ASIIN Seal

Accreditation Report

Bachelor's Degree Programmes

Aquaculture

Fisheries Product Technology

Veterinary Medicine + Veterinary Profession

Provided by

Universitas Airlangga, Surabaya

Version: 27 March 2026

Table of Content

A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for [1]	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC)[2]
S1 Akuakultur	Bachelor of Aquaculture	ASIIN	ASIIN 28 June 2019 - 30 September 2024	08
S1 Teknologi Hasil Perikanan	Bachelor of Fisheries Product and Technology	ASIIN	-	08
S1 Kedokteran Hewan	Bachelor of Veterinary Medicine	ASIIN	ASIIN 28 June 2019 - 30 September 2024	14
Pendidikan Profesi Dokter Hewan	Veterinary Professional Education	ASIIN	ASIIN 28 June 2019 - 30 September 2024	14
Date of the contract: 25.08.2024 **Submission of the final version of the self-assessment report:** 23.07.2025 **Date of the onsite visit:** 12.-13.11.2025 **at: Campus UNAIR**				
Expert panel: Prof. Dr. Amir Husni, Universitas Gadjah Mada Dr. Angela Schwarzer, Ludwig-Maximilians-Universität Munich Dr. Sonja Kleinertz, University of Bremen Mag. Christian Gruber, VETED Consulting Muhammad Saqif Aulia, student at Universitas Syiah Kuala				
Representative of the ASIIN headquarter: Johann Jakob Winter, M.Sc.				
Responsible decision-making committee: Accreditation Commission for Degree Programmes				

[1] ASIIN Seal for degree programmes
[2] TC: TC 14 – Medicine

Criteria used: European Standards and Guidelines as of May 15, 2015 ASIIN General Criteria, as of December 28, 2023	

B Accreditation Status

Result Overview

The most recent decision for the ASIIN Seal was made by the ASIIN Accreditation Commission on 27.03.2026.

Degree Programmes	ASIIN Seal	Validity
Ba Aquaculture	Accredited with requirements	27.03.2026 – 22.03.2026
Ba Fisheries Product Technology	Accredited with requirements	27.03.2026 – 22.03.2026
Ba Veterinary Medicine	Accredited with requirements	27.03.2026 – 22.03.2026
Veterinary Professional Education	Accredited with requirements	27.03.2026 – 22.03.2026

Fulfilment of the Accreditation Criteria

ASIIN General Criteria / Subject-Specific Criteria	Ba Aquaculture	Ba Fisheries Product Technology	Ma Veterinary Medicine	Veterinary Professional Education
1 Degree programme: Concept, Content & Implementation				
1.1 Objectives and learning outcomes (intended qualification profile)	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.2 Title of the degree programme	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.3 Curriculum	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.4 Admission requirements	**Not fulfilled** Requirement A 1	**Not fulfilled** Requirement A 1	**Not fulfilled** Requirement A 1	**Not fulfilled** Requirement A 1

ASIIN General Criteria / Subject-Specific Criteria	**Ba Aquaculture**	**Ba Fisheries Product Technology**	**Ma Veterinary Medicine**	**Veterinary Professional Education**
1.5 Workload and credits	Fulfilled	Fulfilled	Fulfilled	**Not fulfilled** Requirement A 6
1.6 Didactics and teaching methodology	Fulfilled	Fulfilled	Fulfilled	Fulfilled
2 Exams: System, Concept and Organisation				
2 Exams: System, Concept and Organisation	Fulfilled	Fulfilled	Fulfilled	Fulfilled
3 Resources				
3.1 Staff and staff development	Fulfilled	Fulfilled	**Not fulfilled** Requirement A 3, A 4, A 5	**Not fulfilled** Requirement A 3, A 4, A 5
3.2 Student support and student services	Fulfilled	Fulfilled	Fulfilled	Fulfilled
3.2 Funds and equipment	Fulfilled	Fulfilled	Fulfilled	Fulfilled
4 Transparency and Documentation				
4.1 Module descriptions	Fulfilled	Fulfilled	Fulfilled	Fulfilled
4.2 Diploma and Diploma Supplement	**Not fulfilled** Requirement A 2	**Not fulfilled** Requirement A 2	**Not fulfilled** Requirement A 2	**Not fulfilled** Requirement A 2
4.3 Relevant rules	Fulfilled	Fulfilled	Fulfilled	Fulfilled
5 Quality Management: Quality Assessment and Development				
5 Quality Management: Quality Assessment and Development	Fulfilled	Fulfilled	Fulfilled	Fulfilled

Requirements

For all programmes

A 1. (ASIIN 1.4) Abandon the discriminatory admission restriction for students with colour blindness.

