



ASIIN Seal

Accreditation Report

Bachelor's Degree Programme
Pharmacy

Bachelor's Degree and Professional Degree Programme
Nursing

Provided by
Universitas Hasanuddin, Makassar

Version: June 28th 2019

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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
Program Studi Sarjana Farmasi	Bachelor of Pharmacy Study Programme	ASIIN	-	09, 10
Sarjana Keperawatan (S.Kep.) dan Ners (Ns) / BSN-PN	Bachelor of Science in Nursing leading to Professional Nurse	ASIIN	-	10
Date of the contract: 30.08.2018 Submission of the final version of the self-assessment report: 30.10.2018 Date of the onsite visit: 19.02. – 21.02.2019 at: Makassar, Indonesia				
Peer panel: Prof. Dr. Philipp Eschenbeck, University of Applied Sciences Bochum Prof. Dr. Gert Fricker, University Heidelberg Prof. Dr. Steve Strupeit, University of Education Schwäbisch Gmünd Dr. Frank Peter Ritter, Bayer AG Intan Dinny Nuralifa, Institut Teknologi Bandung, student				
Representative of the ASIIN headquarter: Rainer Arnold				
Responsible decision-making committee: Accreditation Commission for Degree Programmes				

¹ ASIIN Seal for degree programmes;

² TC: Technical Committee for the following subject areas: TC 09 – Chemistry; TC 10 – Life Sciences;

Criteria used: European Standards and Guidelines as of 15.05.2015 ASIIN General Criteria as of 28.03.2014 Subject-Specific Criteria of Technical Committee 10 – Life Sciences as of 09.12.2011 Subject-Specific Criteria of Technical Committee 09 – Chemistry as of 09.12.2011	
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B Characteristics of the Degree Programmes

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF ³	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Ba Pharmacy	Sarjana Sains /Bachelor of Science		6	Full time	no	8 Semester	144 Indonesian credits (244.8 ECTS)	July / 2007
Ba in Nursing leading to Professional Nurse	Sarjana Keperawatan (S.Kep.) dan Ners (Ns) / BSN-PN / Bachelor of Science		6	Full time	no	10 Semester	180 Indonesian credits (301.28 ECTS)	August / 1999

³ EQF = The European Qualifications Framework for lifelong learning

For the Bachelor's degree programme in Nursing leading to Professional Nurse (BSN-PN) Universitas Hasanuddin (UNHAS) has presented the following profile in the Self-Assessment Report:

“The BSN leading to PS degree program aims to produce graduates who are excellent in professional nursing education, tropical nursing science, technology, and practice towards global competitiveness. Teaching, learning and research activities in this program are focused on tropical nursing science. The aim of the BSN leading to PS degree program is relevant and linked with the vision and mission of UH.

Vision of the program

The BSN-PN program has a vision to become a centre of excellence in professional nursing education, tropical nursing science, and technology towards global competitiveness in 2025.

Mission of the program

Mission of the BSN-PN program are:

1. Improving quality of nursing education through utilizing competence-based integrated education system, involving healthcare professionals, and conducting accountable management.
2. Conducting nursing research activities focusing on tropical nursing.
3. Performing community nursing services that involving students.
4. Applying good governance and effective leadership in managing nursing study program.
5. Promoting networks with centre of education, research, and community services at local, national, and international levels.”

For the Bachelor's degree programme Pharmacy (BPSP) UNHAS has presented the following profile in the Self-Assessment Report:

“Vision

To be an excellent innovative higher education in pharmacy programme on both national and international level based on the spirit of Indonesian Maritime Culture

Missions

1. To conduct an international qualified pharmacy higher education

2. To create a conducive academic environment, resulting in a proactive, innovative and ethical learner.
3. To develop a quality culture in the organization of education, research and community service.
4. To develop science, technology, and culture in the field of pharmacy through leading research based on Indonesian Maritime Culture producing innovative products and ideas.
5. To implement the result of research into community service”

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:

- Self-Assessment Report
- Discussions during the audit
- Study plans of the degree programmes
- Module Descriptions
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

The peers refer to the Subject-Specific Criteria (SSC) of the Technical Committee Life Sciences and the SSC of the Technical Committee Chemistry as a basis for judging whether the intended learning outcomes of the Bachelor's degree programmes Pharmacy and the Bachelor's degree programme in Nursing leading to Professional Nurse, as defined by UNHAS, correspond with the competences as outlined by the SSC. They come to the following conclusions:

According to the Self-Assessment Report, the graduates of the BSP-PN programme should be able to demonstrate an attitude of cultural sensitivity based on ethical principles and nursing legal aspects, to work professionally to achieve the patients' treatment goals, especially in the area of tropical diseases.

In addition, students should demonstrate a comprehensive understanding of nursing concept, theory and management principles in the care of patients and be able to communicate about the therapeutic treatments and give accurate information about them. Furthermore, they should acquire the necessary skills for delivering nursing care and services according to national and international standards. Graduates should also be able to manage health care systems by working with other nurses and health professionals with the goal of reducing morbidity, fostering a healthy lifestyle, and promoting a healthy environment.

The job perspectives of professional nurses in Indonesia are very promising. The BSN-PN programme at UNHAS is one of the most prestigious in Indonesia and the graduates are in high demand. Most of them work as nurse practitioners and nurse managers in public and private hospitals, public health centres, and other health care services. In addition, they can also find jobs as managers in insurances and public health institution. Other work opportunities are becoming teaching assistants in public or private nursing schools. Besides working in Indonesia, graduates are also qualified for working abroad such as in the USA, Japan, the Netherlands, Australia, and the Kingdom of Saudi Arabia.

The qualification objectives of the Bachelor's degree programme Pharmacy include acquiring sound fundamental biology-relevant knowledge of mathematics and natural sciences as well as knowledge about the essentials of molecular, cell, and organismic biology. The graduates should gain methodological competences in the biological sciences and should be able to carry out practical work in laboratories and outdoors and be able to handle samples and organisms. In addition, students should be familiar with the safe handling of chemicals and pharmaceuticals and have knowledge of safety and environmental issues as well as the associated legal regulations.

In addition to the subject-related qualification objectives, students should also be capable of working autonomously as well as in a team-oriented manner during their studies and be able to conduct research activities. Furthermore, they are able to solve subject-relevant problems, can present the results, have trained their analytical and logical abilities, and have an awareness of possible social and ethical effects of their actions. During the course of their studies, the students have also acquired communicative and language skills, can work in a team, and have developed a strategy for life-long learning.

The vast majority of BPSP graduates directly continues their academic studies to obtain a professional degree as a pharmacist (apothecary) before applying for a job. In 2018, 89.25% of the graduates directly continued with the Apothecary Study Programme. Admission to the professional degree programme is based on a selection interview and English proficiency test. Nevertheless, there are some job opportunities graduates of the Bachelor's programme. They can work in the pharmaceutical industry, biotechnology companies, hospitals and community pharmacies, as manager in drug stores, and analyst in medical laboratories or public institutions.

In general, employers are very satisfied with the qualification profile of the graduates and there is a high demand for graduates of UNHAS in the area of pharmacy as well as in the area of nursing. For this reason, UNHAS should think about raising the number of accepted students, hiring more teaching staff and providing more learning facilities (teaching and

research laboratories). In addition, UNHAS organises a job fair every year, and job opportunities are announced via social media.

The auditors hold the view that the objectives and intended learning outcomes of both degree programmes under review are reasonable and well founded.

In summary, the auditors are convinced that the intended qualification profiles of the BPSP as well as the BSN-PN programme allow students to take up an occupation, which corresponds to their qualification. The degree programmes are designed in such a way that they meet the objectives set for them and the peers judge the objectives and learning outcomes of the degree programmes suitable to reflect the intended level of academic qualification. They correspond with the ASIIN Subject-Specific-Criteria (SSC) of the Technical Committee 10 – Life Sciences and the SSC of the Technical Committee 09 - Chemistry. The peers appreciate that UNHAS aims for high standards as to give their students good chances in the national job market as well as a good starting point to transfer to other academic programmes.

Criterion 1.2 Name of the degree programme

Evidence:

- Self-Assessment Report

Preliminary assessment and analysis of the peers:

The auditors hold the opinion that the English translation and the original Indonesian names of the Bachelor's degree programmes Pharmacy and the Bachelor's degree programme in Nursing leading to Professional Nurse correspond with the intended aims and learning outcomes as well as the main course language.

Criterion 1.3 Curriculum

Evidence:

- Self-Assessment Report
- Discussions during the audit
- Study plans of the degree programmes
- Module Descriptions
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

The BSN-PN programme is offered by the Faculty of Nursing of UNHAS. It is a full-time programme and is divided into two sections: bachelor nurse (BSN) and professional nurse programme (PN). It is compulsory for all students to continue with the PN programme after completing the BSN programme. The length of the BSN-PN programme is five years, four years for bachelor stage and one year for professional stage. The BSN program consists of eight semesters with 46 courses and 144 Indonesian credit points (CP), while the PN programme comprises 24 courses (including 12 elective courses) with 36 CP.

In the first year of studies, a foundation of skills and knowledge of nursing theory and practice is laid, while in the second and third year the focus is on the essentials of theoretical and practical nursing care. The final year of the BSN programme includes comprehensive clinical practice in laboratories, the community services, and the thesis.

The PN programme is pursued in two semesters during which students will practice nursing care in both hospitals and community institutions.

The BPSP programme is offered by the Faculty of Pharmacy of UNHAS, it is designed for four years and at least 144 CP need to be achieved by the students. The courses in the first two semesters convey basic knowledge of natural sciences, mathematics, and languages (Indonesian and English). Courses on the different pharmaceutical sciences are offered from the third to the sixth semester. During the seventh semester, students must complete the community service and in the eighth semester, the undergraduate thesis is conducted.

The members of the teaching staff explain on demand of the peers that they offer possible topics for the Bachelor's thesis according to their own research projects. All members of the teaching staff supervise theses. The students have to design a research proposal with a time schedule for the project, which is discussed with the academic advisor. If they agree, the students apply formally for being allowed to work on the suggested topic.

