ASIIN Seal

Accreditation Report

Bachelor's Degree Programmes
Biology
Biology Education
Geography
Geography Education

Provided by
Universitas Negeri Padang

Version: 24.06.2022

Table of Content

A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for [1]	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC)[2]
Ba Biology		ASIIN	--	10
Ba Biology Education		ASIIN	--	10
Ba Geography		ASIIN	--	11
Ba Geography Education		ASIIN	--	11
Date of the contract: 15.10.2020 **Submission of the final version of the self-assessment report:** 20.05.2021 **Date of the onsite visit:** 27.-30.07.2021 **at: online**				
Peer panel: Prof. Dr. Peter Bagoly-Simó, Humboldt University Berlin Prof. Dr. Ralf Erdmann, Ruhr University Bochum, Prof. Dr. Wolfgang Kainz, University Vienna, Ellen Mallas, University Halle-Wittenberg (Student) (cancelled participation) Dr. Carsten Roller, VBio (Association for Bioscience in Germany) (cancelled participation)				
Representative of the ASIIN headquarter: Dr. Michael Meyer				

[1] ASIIN Seal for degree programmes

[2] TC: Technical Committee for the following subject areas: TC 01 - Mechanical Engineering/Process Engineering; TC 02 - Electrical Engineering/Information Technology; TC 03 - Civil Engineering, Geodesy and Architecture; TC 04 - Informatics/Computer Science; TC 05 - Physical Technologies, Materials and Processes; TC 06 - Industrial Engineering; TC 07 - Business Informatics/Information Systems; TC 08 - Agriculture, Nutritional Sciences and Landscape Architecture; TC 09 - Chemistry; TC 10 - Life Sciences; TC 11 - Geosciences; TC 12 - Mathematics; TC 13 - Physics.

Responsible decision-making committee: Accreditation Commission for Degree Programmes	
Criteria used: European Standards and Guidelines as of May 15, 2015 ASIIN General Criteria, as of December 10, 2015 Subject-Specific Criteria of Technical Committee 10 – Life Sciences as of June 28, 2019 , Technical Committee 11 – Geosciences as of December 9, 2011	

B Characteristics of the Degree Programmes

a) Name	Final degree (original / English translation)	b) Areas of Specialization	c) Corresponding level of EQF	d) Mode of Study	e) Double/ Joint Degree	f) Duration	g) Credit points/unit	h
Biology	S.Si (Bachelor of Science)	Botany Zoology Ecology Microbiology Genetics & Biotechnology	IQF level 6 which correspond to EQF level 6	Full time	-	8 semesters	144 credits equivalent to 217.44 ECTS	
Biology Education	S.Pd (Bachelor of Education)	Biology Education	IQF level 6 which correspond to EQF level 6	Full time	-	8 semesters	149 credits equivalent to 224.99 ECTS	
Geography	S.Si (Bachelor of Science)	Geography	IQF level 6 which correspond to EQF level 6	Full time	-	8 semesters	150 credits equivalent to 226.50 ECTS	
Geography Education	S.Pd (Bachelor of Education)	Geography Education	IQF level 6 which correspond to EQF level 6	Full Time	-	8 semesters	144 credits equivalent to 217.44 ECTS	

For the Bachelor's degree programmes in Biology the institution has presented the following profile in the self-assessment report:

The programmes education objectives are to generate professionals in the field of biological science who are superior so they can have careers as scientists, researchers, educators, and entrepreneurs with following criteria:

1) Apply basic concepts and biological methodologies to be able to innovate and solve problems that exist in society (PEO 1)
2) Develop self-potential through continuing education, both formally and informally (PEO 2)
3) Have integrity and contribute positively to society (PEO 3)".

The university defines the following programmes learning outcomes:

No. Program Learning Outcomes (PLO)	Program Educational Objectives (PEO)		
	1	**2**	**3**
1. Mastering the basic concepts of mathematics and natural sciences related to biology.	v	v	
1.1 Students are able to describe the basic concepts of mathematics and natural sciences related to biology.			
1.2 Students are able to analyze biological phenomena using basic concepts of mathematics and natural sciences related to biology.			
1.3 Students are able to apply the basic concepts of mathematics and natural sciences to the field of biology.			
2. Have the knowledge and ability to apply biological science.	v	v	
2.1 Students are able to describe biological science and phenomena.			
2.2 Students are able to identify types of organisms based on the principles of biological science.			
2.3 Students are able to analyze phenomena in biology.			
2.4 Students are able to apply biology in all relevant fields of science			
3. Have skills in practicum and field courses in accordance with standard methodologies in biological sciences.	v		v
4. Able to use methods in the bioscience and apply them in the realm of biology and other fields of science.	v		v
5. Doing research in at least one specific area in biological science.	v	v	
6. Have knowledge about the environment and related issues.	v	v	v
6.1 Students are able to describe the basics of ecology as a basis for knowledge of the environment and related issues.			
6.2 Students are able to identify/analyze problems as a result of the reciprocal relationship between humans and the environment.			
6.3 Students are able to apply rules and ethics in science and technology.			

7. Able to design and carry out experiments in the field of biology including analyzing and interpreting data scientifically.	v		v
8. Able to demonstrate conceptual, analytical, logical, and innovative thinking skills.	v	v	
9. Able to demonstrate the ability to communicate effectively both orally and in writing.			v
10. Able to show good morals.			v
11. Able to work well together in heterogenous work group.		v	v
12. Having the ability to increase knowledge so that it has the potential to continue studying to a higher level.	v	v	
13. Have entrepreneurial insight.		v	v
14. Have knowledge of planning, implementing and evaluating the biology learning process.	v	v	
14. Students are able to describe the planning, 1 implementation and evaluation of the biology learning process.			
14. Students are able to apply planning, implementation 2 and evaluation of the biology learning process.			