A 2. (ASIIN 4.2) Display the total number of ECTS credits in the final documents and provide information about the credit systems respectively conversion in the Diploma Supplement.

For the Veterinary programmes

A 3. (ASIIN 3.3) Provide a strategic plan how to raise animal welfare standards in accordance with the 5 freedoms principle.

A 4. (ASIIN 3.3) Update the Biosafety and hygiene standards of the pathology dissecting room and its surroundings (e.g. place of delivery), and clinical rooms of the veterinary hospital, and ensure safety via preliminary measures until the update is completed.

A 5. (ASIIN 3.3) Provide a concept for the implementation of a Skills Lab in accordance with international standards for Skills Lab in Veterinary Medicine.

For the DVM programme

A 6. (ASIIN 1.5) Transparently evaluate the student workload and allocate the credit points accordingly.

Accreditation History

Ba Aquaculture

ASIIN Seal	Validity
Initial accreditation with requirements	28.06.2019 - 30.09.2020
Initial accreditation for full duration after fulfilment of requirements	28.06.2019 - 30.09.2024

Ba Fisheries Product Technology

The programme has not been previously accredited by ASIIN.

Ba Veterinary Medicine

ASIIN Seal	Validity
Initial accreditation with requirements	28.06.2019 - 30.09.2020
Initial accreditation for full duration after fulfilment of requirements	28.06.2019 - 30.09.2024

Veterinary Professional Education

The programme has not been previously accredited by ASIIN.

C 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
Bachelor of Aquaculture	S.Pi (Sarjana Perikanan) / Bachelor of Fisheries Science		6	Full time	N/A	8 semesters	145 sks (Indonesian credits) / 232 ECTS	Annual since 2000
Bachelor of Fisheries Product and Technology	S.Pi (Sarjana Perikanan) / Bachelor of Fisheries Science		6	Full time	N/A	8 semesters	145 sks (Indonesian credits) / 232 ECTS	Annual since 2014
Bachelor of Veterinary Medicine	S.KH (Sarjana Kedokteran Hewan) / BVM (Bachelor of Veterinary Medicine)		6	Full time	N/A	8 semesters (Bachelor)	Bachelor : 150 sks / 240 ECTS	Annual since 1972
Veterinary Professional Education	drh (Dokter Hewan) / DVM (Doctor of Veterinary Medicine)		6	Full time	N/A	3 semesters (Professional)	Profession: 37 sks / 59,2 ECTS	Bi-annual since 1972

Contextualisation

Universitas Airlangga (UNAIR) is a public university in the city of Surabaya on the Java island of Indonesia. It was founded as an independent university in 1954 after being established already in 1948 as the medical branch of the University of Indonesia. It is regarded as the second-oldest university in Indonesia and enjoys a high reputation of academic excellence among students, alumni, lecturers, and the industry. Nowadays, UNAIR hosts 16 faculties with more than 30,000 enrolled students. It is ranked as the number 287 in the QS World University Ranking 2024, as well as number 2 in Indonesia and number 52 in the Asian University Ranking. The veterinary education programmes offered by the Faculty of Veterinary Medicine, which have already been accredited by ASIIN in 2019, are considered among the

[3] EQF = The European Qualifications Framework for lifelong learning

best in Indonesia. The Faculty of Fisheries and Marine, which was originally been founded as part of the Faculty of Veterinary Medicine and became independent only later, offers the two other programmes contained in this accreditation cluster. While the Bachelor of Aquaculture programme is subject to the first reaccreditation, the Bachelor of Fisheries Product Technology which has only been implemented in 2014, is subject to international accreditation for the first time.

General assessment

Overall, the experts are highly satisfied with the quality of all four reviewed programmes which produce highly qualified and urgently sought graduates for both the national and international labour market. Positive highlights include the overall programme designs and curricula, the broad involvement of the industry, the university´s data-driven strategic planning and quality assurance system, as well as the qualification, motivation, and engagement of the staff. Room for improvement is found with regard to the use of the ECTS credit system and the corresponding transparency, as well as the development of interprofessional skills and job orientation offers by the university. Moreover, the facilities of the Faculty of Veterinary Medicine need to be urgently improved in terms of animal welfare standards, as well as biosafety, hygiene, and work safety standards and their implementation. Furthermore, it is required to develop a plan for constructing a clinical skills lab which has become crucially important in veterinary education.

