Thermodynamics of Materials	3	Term-2
16	SCPH604116	Transport & Optical Properties of Materials	4	Term-2
17	SCPH604117	Magnetism	2	Term-2
18	SCPH604118	Superconductivity	2	Term-1
19	SCPH604119	Spectroscopy A	2	Term-1
20	SCPH604120	Spectroscopy B	2	Term-2
21	SCPH604121	Nonrelativistic Quantum Field Theory	3	Term-1
22	SCPH604122	Nanosystem Physics	4	Term-1
23	SCPH604123	Computational Materials	3	Term-2
24	SCPH604124	Ionic Solid State Physics	2	Term-2
25	SCPH604125	Introduction to Radiology and Dosimetry	3	Term-1
26	SCPH604126	Anatomy and Physiology	2	Term-1
27	SCPH604127	Introduction to Biophysics	2	Term-2
28	SCPH604128	Introduction to Biomaterials	2	Term-2
29	SCPH604129	Introduction to Radiotherapy	2	Term-2
30	SCPH604130	Introduction to Diagnostic and Interventional Radiology Physics	2	Term-1
31	SCPH604131	Introduction to Nuclear Medicine Physics	2	Term-2
32	SCPH604132	Radiobiology	2	Term-1
33	SCPH604133	Practical in Radiology Physics	1	Term-1
34	SCPH604134	Health Physics and Radiation Protection	2	Term-1
35	SCPH604135	Medical Imaging Theory	2	Term-2

36	SCPH604136	Medical Instrumentation	2	Term-2
37	SCPH604137	Sensors and Actuators	3	Term-1
38	SCPH604138	Practical in Instrumentation Physics I	1	Term-1
39	SCPH604139	Embedded Systems	2	Term-1
40	SCPH604140	Practical in Instrumentation Physics II	1	Term-1
41	SCPH604141	Control Systems	3	Term-2
42	SCPH604142	Machine Learning	2	Term-2
43	SCPH604143	Digital Signal Processing	3	Term-1
44	SCPH604144	Digital Image Processing	2	Term-2
45	SCPH604145	Special Topics in Instrumentation Physics	2	Term-2
46	SCPH604146	Instrumentation Systems	2	Term-2
47	SCPH604147	Practical in Instrumentation Physics II	2	Term-2
48	SCPH604148	Data Acquisition Systems	2	Term-1
Grand Total			120	

e. Undergraduate Program in Chemistry

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Chemistry
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono Department of Chemistry, G Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	International Accredited by Royal Society Chemistry (RSC)
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	To become a center of excellence in chemistry education and research that can make a significant contribution to the development of science and technology at both national and international levels.
8	Mission	1. To produce graduates who are competitive at the national and international levels, and who are able to adapt to the changes and developments in science and technology. 2. To develop a high-quality institution that can play a significant role in advancing chemistry and its applications.

		3. To establish a center of information in the field of chemistry that contributes to solving societal problems.
9	Graduate Profile	The graduate profile of the Bachelor of Chemistry program at FMIPA UI demonstrates abilities and qualifications that allow graduates to take on various roles across multiple fields. Below are some of the career opportunities that graduates can pursue: 1. Chemical Industry: Graduates can work in various chemical industries, including the production of chemicals, pharmaceuticals, petrochemicals, cosmetics, and food. They can be involved in research, product development, production, and quality control. 2. Research and Development: Graduates can work in research and development institutions in both the public and private sectors. They may engage in both fundamental and applied research in various fields of chemistry. 3. Environment and Conservation: Graduates can work in the environmental field, such as waste management, natural resource conservation, and pollution mitigation. They may contribute to the development of environmentally friendly technologies and environmental policies. 4. Energy and Petrochemicals: Graduates can work in the energy and petrochemical sectors, involved in oil and gas drilling, fossil fuel processing, and the development of renewable energy. 5. Education and Training: Graduates may choose a career in education, becoming lecturers or educators at universities or professional training institutions to teach and train the next generation. 6. Health and Pharmaceuticals: Chemistry graduates can also work in the pharmaceutical industry, whether in the

		development of new drugs, quality control of pharmaceutical products, or research related to drugs and diseases. 7. Consulting and Technical Services: Graduates can work as consultants or technical experts in various industries, providing advice and solutions for product development, quality monitoring, and compliance with regulations.
10	Graduate Learning Outcomes	1. Able to apply the 9 core values of UI, namely Honesty, Just and Fair, Trustworthiness, Dignity, Accountability, Togetherness, Transparency, Academic Freedom, and Compliance to Laws. (C3) 2. Able to analyze the basic principles of mathematics, physics, biology, and statistics in solving problems in the field of chemistry. (C4) 3. Able to connect concepts from the 5 sub-disciplines of chemistry: analytical chemistry, physical chemistry, inorganic chemistry, organic chemistry, and biochemistry in a systematic and comprehensive manner. (C4) 4. Able to analyze problems arising in the fields of energy, health, and the environment both qualitatively and quantitatively. (C4) 5. Able to design experiments according to good laboratory practices (GLP) accurately for the preparation, purification, and analysis of substances, and use appropriate instrumentation. (P3) 6. Able to interpret results from chemical instruments and software for determining chemical compounds, both qualitatively and quantitatively. (C5) 7. Able to propose solutions to simple problems in the fields of energy, health, and the environment based on scientific knowledge. (C5) 8. Able to defend ideas, findings, and the impacts of chemical processes to anticipate social, economic, energy, health, and environmental issues. (A4)

		9. Able to develop a professional attitude and possess a willingness to engage in lifelong learning in the field of chemistry. (A5) 10. Able to formulate chemistry knowledge with entrepreneurship to create various entrepreneurial ventures. (C5)
11	Study Period and Credit (SKS)	8 (eight) semester, credits minimum 144 (one hundred forty four) SKS