For the Bachelor's degree programmes in Geography the institution has presented the following learning outcomes in the self-assessment report:

No Program Learning Outcomes (PLO)	Program Educational Objectives (PEO)			
	PEO 1	PEO 2	PEO 3	PEO 4
1 Be able to analyze the characteristics of the material (content knowledge/body knowledge) of the characteristics of students and choose approaches, strategies, models, methods, and assessments based on the theory and principles of active, innovative, creative, effective education and fun in every geography learning (PLO1)	v			
2 Able to apply the development of geospatial technology and ICT as well as the development of global education in geography learning (PLO2)	V			
3 Able to compile scientific work through research based on the principles of the scientific method independently or in groups and communicate it as a solution to problems in the field of geography and geography education (PLO3)	V			

4	Able to apply scientific concepts and methods in the field of geography education for activities of economic value (PLO4)			V
5	Able to analyze physical and social phenomena as a spatial system (intervening, transferability, and complementary) and the implications for decision making in the context of geographic literacy (PLO5)	V		
6	Able to analyze environmental resources effectively and efficiently for support sustainable development and seek solutions to problems environment and disaster (PLO6)	V		
7	Able to analyze regional and territorial characteristics (regionalization) based on the principles and approach of Geography (PLO7)	V		
8	Able to perform method based *land surveying* dan *aerial surveying ma*(PLO8)		V	
9	Able to apply ethical values of professionalism (PLO9)			V

C Peer Report for the ASIIN Seal

1. The Degree Programme: Concept, content & implementation

Criterion 1.1 Objectives and learning outcomes of a degree programme (intended qualifications profile)

Evidence:

- Academic Handbook
- Self-Assessment Report
- Discussions with programme coordinators and representatives of the labour market

Preliminary assessment and analysis of the peers:
The study aims and intended learning outcomes of both programmes defined by the university correspond to learning outcomes relevant to level 6 of the European Qualifications Framework. Learning outcomes are accessible to students, staff members, and all interested stakeholders on the faculty web site. These objectives were discussed in staff meetings with the faculty team and students. The learning outcomes have been formulated additional referring to vision and mission of the Universitas Negeri Padang, the Indonesian Qualification Framework (IQF), National Standards for Higher Education and discussion results with internal and external stakeholders.

The peers referred to the Subject-Specific Criteria (SSC) of the Technical Committees for Biology and Geosciences which are completely fulfilled from their point of view.

From the point of view of the panel both qualification profiles offer good chances on the labor market for the graduates. Graduates from the education programmes worl as teachers in school while graduates from master education programmes may even teach at Higher Education Institutions. Graduates from the usual bachelor's degree programmes work in industry or governmental institutions.

Criterion 1.2 Name of the degree programme

Evidence:

- Websites of the degree programmes

- Self-Assessment Report

Preliminary assessment and analysis of the peers:
The titles of all programmes are published on the subject specific webpages. The information about the programmes are published in Indonesian and English language. The panel confirmed that the names of all programmes reflect the intended aims and learning outcomes.

Criterion 1.3 Curriculum

Evidence:

- The study regulations define the curriculum and the single modules.
- The module descriptions inform about the aims and content of the single modules.
- Objective-Matrices provided in the Self-Assessment Report, Appendix 5
- Discussions with programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
The bachelor's degree programmes at UNP are implemented in two levels. The first level managed centralised by the university consists of two semesters with at least 29 SKS in total and is common for all programmes. In this level the basics in mathematics and natural science are taught but also common topics about Religion and Ethics, Pancasila and Civic Education, Environment. Additional there are implemented first field specific basics in biology respectively in Geology. This level intends to harmonise the heterogenic knowledge of students from school.

The second level consists of six semesters with at least 115 SKS in total and includes programme specific contents.

The peers determined, that the second level of the biology programmes includes plants morphology and morphogens, animal structure, physiology, morphogens, animal and plant taxonomy, microbiology, embryology, cell biology, evolution and biochemistry, but also entrepreneurship, statistics, disaster management and scientific writing. The practical experiences of the students are trained in practical work in labs and in project based learning units. Alumni and employers confirmed to the peers adequate practical experiences and many graduates work in private or governmental laboratories.

For the programmes in geography the peers determined courses about geomorphology, meteorology, cartography, Indonesian geology, geomorphology and climatology, oceanography, hydrogeology, social and population geography, soil geography, biogeography, cadastral mapping, urban and village geography, regional geography. As applications GIS, remote sensing, data bases and digital processing are integrated into the programme as well as historical and social background information. The panels remark the unusual sequence of course about GIS, remote sensing and databases but can understand the didactical concept of the faculty. They wonder how students are trained in scientific writing in these programmes. Although the faculty got the impression that it would be not necessary for the geography students the peers see some opportunities of improvement during their inspection of the final theses. Therefore, they recommend to include a course about scientific writing, like in the other study programmes.

Regarding the educational programmes the panel determines that they also focus on field specific contents with educational courses added above. In the educational master programmes more didactical and pedagogical aspects are included.

The peers determine that the pedagogical content is adequate to the state of the art while the didactical aspects seems to be outdated in some fields. This for the peers is understandable as there are only little research activities regarding didactic.

The panel learns that the feedback regarding the practical work of the students at school is given more or less occasionally. From its point of view it would be helpful if the feedback would be institutionalised.

The peers appreciate the broad field specific content included in all programmes. From the point of view of the peers both programmes are structured very well. The curricula implement all the defined study aims and learning outcomes. With their qualification the peers see good chances for graduates on the labor market which is confirmed by the representatives of industry the panel talked to during the site visit.

The peers also welcome that there are religious modules not only for the Islam religion but for all Indonesian religions as well. The committee gained the impression that the religion modules are in accordance with the principles of scientific research.

Criterion 1.4 Admission requirements

Evidence:

- Self-Assessment Report
- Study Guide

- Discussions during the audit

Preliminary assessment and analysis of the peers:
Student admission policies and entry requirements follow the Ministry Regulation of the Ministry of Research, Technology, and Higher Education (Ministry Decree No. 126 of 2016).

There are several different ways by which students can be admitted to a bachelor's degree programme:

The National Entrance based on Student Academic Performance Records (SNMPTN) is a university admission path followed by 62 National Universities in an integrated system. Prospective students with outstanding academic achievements during the first 5 (five) semesters in senior high school and have consistently demonstrated academic excellence are offered the opportunity to become students in nationally selected national university study programmes

Students who are failed the first admission scheme (SNMPTN) can apply to the second entry option called SBMPTN. In this entry option, prospective students can apply one to three study programs at selected national universities. However, only one study program may be accepted by students based on the graduation rate determined by the study program of the selected national university.

The third entry option is a Local University Entrance based on the outstanding performance of prospective students in various aspects, especially national-level achievements of students in the fields of sports, arts or science. In order to be eligible for this third entry option, all prospective students must first take the SBMPTN entrance examination as a result (SBMPTN test score) will be used together with each national-level achievement obtained for assessment.

Recently UNP also implemented regulations for the recognition of achievements and competences acquired outside the higher education institution based on governmental requirements.