Programme profiles

According to the programmes´ educational profile, the Bachelor of Aquaculture programme pursues the mission

1. “To produce graduates who have knowledge and skills in fisheries processing technology to support the development of biopharmaceuticals or pharmaceutical biota,
2. To develop technology and innovation in the utilization of functional food sources and nutraceuticals from fisheries,
3. To contribute to the quality assurance and safety of processed fisheries products through the application of quality management,
4. To advance fisheries processing technology and management based on the fisheries industry.”

According to the programme´s educational profile, the Bachelor of Fish Product Technology programme pursues the mission

1. “To produce graduates who have knowledge and skills in fisheries processing technology to support the development of biopharmaceuticals or pharmaceutical biota,
2. To develop technology and innovation in the utilization of functional food sources and nutraceuticals from fisheries,
3. To contribute to the quality assurance and safety of processed fisheries products through the application of quality management,
4. To advance fisheries processing technology and management based on the fisheries industry.”

The objectives of the Veterinary Education, including both the Bachelor of Veterinary Medicine and the Doctor of Veterinary Medicine programmes, are

1. “Producing high-quality, dignified graduates who are able to integrate, apply and develop veterinary and animal husbandry sciences to be able to compete at the national and international levels.
2. Producing innovative research that can solve problems that occur in society and encourage the development of science and technology in the fields of veterinary and animal husbandry.
3. Producing community service work that can improve the community's ability to identify, formulate and solve problems related to the veterinary and livestock sectors independently and sustainably.
4. Realizing the independence of study programs that are adaptive, creative, and proactive in responding to the demands of developments in science and technology in the field of veterinary and animal husbandry.
5. Developing research-based, entrepreneurial study programs with world-class excellence based on national values, religious morals, ethics, environmental sustainability and animal welfare.”

D Expert Report for the ASIIN Seal[4]

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
- Education guide of the Faculty of Fisheries and Marine
- Guidelines for the implementation of bachelor´s programmes at the Faculty of Veterinary Medicine
- Veterinary Professional Education programme guidelines
- UNAIR strategy website: https://unair.ac.id/en/about-unair-strategic-plan/
- UNAIR tracer study website: https://tracerstudy.unair.ac.id/
- Websites of the study programmes:
    - BaAq: https://fpk.unair.ac.id/en/programs/aquaculture/
    - BaFPT: https://fpk.unair.ac.id/en/programs/fisheries-product-technology/
    - BaVM: https://fkh.unair.ac.id/program-studi-s1-pendidikan-dokter-hewan/
    - DVM: https://fkh.unair.ac.id/profesi-dokter-hewan/
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:

As outlined in the Self-Assessment Report, the programmes´ websites, and the programme guidelines, study programmes at UNAIR are developed and implemented within a clearly defined framework of a programme's vision, mission, and objectives. The resulting graduate profiles and programme learning outcomes (PLOs) are derived from this framework and formulated in accordance with the Indonesian Qualifications Framework and Higher Education Standards. The PLOs of each programme are distinguished by the domains of

[4] This part of the report applies also for the assessment for the European subject-specific labels. After the conclusion of the procedure, the stated requirements and/or recommendations and the deadlines are equally valid for the ASIIN seal as well as for the sought subject-specific label.

attitude, general skills, knowledge, and special skills, as outlined in the appendix of this report. On the level of the individual modules, the PLOs are further distinguished and specified as course learning outcomes.