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	104
	Faculty	8	
	Study Program	86	
Elective Courses – Merdeka Belajar		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600004	Religion	2	UIGE600007	Integrated Personality Development Skills	6
SCMF600001	Basic Mathematics	2	SCCH601103	Basic Chemistry II	2
SCFI601110	Basic Physics	2	SCCH602104	Analytical Chemistry	3
SCBI601112	General Biology	2	SCCH602501	Organic Chemistry I	4
SCST601001	Introduction to Data Science	2	SCCH602201	Analytical Chemistry LE.	2
UIGE600003	English	2	SCCH602301	Energetics	3
SCCH601101	Basic Chemistry I	3			
SCCH601102	Basic Chemistry LE	2			
SCCH601001	Hazardous Materials Chemical	2			
Total Credits in Semester 1		19	Total Credits in Semester 2		20
Total Credits until Semester 1		19	Total Credits until Semester 2		39

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCCH602502	Organic Chemistry II	4	SCCH602503	Synthesis of Organic Chemistry	2
SCCH603401	Organic Chemistry LE.	2	SCCH603201	Genetic Information & Biocatalysis	2

SCCH602601	Structure & Function of Biomolecular	2	SCCH603503	Biochemistry L.E	2
SCCH602202	Electro Analysis & Basics of Chemical Separation	3	SCCH603601	Transition Metal & Coordination Compound	3
SCCH603003	Computational Chemistry	2	SCCH602204	Electro analysis & Basic of Chemical Separation	2
SCCH603402	Quantum Chemistry	3	SCCH602452	Bioseparation and Biomolecular Analysis	2
SCCH602302	Phase System	2	SCCH602303	Chemical Kinetics	2
SCCH602403	Structure & Reactivity of Inorganic Compound	3	SCCH603603	Molecular Spectroscopy	2
			SCCH602401	Metal & Non Metal Chemistry	3
			SCCH602402	Metal & Non Metal Chemistry LE.	1
Total Credits in Semester 3		21	Total Credits in Semester 4		21
Total Credits until Semester 3		60	Total Credits until Semester 4		81

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCCH603002	Research Method	2		Study Program Elective Courses or Merdeka Belajar	20
SCCH603602	Structure Elucidation	2			
SCCH603202	Metabolism	2			
SCCH602203	Spectrometry Analysis Chemistry	3			
SCCH603555	Pharmaceutical Biochemistry	2			
SCCH602304	Physical Chemistry LE.	2			
SCCH603502	Coordination Compound Synthetical LE	1			
SCCH603501	Instrumental Chemistry L.E	1			
	Study Program Elective Courses or Merdeka Belajar	6			
Total Credits in Semester 5		21	Total Credits in Semester 6		20
Total Credits until Semester 5		102	Total Credits until Semester 6		122

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCCH604001	Introduction to Research	2	SCCH604000	Thesis	6

	Study Program Elective Courses or Merdeka Belajar	14		
Total Credits in Semester 7		16	Total Credits in Semester 8	6
Total Credits until Semester 7		138	Total Credits until Semester 8	144

Resume	Compulsory Courses	104
	Elective Courses	40
	Total Study Load	144

4. List of Elective Courses

Term-1			
NO	CODE	COURSE NAME	SKS
1	SCCH603251	Quality Assurance Analysis	2
2	SCCH603252	Sampling & Preparation	2
3	SCCH603052	Toxicology	2
4	SCCH603351	Applied Physical Chemistry	2
5	SCCH603352	Solid State Chemistry	2
6	SCCH603353	Surface Chemistry	2
7	SCCH603451	Organometal	2
8	SCCH603452	Silica Alumina Mineral	2
9	SCCH603551	Chemistry of Natural Product	2
10	SCCH603552	Organic Pollutants	2
11	SCCH603651	Lipid	2
12	SCCH603254	X-Ray Analysis Chemistry	2
13	SCCH603255	Analysis Chemistry Capita Selecta I	2
14	SCCH603655	Biosynthesis	2
15	SCCH604052	Environmental Chemistry	3
16	SCCH603356	Chemical Sensors	2
17	SCCH601052	Industrial Chemistry	2
18	SCCH604451	Inorganic Capital Selecta I	2
19	SCCH603302	Introduction to Polymer	2
20	SCCH603656	Biochemistry Capita Selecta	2
21	SCCH603301	Physical Organic Chemistry	2
Total			43

Term-2			
NO	CODE	COURSE NAME	SKS
1	SCCH603453	Bioinorganic	2
2	SCCH604452	Inorganic Chemistry Capita Selecta II	2
3	SCCH603657	Synthesis of Active Pharmaceutical Ingredients	2
4	SCCH603554	Polymer Chemistry	2
5	SCCH603654	Biotechnology	2

6	SCCH602451	Chemistry of Mineralogy	2
7	SCCH603354	Heterogeneous Catalysis	2
8	SCCH602251	Chromatography	2
9	SCCH602351	Operation Unit	2
10	SCCH602052	Alternative Energy	2
11	SCCH602053	Forensic Chemistry	2
12	SCCH604351	Physical Chemistry Capita Selecta I (Hydrogen Energy)	2
13	SCCH604251	Analysis Chemistry Capita Selecta. II: Chemometrics	2
14	SCCH604651	Nutrition	2
15	SCCH604652	Introduction to Bioinformatics	2
16	SCCH604653	Biochemistry Capita Selecta II: Chemical Biomarkers	2
17	SCCH604654	Biochemistry Capita Selecta III: Microbial Metabolism	2
18	SCCH603357	Electrochemical Techniques	2
19	SCCH603253	Thermal Analytical Chemistry	2
20	SCCH603653	Microbiology LE	2
21	SCCH603256	Flow Injection Analysis	2
22	SCCH604552	Stereochemistry	2
23	SCCH603355	Nano Chemistry	2
24	SCCH603652	Microbiology	2
Total			48

f. Undergraduate Program in Biology

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Biology
3	Education Level	Bachelor
4	Address	Department of Biology, E Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) Jl. Prof. Dr. Mahar Mardjono UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Excellent (Unggul) 2023 – 2028 by LAMSAMA
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	Vision for 2024-2030: To become an excellent provider of higher education in the field of biodiversity prospecting and conservation, producing biology graduates who can play a significant role at the national and global levels in advancing science, technology, and sustainable development