The auditors find the terms of admission to be binding and transparent. They confirm that the admission requirements support the students in achieving the intended learning outcomes.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 1:

As the university waived any comments, the peers confirm their preliminary assessment.

2. The degree programme: structures, methods and implementation

Criterion 2.1 Structure and modules

Evidence:

- Self-Assessment Report
- Study plans of the degree programmes
- Module descriptions
- Discussions with programme coordinators, teaching staff and students

Preliminary assessment and analysis of the peers:
The structure of the programmes under review is clearly outlined on the specific websites for each study programme. The programmes consists of modules, which comprise a sum of teaching and learning. The module descriptions are also published on the subject specific website. Based on the analysis of the sequence of modules and the respective module descriptions the peers concluded that the structure of all programmes ensures that the learning outcomes can be reached.

The programmes also offers several elective courses, which allows students to define an individual focus. The peers appreciate the strong advisory systems to support students in selecting the most meaningful courses for their individual interest.

Based on the analysis of the curriculum and the module descriptions the peers confirmed that the objectives of the modules and their respective content help to reach both the qualification level and the overall intended learning outcomes.

In order to support the international mobility of students the faculty has established several student exchange programmes with international universities and offers organizational and financial support for students studying abroad. Nevertheless, the number of scholarships is very limited, which is why only few students use the opportunity to study abroad. The peers recommend to improve the student mobility by additional support.

Criterion 2.2 Work load and credits

Evidence:

- Self-Assessment Report
- Study plans of the degree programmes

- Module descriptions
- Study Guide
- Discussions during the audit

Preliminary assessment and analysis of the peers:
Based on the National Standards for Higher Education of Indonesia (SNPT), both programmes use a credit point system called SKS. In comparison to ECTS credit system, wherein 1 ECTS equals 25-30 hours of students' workload per semester, it is determined that 1 CSU is awarded for 170 minutes of student workload per week and the relation between the different kind of learning (contact hours, self-studies) is fixed. With a duration of 16 weeks per semester one SKS correspond to 45,3 hours of student workload. For a bachelor's degree programme with 145 CSU the total time of study is round 6500 h in four years with an average of some 800 hours per semester. For bachelor's degree programmes a possible range from 140 to 150 SKS is defined by governmental regulations.

For the geography programmes the peers determined different calculations of SKS for different courses with the same number of contact hours and the same student workload. Additionally, the transformation SKS to ECTS-points changes for several courses. Therefore, from the point of view of the panel it is necessary to ensure a consistent calculation of SKS over all modules and a common ratio between SKS and ECTS credit points for all modules.

The peers welcomed the Indonesian system wherein the student's workload per semester dependents on their average grades in the former semester. The students' individual study plans are indeed different from each other, but have to be approved by their academic advisors. The average workload per semester is 18 SKS. The real workload of the individual students may range from 9-24 SKS depending on their performance in the former semester.

Therefore it could be difficult to schedule common lectures like laboratory work and the peers can understand that in some cases practical exercises are scheduled in the evening.

The peers also positively noted that the module handbook describes consistently in all modules the credit points and the workload distinguishing between contact time and time of self-study

Comparing to the objectives and the content of the courses the workload defined for the single modules seems to be realistic for the peers besides for the internships and the final theses. The students confirmed this impression in general. The peers welcomed that in case of an overloaded workload students may give directly feedback to the lecturers who consider their remarks.

While the workload calculation of the courses seems to be adequate, the panel determines an imbalance of the workload between the single semesters in the biology programmes due to an imbalance of courses in different semesters. Although the faculty has changed the curricula in order to balance the workload more equally the peers still see opportunities for ongoing improvement. Therefore, they recommend to distribute the courses more evenly across the semesters in order to avoid peaks of student workload.

Criterion 2.3 Teaching methodology

Evidence:

- Self-Assessment Report
- Study plans of the degree programmes
- Module descriptions

Preliminary assessment and analysis of the peers:
The staff members of UNP apply various teaching and learning methods like interactive lecture, small group discussion, demonstration, collaborative learning, case study, project based learning, laboratory practice, presentation and software simulation. The panel appreciates that project oriented learning is implemented in both programmes. With nearly 30 SKS in different project works implemented, an adequate student oriented learning and teaching system. Within the project groups, the students also train their teamwork and communication skills.

The peers determined out of the module descriptions that the named literature for the preparation of the students is quite old some cases and recommend to ensure that the literature used in the courses is up to date.

Criterion 2.4 Support and assistance

Evidence:

- Self-Assessment Reports
- Discussions during the audit

Preliminary assessment and analysis of the peers:
UNP offers a comprehensive advisory system for all undergraduate students. At the start of the first semester, every student is assigned to an academic advisor. He/she is a student's first port of call for advice or support on academic or personal matters.

The role of the academic advisor is to help the students with the process of orientation during the first semesters, the introduction to academic life and the university's community, and to respond promptly to any questions. They also offer general academic advice, make suggestions regarding relevant careers and skills development and help if there are problems with other teachers. The students confirm during the discussion with the peers that they all have an academic advisor.

In general, students stress that the teachers are open minded, communicate well with them, consider their opinions and suggestions and changes are implemented if necessary.

In addition, there are tutorials for several compulsory courses in order to support students' learning activities. Tutors are selected from senior students with excellent academic records and good tutoring skills.

All students at UNP have access to the digital academic information system. The students' profiles (student history, study plan, academic transcript and grade point average/GPA, lecturer evaluation, course list) are available via SI-X.

UNP provides several services to support its students. This includes a Career Centre, a Language Centre, Health Services, a Health Clinic, a Sports Centre, and Student Dormitories. Finally, there are several student organizations at UNP.

The peers notice the good and trustful relationship between the students and the teaching staff. There are enough resources available to provide individual assistance, advice and support for all students. The support system helps the students to achieve the intended learning outcomes and to complete their studies successfully. The students are well informed about the services available to them.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 2:

As the university waived any comments, the peers confirm their preliminary assessment.

3. Exams: System, concept and organisation

Criterion 3 Exams: System, concept and organisation

Evidence:

- Self-Assessment Reports
- Module descriptions
- Regulation for Academic and Student Affairs

Preliminary assessment and analysis of the peers:
According to the Self-Assessment Reports, the students' academic performance is evaluated based on their attendance and participation in class, their laboratory works and reports, assignments, homework, presentations, mid-term exam, and the final exam at the end of each semester. The most common assessment form are written examinations in the middle and at the end of the semester and quizzes; however laboratory work, assignments, presentations, seminars, and discussions can also contribute to the final grade. Written exams, usually include short answers, essays, problem solving or case-based questions, and problem calculations. Some lecturers also provide multiple choice or true-false questions or matching questions in an exam or a quiz. The grade from laboratory work usually consists of laboratory skills, discussions, reports, and oral exams. The final grade is the result of the different activities in the course (e.g. laboratory work, mid-term exam, the final exam, quizzes or other given assignments).