During the sixth, seventh or eighth semester, students must complete the community service. The peers discuss with the programme coordinators about the content and goal of this course. The programme coordinators explain that community service is compulsory for all Indonesian students. It has a minimum length of eight weeks and takes place in villages or rural areas where students stay and live together with the local people. The course is designed "to allow students to apply their knowledge based on own field in order to empower society." Since the community service usually takes place in remote areas, the students cannot attend any classes during this time. The students work in interdisciplinary teams during the community service in order to advance the society and bring further development about. This course was introduced at all Indonesian Universities in 1971. The assessment of the community service consists of a work plan, programme implementation,

and activity report. The peers understand that students should work for the benefit of the community and the Indonesian society during the community service and support this concept.

Since UNHAS has the goal to become internationally more visible and wants to further internationalise its degree programmes, the peers discuss with the programme coordinators if there are any classes taught in English. The programme coordinators explain that the course descriptions and the necessary documents are all available in English, but only a few classes are taught in English. This is for example the case if there is an international student attending the class. UNHAS's partner from the industry point out that the practical English skills of the graduates could be improved. This is confirmed by the students who express their sincere wish to have more subject-specific elements taught in English. This could for example be achieved by offering a journal club, where the students read, discuss and present current international papers or seminars with discussions and student presentations in English. In addition, the peers recommend doing poster presentations and oral presentations in English, which will also improve the communication skills of the students.

The peers gain the impression that the graduates of the all degree programme under review are well prepared for entering the labour market and can find adequate jobs in Indonesia. During the discussion with the peers UNHAS's partner from the industry/public sector confirm that the graduates have a broad scientific education, are very adaptable, and have manifold competences which allows them to find adequate jobs.

Criterion 1.4 Admission requirements

Evidence:

- Self-Assessment Report
- Discussions during the audit
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

According to the Self-Assessment Report, admission of new students to UNHAS is possible via different modes of entry (national and local modes). The different modes of entry are designed not only to select the top-quality students from high schools, but also to provide opportunities for high school students from all over Indonesia, especially those from rural areas.

The different modes of entry are:

1. SNMPTN (National Entry Selection of Public Universities), based on academic performance during high school.
2. SBMPTN (Joint Entry Selection of Public Universities), based on a nationwide selection test that is held every year for university candidates.
3. Local admission, these students are selected under special consideration of their education, local origin, social background, achievements in sports or science, and financial means.

Every year, approximately 100 to 150 new students are admitted to the BSP-PN programme. The number of applications is significantly higher and varies between 4909 in 2015 and 2334 in 2018. This is equivalent to an admission rate of 3 % in 2015 and 7 % in 2018.

In the BPSP programme, the number of applications exceeds the available places even more: In 2015, 8199 students applied for admission of which 183 were admitted; this is equal to an admission rate of 2 %. In 2018, there were 5804 applications and 197 new students were admitted; this is equal to an admission rate of 3 %.

The requirements, schedule, registration venue, and selection test are announced on UNHAS's webpage and thus accessible for all stakeholders.

The peers inquire of the programme coordinators why there are so many students applying for studying at UNHAS, especially in the BPSP programme. They learn that pharmacy is a very popular degree programme because the job perspectives are very good. In addition, there are a great many high school graduates in Indonesia and UNHAS is one of the most prestigious universities in the country. Consequently, UNHAS is able to only accept the very best candidates. From their discussion with the students, the peers gain the impression that the admission system is very effective and only very motivated and high-performing candidates are admitted. The peers consider the highly selected and dedicated students to be one of the strong points of the degree programmes under review.

In summary, 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:

The auditors understand that there is a high demand for graduates from both degree programmes and that the number of accepted students is decided each year by considering

the ratio between teaching staff and students as well as the capacity of the learning facilities in the degree programmes. They are pleased to learn that UNHAS plans to increase the number of teaching staff members and will develop learning facilities with bigger capacity to accommodate larger number of students. The auditors especially appreciate that the Faculty of Nursing will move into the old building of the Faculty of Engineering where there will be more learning facilities (teaching and research laboratories) available. In addition, UNHAS will also expand the teaching laboratories for the BPSP programme.

The auditors support the plans to gradually enhancing students' English language skills by requiring them to prepare their slides in English and by encouraging them to present their work in English in the BSN-PN programme.

In the BSPN programme, it is planned to offer subject-specific classes in English. Therefore, there will be more English elements (slides, handouts, textbooks) integrated in several courses. The auditors support these efforts.

The auditors consider the criterion to be fulfilled.

2. The degree programme: structures, methods and implementation

Criterion 2.1 Structure and modules
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Evidence:

- Self-Assessment Report
- Study plans of the degree programmes
- Module Descriptions
- Discussions during the audit
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

The curriculum of the BPSP programme is aligned with the national standards in Indonesia and covers five core areas. The first core area covers "Principles and Methods of Basic Science" e.g. with courses in "Cellular Biology", "Organic Chemistry", "Microbiology and Virology", "Analytical Chemistry", and "Pharmaceutical Botany". The second core area is "Biomedical Science" e.g. with courses in "Human Anatomy and Physiology", "Pathology",

“Haematology”, and “Immunology”. “Pharmaceutical Science” is the third core area and includes courses like “Drug Synthesis”, “Pharmacokinetics”, “Pharmacognosy Analysis”, “Biopharmaceutics”, and “Pharmaceutical Biotechnology”. The fourth core area is “Clinical, Social and Community Pharmacy” which covers courses like “Physical Pharmacy”, “Food Safety Analysis”, “Traditional Medicine” and “Analytical Method Development and Validation”. Finally, there is the fifth core area “Management, Administration and Regulation”, this includes e.g. courses in “Entrepreneurship” and “Health Legislation and Ethics”.

In addition to these mandatory classes, there are several electives, covering different specialised aspects of pharmaceutical sciences. Students are required to take at least six elective courses to obtain additional 11 CP.

The curriculum is designed for eight semesters. Nevertheless, it is also possible for excellent students to complete the degree in only seven semesters. The students’ individual study plans are different from each other, but have to be approved by their academic advisors and the Vice Dean of Academic Affairs and Development.

Research-oriented courses like “Research Seminar Proposal”, “Research Seminar Result” and the Bachelor’s thesis are offered in the last semester. They are not assigned a large workload (together 5 CP) as only few graduates will work in research-related occupations. Furthermore, those who wish to become a researcher will often continue their studies with a Master’s programme that includes significantly more research activities. The research project (Bachelor’s thesis) is usually done in the last semester of the BPSP programme. This project is the only course offered in the 8th semester because students should be able to conduct research activities and complete their Bachelor’s Thesis without being distracted by assignments from other courses.

All courses taught in the BPSP programme are delivered in Bahasa Indonesia (Indonesian language) but some if not most reading lists include English textbooks.

In the BSP-PN programme, the Bachelor’s studies also encompass eight semesters with compulsory (including community service and undergraduate thesis) and elective courses. In contrast to the pharmacy programme, students in the nursing programme do not finish their academic education with the Bachelor’s degree but continue to complete the Professional degree. The students confirm towards the peers that no students leave after finishing the Bachelor’s degree and all of them continue with the Professional degree. As a result, the Bachelor’s and the Professional degree in the nursing programme are “integrated and inseparable”.

In the course of the BSP programme, the concepts of nursing and basic nursing skills are taught in the first year with courses in “Fundamental of Nursing”, “Basic Concept in Nursing”, and “Basic Science in Nursing”. Through these courses, students should learn how to become a caring nurse, and how to follow nursing ethical principles. In the second-year students have advanced nursing courses, such as “Communications in Nursing”, “Health informatics and Technology in Nursing”, and specific nursing courses such as “Medical Surgical Nursing”, “Paediatric Nursing”, “Maternity Nursing”, “Psychiatric and Mental Health Nursing”, and “Community Nursing”. In the third year, students get more advanced nursing courses in medical-surgical nursing, paediatric, maternity, mental health, community, family, emergency and critical nursing and nursing research methodology. In the fourth year, students receive nursing courses about nursing palliative, tropical, disaster, nursing management and the comprehensive clinical practice. In addition, students have to complete the community service and the Bachelor’s thesis in their last year of Bachelor’s studies.

In the fifth year, students enrol in the PN programme. This includes clinical placements in the different areas of nursing (medical-surgical nursing, paediatric nursing, maternity nursing, psychiatric and mental health nursing, nursing management, community health nursing, family, and gerontological nursing). These stages are designed to give students the necessary practical experience in nursing in both hospital and community settings. At the end of all nursing practice stages, students will choose their interest of specialization (clinical electives).

It is compulsory for students to study foreign languages (English is mandatory, classes in Japanese or Arabic are electives) in the BSN-PN programme. Courses are mainly taught in Bahasa Indonesia. However, students are encouraged to read and to integrate English textbooks and papers into their studies.

With respect to electives, there are some courses offered including Advanced English, Arabic, and Japanese. They are designed to better prepare students for the international job market. Students learn to use English in clinical nursing settings, as many nursing jobs are available in English speaking countries. Similarly, Arabic and Japanese are taught, because numerous nursing jobs are offered from Middle East countries and Japan.

Prior to conducting research, students should write a research proposal and present it in a seminar attended by lecturers and other students. The results of the thesis are presented in a seminar.

Both degree programmes under review include university requirements. These courses are mandatory for all students at UNHAS and are non-subject-specific but focus on language, religion, and social sciences. In total there are seven university requirements at UNHAS, encompassing 14 CP.

After analysing the module descriptions and the study plans the peers confirm that both degree programmes under review are divided into modules (here called courses) and that each module is a sum of coherent teaching and learning units. All working practice intervals (community service) and internships are well integrated into the curriculum and the supervision by the Faculty of Pharmacy and the Faculty of Nursing guarantees for their respective quality in terms of relevance, content, and structure.

The peers discuss with the programme coordinators of the pharmacy programme why there is no mandatory internship in the curriculum. There is plan to introduce an internship, but currently students do internships after finishing their Bachelor's degree. UNHAS is trying to cooperate with pharmaceutical companies but this is difficult in Makassar, because there are no large pharmaceutical companies in the area, only smaller companies that focus on traditional medicine and treatments. Employers and the partners from the industry confirm towards the peers, that they would like to offer internships. Both side would benefit from this cooperation; the students can get first-hand experience in the industry and the companies can benefit from the work and can possibly hire the students after graduation. For these reasons, the peers recommend introducing an internship into the curriculum of the pharmacy programme.