8	Mission	1. To conduct high-quality education, research, and community service activities in the field of biodiversity prospecting and conservation in Indonesia. 2. To produce biology graduates capable of contributing at national and global levels to the advancement of science, technology, and sustainable development.
9	Graduate Profile	Upon completing the undergraduate program in Biology at UI, graduates are expected to have the following profile: A Biology Graduate who is capable of designing solutions to a wide range of problems in a professional and ethical manner based on scientific methods, utilizing biological concepts in the fields of biodiversity prospecting and conservation. The roles that can be taken by graduates of the Biology program are varied, including positions as researchers, academicians, working in various companies, government institutions, as entrepreneurs, consultants, and others.
10	Graduate Learning Outcomes	1. CPL-1, C6, A1: Able to formulate solutions to issues related to biodiversity prospecting and conservation, using relevant biological principles and technologies, while adhering to ethical standards and demonstrating professionalism in the field of biology. 2. CPL-2, C5: Able to recommend relevant biological principles and technologies in analyzing issues related to biodiversity prospecting and conservation that benefit society. 3. CPL-3, C4, P2: Able to identify biological resources and the environment based on the principles of biodiversity prospecting and conservation. 4. CPL-4, C3, P4: Able to use basic software, instruments, and standard methods for analysis and synthesis in general and specific biological fields. 5. CPL-5, A4, C3: Able to demonstrate and develop lifelong learning behavior.

		6. CPL-6, C3, P4: Able to apply the basic principles of mathematics, physics, chemistry, biology, and statistics in solving biological problems. 7. CPL-7, C4, P2, A4: Able to identify entrepreneurial opportunities by combining innovation and independence based on ethics. 8. CPL-8, C3, P4: Able to use oral and written communication skills in both Indonesian and English for academic and non-academic activities. 9. CPL-9, C3, A3: Able to identify and propose alternative solutions to problems arising in the environment, society, nation, and state. 10. CPL-10, A4, C3, P4: Able to demonstrate integrity, critical, creative, and innovative thinking, as well as intellectual curiosity in solving individual and group-level problems using information and communication technology wisely.
11	Study Period and Credit (SKS)	8 (eight) semester, credits minimum 144 (one hundred forty four) SKS

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	101
	Faculty	8	
	Study Program	83	
Elective Courses / Merdeka Belajar		43	43
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600003	English	2	UIGE600007	Integrated Personality Development Skills	6
UIGE600004	Religion	2	SCCH602591	Organic Chemistry	2
SCMF600001	Basic Mathematics	2	SCBI601201	Animal Structure	2
SCPH601110	Basic Physics	2	SCBI601331	Animal Structure LE	1
SCCH601101	General Chemistry	2	SCBI601202	Plant Structure	2
SCB1601103	Basic Biology	3	SCBI601329	Plant Structure LE	1
SCBI601001	Cell Biology	3	SCBI602205	Diversity of Microorganisms	3

SCBI601101	Genetics	3	SCBI602227	Diversity of Microorganism LE	1
SCBI601102	Genetics LE	1	SCMF600002	Introduction to Data Science	2
Total Credits in Semester I		20	Total Credits in Semester II		20
Total Credits until Semester I		20	Total Credits until Semester II		40

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCBI603201	Evolutionary Biology	3	SCBI602335	Animal Physiology	3
SCBI602203	Diversity of Animals	3	SCBI602336	Animal Physiology LE	1
SCBI602204	Diversity of Animals LE	1	SCBI602332	Plant Physiology	3
SCBI602206	Diversity of Plants	3	SCBI602334	Plant Physiology LE	1
SCBI602207	Diversity of Plants LE	1	SCBI603401	Microbiology	3
SCCH602691	Biochemistry	3	SCBI603402	Microbiology LE	1
SCBI603009	Molecular Biology	3	SCBI602202	Biosystematics	3
SCBI603010	Molecular Biology LE	1	SCBI602003	Biometrics	3
SCBI602337	Basic Techniques in Biological Laboratory	2	SCBI603011	Scientific Writing	3
Total Credits in Semester III		20	Total Credits in Semester IV		21
Total Credits until Semester III		60	Total Credits until Semester IV		81

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCBI602501	Ecology	3		Elective Courses - Merdeka Belajar	20
SCBI602502	Ecology LE	1			
SCBI602228	Bioinformatics	3			
SCBI603101	Biopreneur	2			
SCBI603005	Research Design	3			
	Elective Course	3			
Total Credits in Semester V		15	Total Credits in Semester VI		20
Total Credits until Semester V		96	Total Credits until Semester VI		116

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCBI604701	Research Proposal	2	SCBI604000	Thesis	6
	Elective Courses - Merdeka Belajar	20			
Total Credits in Semester VII		16	Total Credits in Semester VIII		6
Total Credits until Semester VII		138	Total Credits until Semester VIII		144

Resume	Compulsory Courses	101
	Elective Courses	43
	Total Study Load	144

4. List of Elective Courses

NO	CODE	COURSE NAME	SKS
1	SCBI603938	Natural Resource Management	2
2	SCBI603901	Biorisk Bioethics and Biosafety	2
3	SCBI603902	Science Communication	2
4	SCBI603922	Biology Capita Selecta	3
5	SCBI603220	Entomology	2
6	SCBI603225	Marine Biology	3
7	SCBI603923	Soil Ecology	2
8	SCBI603318	Marine Biota Physiology	2
9	SCBI603506	Animal Ecology	3
10	SCBI603509	Freshwater Ecology	2
11	SCBI603514	Oceanography	2
12	SCBI603924	Cancer Biology	2
13	SCBI603925	Plant Molecular Biology	3
14	SCBI603926	Synthetic Biology	2
15	SCBI603927	Structural and Developmental Biology	3
16	SCBI603928	Immunoendocrinology	2
17	SCBI603929	Cell and Organoid Culture	2
18	SCBI603909	Introduction to Omics Science	3
19	SCBI603224	Mycology	2
20	SCBI603405	Food Microbiology	2
21	SCBI603915	Bioinformatics and Microorganism Systematics	3
22	SCBI603916	Bacteriology	2
23	SCBI603917	Algae Culture Technology	3
24	SCBI603406	Environmental Microbiology	2
25	SCBI603919	Microorganisms Prospecting and Fermentation	2
26	SCBI603930	Chemical Ecology	2
27	SCBI603931	Bioprospection	2
28	SCBI603914	Bioremediation	2
29	SCBI603932	Introduction to Nanobiology	2
30	SCBI603933	Spectroscopy and Chromatography Instrumentation	1
31	SCBI603934	Plant Cultivation Technology	2
32	SCBI603935	Introduction to Natural Products	2
33	SCBI603920	Introduction to Plant Tissue Culture	2
34	SCBI603209	Biogeography	2
35	SCBI603325	Animal Behaviour Science	2
36	SCBI602107	Conservation Genetics	2
37	SCBI603937	Landscape and Tropical Forest Ecology	3
38	SCBI603904	Ethnobiology	3
39	SCBI603905	Conservation Biology	2
40	SCBI603936	Wildlife Reproduction	2
Total			89