In case of failing an exams students could rewrite it and even if students pass an exams the may repeat it voluntarily in order to improve the grade. Students who failed an exam have to retake the module in the next semester and are not allowed to repeat the exam without visiting the classes again.

In the last two semesters students have also the opportunity to improve grades in passed exams.

A drop put of students without graduation nearly not exists. In the education programmes 1-5% of the students miss the graduation. But students with a poor performance needs longer to finish their studies, in some cases up to 7 years. From the view of the peers the 6 SKS awarded for the bachelor theses seems not to be adequate to workload the students put into the theses. Taken into account the quality of the theses the peers assume that students would invest more time. As they do not have any evidences for this presumption they only recommend to strengthen the formal weight of the bachelor thesis in the curriculum.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 3:

As the university waived any comments, the peers confirm their preliminary assessment.

4. Resources

Criterion 4.1 Staff

Evidence:

- Self Assessment Report
- Staff handbook
- Discussions with programme coordinators and teaching staff

Preliminary assessment and analysis of the peers:
At UNP, the staff members have different academic positions. There are professors, associate professors, assistant professors and instructors. The academic position of each staff member is based on research activities, publications, academic education, supervision of students, and other supporting activities. For example, a full professor needs to hold a PhD degree. In addition, the responsibilities and tasks of a staff member with respect to teaching, research, and supervision depend on the academic position.

The peers learned that the government finance determine the number of staff for each programme based on the number of students.

According to the Self-Assessment Report, the department of biology consists 37 lecturers including one full professor, 13 associate and 12 assistant professors. The department of geography includes 34 lecturers in total including two full, 6 associate and 12 assistant professors.

Most of the faculty members hold a PhD from either a reputable Indonesian or international university.

All members of the teaching staff are obliged to be involved in teaching/advising, research and community service. As the peers learn during the audit, all teachers have a workload between 12 and 16 lecture hours per week. However, the workload can be distributed differently between the three areas from teacher to teacher. In all laboratories a special lab staff for supporting the student practice is involved.

The university support research activities of the teaching staff by giving incentives for publishing scientific articles in reputable international journals, financing participations on national and international scientific conferences and giving grants for research projects.

The peers appreciate that UNP strives to improve research projects of the teaching staff further on, despite the already established activities. Giving the teaching staff more time for research activities e.g. by implementing sabbaticals could be a step in this direction. But to become a research university in the near future as mentioned in the self-assessment report there will be still additional support for the lecturers necessary. Therefore, the peers recommend to significantly improve the teaching staff's research activities by adequate support from the university.

Regarding the educationale programmes the peers recommend to strengthen research activities in the field of didactic as well.

Over all the peers see an appropriate network of the university and the departments with national and international research institutions.

Criterion 4.2 Staff development

Evidence:

- Self-Assessment Reports
- Staff handbook
- Discussions during the audit

Preliminary assessment and analysis of the peers:
The peers learn that UNP encourages training of its academic and technical staff for improving the didactic abilities and teaching methods. As described in the Self-Assessment Reports, faculty members and non-academic staff regularly participate in training or workshops organised either by UNP itself or together with other Indonesian and even foreign universities.

The peers see that the lecturers are satisfied with the internal qualification programmes at UNP and their opportunities to spend some time abroad to attend conferences, workshops or seminars. The university offers financial support for the lecturers to take part in international conferences.

In summary, the auditors confirm that UNP offers sufficient support mechanisms and opportunities for members of the teaching staff who wish for further developing their professional and teaching skills.

Criterion 4.3 Funds and equipment

Evidence:

- Self Assessment Report
- online visit of the laboratories, lecture rooms, and the library
- Discussions with representatives of UNP management, programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
The peers were explained that financial sources for UNP originated from government funding, society funding, and tuition fees. The operational funds were distributed to the faculties based on a specific formula depending on the number of students. The salary for staff

members included a basic salary from government and incentives depending on additional efforts of staff members. The management of UNP stressed that even if the contributions from private businesses decreased to zero due to bad economic developments, UNP would still be capable to maintain its operations.

The peers were convinced that the financial means were sufficient and secured for the timeframe of the accreditation.

The financing of the equipment is ensured mostly by external funds (third party money). In general the panel sees the equipment of the laboratories adequate or even very well.

The library offers students online access to a wide range of international literature and journals.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 4:

As the university waived any comments, the peers confirm their preliminary assessment.

5. Transparency and documentation

Criterion 5.1 Module descriptions

Evidence:

- Module descriptions:

Preliminary assessment and analysis of the peers:
The peers positively noted that the full set of modules descriptions is published for every degree programme under review. Hence, the module descriptions are available for all interested stakeholders. The peers examined the module descriptions and noted that the modules have comprehensible names and identification codes. The module descriptions inform in an adequate way about the person responsible for the each module, about the teaching methods and workload, about the intended learning outcomes and the content of the modules, about admission and examination requirements, forms of exams and recommended literature.

Criterion 5.2 Diploma and Diploma Supplement

Evidence:

- Certificate of study programme is missing

- Transcript of Records of study programme is missing
- Diploma Supplement is missing

Preliminary assessment and analysis of the peers:
The peers confirm that the students of all three degree programmes under review are awarded a Diploma and a Diploma Supplement after graduation. The Diploma consists of a Diploma Certificate and a Transcript of Records. The Diploma Supplement contains all necessary information about the degree programme including acquired soft skills and awards (extracurricular and co-curricular activities). The Transcript of Records lists all the courses that the graduate has completed, the achieved credits, grades, and cumulative GPA. Within the documents statistical data as set forth in the ECTS User's Guide are included to allow readers to categorise the individual result/degree.

Criterion 5.3 Relevant rules

Evidence:

- Regulations for Academic and Student Affairs

Preliminary assessment and analysis of the peers:
The peers acknowledged that expectations UNP at the students are clearly defined. Furthermore, the rights and duties of UNP and students are regulated in detail. The auditors could see that all necessary rights and duties of both UNP and students were clearly defined and binding for all relevant stakeholders. The regulations are published on the webside.