The students confirm in the discussion with the peers that they are very satisfied with the organisation and content of both degree programmes. They only suggest offering a course in cosmetics in the BPSP programme. Obviously, several students are interested in this area and the peers see that a course in cosmetics will offer additional job perspectives. For this reason, they support the students' point of view.

In summary, the peers gain the impression that the choice of modules and the structure of the curricula ensure that the intended learning outcomes of the respective degree programme can be achieved.

International Mobility

According to the opinion of the peer group, a critical aspect of the degree programmes under review is the limited academic mobility of the students. The programme coordinators admit that the number of students who participate in international exchange programmes is still low.

According to the Self-Assessment Report, academic mobility in the BSN-PN programme is limited. From 2014 to 2018, there were 15 incoming students (7 from Japan and 8 from the Netherlands) and only 5 outgoing students (to Japan in 2015). Unfortunately, this outgoing students programme was not continued due to budgeting reason. With respect to staff members, there were some visiting teachers from Japan, USA, the Netherlands, Australia,

and from other region of Indonesia (Surabaya). In 2014 and 2016, one staff member was sent to Japan. In 2018 there were two teachers visiting La Trobe University in Australia.

In terms of student mobility, there is student inbound programme that is designed for international students who want to join the BSN-PN programme. For the professional nursing degree programme, the international students are given the opportunity to have clinical practice in several hospitals under the supervision of lecturers from UNHAS and preceptors from designated hospitals where the professional nurse stages takes place. With respect to research in the nursing programme, international students have the opportunity to collect data in public health centres. This student inbound programme is part of a collaboration between Hanze University of Applied Sciences Groningen, the Netherlands and the Faculty of Nursing.

The situation is similar in the BPSP programme. Some teachers and students from overseas join the faculty either for delivering lectures or for attending classes. From 2015 to 2018, there was a total of 5 incoming international students (from France, USA, and Germany) and 14 visiting teachers (from Japan, Australia, the Netherlands, Malaysia, and Thailand). Reversely, staff members and students of the BPSP programme also visit other institutions to share and obtain academic experiences. From 2014 to 2018, 18 students from the BPSP programme spent some time abroad (in Thailand, Egypt, and Japan) and 11 staff members went to international universities (in Australia, Japan, Germany, South Korea, and England).

In summary, there are some incoming students and a cooperation with Kanazawa University in Japan exists. Otherwise, academic mobility is very limited.

The Faculty of Nursing and the Faculty of Pharmacy have recognised that there is a serious need for increasing the academic mobility of its own students and for attracting more international students. The peers are convinced that more measures need to be implemented in order to support the internationalisation of UNHAS. For example, there should be more English elements in the subject-specific classes, classes in scientific English should be offered, and the members of the teaching staff should further improve their English proficiency and spent more time abroad. Furthermore, the faculties should invite more visiting lecturers, initiate more international exchange programmes, offer more places for summer courses, and should provide more and better-endowed scholarships for the outgoing students.

The students confirm during the discussion with the peers that some opportunities for international academic mobility exist. However, they also point out that they wish for more places, more exchange programmes and more scholarships. The students confirm that some presentations are done in English, and English textbooks are used but the peers are convinced that more active English speaking would be useful. In addition, students would

like to improve their English proficiency in order to increase their international job perspectives and their chances for receiving a scholarship for continuing their academic education at an international university.

The peers appreciate the effort to foster international mobility and support both faculties further pursuing this path. However, the academic mobility is still low and there is a lot of room for improvement.

Criterion 2.2 Workload and credits

Evidence:

- Self-Assessment Report
- Study plans of the degree programmes
- Module Descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Based on the National Standard of Higher Education of Indonesia, both programmes use a credit point system called SKS, which is regulated as follows:

- 1 CP of teaching covers 50 minutes contact hours + 60 minutes assignment/tutorial + 60 minute of self-studies
- 1 CP of practical work covers 170 minutes
- 1 CP of seminar covers 170 minutes

In comparison to ECTS credit system, wherein 1 ECTS equals 25-30 hours of students' workload, it is determined that 1 CP is awarded for different amounts of workload, depending on the kind of studies.

The students' workload (contact hours and self-studies) is measured in Indonesian credit points (CP), and converted to the European Credit Transfer System (ECTS). The extent of studies required for the BSN degree is 144 CP (234.08 ECTS) and for the PN degree 36 CP (67.20 ECTS). An average workload of 1500 hours is needed for one academic year, which corresponds to 60 ECTS. One ECTS equals 25 hours of students' workload.

The BSN-PN programme comprises 180 CP in total, which corresponds to 7532 hours or 301.28 ECTS and are evenly distributed among 10 semesters.

Standard period of study in the BPSP programme is 8 semesters, the Bachelor's degree is awarded if students achieve at least 144 CP (244.8 ECTS). An average 18 CP are taken per

semester, which equals to 30.6 ECTS. However, students are allowed to gain up to 24 CP in a semester with the approval of their academic advisor.

The peers confirm that the workload in hours is indicated in the module descriptions and the distinction between classroom work and self-studies is made transparent.

UNHAS provides statistical data about the average length of studies and the number of dropouts. According to the data, the average length of studies in the BPSP programme has significantly decreased in the recent years: from 4.3 years in 2015 to 3.95 years in 2018. By contrast, the average length of studies in the BSN-PN programme remains constant at 4.5 years. So, most of the students complete their degree before their fifth year.

The peers see that almost all students complete the degree programmes, for example, there are only between 1 to 4 students that drop out the BPSP programme every year, the numbers are similar in the BSN-PN programme (0 to 4 dropouts from 2014 to 2018).

The data verifies that both degree programmes under review can be completed in the expected period.

The peers discuss with the programme coordinators and the students about the scope of the Bachelor's thesis, the related workload, and the awarded credit points. They gain the impression that the students regularly spent more time on the Bachelor's thesis than expected. Since the workload of the students was only estimated by the programme coordinators and seems to be too low in comparison to the actual time needed by the students, the peers suggest asking the students directly about their experiences. This could e.g. be done by including a respective question in the course evaluations. In any case, UNHAS must make sure that the actual workload of the students and the awarded credits correspond with each other.

Criterion 2.3 Teaching methodology

Evidence:

- Self-Assessment Report
- Study plans of the degree programmes
- Module Descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

Both programmes under review make use of several different educational methods for each course such as practical laboratory work, seminars, tutorials, lectures, fieldwork, community service, internship, and undergraduate thesis.

During the classes, active and interactive teaching methods (e.g. lectures, discussions, reports, presentations, and group work) are applied. UNHAS wants to encourage the students to gain knowledge from different scientific areas and wants to introduce them to research activities. This should ultimately contribute to the transition from a teacher centred to a student centred learning approach.

By applying different teaching methods, students in the BSN-PN programme have a balanced mix of classroom-based, clinical laboratory-based studies, and are exposed to clinical settings. During the professional phase in the fifth year of study, a preceptorship model is used.

To help the students to achieve the intended learning outcome and to facilitate adequate learning and teaching methods UNHAS has established a learning management system, designed as a digital platform, where students and teachers can interact.

In summary, the peer group judges the teaching methods and instruments to be suitable to support the students in achieving the intended learning outcomes.

Criterion 2.4 Support and assistance

Evidence:

- Self-Assessment Report
- Discussions during the audit

Preliminary assessment and analysis of the peers:

UNHAS offers a comprehensive advisory system for all undergraduate students. The offers can be divided into two types: academic support and non-academic supports. Academic advice includes the academic advisors, the Counselling and Advisory Centre, the Student Affairs Unit, the programme coordinators, the Vice Dean for Academic Affairs and Development, and the supervisors for the Bachelor's thesis. Non-academic supports comprises the University Hospital, the Sports Centre, the Language Centre, the Alumni and Career Planning Centre, the Central Library, computer laboratories, and student dormitories.

At the start of the first semester, every student is assigned to an academic advisor. Each academic advisor is a member of the academic staff and is responsible for a group of 20

students from his classes. He 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, that they meet regularly, and that they can always contact their advisor personally and ask for help or advice.

The Counselling and Advisory Centre helps and guides students who have individual problems, such as anxiety, depression or other personal issues. The Student Affair Unit offers scholarships, entrepreneurship programmes, student creativity programmes and other similar activities. There are many scholarships offered to students, (e.g. from private companies, the government or other foundations). This includes scholarship for students from low-income families and for those with high academic achievements. New students can attend classes to develop their effective learning and soft skills.

The programme coordinators are responsible for developing the study guides and monitoring academic activities. The Vice Dean for Academic Affairs and Development has the overall responsibility for the academic activities and the degree programmes.

In addition, every student who enrolls for the Bachelor's thesis courses will be assigned a thesis supervisor. The role of thesis supervisor is to help students to complete their thesis research; they also monitor the progress of thesis in order to ensure the completion of the thesis in the intended amount of time.

The students confirm towards the peers that they are supervised in the working/research group during their work on the Bachelor's thesis. There are regular lab meetings where the students present their results and receive feedback from the other lab members.

All students at UNHAS have access to the Learning Management System (LMS). By using LMS, lecturers can upload their syllabus and learning materials or modules as well as assignment for students. Through LMS, students can also interact with other students and lecturers.

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 and without delay. The students are well informed about the services available to them.

The peers judge the extensive advisory system to be one of the strong points of UNHAS.

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

The auditors observe that UNHAS is trying to establish an internship in the BPSP programme by integrating industry related community service and by offering an elective course for students who wish to gain extra work experience. The course will be called “Practical training” The duration of the course is 7 working days (7 hour a day or equal to 49 hours per semester). The credit workload is 1 SKS or equal to 1.7 ECTS.

Furthermore, UNHAS has signed several Memorandums of Understanding with pharmaceutical industries, community pharmacies or hospitals to facilitate internships. In addition, more collaboration with international pharmaceutical companies will be initiated to increase a chance for BPSP students to experience an internship programme overseas. The auditors support these plans.