g. Undergraduate Program in Geography

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Geography
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono Department of Geography, H Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Excellent (Unggul) by LAMSAMA
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	To become a center of excellence and national reference in the field of Geography, capable of contributing globally in supporting sustainable development
8	Mission	1. To organize higher education activities in geography based on competence and research, producing geography graduates who are highly intellectual, smart, virtuous, and able to compete regionally/internationally. 2. To carry out research and development activities in the field of geography and applied geographic research within an academic atmosphere and research culture, advancing geography knowledge to produce innovations and solutions for supporting sustainable development. 3. To organize community service or applied geography activities to contribute and play an active role in the development of science and innovation.
9	Graduate Profile	A Bachelor of Science in Geography who is capable of mapping natural resources and human activities using spatial information technology to support decision-making in the sustainable management of life, acting professionally according to scientific and environmental ethics.
10	Graduate Learning Outcomes	1. Able to apply principles of natural sciences, mathematics, and data analytics to geographic studies. 2. Able to analyze the application of fundamental theories and geographic

		methods, as well as spatial information technology at various scales and characteristics of the Earth's surface. 3. Able to validate geographic data and information. 4. Able to assess problems related to life resources based on geographic working procedures. 5. Able to interpret the interdependence between humans and the environment from a spatial perspective. 6. Able to formulate spatial models/synthesis based on geographic theories and methods, as well as spatial information technology. 7. Able to demonstrate honesty, dignity, and responsibility in accordance with scientific, professional, and environmental ethics. 8. Able to show maturity, a well-rounded attitude, and self-confidence in exploring intellectual curiosity in response to societal needs professionally. 9. Able to propose critical, creative, and innovative ideas about the opportunities for applying the geography discipline to solve life resource problems. 10. Able to present various geographic information that is verbal and textual in both Indonesian and English effectively and efficiently for relevant stakeholders.
11	Study Period and Credit (SKS)	8 (eight) semester, credits minimum 144 (one hundred forty four) SKS

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	101
	Faculty	10	
	Study Program	81	
Elective Courses / Merdeka Belajar		43	43
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600003	English	2	UIGE600007	Integrated Personality Development Skills	6
UIGE600004	Religion	2	SCMA601003	Elementary Linear Algebra	2
SCMF600001	Basic Mathematics	2	SCGE601005	Principles and Perspectives of Human Geography	3
SCMF600002	Introduction to Data Science	2	SCGE601008	Introduction to Geographical Methods	2
SCPH601110	Basic Physics	2	SCGE601009	Surveying and Mapping	2
SCCH601101	General Chemistry	2	SCGE601010	Surveying and Mapping Laboratory	1
SCGE601002	Geographic Thinking	2	SCGE601011	Physical Geographic Systems and Processes	3
SCGE601003	Principles and Perspectives of Physical Geography	2	SCGE601012	Physical Geography 2 Laboratory	1
SCGE601004	Physical Geography 1 Laboratory	1			
SCGE601006	Cartography	2			
SCGE601007	Cartography Laboratory Course	1			
Total Credits in Semester I		20	Total Credits in Semester II		20

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCBI601112	General Biology	2	SCGE602001	Geographical Research Design	2
SCGE602003	Fieldwork I	3	SCGE602004	Fieldwork II	3
SCGE602005	Qualitative Method in Geography	3	SCGE602013	Land Use Dynamics	2
SCGE602006	Geography Qualitative Method Lab. Course	1	SCGE602014	Professional Geography	2
SCGE602007	Geographical Data and Statistics	2	SCGE602018	Geographic Information System	2
SCGE602008	Statistical Geography Laboratory	1	SCGE602019	Geographic Information System Lab. Course	1
SCGE602011	Human Activity Spatial Organization	4	SCGE602027	Hydrogeography	2
SCGE602012	Human Geography Laboratory	1	SCGE602030	Spatial Dynamic of Urban Region	2

SCGE602016	Remote Sensing	2	SCGE602031	Space and Economic System	2
SCGE602017	Remote Sensing Lab. Course	1	SCGE602032	Quality of Life and Population Mobility	2
SCGE602033	Atmospheric and Climate Processes	2	SCGE602034	Landforms and Ecosystems	2
Total Credits in Semester III		22	Total Credits in Semester IV		22

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGE603703	Fluvial Landform Dynamics	3	SCGE603709	Urban Climatology	2
SCGE603711	Oceanography	2	SCGE603710	Dynamics of Coastal Landforms	2
SCGE603718	Climate Change Phenomena and Impacts	3	SCGE603723	Coastal Geography	2
SCGE603722	Hydrometeorological Modeling	2	SCGE603726	Hydroclimatology Modeling	2
SCGE603724	Sustainable Land Resources	2	SCGE603727	Land and Water Resources Evaluation and Conservation	2
SCGE603725	Disaster Risk Assessment	2	SCGE603728	Tropical Region Volcano, Structural, and Karst Landforms	2
SCGE603803	Radar Remote Sensing	2	SCGE603730	Applied Geomorphology	2
SCGE603804	Multi and Hyperspectral Remote Sensing	2	SCGE603811	Regional Survey	2
SCGE603805	Spatial Database Management	2	SCGE603816	Geocomputing and GIS Customization	2
SCGE603809	Hydrographic Survey	2	SCGE603817	Participatory Mapping	2
SCGE603812	Interactive Cartography and Digital Visualization	2	SCGE603820	Remote Sensing for Aquatic Resources	2
SCGE603815	Digital Aerial Photography	2	SCGE603822	Remote Sensing for Regional Climate	2
SCGE603825	Topographic Mapping	2	SCGE603823	Remote Sensing for Land Ecosystem	2
SCGE603901	Culture and Place Identity	3	SCGE603907	Historical Geography	2
SCGE603902	Ecological Power and Space	2	SCGE603910	Industrial Geography	2
SCGE603908	Geography of Health	2	SCGE603920	Geography of Energy	2
SCGE603915	Tourism Geography	2	SCGE603921	Local Innovation and Creativity	2