The peers understood that the students received all relevant course material in the language of the degree programme including the syllabi at the beginning of each semester. In addition, most information is also available on the intranet accessible for all students.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 5:

As the university waived any comments, the peers confirm their preliminary assessment.

6. Quality management: quality assessment and development

Criterion 6 Quality management: quality assessment and development

Evidence:

- Self Assessment Report
- Regulations for Academic and Student Affairs
- Discussions with representatives of UNP management, programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
The auditors learn that there is a continuous process in order to improve the quality of the degree programmes and it is carried out through internal (IQA) and external quality assurance (EQA). IQA encompasses all activities focused on implementing measures for improving the teaching and learning quality. EQA focuses on both national and international accreditations.

The Quality Assurance Unit conducts the internal quality assurance system. This unit determines the criteria, suitable measures, and its indicator as well as the quality assurance processes for all study programmes.

Internal evaluation of the quality of the degree programmes is mainly provided through student and alumni surveys. Students give their feedback on the courses through online questionnaires at the end of each semester. Giving feedback on the classes is compulsory for the students. Additionally, students' feedback is collected by distributing a mid-semester questionnaire. The students' feedback from mid-semester questionnaires is normally addressed directly by the lecturer by discussing it with the students. This feedback gives the chance to lecturers to improve their teaching practice.

Furthermore, UNP regularly conducts an alumni study. By taking part at this survey, alumni can reflect on their educational experiences and their professional career.

The curriculum evaluations are held during the final exam week. A compilation of the students' feedback is sent to the respective lecturers. As the students point out during the discussion with the peers, there is also the possibility to give a direct and informal feedback to the teacher.

During the audit, the peers learn that if there is negative feedback, the Dean talks to the respective teacher, analyses the problem, and offers guidance. The auditors gain the impression that students' feedback is taken seriously by the faculties and changes are made if there is negative feedback. Additionally the peers notice that the results of the questionnaires are discussed with the students directly.

As the peers consider the further development of the degree programmes to be very important, they appreciate the existing culture of quality assurance. In summary, the peer

group confirms that the quality management system is suitable to identify weaknesses and to improve the degree programmes. All stakeholders are involved in the process.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 6:

As the university waived any comments, the peers confirm their preliminary assessment.

D Additional Documents

„No additional documents needed“

E Comment of the Higher Education Institution

The university waives any comments.

F Summary: Peer recommendations

The peers recommend the award of the seals as follows:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditaiton
Ba Biology	Without requirement	--	30.09.2027
Ba Biology Education	Without requirements	--	30.09.2027
Ba Geography	With requirements for one year	--	30.09.2027
Ba Geography Education	With requirements for one year	--	30.09.2027

Requirements

For Geography

A 1. (ASIIN 2.2) Ensure a consistent calculation of SKS and ECTS credit points over all modules.

Recommendations

For all programmes

E 1. It is recommended to strengthen the formal weight of the bachelor thesis in the curriculum.

E 2. (ASIIN 4.1) Given the university's ambition to become a research university by 2026 it is recommended to significantly improve the teaching staff's research activities.

E 3. (ASIIN 2.2) It is recommended to improve the international mobility of the students.

E 4. It is recommended to ensure that the literature used in the courses is up to date.

Bachelor Geography

E 5. (ASIIN 2.2) It is recommended to implement a course about scientific writing as in the other programmes.

Education Programmes

E 6. (ASIIN 4.1) It is recommended to improve research activities in the field of biology and geography didactics as well.

For the Biology programmes

E 7. (ASIIN 2.2) It is recommended to distribute the courses more evenly across the semesters in order to avoid peaks of student workload.

G Comment of the Technical Committees Bioscience and Geoscience

The technical Committees discuss the procedure and follow the assessment of the peers without any changes.

H Decision of the Accreditation Commission

The Accreditation Commission discuss the procedure and follows the assessment of the peers and the technical committees without any changes.

The accreditation commission awards the seals as follows:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditaiton
Ba Biology	Without requirement	--	30.09.2027
Ba Biology Education	Without requirements	--	30.09.2027
Ba Geography	With requirements for one year	--	30.09.2027
Ba Geography Education	With requirements for one year	--	30.09.2027

Requirements

For Geography

A 1. (ASIIN 2.2) Ensure a consistent calculation of SKS and ECTS credit points over all modules.

Recommendations

For all programmes

E 1. It is recommended to strengthen the formal weight of the bachelor thesis in the curriculum.

E 2. (ASIIN 4.1) Given the university's ambition to become a research university by 2026 it is recommended to significantly improve the teaching staff's research activities.

E 3. (ASIIN 2.2) It is recommended to improve the international mobility of the students.

E 4. It is recommended to ensure that the literature used in the courses is up to date.

Bachelor Geography

E 5. (ASIIN 2.2) It is recommended to implement a course about scientific writing as in the other programmes.

Education Programmes

E 6. (ASIIN 4.1) It is recommended to improve research activities in the field of biology and geography didactics as well.

For the Biology programmes

E 7. (ASIIN 2.2) It is recommended to distribute the courses more evenly across the semesters in order to avoid peaks of student workload.

I Fulfilment of Requirements

The accreditation commission awards the seals as follows at 26 June 2022:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditaiton
Ba Geography	All requirements fulfilled	--	30.09.2027
Ba Geography Education	All requirements fulfilled	--	30.09.2027

Appendix: Programme Learning Outcomes and Curricula

The following **curriculum** is presented for biology programme:

No.	Code	Course (CU)	Credit Unit ΣT	T	P	F	No.	Code	Course (CU)	Credit Unit ΣT	T	P	F
		Semester 1							**Semester 2**				
		Compulsory courses organized by University							**Elective courses organized by University**				
1	UNP1.60.1401	Religion Education	3	3	0	0	1	UNP2.60.2101	Health and Fitness Education	2	2	0	0
2	UNP1.60.1402	Pancasila Education	2	2	0	0	2	UNP2.60.2401	History of Indonesia Struggle	2	2	0	0
3	UNP1.60.1403	Citizenship Education	2	2	0	0			**Compulsory courses organized by Biology**				
4	UNP1.60.1404	Indonesian	2	2	0	0	3	BIO1.62.2004	Plant Morphology	3	2	1	0
5	UNP1.60.1405	English	2	2	0	0	4	BIO1.62.2005	Animal Structure	3	2	1	0
		Elective courses organized by University					5	BIO1.62.2006	Animal Taxonomy	4	3	1	0
6	UNP2.60.1402 s	Basic Social Science	2	2	0	0	6	BIO1.62.2007	Plant Anatomy	3	2	1	0
		Compulsory courses organized by Faculty							Total CU Compulsory : 13 | Elective : 4				
7	FMA1.60.1301	General Biology	4	3	1	0							
8	FMA1.60.1302	Calculus	4	3	1	0							
9	FMA1.60.1303	General Physics	4	3	1	0							
10	FMA1.60.1304	General Chemistry	4	3	1	0							
		Compulsory courses organized by Biology											
11	BIO1.62.1002 ce	Environmental Scien	2	2	0	0							
	Total CU	Compulsory : 29 | Elective : 2											