The auditors thank UNHAS for clarifying that a Cosmetology course is offered in the 6th semester as a compulsory subject in BPSP. However, it seems that students wish to obtain practical skills related to cosmetic formulation and production techniques. In response to that, BPSP will integrate practical session in Cosmetology and introduce project based learning, to encourage students to create their own cosmetic products in laboratory.

The auditors appreciate that in the BSN-PN programme the amount of English lecture materials will be increased and that an English proficiency test will be introduced in the 3rd semester. In addition, English courses will be continued for all academic staff members. The recently established cooperations with universities in Japan and the Netherlands are useful for further promotion international exchange and students should be encouraged to take part. This is also true for the BSPS programme, where plans exist to establish additional cooperations with Australian, Japanese and Korean universities.

The auditors are pleased to learn that in response to their comments a survey to evaluate students’ workload for the Bachelor’s thesis has been conducted. Forty-five students that have finished their thesis in the last 3 months responded to the survey. The survey shows an average of 435.33 hours that correspond to 17.41 ECTS, which is different from previous calculation of only 7.47 ECTS. Based on this result, the curriculum workload mapping in the BSN-PN programme will be adjusted to the actual workload.

A similar survey was conducted in the BPSP programme. Based on 55 respondents, the actual time spent for completing the Bachelor’s thesis is 528 hours, which corresponds to 20

ECTS (1 credit ECTS = 27 hours). Currently, the workload credit given is only 6 SKS (275.4 hours of workload), which is only half of the actual time spent by students. This result will be taken to the Faculty Board meeting to discuss matching the actual workload with the awarded credits. The auditors expect that they will be informed about the result.

The auditors consider the criterion to be mostly fulfilled.

3. Exams: System, concept and organisation

Criterion 3 Exams: System, concept and organisation
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Evidence:

- Self-Assessment Report
- Module Descriptions
- Sample exams and theses
- Discussions during the audit

Preliminary assessment and analysis of the peers:

According to the Self-Assessment Report, the students' academic performance in the nursing as well as in the pharmacy programme is evaluated based on their attendance and participation in class, their practical work and reports, assignments, homework, presentations, mid-term exam, and the final exam at the end of each semester. The form and length of each exam is mentioned in the course descriptions that are available to the students via UNHAS's homepage and the Learning Management System.

The written exams can be multiple choice, quizzes, or essays. In addition, there are oral exams, especially for assessing the laboratory work. The students are informed about mid-term and final exams via the Academic Calendar. 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).

Based on the academic regulation, to be eligible to take final exam, students must attend at least 80% of the total course sessions. The results of the final exams will be announced online within two weeks after the exam period. Students, who fail the exam, must retake the course in the following year. The failed courses can be re-taken as often as necessary. If a student's GPA does not reach 2,00 out of 48 credits at the end of the fourth semester, he is ejected for academic reasons.

The peers discuss with the students how many and what kind of exams they have to take each semester. They learn that for each course there is one mid-term exam and one final exam in every semester. Usually, there are additional practical assignments or oral tests. The final grade is the sum of the sub exams. The students appreciate that there are several short exams instead of one big exam and confirm that they are well informed about the examination schedule, the examination form and the rules for grading.

At the end of the first two years, the students' academic achievements are evaluated to determine whether they can continue their studies or must leave the faculty. Students may continue their studies if they acquire at least half of the expected credits and have a GPA of ≥ 2.00 . According to the programme coordinators, most dropouts in both programmes are due to students failing this evaluation. Only few students leave the degree programmes for other reasons and the total dropout rate is rather low (approximately 5 %). The peers see that only a few students do not complete their degree, but they suggest registering the real dropout rate for all degree programmes and distinguishing between students failing the examination after two years and students leaving on their own decision.

The peers confirm that there is a form of assessment for each course and that all students are well informed about the form of assessment and the details of what is required to pass the module.

Every student is required to do a final thesis in the fourth year of studies. Prior to the actual research work, the students are required to write a research proposal and present it in a seminar attended by lecturers and other students. The research proposal has to be accepted by the Dean, who will then appoint the research supervisors. Usually, there are 2-3 research supervisors for each student. One will act as the principal supervisor and the others act as co-supervisors. After completing the work on the Bachelor's thesis, the student has to present and defend the results in front of teachers and fellow students.

In the nursing programme, students complete their professional degree with the National Nursing Examination.

The peers discuss with the programme coordinators, the members of the teaching staff, and the students about the process of finding suitable topic of the Bachelor's thesis. Basically, there are two possibilities. Either students can propose their own ideas or they can ask their academic advisor or other teachers for suggestions. Furthermore, the courses "research methodology" in the nursing programme and "research seminar I +II" in the pharmacy programme are designed to prepare students for doing research and finding suitable topics for their Bachelor's thesis.

The peers also inspect a sample of examination papers and final theses and are overall satisfied with the general quality of the samples. They confirm the high standard of the Bachelor's theses.

The peers conclude that the criteria regarding the examinations system, concept, and organization are fulfilled and that the examinations are suitable to verify whether the intended learning outcomes are achieved or not.

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

The university does not comment on this criterion.

The auditors consider the criterion to be fulfilled.

4. Resources

Criterion 4.1 Staff

Evidence:

- Self-Assessment Report
- Staff Handbook
- Discussions during the audit
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

At UNHAS the staff members have different academic positions. There are professor, associate professor, assistant professor and lecturers. 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 main difference of tasks and responsibilities based on academic staff position lies on the proportion of teaching and research activities. The higher the academic staff position is, the greater is the proportion of research activities, but the lower is the proportion of teaching activities.

According to the Self-Assessment Report, the teaching staff in the BPSP programme consists of 40 full-time teachers (5 professors, 13 associate professors, 4 senior lecturers, and 18 associate lecturers). Furthermore, the BPSP programme also involves some lecturers from other study programmes to teach relevant courses, for example, the courses “basic sciences in pharmacy”, “statistics and computing”, as well as “entrepreneurship” are taught by teachers from other faculties.

At the Faculty of Nursing, 30 full-time teachers are involved with BSP-PN programme. With respect to the academic position, the teaching staff consists of 3 associate professors, 11 assistant professors and 16 lecturers.

All academic staff members are involved in teaching, but the module coordinator can only be chosen from academic staff at senior lecturer level and above. All teachers are also responsible for advising students and supervising Bachelor’s degree theses (either as main or as co-supervisor). With respect to research activities, associate lecturers are required to publish their research in national journals, senior lecturers and associate professors are required to publish papers in an accredited national journal and/or international journal, while professors are required to publish their papers in reputable international journals

During the discussion with the programme coordinators the peers learn that UNHAS has a semi-autonomous status, which allows them to recruit their own staff members. However, the Indonesian Ministry of Higher Education still decides how many new staff members can be hired every year. The staff members are in general satisfied with the existing opportunities for pursuing their research interests. International publications are the goal and the key performance indicator for evaluating the research quality of the teachers.

The peers discuss with the teachers and the programme coordinators about the criteria for reaching the next academic level. They learn that there is a nationwide credit point system for teachers that includes three areas: research activities, teaching, and community service. The teachers receive credit point for each relevant activity and must achieve a minimum in each areas and a certain number in total to be able to be promoted. The staff members consider this process to fair and transparent and utter no complaints.

While analysing the staff handbook, the peers notice that there is no “full professor” in the Faculty of Nursing. The programme coordinators explain that the Faculty is rather new; it was established only in 2017, before the BPSP programme was under the supervision of the Faculty of Medicine. As a result, the teachers in Faculty of Nursing have not had enough time to accumulate enough credit points for promotion. However, one staff member is applying for full professorship and another one is in the progress of preparing an application. The peers accept this explanation and hope, that there soon will be “full professors” in the Faculty of Nursing.

In summary, the peers confirm that the composition, scientific orientation and qualification of the teaching staff are suitable for successfully implementing and sustaining the degree programmes. The only weak point they identify with respect to the qualification of the teaching staff is the fact that most of the staff members are also graduates from UNHAS. For this reason, they recommend also hiring new staff members that graduated from other universities. At least, UNHAS should make sure that the staff members spent some time abroad or at another Indonesian university after their graduation from UNHAS before hiring them permanently (for example by sending them abroad for doing a PhD).

The auditors are impressed by the excellent and open-minded atmosphere among students and staff members. It is supported by an extensive advisory system, which ensures that every student has an academic advisor. This atmosphere of understanding and support is one of the strong points of the degree programmes.

Criterion 4.2 Staff development
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Evidence:

- Self-Assessment Report
- Staff Handbook

Preliminary assessment and analysis of the peers:

UNHAS encourages the training of its academic staff so it has developed a programme for improving the didactic abilities and teaching methods. According to the Self-Assessment Report to further improve teaching skills, UNHAS regularly offers workshops for staff members. They cover basic principles of learning and teaching, curriculum planning, and assessment of learning and teaching.

Moreover, every staff member has the opportunity to attend conferences, seminars, or workshops outside UNHAS in order to promote their professional development and expertise. UNHAS supports the professional development of its personnel by allowing them to take two trainings per year for independent study if the employee's supervisor and head of the unit (Dean) agree.

The peers support the strategy to send academic staff members to international universities to pursue a higher academic degree (Master's or PhD). This will not only foster academic expertise and knowledge, but also improve the English proficiency and promote the internationalisation of the degree programmes.

The peers discuss with the members of the teaching staff about the opportunities to develop their personal skills and learn that the teachers are satisfied with the internal qualification programme at UNHAS. Since UNHAS wants to become internationally more visible the peers recommend to further increase the efforts to improve the English proficiency of the teaching staff. This would also allow to offer more subject-specific courses in English and subsequently foster the internationalisation of UNHAS (see Criterion 2.1)

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

Criterion 4.3 Funds and equipment

Evidence:

- Self-Assessment Report
- On-site visit of the laboratories, seminar rooms, and libraries

Preliminary assessment and analysis of the peers:

During the audit, the peer group also visits the laboratories and the classrooms in order to assess the quality of infrastructure and technical equipment. They notice that there are no severe bottlenecks due to missing equipment or a lacking infrastructure and confirm that the laboratories are equipped with the necessary equipment and instruments in addition to the necessary basic equipment, and that there are sufficient workplaces for all students. The students also express their satisfaction with the available equipment and instruments.