The corresponding graduate profile of the Bachelor of Aquaculture (BaAq) and Bachelor of Fisheries Product Technology (BaFPT) programmes comprise the roles as managers, entrepreneurs, researchers, and instructors in their respective fields. According to the programme coordinators, the BaAq programme focuses mainly on fish diseases, including fish immunology and parasitology, primarily of freshwater fish but also some marine fish species. The distinguishing characteristic of the BaFPT programme is the specialisation in fisheries biopharmaceuticals with a focus on community welfare. The programme coordinators further explain that the Faculty of Marine and Fisheries, which administers both programmes was originally founded within the Faculty of Veterinary Medicine. Therefore, there is still a strong connection between both faculties, fish programmes also working in medicine-related research domains. The results of the faculty´s tracer study show that the distribution of the graduates across the different profile roles varies over the years. As Surabaya is a centre of the Indonesian aquaculture and fisheries industries, there is high demand for graduates of these programmes which is also reflected in the key figure of the average transfer time for graduates to start a job which, as the tracer study shows, is 2.7 months. The representatives of potential employers and professional organisations confirm during the audit that graduates of both these programmes have manifold employment opportunities, and stress their subject-specific skillsets, strong managerial competencies as well as their ability to adapt to different work environments as outstanding characteristics. However, potential for improvement is seen in the graduates´ competencies regarding digitalisation. Despite that, the experts express their satisfaction with the formulation and the achievement of the PLOs.

For the Bachelor of Veterinary Medicine (BaVM) programme, the graduate profile contains the roles of manager, veterinary and animal husbandry consultant, entrepreneur, and researcher. However, according to the Indonesian education regulations, the Bachelor´s degree does not qualify students for the practical work as veterinary practitioners as these practical skills are only obtained during the Veterinary Professional Education (DVM) programme. Therefore, almost all BaVM graduates directly continue with the consecutive DVM programme. This programme offers the additional graduate profile role as a professional veterinarian and, as tracer study results show, more than 50% of all graduates work as practitioners. Other exemplary fields of occupation, as the representatives of employers explain, are work at the Ministry of Agriculture for vaccine research and production and management of veterinary clinics and companies. 97% of the graduates find a job within six months from graduation, 41% even start directly after completing their studies. While

the overall high satisfaction with the graduates is confirmed, the interviewees mention digitalisation, respectively the use of information technology, soft skills, experience in performing necropsy, as well as the ability to convert research into a product and mass production as potential for further improvement. While the experts consider the latter not the primary objective of the BaVM and DVM programmes, they suggest that the programme coordinators should follow up on the first three points of critique. Despite that, the experts confirm that the defined learning outcomes adequately cover the competence profile of a professional veterinarian.

In terms of a regular review of the programmes, the experts learn during the audit that new national programme standards for programme profiles and curricula are currently being developed, which will then be incorporated in the UNAIR programmes. This process is part of the regular 5-year review cycle obliged by national regulations. For the BaAq programme, the new regulation will likely constitute a shift of the focus towards aquaculture engineering, sustainable aquaculture, and entrepreneurship, while new focus points of the BaFPT programme will be on the importance of the discipline for pursuing Sustainable Development Goals, as well as Artificial Intelligence. For the BaVM and DVM programmes, the eleven one-day competences are supposed to be integrated more extensively, and current gaps in veterinary leadership and one health should be closed. The process to incorporate changes in the programmes also includes the industrial stakeholders as well as the voices of the students, as the experts positively acknowledge. The experts are satisfied with the review system and are convinced that the new national standards can be successfully integrated in the existing programme structures.

In summary, the experts confirm that the objectives and PLOs of the programmes are clearly defined, described briefly and concisely, and are transparently anchored and published in the programmes' regulatory documentation as well as the corresponding websites. The graduate profile is in accordance with the desired competence level of EQF 6 for Bachelor´s programmes, and enables the graduates to successfully take up adequate employment in their respective fields. The experts further confirm that a process for the regular review is in place, which incorporates all relevant stakeholders.

Criterion 1.2 Name of the Degree Programme

Evidence:

- Self-Assessment Report
- Regulatory documentation of all study programmes
- Websites of all study programmes

- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
As the experts confirm, all programme names adequately reflect their respective profiles and curricular contents in line with both national and international denomination standards and definitions. The names in both their original Indonesian version as well as their corresponding English translation are consistently used in all official documents and on all websites. While graduates of the BaAq and BaFPT programmes are awarded the degree of Bachelor of Fisheries Sciences, the degree of the BaVM programme is Bachelor of Veterinary Medicine, and the title of DVM graduates is Doctor of Veterinary Medicine. The experts confirm that the degree titles also correspond to the programmes.