No.	Code	Course (CU)	Credit Unit ΣT	T	P	F	No.	Code	Course (CU)	Credit Unit ΣT	T	P	F
		Semester 3							**Semester 4**				
		Compulsory courses organized by University							**Compulsory courses organized by Biology**				
1	UNP1.60.3101	Entrepreneurship	3	3	0	0	1	BIO1.62.4001	Animal Physiology	3	2	1	0
		Elective courses organized by University					2	BIO1.62.4002	Plant Physiology	3	2	1	0
2	UNP2.60.3401	Minangkabau Culture	2	2	0	0	3	BIO1.62.4003	Animal Morphogenesis	3	2	1	0
3	UNP2.60.3403	Disaster Management	2	2	0	0	4	BIO1.62.4004	Plant Morphogenesis	3	2	1	0

	Compulsory courses organized by Biology						5	BIO1.62.4005	Microbiology	3	2	1	0
4	BIO1.62.3003	Embryology	3	2	1	0	6	BIO1.62.4006	Statistic	3	3	0	0
5	BIO1.62.3004	Cell Biology	3	3	0	0	7	BIO1.62.4007	Genetics I	2	2	0	0
6	BIO1.62.3005	Biochemistry	3	2	1	0	8	BIO1.62.4008	Research Methods and Design of Experiments	3	3	0	0
7	BIO1.62.3006	Plant Ecology	3	2	1	0	9	BIO1.62.4009	Biotechnology	2	2	0	0
8	BIO1.62.3007	Animal Ecology	3	2	1	0	10	BIO1.62.4010	Evolution	2	2	0	0
9	BIO1.62.300 Plant Taxonomy 4 3 1 0 Total CU Compulsory : 27 | 8 Elective : 0												
	Total CU	Compulsory : 22 | Elective : 4											

No.	Code	Course (CU)	Credit Unit Σ	T	P	F	No.	Code	Course (CU)	Credit Unit Σ	T	P	F
	Semester 5							**Semester 6**					
	Compulsory courses organized by Biology							**Compulsory courses organized by Biology**					
1	BIO1.62.500	Microtechnique 3 1	2	1	0	1		BIO1.62.600	Human Anatomy and Physiology 3 3 1			0	0
2	BIO1.62.500	Genetics II 3 2	2	1	0	2		BIO1.62.600	Seed Physiology 2 2 3			0	0
	Elective courses organized by Biology					3		BIO1.62.600	Fundamentals of Conservation 2 2 7			0	0
3	BIO2.62.XXX	Elective course 2 X	2	0	0			**Elective courses organized by Biology**					
4	BIO2.62.XXX	Elective course 2 X	2	0	0	4		BIO2.62.XXXX	Elective course	2	2	0	0
5	BIO2.62.XXX	Elective course 2 X	2	0	0	5		BIO2.62.XXXX	Elective course	2	2	0	0
	Total CU Compulsory : 6 | Elective : 6		Total CU Compulsory : 7 | Elective : 4										

No.	Code	Course (CU)	Credit Unit Σ	T	P	F	No.	Code	Course (CU)	Credit Unit Σ	T	P	F
	Semester 7							**Semester 8**					
	Compulsory courses organized by University							**Compulsory courses organized by Biology**					
1	UNP1.60.74	Community Service Program 2 0 01	0	2	1		BIO1.62.800	Thesis 4 4 1				0	0
	Compulsory courses organized by Biology							**Elective courses organized by Biology**					
2	BIO1.62.700	Scientific Writing 2 2 1	0	0	2		BIO2.62.XXXX	Elective course		2	2	0	0
3	BIO1.62.700	Work Practice 3 0 2	0	3			Total CU	Compulsory : 4 | Elective : 2					
4	BIO1.62.700	Biology Education 3 3 3	0	0			**Total of Compulsory Course:**						**120**
5	BIO1.62.700	Research Proposal 2 0 4 Seminars	2	0			**Total of Elective Course:**						**24**
	Elective courses organized by Biology						**Credit Units of Graduation Requirement :**						**144**
6	BIO2.62.XXX	Elective course	2	2	0	0							
	Total CU	Compulsory : 12 | Elective : 2											

The following **curriculum** is presented for biology educational programme:

No.	Code	Course	Credit Unit (CU)				No.	Code	Course (CU)	Credit Unit			
			Σ	T	P	F				Σ	T	P	F
		Semester 1							**Semester 2**				
		Compulsory courses organized by University							**Compulsory courses organized by University**				
1	UNP1.60.1401	Religion Education	3	3	0	0	1	UNP1.61.2101	Educational Psychology	2	2	0	0
2	UNP1.60.1402	Pancasila Education	2	2	0	0	2	UNP1.61.2102	Administration and Education Supervision	2	2	0	0
3	UNP1.60.1403	Citizenship Education	2	2	0	0	**Elective courses organized by University**						
4	UNP1.60.1404	Bahasa Indonesia	2	2	0	0	3	UNP2.60.2101	Health and Fitness Education	2	2	0	0
5	UNP1.60.1405	English	2	2	0	0	4	UNP2.60.2102	Japanese Language	2	2	0	0
6	UNP1.61.1201	Fundamental of Education	2	2	0	0	5	UNP2.60.2103	Multicultural of Education	2	2	0	0
		Compulsory courses organized by Faculty					6	UNP2.60.2401	History of Indonesia Struggle	2	2	0	0
7	FMA1.60.1301	General Biology	4	3	1	0	7	UNP2.60.2402	Disaster Management	2	2	0	0
8	FMA1.60.1304	General Chemistry	4	3	1	0	**Compulsory courses organized by Faculty**						
		Compulsory courses organized by Biology Education					8	FMA1.60.2101	Calculus	4	3	1	0
9	BIO1.61.1201	Management and Technique Laboratory	3	2	1	0	9	FMA1.60.2104	General Physics	4	3	1	0
10	BIO1.61.1401	Environmental Science	2	2	0	0	**Compulsory courses organized by Biology Education**						
		Elective courses organized by Biology Education					10	BIO1.61.2201	Plant Morphology	3	2	1	0
11	BIO2.61.1101	Education Family Life	2	2	0	0	11	BIO1.61.2301	Animal Structure	3	2	1	0
		Total CU Compulsory : 24 | Elective : 0					12	BIO1.61.2302	Plant Anatomy	3	2	1	0
									Elective courses organized by Biology Education				
							13	BIO2.61.2201	Learning and Instruction	2	2	0	0
									Total CU Compulsory : 22 | Elective : 2				