SCGE603917	Urbanization and the City of the Future	2	SCGE603922	Territoriality and Natural Resource Contes	2
SCGE603918	Spatial Behavior and Location Decisions	2	SCGE603924	Rural Transform	2
			SCGE603925	Geographic Transportation Systems	2
Maximum Total Credits in Semester V		21	Maximum Total Credits in Semester VI		22

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGE604007	Geography Research Seminar	2	SCGE604032	Thesis	6
SCGE604029	Regional Geography of Indonesia	4			
SCGE604030	Regional Development	3			
SCGE604031	Spatial Simulation and Modeling	2			
Total Credits in Semester VII		11	Total Credits in Semester VIII		6

Resume	University Compulsory Courses	10
	Faculty Compulsory Courses	10
	Study Program Compulsory Courses	81
	Total of Compulsory Courses	101
	Elective Courses / MBKM	43
	Total Study Load	144

h. Undergraduate Program in Geophysics

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Geophysics
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono , A Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Very Good (Baik Sekali) 2022 - 2027 by LAMSAMA
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	To become an outstanding Undergraduate Program in Geophysics in the field of Earth sciences that can contribute to the development of Indonesian society and has a reputation in Southeast Asia

8	Mission	• To implement quality Tridharma activities in geophysics, relevant to national and global challenges. • To produce Geophysics graduates who are of high quality, have integrity, morals, social sensitivity, and are capable of competing at the national and global levels. • To manage the Bachelor's Program in Geophysics with a focus on quality and accountability to support the vision of FMIPA and the Universitas Indonesia
9	Graduate Profile	A Geophysics graduate who is capable of analyzing Earth-related problems by applying geophysical concepts and methodologies, alongside other scientific disciplines, based on developments in knowledge and technology, and in response to the demands of business and industry, while adhering to professional ethics.
10	Graduate Learning Outcomes	1. Able to examine mathematical principles and basic sciences in geophysical problems. 2. Able to study the concepts, objects, and natural processes that occur on Earth. 3. Able to apply the principles of various geophysical methods. 4. Able to analyze geophysical data both analytically and numerically. 5. Able to manage independent observation activities using various geophysical instruments, data processing, modeling, and interpretation, including uncertainty analysis. 6. Able to recommend appropriate geophysical methods for natural resource exploration, environmental issues, and disaster management. 7. Able to integrate geophysical data with other Earth data. 8. Able to synthesize findings from various geophysical information and data through supervised learning activities. 9. Demonstrates integrity, critical thinking, creativity, and innovation, and is capable of providing alternative solutions to problems at the individual and group levels, addressing issues within the environment, society, nation, and state.

11	Study Period and Credit (SKS)	8 (eight) semester, credits minimum 145 (one hundred forty five) SKS
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2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	105
	Faculty	8	
	Study Program	87	
Elective Courses		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600003	English	2	UIGE600006	Integrated Personality Development Skills	6
SCMF600001	Basic Mathematics	2	SCGP601105	Calculus	2
SCCH601101	General Chemistry	2	SCGP601106	Geophysical Linear Algebra	2
SCST601001	Introduction to Data Science	2	SCGP601107	Geophysical Computation	2
SCBI601112	General Biology	2	SCGP601108	Wave Physics	2
UIGE600004	Religion	2	SCGP601209	Sedimentology and Stratigraphy	2
SCGP601101	Basic Physics	2	SCGP601210	Petrology	2
SCGP601102	Electricity and Magnetism	2	SCGP601111	Basic Physics Laboratory 2	1
SCGP601103	Introduction to Earth Sciences	3			
SCGP601104	Basic Physics Laboratory 1	1			
Total Credits in Semester I		20	Total Credits in Semester II		19
Total Credits until Semester I		20	Total Credits until Semester II		39

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGP601112	Mathematical Physics 1	3	SCGP601321	Gravity and Magnetic Methods	3
SCGP601113	Mathematical Physics 2	3	SCGP601322	Geoelectric Methods	2
SCGP601214	Field Theory	2	SCGP601323	Electromagnetic Methods	2
SCGP601115	Geostatistics	2	SCGP601324	Seismic Methods	3

SCGP601216	Introduction to Geophysics	2	SCGP601225	Petrophysics	3
SCGP601217	Geodynamics	2	SCGP601226	Remote Sensing and GIS	2
SCGP601218	Structural Geology	2	SCGP601227	Seismology 2	2
SCGP601219	Seismology 1	2	SCGP601128	Thermodynamics	2
SCGP601420	Numerical Analysis	2			
Total Credits in Semester III		20	Total Credits in Semester IV		19
Total Credits until Semester III		59	Total Credits until Semester IV		78

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGP601429	Geophysical Data Analysis 1	2		Elective Course - Merdeka Belajar	20
SCGP601430	Geophysical Data Analysis 2	2			
SCGP601031	Geophysical Investigation	4			
SCGP601432	Geophysical Inversion Methods	2			
SCGP601433	Geotomography	2			
SCGP601434	Digital Signal Processing	2			
SCGP601235	Volcanology	2			
SCGP601436	Geomechanics	2			
Total Credits in Semester V		18	Total Credits in Semester VI		20
Total Credits until Semester V		96	Total Credits until Semester VI		116