The only critical point the peers notice in the Faculty of Pharmacy are neglected safety measures. For example, no goggles are available. Consequently, the peers expect the Faculty of Pharmacy to follow strictly all safety measure and to adopt international safety standards in all laboratories.

While visiting the Faculty of Nursing the peers see that there are enough skill labs for teaching students, but the laboratories are rather small and accommodate only a small amount of students. In order to be able to teach all nursing students, the classes have to split up and the course has to be taught several times. This puts a lot of strain on the teaching staff and restricts the availability of the labs. Since the number of students in the Faculty of Nursing has been growing constantly and is expected to raise even further the current situation is not sustainable in the long run. Sufficient working space is important and the peers support the plans to construct a separate building for the Faculty of Nursing that offers

more laboratory space and can accommodate all students and staff members. For this reason, the peers strongly recommend UNHAS to provide more laboratory space for the Faculty of Nursing, ideally in a new separate building that would house the whole Faculty. Currently the Faculty of Nursing is just a “guest” in the upper two floors of the building of the Faculty of Medicine.

Finally, the peers notice that the Central Library is in need of renovation and not well equipped with up-to-date textbooks. On the other hand, there is small subject-specific library in the Faculty of Nursing as well as in the Faculty of Pharmacy where students can do literature research for their assignments and research proposals. In general, students are satisfied with the library opening hours and the available literature. From their point of view, there is sufficient access to current international literature and databases and a remote access is possible. The peers point out, that some modern literature is available but they recommend providing access to more scientific databases. (e.g. Elsevier journals for pharmacy and CINHALL for nursing).

Besides the already mentioned restrictions, the auditors judge the available funds, the technical equipment, and the infrastructure (laboratories, library, seminar rooms etc.) to comply with the requirements for sustaining the degree programmes.

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

The peers thank UNHAS for pointing out that there are two mechanisms for hiring new academic staff members: a scheme for Indonesian and a scheme for foreign academic staff members. UNHAS confirms in its statement that most academic staff members are graduates from UNHAS. It is often that the best-qualified applicant are UNHAS alumni. In order to further enrich and strengthen the knowledge and experience of the teachers, UNHAS promotes their further academic education outside UNHAS (e.g. for receiving a PhD degree). The auditors encourage UNHAS to increase its efforts and to make sure that preferably all teachers gain international experience.

The programme coordinators of the BPSP programme ensure that all safety regulations are in place and are strictly followed in all laboratories. The missing goggles during the visit were placed in cabinet, because the students had already finished their practical lessons. Nevertheless, the auditors emphasize that safety regulations must be met at all times and visitors need to follow them.

The auditors are pleased that UNHAS agrees on the need of improving and renovating the Central Library. A renovation plan has been drafted; it consists of upgrading the collections, not only in quantity but also in sufficient quality and depths. Funds have been also provided

to have more access to scientific databases such as Elsevier for pharmaceutical science, and CINAHL for nursing science.

The auditors consider the criterion to be mostly fulfilled.

5. Transparency and documentation

Criterion 5.1 Module descriptions

Evidence:

- Self-Assessment Report
- Module Descriptions
- Discussions during the audit
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

The students, as all other stakeholders, have access to the module descriptions via UNHAS's homepage and the digital learning platform.

After studying the module descriptions the peers confirm that they include all necessary information about the persons responsible for each module, the teaching methods and work load, the awarded credit points, the intended learning outcomes, the content, the applicability, the admission and examination requirements, and the forms of assessment and details explaining how the final grade is calculated.

Criterion 5.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report
- Sample Transcript of Records for each degree programme
- Sample Diploma certificate for each degree programme
- Sample Diploma for each degree programme

Preliminary assessment and analysis of the peers:

The peers confirm that the students of both degree programmes 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, co-curricular, and intra-curricular activities). The Transcript of Records lists all the courses that the graduate has completed, the achieved credits, grades, cumulative GPA, and mentions the seminar and thesis title.

Criterion 5.3 Relevant rules

Evidence:

- Self-Assessment Report
- Webpage Faculty of Nursing: <https://unhas.ac.id/keperawatan/nursing/?lang=en>
- Webpage Faculty of Pharmacy: <http://farmasi.unhas.ac.id/?lang=en>

Preliminary assessment and analysis of the peers:

The auditors confirm that the rights and duties of both UNHAS and the students are clearly defined and binding. All rules and regulations are published on the university's website and hence available to all relevant stakeholders.

In addition, the students receive all relevant course material in the language of the degree programme including at the beginning of each semester.

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

The university does not comment on this criterion.

The auditors consider the criterion to be fulfilled.

6. Quality management: quality assessment and development

Evidence:

- Self-Assessment Report
- Module Descriptions
- Discussions during the audit

Preliminary assessment and analysis of the peers:

The auditors discuss the quality management system at UNHAS with the programme coordinators. They learn that there is a continuous process in order to improve the quality of the degree programmes and it is carried out through internal and external evaluation. The quality assurance system is conducted at university level by the Board of Quality Assurance and Development of Education (LPMPP), which is supported by the Quality Assurance Unit (GPM) on faculty level.

The GPMs aim to establish a quality management system and processes that promote the further academic and administrative development of the respective programmes.

Internal evaluation of the quality of the degree programmes is mainly provided through student, alumni and employer surveys. The students give their feedback on the courses by filling out the questionnaire online. Giving feedback on the classes is compulsory for the students; otherwise, they cannot access their account on the digital platform. The course evaluations are conducted at the end of each semester; the questionnaire was developed by the course survey committee and includes questions with respect to the course in general and about the teachers' performance.

The employer survey is intended to evaluate UNHAS's alumni performance and qualification. An alumni survey is done at an interval of two years after graduation.

The results of the course evaluations surveys are handed out to each teacher. Based on the results the programme coordinator and the teachers re-assess every course and possibly some changes are made. If there are negative results, the programme coordinator invites the concerned teacher to discuss about his or her teaching methods and thus, they are expected to enhance their performance in the future.

During the audit, the peers learn that the results of the surveys are accessible by the students and the members of the teaching staff. If there is negative feedback, the Dean talks to the respective teacher, analyses the problem, and offers guidance. Furthermore, there is a complain box for the students that can be used for suggestions or criticism. The auditors gain the impression that the faculties take the students' feedback seriously and changes are made if there is negative feedback. Nevertheless, the peers see that the results of the course evaluations are not discussed with the students. As a consequence, the peers expect UNHAS to inform students about the results of the course evaluations and the teachers should discuss with them about possible improvements in the respective course. The feedback loops need to be closed.

In addition, students confirm during the audit that they are not represented in the university's panels and, thus, are not directly involved in the decision-making processes. The

peers are convinced that it is very useful to have student members in the different boards and for this reason they recommend establishing an institutionalized students' representation like an student's council or committee on programme or faculty level that meet regularly with the dean and vice deans to discuss about the programmes and possible improvements. There is the students' representative council, but it is a students' association with chapters at all Indonesian universities and focuses on extracurricular aspects and its members are not involved in the academic procedures at their university.

External quality assessment of both degree programmes is provided by the National Accreditation Agency for Higher Education in Health (IAAHEH) every five years. This national standard of higher education was designed to encourage educational institutions to improve their performance in providing quality education services. Moreover, the objective of this standard is to support transparency and accountability in the implementation of national education system. The BSN-PN programme achieved level B (the 2nd highest level of accreditation) in 2014; the latest external audit for the BPSP programme was conducted in 2017 and it was accredited with level A (highest level).

UNHAS has established an alumni network that allows them to keep in touch with each other and with the UNHAS. The peers see that alumni are involved in the educational processes in the form of curriculum review, seminars, conferences, guest lectures, etc. Alumni surveys provide information regarding the relevance of alumni's knowledge, skills, and competences in comparison to market needs. The peers discuss with the representatives of UNHAS's partners from public institutions and private companies that there are regular meetings with the partners on faculty level, where they discuss the needs and requirements of the employers and possible changes to the degree programmes. As the peers consider the input of the employers to be very important for the further improvement of the degree programmes, they appreciate the existing culture of quality assurance with the involvement of all stakeholders in the quality assurance process.

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:

The auditors see that UNHAS is trying to better involve students in the quality management system and to close the feedback loops. As UNHAS points out, course evaluations are conducted every June for even semester, and every December for odd semester. The results are distributed to each course coordinator and then used as feedback to improve the preparation and implementation of the course next year. The programme coordinators confirm

that the course evaluation process should be completed by informing and discussing the results with students. The auditors expect that this plan be put into action.

UNHAS point out that students are already involved in some decision-making processes. For example in the BSN-PN programme there is an annual meeting (called Temu Civitas Akademik) with students, teachers and administrative staff. In addition, the Dean will have regular meetings with the students represented by the Board of Student Council. These meetings will be held at least once every semester. In the BPSP programme, a Student Executive Board (SEB) was established. The SEB works closely with the Vice Dean of Students and Alumni Affairs, who acts as the students' advocate in the Faculty's board meetings. The peers appreciate these efforts; however, they think it would be even better to students' representatives in the decision-making bodies.

The auditors consider the criterion to be mostly fulfilled.

D Additional Documents

Before preparing their final assessment, the panel ask that the following missing or unclear information be provided together with the comment of the Higher Education Institution on the previous chapters of this report:

- none

E Comment of the Higher Education Institution (15.04.2019)

The institution provided a detailed statement as well as the following additional documents:

BSN-PN programme:

- List of Memorandum of Understanding (MoU) and Memorandum of Agreement (MoA) between UNHAS/Faculty of Nursing and Universities/Institutions in overseas countries.
- Nursing Bachelor Degree Thesis Workloads
- Number and percentage of Academic Staff Graduated from UNHAS and outside UNHAS
- Description of Academic Staff Study Places and Academic Mobility conducted outside UNHAS (short-course/training/academic/research activities).