No.	Code	Course (CU)	Credit Unit				No.	Code	Course (CU)	Credit Unit			
			Σ	T	P	F				Σ	T	P	F
Semester 3							**Semester 4**						
Compulsory courses organized by University							**Compulsory courses organized by University**						

1	UNP1.60.3101	Entrepreneurship	3	3	0	0	1	UNP1.61.4201	Guidance and counseling	2	2	0	0
Elective courses organized by University							**Compulsory courses organized by Biology Education**						
2	UNP2.60.3401	Minangkabau Culture	2	2	0	0	2	BIO1.61.4301	Cell Biology	3	2	1	0
3	UNP2.60.3402	Information and communication technology	2	2	0	0	3	BIO1.61.4302	Animal Ecology	3	2	1	0
Compulsory courses organized by Biology Education							4	BIO1.61.4303	Plant Ecology	3	2	1	0
4	BIO1.61.3201	Biology Learning Media	2	1	1	0	5	BIO1.61.4305	Diversity of Vertebrate Animal	3	2	1	0
5	BIO1.61.3301	Animal Development	3	2	1	0	6	BIO1.61.4306	Learning Biology Method	3	3	0	0
6	BIO1.61.3302	Microbiology	3	2	1	0	Total CU		Compulsory : 17 | Elective : 0				
7	BIO1.61.3303	Analysis of Curriculum and Biology Textbook	4	4	0	0							
8	BIO1.61.3304	Protista and Fungi	3	2	1	0							
9	BIO1.61.3305	Diversity of Plants Diversity	3	2	1	0							
10	BIO1.61.3306	Statistic for Education	2	2	0	0							
11	BIO1.61.3307	Diversity of an invertebrate animal	3	2	1	0							
	Total CU		Compulsory : 24 | Elective : 0										

No.	Code	Course	Credit Unit (CU)				No.	Code	Course	Credit Unit (CU)			
			Σ	T	P	F				Σ	T	P	F
Semester 5							**Semester 6**						
Compulsory courses organized by University							**Compulsory courses organized by University**						
1	UNP1.61.5101	Educational experience 1	1	0	0	1	1	UNP1.61.6401	Educational Experience 2	1	0	0	1
Compulsory courses organized by Biology Education							**Compulsory courses organized by Biology Education**						
2	BIO1.61.5201	Evaluation of Processes and Learning Biology Outcomes	3	3	0	0	2	BIO1.61.6101	Microteaching	2	0	2	0
3	BIO1.61.5202	Development Program of Learning Biology	3	3	0	0	3	BIO1.61.6301	Human Anatomy and Physiology	3	2	1	0
4	BIO1.61.5301	Biochemistry	3	2	1	0	4	BIO1.61.6302	Animal Physiology	3	2	1	0
5	BIO1.61.5302	Plant Physiology	3	2	1	0	5	BIO1.61.6303	Scientific Writing	2	1	1	0

6	BIO1.61.5303	Education Research Method	3	3	0	0	6	BIO1.61.6304	English for Biology	2	2	0	0
7	BIO1.61.5304	Genetics	3	2	1	0	7	BIO1.61.6305	Evolution	2	2	0	0
8	BIO1.61.5305	Biotechnology	3	3	0	0	**Elective courses organized by Biology Education**						
Elective courses organized by Biology Education							8	BIO2.61.6101	Research Action Class	2	2	0	0
9	BIO2.61.5201	Innovative Biology Learning	2	2	0	0	9	BIO2.61.6102	Management Educational Institutions	2	2	0	0
10	BIO2.61.5202	Authentic Assessment	2	2	0	0	10	BIO2.61.6201	Learning Media Based Technology Information	2	2	0	0
11	BIO2.61.5203	Entrepreneurship Biology	2	2	0	0	11	BIO2.61.6301	Development 2Instrument Research Education	2	0	0	
Total CU	Compulsory : 22 | Elective : 2						Total CU	Compulsory : 14 | Elective : 2						

No.	**Code**	**Course (CU)**	**Credit Unit Σ**	**T**	**P**	**F**	**No.**	**Code**	**Course (CU)**	**Credit Unit Σ**	**T**	**P**	**F**
Semester 7							**Semester 8**						
Compulsory courses organized by University							**Compulsory courses organized by Biology Education**						
1	UNP1.60.7401	Community Service Program	2	0	0	2	BIO1.61.8301	Thesis	4	0	4		0
2	UNP1.61.7401	Educational Experience 3	3	0	0	3	Total CU		Compulsory : 4 | Elective :0				
Compulsory courses organized by Biology Education													
3	BIO1.61.7101	Research Proposal Seminars	2	0	2	0							
Elective courses organized by Biology Education							**Σ = Sum of credit unit of a course; T = Theory; P = Practical; F = Field**						
4	BIO2.61.7101	Learning Biology in English	2	2	0	0							
5	BIO2.61.7102	Development Laboratorium Work Biology School	2	2	0	0							
Total CU Compulsory : 9| Elective : 2													

The following **curriculum** is presented for geography programme:

No.	Code	Course	Credit Unit (CU)				No.	Code	Course	Credit Unit (CU)			
			Σ	T	P	F				Σ	T	P	F
Semester 1							**Semester 2**						
Study Program Compulsory Courses							**Faculty SMO Courses**						
1	GEO1.62.1001	Geomorphology	3	1	1	1	1	FIS2.60.2301	Introduction to Indonesia History	2	2	0	0
2	GEO1.62.1002	Geology	3	2	1	0	**Study Program Compulsory Courses**						
3	GEO1.62.1003	Meteorology / climatology (Meteorology/ climatology)	3	2	1	0	2	GEO1.62.2001	Land Surveying	3	1	1	1
4	GEO1.62.1004	Mathematics	2	2	0	0	3	GEO1.62.2003	Indonesia Geology	2	2	0	0
5	GEO1.62.1005	Physics	2	2	0	0	4	GEO1.62.2004	Indonesia Geomorphology	2	2	0	0
6	GEO1.62.1006	Introduction to Geography	3	3	0	0	5	GEO1.62.2007	Indonesia Climatology Regional	2	2	0	0
7	GEO1.62.1007	Cartography	3	2	1	0	6	GEO1.62.2009	Chemistry	2	2	0	0
University Compulsory Courses							7	GEO1.62.2011	Hydrology	3	2	1	0
8	UNP1.60.1401	Religion Education	3	3	0	0	8	GEO1.62.2012	Demography	2	2	0	0
9	UNP1.60.1402	Pancasila Education	2	2	0	0	9	GEO1.62.2013	Remote sensing	3	2	1	0
10	UNP1.60.1403	Civic Education	2	2	0	0	**University SMO Courses**						
11	UNP1.60.1404	Bahasa Indonesia	2	2	0	0	10	UNP2.60.2101	Health and Fitness Education	2	2	0	0
12	UNP1.60.1405	English	2	2	0	0	11	UNP2.60.2102	Japanese Language	2	2	0	0
13	UNP2.60.1401	Basic Natural Science	2	2	0	0	12	UNP2.60.2103	Multicultural of Education	2	2	0	0
14	UNP2.60.1402	Basic Socio-Cultural Sciences	2	2	0	0	13	UNP2.60.2401	History of Indonesia Struggle	2	2	0	0
Total CU		47					Total CU		29				

No.	Code	Course	Credit Unit (CU)				No.	Code	Course	Credit Unit (CU)			
			Σ	T	P	F				Σ	T	P	F
Semester 3							**Semester 4**						
Faculty SMO Courses							**Faculty Elective Courses**						
1	FIS2.60.3302	Political State	2	2	0	0	1	FIS2.60.4401	Public Communication	2	2	0	0
Study Program Compulsory Courses							**Study Program Compulsory Courses**						
2	GEO1.62.3002	Oceanography	2	2	0	0	2	GEO1.62.4007	Digital Image Processing	3	0	3	0
3	GEO1.62.3011	Hydrogeology	2	2	0	0	3	GEO1.62.4008	Physical Geography Fieldwork and Mapping	1	0	0	1
4	GEO1.62.30 12	Descriptive Statistics	2	2	0	0	4	GEO1.62.40 11	Inferential Statistics	2	2	0	0
5	GEO1.62.3013	Population Geography	2	2	0	0	5	GEO1.62.4014	Cadastral mapping	2	1	1	0

6	GEO1.62.3014	Social Geography	2	2	0	0	6	GEO1.62.4015	Urban Village Geography	2	2	0	0
7	GEO1.62.3015	Soil Geography	3	2	1	0	7	GEO1.62.5007	World Regional Geography	3	3	0	0
8	GEO1.62.3016	Biogeography	2	2	0	0	Total CU		15				
9	GEO1.62.4012	Indonesia Regional Geography	3	3	0	0							
University Compulsory Courses													
10	UNP1.60.3101	Entrepreneurship	3	3	0	0							
University Elective Courses													
11	UNP2.60.3401	Minangkabau Culture	2	2	0	0							
12	UNP2.60.3402	Information and communication technology	2	0	2	0							
Total CU		27											

No.	Code	Course	Credit Unit (CU)				No.	Code	Course	Credit Unit (CU)			
			Σ	T	P	F				Σ	T	P	F
Semester 5							**Semester 6**						
Faculty Compulsory Courses							**Study Program Compulsory Courses**						
1	FIS1.60.5101	Indonesian Society Studies	2	2	0	0	1	GEO1.62.4005	Geographical Information System Applications	3	0	3	0
Faculty Elective Courses							2	GEO1.62.6001	Regional Development Planning Techniques	3	2	1	0
2	FIS2.60.5101	History of Islam	2	2	0	0	3	GEO1.62.6004	Social Geography Field Work	1	0	0	1
Study Program Compulsory Courses							4	GEO1.62.6005	DataBase Management System	2	0	2	0
3	GEO1.62.3009	Geographic Information System	3	2	1	0	5	GEO1.62.6006	Internship	3	0	0	3
4	GEO1.62.5008	Geographical Research Methodology	3	3	0	0	6	GEO1.62.6009	Coastal and Marine Geography	2	1	1	0
5	GEO1.62.5009	Evaluation of Land Resources	3	2	1	0	7	GEO1.62.6010	Development Geography	2	2	0	0
6	GEO1.62.5010	Economic Geography	3	3	0	0	**Study Program Elective Courses**						
7	GEO1.62.5011	Regional Science	2	2	0	0	8	GEO2.62.6001	Agricultural Geography	2	2	0	0
8	GEO1.62.5012	Tourism Geography	2	2	0	0	9	GEO2.62.6003	Forest Area Management	2	2	0	0
9	GEO1.62.5013	Political Geography	2	2	0	0	10	GEO2.62.6004	Disaster Mitigation Techniques	2	2	0	0
10	GEO2.62.5001	Watershed Management	2	2	0	0	11	GEO2.62.6006	Health Geography	2	2	0	0
11	GEO2.62.5003	Population and Environmental Education	2	2	0	0	Total CU		26				
12	GEO2.62.5004	Astronomy	2	2	0	0							
13	GEO2.62.5005	Industrial Geography	2	2	0	0							

14	GEO2.62.5006	Contemporary Regional Geography	2	2	0	0		
University Compulsory Courses								
15	UNP1.60.5401	Community Service Program	2	0	0	2		
Total CU		34						

No.	Code	Course	Credit Unit (CU)				No.	Code	Course	Credit Unit (CU)			
			Σ	T	P	F				Σ	T	P	F
Semester 7							**Semester 8**						
Study Program Compulsory Courses							**Study Program Compulsory Courses**						
1	GEO1.62.7001	Planning for Land Use in Disaster Prone Areas	3	3	0	0	1	GEO1.62.8001	Thesis	6	0	0	6
2	GEO1.62.7005	Environmental Geography	2	2	0	0	Total CU		6				
3	GEO1.62.7006	Disaster Geography and Mitigation	3	3	0	0							
4	GEO1.62.7007	Thematic Field Work	1	0	0	1	**Σ = Sum of credit unit of a course; T = Theory; P = Practical; F = Field**						
Total CU		9											