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
	Elective Course - Merdeka Belajar	20	SCGP601038	Final Assignment	6
SCGP601037	Scientific Writing and Presentation	2			
Total Credits in Semester VII		22	Total Credits in Semester VIII		6
Total Credits until Semester VII		138	Total Credits until Semester VIII		144

Resume	University Compulsory Courses	10
	Faculty Compulsory Courses	8
	Study Program Compulsory Courses	87
	Total of Compulsory Courses	105
	Elective Courses / MBKM	40
	Total Study Load	145

4. List of Elective Courses

CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGP602239	Geothermal Geology	2	SCGP602049	Geophysics Internship	6
SCGP602240	Oil, Gas, and Coal Geology	2	SCGP602750	Mineral Exploration	2
SCGP602241	Metallic and Non-metallic Mineral Geology	2	SCGP602751	Oil and Gas Exploration	2
SCGP602242	Hydrogeology and Environmental Geology	2	SCGP602752	Geothermal Exploration	2
SCGP602243	Geochemistry	2	SCGP602653	Engineering and Environmental Geophysics	2
SCGP602744	Earth Science Law and Legislation	2	SCGP602454	Geothermal Prospect Evaluation	2
SCGP602745	Earth Disaster Mitigation	2	SCGP602555	Project Management	2
SCGP602346	Geophysical Instrumentation	4	SCGP602256	Geotourism	2
SCGP602247	Meteorology and Climatology	2	SCGP602457	Machine Learning	2
SCGP602648	Engineering Seismology	2	SCGP602958	Selected Topics in Geophysics	2

i. Undergraduate Program in Geology

1. Study Program Identity

1	Institution Name	Universitas Indonesia
2	Study Program Name	Undergraduate Program in Geology
3	Education Level	Bachelor
4	Address	Jl. Prof. Dr. Mahar Mardjono , A Building Faculty of Mathematics and Natural Sciences, Universitas Indonesia (FMIPA UI) UI Campus, Depok 16424
5	Accreditation Status and Accrediting Body	Very Good (Baik Sekali) by LAMSAMA
6	Graduate Title	Bachelor of Science (S.Si.)
7	Vision	To become an excellent Study Program of Undergraduate Program in Geology that plays a

		significant role in Southeast Asia in advancing earth science and sustainable development
8	Mission	1. To carry out the Tri Dharma of Higher Education to produce graduates of the Undergraduate Program in Geology as future leaders who are professional, intelligent, moral, socially sensitive, and globally competitive. 2. To foster an active learning environment and cutting-edge research in the field of geology to generate innovations and solutions that benefit society and support national development and resilience. 3. To contribute actively to the development of science and innovation in the field of geology.
9	Graduate Profile	Graduates of the Undergraduate Program in Geology are expected to be able to conduct geological studies and apply geological knowledge in the utilization of earth sciences in accordance with professional ethics and the Tri Dharma of Higher Education. Graduates should have expertise in the structure, composition, processes, and history of the Earth. Based on this knowledge, graduates can take on various roles, including: 1. Explorer: Responsible for searching and assessing natural resources such as minerals, oil, natural gas, and geothermal energy, with economic potential. Explorers should be capable of collecting, analyzing, and interpreting geological, geophysical, and geochemical data, as well as creating maps and exploration reports. 2. Environmental Consultant: Focused on assessing and managing the environmental impact of mining, oil, and other development activities. Environmental consultants must be able to conduct feasibility studies, audits, monitoring, and mitigation efforts, while offering environmentally friendly recommendations and solutions. 3. Researcher: Focused on advancing science and technology in the field of geology, either in government institutions, private sectors, or higher education institutions. Researchers should be capable of

		formulating research problems, hypotheses, and objectives, conducting experiments, processing and analyzing data, and preparing reports and scientific publications. 4. Educator: Focused on teaching geological knowledge and skills to younger generations, in schools, universities, or other educational institutions. Educators should be able to develop curricula, learning materials, and methods, as well as evaluate student or learner performance.
10	Graduate Learning Outcomes	1. Able to apply expertise in geology to solve earth-related problems and adapt to various situations faced. 2. Able to explain in-depth theoretical concepts in both general and specialized geology, and to systematically formulate solutions to problems. 3. Able to make well-reasoned decisions in geology based on analysis of information and data, selecting alternatives independently or in groups. 4. Capable of managing and taking responsibility for geological work both independently and in teams. 5. Able to apply the basic principles of mathematics, physics, chemistry, biology, and statistics in solving geological problems. 6. Able to keep up with the development of science, technology, and art relevant to geology, and to apply these in academic and professional activities. 7. Possesses cognitive and non-cognitive skills, including critical, creative, and innovative thinking, as well as attitudes and behaviors that reflect spiritual values, empathy, and teamwork. 8. Demonstrates awareness and concern for environmental and societal issues and is able to contribute to the nation's framework based on the values of Pancasila. 9. Able to wisely use information and communication technology, and proficient in both spoken and written Indonesian and/or English for academic and professional purposes.

		10. Possesses an entrepreneurial mindset characterized by innovation and independence, grounded in ethics.
11	Study Period and Credit (SKS)	8 (eight) semester and 144 (one hundred forty five) SKS

2. Curriculum Structure

Course Type		SKS	Total
Compulsory Courses	University	10	104
	Faculty	10	
	Study Program	84	
Elective Courses		40	40
Total		144	144

3. Course Distribution for each Semester

SEMESTER 1			SEMESTER 2		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
UIGE600003	English	2	UIGE600007	Integrated Personality Development Skills	6
UIGE600004	Religion	2	SCGL601204	Mathematics for Geology	2
SCMF600001	Calculus	2	SCGL601205	Physics for Geology	2
SCST601001	Introduction to Data Science	2	SCGL601206	Chemistry for Geology	2
SCPH601110	Basic Physics	2	SCGL601207	Sedimentology and Stratigraphy	2
SCCH601101	General Chemistry	2	SCGL601208	Geomorphology	2
SCBI601112	General Biology	2	SCGL601209	Geomorphology Lab. Course	1
SCGL601101	Basic Geology	3	SCGL601210	Petrology	2
SCGL601102	Crystallography & Mineralogy	2			
SCGL601103	Crystallography & Mineralogy Lab. Course	1			
Total Credits in Semester 1		20	Total Credits in Semester 2		20
Total Credits until Semester 1		20	Total Credits until Semester 2		40