BPSP programme:

- Draft of revised BPSP curriculum
- The list of international mobility of BPSP academic staff in 2017-2018
- Plan for upcoming international mobility of BPSP academic staff in 2019
- The list of international mobility of BPSP students in 2017 and 2018
- Future plans for BPSP student international mobility in 2019
- The number of visiting lecturers from overseas in 2018-2019
- The list of ongoing international research collaboration involving BPSP academic staff
- The actual time spent by BPSP students to complete Research Capacity Modules
- List of academic staff members currently pursuing Master and PhD degrees in overseas controlled

F Summary: Peer recommendations (30.04.2019)

Taking into account the additional information and the comments given by UNHAS the peers summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditation
Ba Pharmacy	With requirements for one year	-	30.09.2024
Bachelor's and Professional Degree in Nursing	With requirements for one year	-	30.09.2024

Requirements

For all degree programmes

- A 1. (ASIIN 2.3) Verify the students' actual workload and award the ECTS credits accordingly.
- A 2. (ASIIN 6) Ensure that students get a feedback about the results of the course evaluations.

For the Bachelor's degree programme Pharmacy

- A 3. (ASIIN 4.3) Improve the safety measures in the laboratories

Recommendations

For all degree programmes

- E 1. (ASIIN 2.1) It is recommended to better promote students' academic mobility and to establish more international cooperations.
- E 2. (ASIIN 2.1) It is recommended to improve students' English proficiency.
- E 3. (ASIIN 6) It is recommended to institutionalise students' and non-academic employees' representation in order to include them in the decision-making processes.

- E 4. (ASIIN 4.3) It is recommended to update and to expand the infrastructure, and to hire more staff members in order to be able to accommodate more students.
- E 5. (ASIIN 4.3) It is recommended to provide access to more digital databases e.g. CINHAL and Elsevier.

For the Bachelor's degree programme Pharmacy

- E 6. (ASIIN 2.1) It is recommended to introduce an internship into the curriculum of the pharmacy programme.

G Comment of the Technical Committees (13.06.2019)

Technical Committee 09 - Chemistry (12.06.2019)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee is of the opinion that no concrete databases should be mentioned (recommendation E 5). However, it is important that students have sufficient access to international literature. Otherwise, the expert committee endorses the proposals made by the reviewers.

The Technical Committee 09 – Chemistry recommends the award of the seals as follows:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Ba Pharmacy	With requirements for one year	-	30.09.2024
Bachelor's and Professional Degree in Nursing	With requirements for one year	-	30.09.2024

Technical Committee 10 – Life Sciences (13.06.2019)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee is of the opinion that no concrete databases should be mentioned (recommendation E 5). However, it is important that students have sufficient access to international literature. Otherwise, the expert committee endorses the proposals made by the reviewers.

The Technical Committee 10 – Life Sciences recommends the award of the seals as follows:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Ba Pharmacy	With requirements for one year	-	30.09.2024
Bachelor's and Professional Degree in Nursing	With requirements for one year	-	30.09.2024

H Decision of the Accreditation Commission (28.06.2019)

Assessment and analysis for the award of the subject-specific ASIIN seal:

The Accreditation Commission follows the assessment of the peers and supports the changes suggested by Technical Committee 10 –Life Sciences.

The Accreditation Commission for Degree Programmes decides to award the following seals:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Ba Pharmacy	With requirements for one year	-	30.09.2024
Bachelor's and Professional Degree in Nursing	With requirements for one year	-	30.09.2024

Requirements

For all degree programmes

- A 1. (ASIIN 2.3) Verify the students' actual workload and award the ECTS credits accordingly.
- A 2. (ASIIN 6) Ensure that students get a feedback about the results of the course evaluations.

For the Bachelor's degree programme Pharmacy

- A 3. (ASIIN 4.3) Improve the safety measures in the laboratories.

Recommendations

For all degree programmes

- E 1. (ASIIN 2.1) It is recommended to better promote students' academic mobility and to establish more international cooperations.
- E 2. (ASIIN 2.1) It is recommended to improve students' English proficiency.

- E 3. (ASIIN 6) It is recommended to institutionalise students' and non-academic employees' representation in order to include them in the decision-making processes.
- E 4. (ASIIN 4.3) It is recommended to update and to expand the infrastructure, and to hire more staff members in order to be able to accommodate more students.
- E 5. (ASIIN 4.3) It is recommended to provide access to more digital databases.

For the Bachelor's degree programme Pharmacy

- E 6. (ASIIN 2.1) It is recommended to introduce an internship into the curriculum of the pharmacy programme.

Appendix: Programme Learning Outcomes and Curricula

According to the Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor's degree programme in Nursing leading to Professional Nurse:

Program Learning Outcomes (PLOs)

The BSN-PN program has five learning outcomes. The program provides opportunity for graduates to be able:





1. To perform effective communication, therapeutic communication in giving health care, ability to build effective inter-professional relations **(PLO1)**.
2. To educate and to improve health conditions of clients, family, and community in both clinical health and community setting **(PLO2)**.
3. To perform professional nursing practice for patients by focusing on bio psychosocial, cultural, and spiritual **(PLO3)**.
4. To act as a manager and a leader in nursing care to provide patient safety and to evaluate nursing care services **(PLO4)**.
5. To develop critical thinking and to conduct nursing research **(PLO5)**.

Intended Learning outcomes (ILOs)

To achieve PLO mentioned above, ten ILOs are formulated. These ILOs are designed according to the Indonesian Qualification Framework (IQF) which comprises four learning domains: Attitude, Knowledge, Skills, and Competence.

Area	Code	Intended Learning Outcomes (ILOs)
Attitude (A)	A1	Students will be able to show attitude with cultural sensitivity based on ethical principles and nursing legal aspects.
	A2	Students will be capable to work professionally with passion and determination based on maritime continent culture in achieving patients' goal of care according to her/his clinical privilege and responsibility, particularly in nursing care for tropical disease.
Knowledge (K)	K1	Students will be able to demonstrate comprehensive understanding nursing concept, theory and management principles in providing nursing care to client in clinical and community settings based on research findings.
	K2	Students will be able to apply nursing knowledge, information system and technology into clinical practices.
Skills (S)	S1	Students will be able to communicate his/her opinions/ argumentations or product of innovation that useful for nursing profession developments nationally and internationally that credible in scientific and professional ethics.
	S2	Students will have task competence in delivering nursing care and services that able to compete nationally and globally.
Competence (C)	C1	Students will be able to provide comprehensive and continuing nursing care based on research that ensure patients' safety according to the standards of nursing care in all nursing areas particularly on tropical disease that commonly occurred in maritime continent according to nurse' clinical privilege.
	C2	Students will be able to perform therapeutic communication and give accurate information to clients and/or to family/assistance/advocates in obtaining an informed consent of care within their responsibility.
	C3	Students will be able manage nursing care systems in one unit or ward within their responsibility by collaborating with other nurses, other health professionals, and group of people in community to reduce morbidity rates, to improve healthy lifestyles and healthy environment.
Area	Code	Intended Learning Outcomes (ILOs)
	C4	Students will be able to improve nursing and health services qualities by applying research skill and integrating theory into nursing practice.

The following **curriculum** is presented:

Sem	Structure of Professional Nurse (PN)							YEAR
10	Emergency Nursing (3 CP)	Critical Care in Nursing (3 CP)	Gerontological Nursing (2 CP)	Community Nursing (2 CP)	Family Nursing (2 CP)	Nursing Management (2 CP)	Clinical Electives (4 CP)	5th YEAR
9		Fundamental of Nursing (2 CP)	Medical-Surgical Nursing I (3 CP)	Medical-Surgical II (3 CP)	Psychiatric and Mental Health Nursing (3 CP)	Maternity Nursing (3 CP)	Pediatric Nursing (3 CP)	Clinical Internships
	Structure of Bachelor of Science in Nursing (BSN)							
8							Bachelor Degree Thesis (4 CP)	4th YEAR
7	Student Community Services (4 CP)	Tropical Disease in Nursing (2 CP)	Disaster Nursing (2 CP)	Palliative Nursing (3 CP)	Nursing Management (4 CP)	Comprehensive Clinical Nursing Practice I (2 CP)	Comprehensive Clinical Nursing Practice II (2 CP)	Final Project
								
6		Research Methodology (4 CP)	Biostatistic (2 CP)	Gerontological Nursing (4 CP)	HIV Nursing (2 CP)	Emergency Nursing (4 CP)	Critical Nursing (3 CP)	3rd YEAR
5		Maternity Nursing II (2 CP)	Pediatric Nursing II (3 CP)	Community Nursing II (3 CP)	Psychiatric and Mental Health Nursing II (4 CP)	Family Nursing (4 CP)	Medical-Surgical Nursing III (6 CP)	Advanced Nursing
								
4		Elective (2 CP)	Community Nursing I (2 CP)	Psychiatric and Mental Health Nursing I (2 CP)	Medical-Surgical Nursing II (6 CP)	Maternity Nursing I (4 CP)	Pediatric Nursing I (4 CP)	2nd YEAR
3	Civic Education (2 CP)	English II (2 CP)	Health Informatics and Technology in Nursing (2 CP)	Patient and Occupational Health Safety (2 CP)	Education and Health Promotion (3 CP)	Communication in Nursing II (3 CP)	Medical-Surgical Nursing I (5 CP)	Strong Foundation in Nursing
								
2	Pancasila (2 CP)	English I (2 CP)	Communication in Nursing I (2 CP)	Psychosocial and Cultural in Nursing (2 CP)	Basic Science in Nursing II (5 CP)	Fundamental of Nursing I (4 CP)	Fundamental of Nursing II (4 CP)	1st YEAR
1		Religion Education (3 CP)	Bahasa Indonesia (2 CP)	Philosophy & Nursing Theory (3 CP)	Basic Science in Nursing I (6 CP)	Basic Concept in Nursing I (3 CP)	Basic Concept in Nursing II (3 CP)	Basic Sciences & Concepts