SEMESTER 3			SEMESTER 4		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGL602112	Volcanology	2	SCGL602224	Geological Computing	2

SCGL602113	Structural Geology	2	SCGL602225	Geological Computing Lab. Course	1
SCGL602114	Structural Geology Lab. Course	1	SCGL602226	Micropaleontology	2
SCGL602115	Remote Sensing & GIS	2	SCGL602227	Micropaleontology Lab. Course	1
SCGL602116	Remote Sensing & GIS Lab. Course	1	SCGL602228	Geophysical Data Interpretation	2
SCGL602117	Paleontology	2	SCGL602229	Geological Mapping Methods	4
SCGL602118	Paleontology Lab. Course	1	SCGL602230	Geodynamics	2
SCGL602119	Optical Mineral & Petrography	2	SCGL602231	Geology of Indonesia	2
SCGL602120	Optical Mineral & Petrography Lab. Course	1	SCGL602232	Environmental Geology & Disasters	2
SCGL602121	Geostatistics	2	SCGL602233	Hydrogeology	2
SCGL602122	General Geochemistry	2			
SCGL602123	General Geophysics	2			
Total Credits in Semester 3		20	Total Credits in Semester 4		20
Total Credits until Semester 3		60	Total Credits until Semester 4		80

SEMESTER 5			SEMESTER 6		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
SCGL603134	Geological Mapping	5		Elective Course / Merdeka Belajar	20
SCGL603135	Coal Geology	2			
SCGL603136	Ore & Hydrothermal Mineral Deposits	2			
SCGL603137	Geothermal Geology	2			
SCGL603138	Petroleum & Natural Gas Geology	2			
SCGL603139	Engineering Geology	2			
SCGL603140	Engineering Geology Lab. Course	1			
SCGL603141	Elective Course	2			
Total Credits in Semester 5		18	Total Credits in Semester VI		20
Total Credits until Semester 5		98	Total Credits until Semester VI		118

SEMESTER 7			SEMESTER 8		
CODE	COURSE NAME	SKS	CODE	COURSE NAME	SKS
	Elective Course / Merdeka Belajar	16	SCGP601038	Final Assignment	6
SCGL604142	Research Proposal	2			
	Elective Course	2			
Total Credits in Semester VII		20	Total Credits in Semester VIII		6
Total Credits until Semester VII		138	Total Credits until Semester VIII		144

Resume	University Compulsory Courses	10
	Faculty Compulsory Courses	10
	Study Program Compulsory Courses	84
	Total of Compulsory Courses	104
	Elective Courses / MBKM	40
	Total Study Load	144

4. List of Elective Course

CODE	COURSE NAME	SKS
SCGL603243	Advanced Stratigraphy	2
SCGL603244	Geology Special Topics 11	2
SCGL603245	Geology Special Topics 2	2
SCGL603246	Formation Evaluation	2
SCGL603247	Mining Geological Modeling	2
SCGL603248	Mineral Exploration Geology	2
SCGL603249	Quaternary Geology of Indonesia	2
SCGL603250	Geothermal Prospect Evaluation	2
SCGL603251	Rock Mechanics	2
SCGL603252	Urban Geology	2
SCGL603253	Applied Structural Geology	2
SCGL603254	Geological Research Management	2
SCGL603255	Petrophysics	3
SCGL603256	Marine Geology	2
SCGL604157	Subsurface Mapping	2
SCGL604158	Petroleum & Natural Gas Geological Modeling	2
SCGL604159	Geotourism	2
SCGL604160	Earth Sciences Laws & Regulations	2
SCGL604161	Environmental Impact Analysis	2
SCGL604162	Disaster Geology Modeling & Information Systems	2
SCGL604163	General Hydrology	2
SCGL604164	Geology Internship	4
SCGL604165	Geological Data Science	2
SCGL604166	Machine Learning for Geology	2
SCGL604167	Geology Special Topics 3	2
SCGL604168	Geology Special Topics 4	2
SCGL604169	Geology Seminar	2
SCGL604170	Rock Thermodynamics	2
SCGL604171	Slope Engineering	2

CHAPTER 4

Research and Community Services

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The FMIPA UI PPM Unit has broad duties and functions to provide, facilitate, and monitor research grant activities and community service carried out by students and lecturers at FMIPA UI. The research and community service activity grant scheme can come from various sources, both internal and external, such as from the University of Indonesia, FMIPA UI, the Ministry of Research and Technology, BRIN, and various other funding sources. These various forms of activities are aligned with the performance targets implemented by the Dean of FMIPA UI related to research and community service, including the number of publications in international journals, lecturers' participation in scientific meetings, the number of IPRs, patents, and other achievements.

4.1. Research

a. Policy and Strategy

The Research and Community Service Division of FMIPA UI plays a major role in managing research and community service activities carried out by lecturers at FMIPA UI. These management activities include dissemination of external grants (from university level, ministries, or other sources), provision of internal grants of FMIPA UI, monitoring the progress of the research process, to monitoring research output.

b. Types of Grants

There are various types of grants offered in the FMIPA UI environment, including:

1. External Funding

Research grant funding from external sources comes from both research schemes at the Indonesian Ministry of Education and Culture, as well as from various other funding outside the ministry, such as through cooperation with industry, foreign research institutions, and so on. Examples of forms of external funding schemes from the Ministry of Education and Culture in 2022 include Basic, Applied, and Development Research schemes. In addition, in 2017-2022, there were also several funding schemes that were successfully achieved by lecturers at FMIPA UI through external funds such as Newton fund, Asahi, UITM, INSINAS, PPKI and etc.