Semester 1						Semester 2					
No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS	No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS
1	07...U003	Religion Education	3	119.0	4.76	1	079U002	Pancasila	2	79.33	3.17
2	080U002	Bahasa Indonesia	2	79.33	3.17	2	081U002	English I	2	79.33	3.17
3	17101R0103	Philosophy & Nursing Theory	3	119.0	4.76	3	17151R0102	Communication in Nursing	2	79.33	3.17
4	17102R0106	Basic Science in Nursing I	6	238.0	9.52	4	17152R0102	Psychosocial and Cultural in Nursing	2	79.33	3.17
5	17103R0103	Basic Concept in Nursing I	3	119.0	4.76	5	17153R0105	Basic Science in Nursing II	5	198.33	7.93
6	17104R0103	Basic Concept in Nursing II	3	119.0	4.76	6	17154R0104	Fundamental of Nursing I	4	158.67	6.35
						7	17155R0104	Fundamental of Nursing II	4	172.67	6.91
Sum			20	793.33	31.73	Sum			21	847.0	33.88
Total = 20 credits						Total = 21 credits					
Total 1st year credits = 41 credits											
Total 1st year work load = 1640.33 hours											
Total 1st year ECTS (1 ECTS equivalent to 25 work load hours) = 65.61											
Semester 3						Semester 4					
No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS	No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS
1	077U002	Civic Education	2	79.3	3.17	1	17256R0106	Medical-Surgical Nursing II	6	245.00	9.80
2	17205R0102	English II	2	79.33	3.17	2	17257R0104	Maternity Nursing I	4	165.67	6.63
3	17206R0102	Health Informatics and Technology in Nursing	2	79.3	3.17	3	17258R0104	Pediatric Nursing I	4	165.67	6.63
4	17207R0102	Occupational Health & Safety	2	79.3	3.17	4	17259R0102	Psychiatric and Mental Health Nursing I	2	79.33	3.17
5	17208R0103	Health Promotion & Health Education	3	119.0	4.76	5	17260R0102	Community Nursing I	2	79.33	3.17
6	17210R0103	Communication in Nursing II	3	126.0	5.04	6	1726..R0102	Electives (Adv. English, Arabic & Japanese)	2	79.33	3.17
7	17211R0105	Medical-Surgical Nursing I	5	205.33	8.21						
Sum			19	767.7	30.71	Sum			20	814.33	32.57
Total = 19 credits						Total = 20 credits					
Total 2nd year credits = 39 credits											
Total 2nd year work load = 1582.0 hours											
Total 2nd year ECTS (1 ECTS equivalent to 25 work load hours) = 63.28											

0 Appendix: Programme Learning Outcomes and Curricula

Semester 5						Semester 6					
N o	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS	No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS
1	17312R0106	Medical-Surgical Nursing III	6	245.0	9.8	1	17364R0104	Gerontic Nursing	4	158.67	6.35
2	17313R0102	Maternity Nursing II	2	79.33	3.17	2	17365R0102	HIV/AIDS Nursing	2	79.33	3.17
3	17314R0103	Pediatric Nursing II	3	126.0	5.04	3	17366R0104	Emergency Nursing	4	158.67	6.35
4	17315R0104	Psychiatric and Mental Health Nursing II	4	165.7	6.63	4	17367R0103	Critical Care Nursing	3	119.00	4.76
5	17316R0103	Community Nursing II	3	126.0	5.04	5	17368R0104	Research Methodology	4	158.67	6.35
6	17317R0104	Family Nursing	4	158.7	6.35	6	17369R0102	Biostatistic	2	79.33	3.17
Sum			22	900.67	36.03	Sum			19	753.67	30.15
Total = 22 credits						Total = 19 credits					
Total 3rd year credits = 41 credits											
Total 3rd year work load = 1654.33 hours											
Total 3rd year ECTS (1 ECTS equivalent to 25 work load hours) = 66.17											
Semester 7						Semester 8					
N o	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS	No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS
1	17418R0103	Palliative & End of Life Nursing	3	119.0	4.76	1	17470R0104	Bachelor Degree Thesis	4	186.67	7.47
2	17419R0104	Nursing Management	4	165.67	6.63						
3	17420R0102	Disaster Nursing	2	79.3	3.17						
4	17423R0102	Tropical Diseases in Nursing	2	79.3	3.17						
5	17421R0102	Comprehensive Clinical Practice I	2	79.3	3.17						
6	17422R0102	Comprehensive Clinical Practice II	2	79.3	3.17						
7	449UU4	Student Community Services	4	186.67	7.47						
Sum			19	788.7	31.55	Sum			4	186.67	7.47
Total = 19 credits						Total = 4 credits					
Total 4th year credits = 23 credits											
Total 4th year work load = 975.33 hours											
Total 4th year ECTS (1 ECTS equivalent to 25 work load hours) = 39.01											

0 Appendix: Programme Learning Outcomes and Curricula

Semester 9						Semester 10					
N o	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS	No	Code	Course Title	Credit Point (CP)	Work load Hours	ECTS
1	17501R0202	Fundamental of Nursing Practice	2	93.3	3.73	1	17551R0203	Emergency Nursing Practice	3	140.0	5.60
2	17502R0203	Medical-Surgical Nursing Practice I	3	140.0	5.60	2	17552R0203	Critical Care Nursing Practice	3	140.0	5.60
3	17503R0203	Medical-Surgical Nursing Practice II	3	140.0	5.6	3	17553R0202	Gerontic Nursing Practice	2	93.33	3.73
4	17504R0203	Psychiatric and Mental Health Nursing Practice	3	140.0	5.6	4	17554R0203	Community Nursing Practice	3	140.0	5.60
5	17505R0203	Maternity Nursing Practice	3	140.0	5.6	5	17555R0202	Family Nursing Practice	2	93.33	3.73
6	17506R0203	Pediatric Nursing Practice	3	140.0	5.6	6	17556R0202	Nursing Management Clinical Practice	2	93.33	3.73
						7	175.....R020	Clinical Electives	4	186.67	7.47
Sum			17	793.33	31.73	Sum			19	886.67	35.47
Total = 17 credits						Total = 19 credits					
Total 5th year credits = 36 credits											
Total 5th year work load = 1680.0 hours											
Total 5th year ECTS (1 ECTS equivalent to 25 work load hours) = 67.20											

According to the Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor's degree programme Pharmacy:

As the Programme Educational Objectives (PEO) Bachelor Degree of Pharmacy aims to provide graduates that have qualities as follows:

1. Be able to solve problems in the community through implementation of the concepts and skills in pharmaceutical sciences and technology
2. Capable to continuously develop their knowledge and skills and be prepared for a higher level of degree or training
3. Demonstrate professional attitude, function, and creativity in their field and be adaptive to their work environment

Learning outcomes of the programme

Supporting the achievement of Programme Educational Objectives (PEO), the institution has outlined Learning Outcomes stating that upon successful completion of the degree programme, it is expected that graduates will have certain knowledge/understanding, skills and competences as follows:

Knowledge/Understanding

1. Integrate the basic concepts of natural and biomedical sciences as foundations of pharmaceutical sciences and pharmacy practice
2. Distinguish types of pharmaceutical dosage forms and recognize their potential problems and solution in order to optimize their therapeutic effects
3. Explain the concepts of drug therapeutic effects and contributing factors to provide information in community as part of pharmaceutical service
4. Employ the theoretical and mathematical concepts of drugs, drug kinetics and mechanisms, and the relationship between drug physico-chemistry characteristics and their biological activities
5. Choose appropriate procedures to perform, develop and/or validate methods of analysis of active compounds or crude drugs from synthetic or natural sources.

Skills

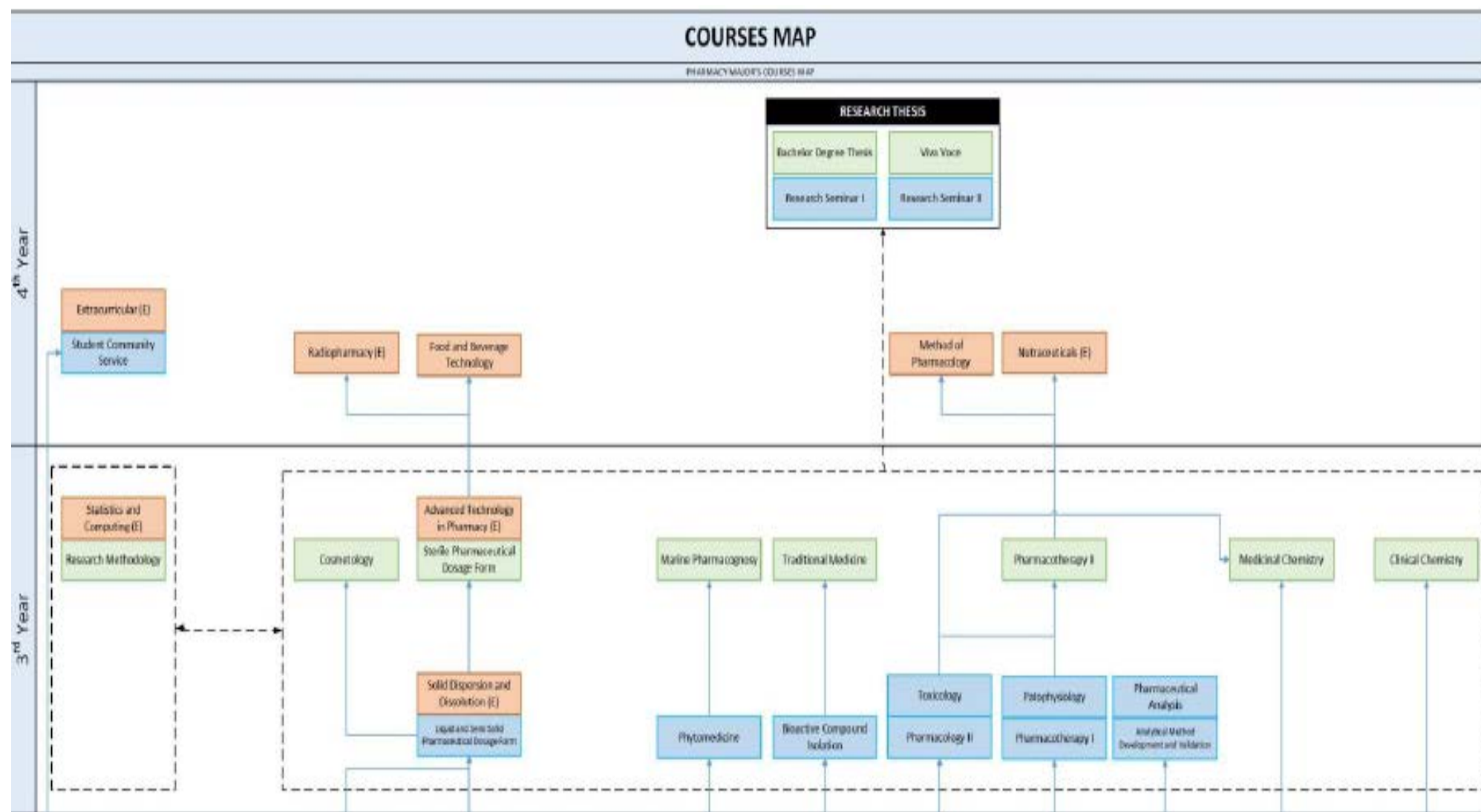
6. Apply logical/critical thinking to analyse, develop, implement and disseminate information from legitimate source to find a solution to a problem
7. Construct scientific writing based on academic rules and ethics