2. Pendanaan Internal oleh Universitas Indonesia

Various research grant funding schemes are provided by the University of Indonesia every year, where the scheme is adjusted from year to year depending on the long-term target of the research vision at the University of Indonesia. The research grant policy prepared by the University of Indonesia aims to improve the quality and quantity of research publications, both by lecturers and students at the University of

Indonesia. The Directorate of Research and Development of the University of Indonesia (Risbang UI) organizes the UI Research Grant with the "Internationally Indexed Publication" scheme, abbreviated as PUTI. This grant consists of PUTI Hi-Impact, PUTI Q1, PUTI Q2, and PUTI Postgraduate.

3. Internal Funding by the Faculty of Mathematics and Natural Sciences, UI Research Grant Program is a research grant program and administration organized by FMIPA UI with funding sources originating from Activity Budget Plan FMIPA UI. In 2023 – 2024, priority is given to several focus topics as follows:
 - Materials and science for energy storage
 - Handling and prevention of infectious diseases
 - Disaster management and mitigation
 - Basic sciences that have the potential to have a high impact and are potentially useful in the future.
 - Other topics that have high impact, are innovative, and have high potential in solving national problems.

4.2. Community Service

Strategic policies related to research and community service at FMIPA UI are designed in line with the Research and Community Service Roadmap at the University of Indonesia level. Every lecturer at FMIPA UI is required to carry out the tridharma of education activities, one of which is how a lecturer can devote his knowledge to the community directly. This can be accommodated through community service activities. Through community service activities, lecturers at FMIPA UI are expected to be able to provide real contributions in the downstreaming of research both at the local and global levels.

Based on the 2020-2024 community service and empowerment roadmap guidebook released by the Directorate of Community Service and Empowerment (PPM) of the University of Indonesia, UI's development policy through community service activities is detailed in three policies, namely:

1. Community service as a research-based or expertise-based activity.
2. Community service activities are carried out by the PPM Directorate in collaboration with various directorates at UI to optimize UI's potential to benefit the community.
3. UI research branding to the industrial world needs to be improved to encourage an increase in the number of collaborations with industry.

The focus of the community service targeted by the University of Indonesia automatically also becomes the focus that must be targeted by all forms of community service implemented at FMIPA UI. The focus of community service includes:

1. Health and Wellbeing
2. Energy and material resources
3. Innovative and connected society
4. Earth, climate, and environment
5. Resilience and Security

4.3. Symposium and Webinar Series

To enhance scientific knowledge and improve communication quality among the academic community at FMIPA UI, as well as with academic communities outside UI and abroad, FMIPA also organizes an International Symposium, which is held annually, namely:

- a. The International Symposium on Current Progress in Mathematics and Sciences (ISCPMS)

ISCPMS is an academic forum that can be a means for undergraduate and postgraduate students, lecturers and researchers in the fields of mathematics and science to present their research results, share experiences and tips in conducting research and follow the latest research developments in this field.

- b. The International Symposium on Current Progress in Functional Materials (ISCPFM)

ISCPFM is a symposium held with the support of the University of Indonesia as a means for undergraduate and postgraduate students, lecturers and researchers in the field of functional materials to present their research results, share experiences and tips in conducting research and follow the latest research developments in this field. The program of activities is attached.

- c. The Life and Environmental Sciences Academics Forum (LEAF)

LEAF is an academic forum that can be a means for undergraduate and postgraduate students, lecturers and researchers in the fields of life sciences, environmental sciences, earth sciences, geography and geosciences to present their research results, share experiences and tips in conducting research and follow the latest research developments in this field.

- d. The International Science and Mathematics in Academics Research Talks (ISMART)

ISMART is an academic forum that can be a means for undergraduate students in mathematics and science to present their research results, share experiences and tips in conducting research and follow the latest research developments in this field.

CHAPTER 5

Alumni



5.1. Alumni

Alumni is one of the important components in each department / faculty / university in addition to faculty, staff and students. Alumni FMIPA is part of a Big Family ILUNI UI, which is referred to as ILUNI FMIPA UI.

Universitas Indonesia was one of the first universities in Indonesia who started tracking studies of alumni (Tracer Study) at the college level. In 2008 UI is seriously working on the Tracer Study UI 2008. In spite of some shortcomings in the pilot study, UI Tracer Study 2008 has proven to be beneficial for college and the world of work.

Since 2014 the Faculty of Mathematics and Natural Sciences began working consistently Tracer Study FMIPA UI. Consistency is visible from some of the role of alumni FMIPA UI through consulting services, grants, and voluntary donations that will fund these funds will be used for the development of the Faculty of Mathematics and Natural UI through a specific event or events. Not only that, ILUNI FMIPA UI regularly will make a bulletin ILUNI FMIPA UI and will do Tracer Study FMIPA UI-based expertise to serve directory book FMIPA UI graduates.

ILUNI MIPA UI regularly hold annual event, titled "Homecoming Day MIPA UI" with the purpose of (i) unites and strengthens kinship between fellow alumni MIPA UI, (ii) as a forum that facilitates sustainable relationships between alumni, faculty, departments, and the UI Faculty students will be expected to devote knowledge in every aspect of social life and state, (iii) dig more detailed information about the biographies of the alumni who will be a bridge between alumni and students seeking learning experience in the world of higher education and as a precondition performance in the workplace, (iv) explore further information regarding the transition from higher education to the world of work, the relevance of education and competence acquisition alumni, sociobiografi aspects alumni, as well as photographing the relationship between the learning experience in the world of higher education and the prerequisites and performance in the workplace.

The first graduates FIPIA UI academic year 1949-1950 as many as 171 people. Until 2024 FMIPA UI graduates has reached $\pm 28,000$. UI FMIPA alumni who have been successful and work for Indonesia scattered in various areas in government agencies such as: BPPT, BAPETEN, BP Migas, BATAN, LIPI, the Ministry of Education and Culture, Ministry of Interior, Ministry of Energy and Minerals, Ministry of Agriculture, Ministry of Finance, PT.Telkom. While in the non-governmental organizations such as WWF, CI, WALHI, NRM, the World Bank. As a private company, which is engaged in banking, insurance, media, mining and petroleum, agribusiness, consumer goods, computers & IT, telecommunication, digital mapping, pharmaceutical industry, chemical industry, semiconductor industry, metal industry, education and research, survey.

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