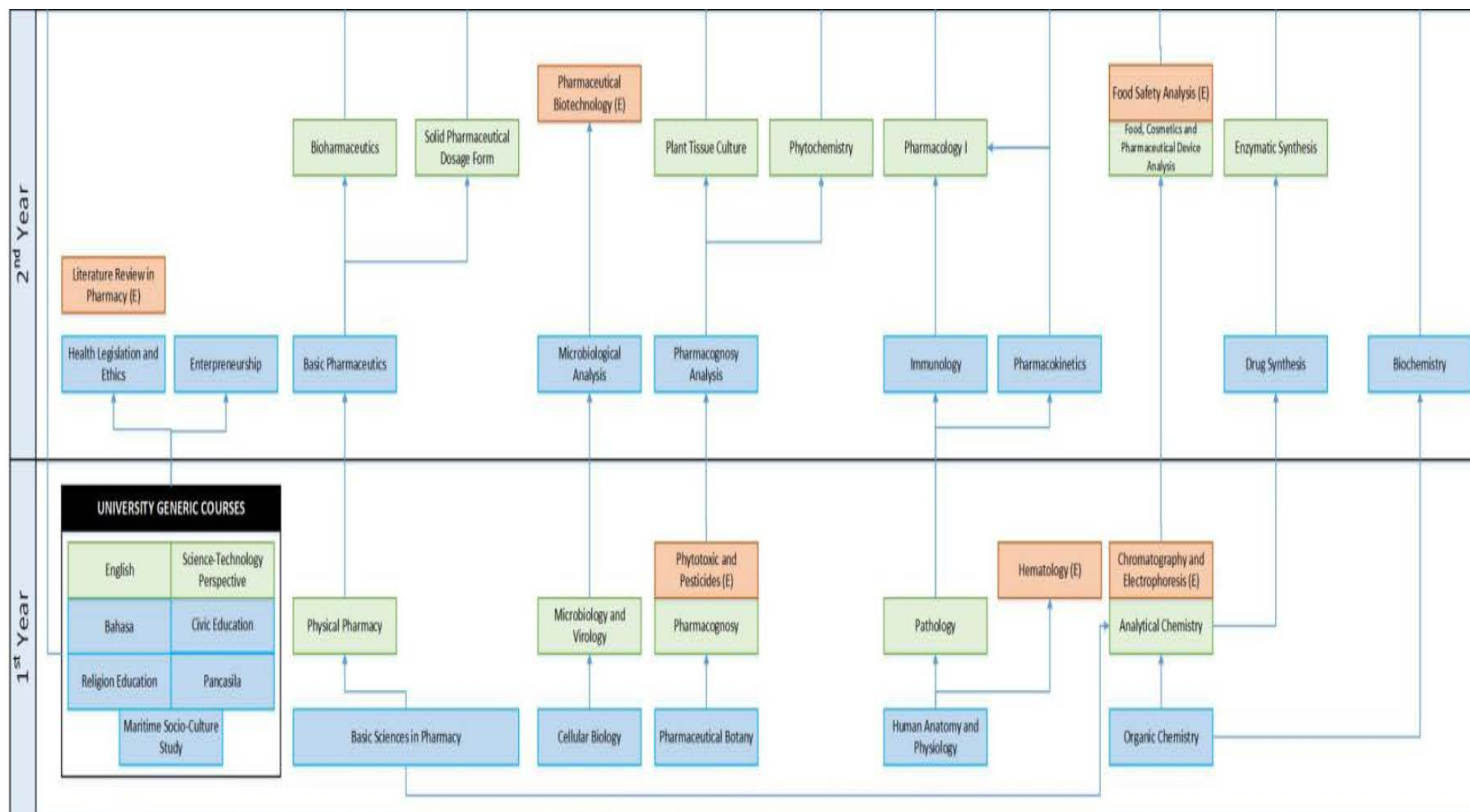
8. Choose a decision based on legal practice, professional conduct and ethics to solve problems related to their competence
9. Develop interpersonal relation with teamwork and be adaptive to dynamic culture and environment.

Competences

10. Conduct well-designed research related to pharmacy and pharmaceutical sciences
11. Apply concepts of pharmaceutical sciences and technologies in designing, formulating and/or developing safe, effective, stable and high quality pharmaceutical products
12. Explore potential therapy based on ethno-medicine and research data from Indonesia natural resources
13. Develop inventive and innovative idea based on science and technology to create and develop business or job

The following **curriculum** is presented:





SEM	CODE	COURSES	SKS	ECTS	ECTS/ SEM
1	00(1-6)3U0032	Religion Education	2	3.4	40.8
	007U0032	Maritime Socio-Cultural Studies	2	3.4	
	009U0032	Bahasa	2	3.4	
	011U0032	Civic Education	2	3.4	
	012U0032	Pancasila	2	3.4	
	101N1103	Pharmaceutical Botany	3	5.1	
	102N1112	Cellular Biology	2	3.4	
	103N1114	Basic sciences in Pharmacy	4	6.8	
	104N1112	Organic Chemistry	2	3.4	
	105N1113	Human Anatomy and Physiology	3	5.1	
2	008U0032	Science-Technology Perspective	2	3.4	30.6
	010U0032	English	2	3.4	
	131N1103	Microbiology and Virology	3	5.1	
	132N1103	Analytical Chemistry	3	5.1	
	133N1103	Pharmacognosy	3	5.1	
	134N1103	Physical Pharmacy	3	5.1	
	135N1102	Pathology	2	3.4	
	146N1122	Chromatography and Electrophoresis (E)	2	3.4	ELECTIVE
	147N1102	Hematology (E)	2	3.4	ELECTIVE
	247N1102	Phytotoxic and Pesticides (E)	2	3.4	ELECTIVE
3	201N1113	Basic Pharmaceutics	3	5.1	39.1
	202N1113	Drug Synthesis	3	5.1	
	203N1113	Biochemistry	3	5.1	
	204N1113	Pharmacokinetics	3	5.1	

SEM	CODE	COURSES	SKS	ECTS	ECTS/ SEM
	205N1112	Immunology	2	3.4	
	206N1102	Entrepreneurship	2	3.4	
	207N1112	Health Legislation and Ethics	2	3.4	
	208N1112	Microbiological Analysis	3	5.1	
	209N1112	Pharmacognosy Analysis	2	3.4	
	216N1112	Literature Review in Pharmacy (E)	2	3.4	ELECTIVE
4	231N1103	Solid Pharmaceutical Dosage Forms	3	5.1	28.9
	232N1103	Phytochemistry	3	5.1	
	233N1103	Pharmacology I	3	5.1	
	234N1102	Biopharmaceutics	2	3.4	
	235N1102	Plant Tissue Culture	2	3.4	
	236N1122	Enzymatical Synthesis	2	3.4	
	237N1102	Food, Cosmetics and Pharmaceutical Device Analysis	2	3.4	ELECTIVE
	246N1102	Food Safety Analysis (E)	2	3.4	
	248N1102	Pharmaceutical Biotechnology (E)	2	3.4	
5	301N1103	Pharmaceutical Analysis	3	5.1	35.7
	302N1103	Liquid and Semi Solid Pharmaceutical Dosage Forms	3	5.1	
	303N1102	Pharmacology II	2	3.4	
	304N1102	Pathophysiology	2	3.4	
	305N1102	Analytical Method Development and Validation	2	3.4	
	306N1103	Bioactive Compound Isolation	3	5.1	
	307N1102	Phytomedicine	2	3.4	
	308N1102	Pharmacotherapy I	2	3.4	
	309N1102	Toxicology	2	3.4	
	316N1102	Solid Dispersion and Dissolution (E)	2	3.4	ELECTIVE

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6	331N1122	Medicinal Chemistry	2	3.4	30.6
	332N1122	Pharmacotherapy II	2	3.4	
	333N1123	Sterile Pharmaceutical Dosage Forms	3	5.1	
	334N1123	Clinical Chemistry	3	5.1	
	335N1102	Traditional Medicine	2	3.4	
	336N1122	Marine Pharmacognosy	2	3.4	
	337N1122	Cosmetology	2	3.4	
	338N1122	Research Methodology	2	3.4	
	339N1122	Advanced Technology in Pharmacy (E)	2	3.4	ELECTIVE
	346N1122	Statistics and Computing (E)	2	3.4	ELECTIVE
7	461N1131	Research Seminar I: Proposal	1	1.7	20.4
	462N1131	Research Seminar II: Results	1	1.7	
	463N1133	Bachelor Student Thesis	3	5.1	
	464N1131	Viva Voce	1	1.7	
	499U004	Student Community Services	4	6.8	
	414N1112	Methods of Pharmacology (E)	2	3.4	ELECTIVE
	415N1112	Nutriceuticals (E)	2	3.4	ELECTIVE
	417N1112	Radiopharmacy (E)	2	3.4	ELECTIVE
	418N1112	Food and Beverage Technology (E)	2	3.4	ELECTIVE
	486N1131	Extracurricular (E)	1	1.7	ELECTIVE