Criterion 1.3 Curriculum

Evidence:

- Self-Assessment Report
- Education guide of the Faculty of Fisheries and Marine
- Guidelines for the implementation of bachelor´s programmes at the Faculty of Veterinary Medicine
- Veterinary Professional Education programme guidelines
- Curricular overview of each study programme
- Module handbook of each study programme
- Objective-module matrix of each study programme
- Statistical data about the progress of studies
- Discussions during the audit

Preliminary assessment and analysis of the experts:
Structure and content

All three Bachelor´s programmes are designed for a regular full-time study duration of 4 years (8 semesters) and comprise 145 Indonesian/ 232 ECTS credit points (BaAq and BaFPT), respectively 150 Indonesian/ 240 ECTS (BaVM). The consecutive DVM programme encompasses 3 semesters during which 37 Indonesian/ 59.2 ECTS credit points need to be achieved. The curricular overviews of all programmes are contained in the appendix.

The curricula follow a modular structure which is classified into compulsory university courses that every (Bachelor´s) programme at UNAIR contains, including e.g. Religion,

Pancasila (Indonesian state philosophy), and Indonesian language, compulsory faculty courses determined by each faculty for their offered programmes, compulsory study programme courses which are the subject-specific core of each programme, as well as elective modules. The specific learning outcomes and teaching contents of each module as well as their relevance and contribution to the overall PLOs are transparently outlined in the module handbook and the objective-module matrix of each programme.

The BaAq programme curriculum integrates foundational sciences, aquatic biology, and specialized aquaculture technologies to develop competencies in fish health, environmental management, breeding, and nutrition. Early semesters emphasize basic biology, chemistry, ichthyology, ecology, physiology, and water quality, forming the scientific basis for advanced topics. Higher-level courses strengthen applied skills in fish pathology, parasitology, hatchery technology, genetics, feed technology, aquaculture management across freshwater, brackish, and marine systems, and aquatic biotechnology. The experts confirm that the curriculum covers all relevant aquaculture topics.

The BaFPT programme focuses on the science, engineering, and technology behind fisheries post-harvest handling and processing. Students begin with core natural sciences and introductory fisheries science before progressing into specialized subjects such as materials science of fisheries products, handling and preservation technology, food chemistry, microbiology, bio-pharmaceutical aspects, and factory layout. Advanced semesters emphasize product diversification, packaging, industrial management, waste and by-product utilization, biotechnology, thermal and fermentation processing, sanitation, hygiene, and quality assurance. While the experts are generally satisfied with the curriculum, they wonder why the module “Fishery law and policy” which is contained in the BaAq programme as an elective, is not contained in this programme. The experts find this to be a relevant topic for this programme and therefore recommend UNAIR to provide access to this module for BaFPT students.

The curriculum of the BaVM programme provides a comprehensive foundation in animal structure, function, pathology, and disease, combining biomedical sciences with applied veterinary skills. Students progress from basic anatomy, embryology, histology, biochemistry, and physiology to parasitology, bacteriology, mycology, virology, pathology, toxicology, and pharmacology. Clinical competency is developed through courses in diagnostic methods, counselling, feed technology, and species-specific health and management. The sequential structure reflects a strong integration of laboratory practice and theoretical learning to develop scientific reasoning, diagnostic abilities, and an understanding of animal health, welfare, and production systems. While the BaVM programme constitutes the academic component of veterinary education in Indonesia, the DVM programme is the consecutive clinical part. It focuses on clinical immersion, professional competencies, and

practical skills required for veterinary practice. While detailed modules are contained within the professional phase, the curriculum typically emphasizes rotations across major and minor animal clinics, surgery, internal medicine, reproduction, pathology, public health, and field practice. Students develop hands-on diagnostic, therapeutic, and case-management skills, strengthened by direct engagement with animal owners, clinical records, and interdisciplinary health settings.

In terms of practical components, the BaAq and BaFPT programmes both contain internships in the seventh semester, which refer to practical and research-oriented work in companies related to the respective fields. In the veterinary education, the practical training in the form of a clinical rotation at the university´s animal farms and veterinary clinic is reserved for the DVM programme, while, in the BaVM programme, practice is integrated only via laboratory practicums in some modules. An additional practical activity is the community service, which is mandatory for all Bachelor students in Indonesia. Students participate in projects that benefit community development, usually related to the development of rural areas of the country, and apply the skills obtained during the studies up to that point.

During the on-site visit, the experts discuss various aspects of the curricula with different stakeholders of the university and conclude that the curricula are generally well-designed for students to achieve the targeted skillsets. It becomes clear which knowledge, skills, and competences the students acquire in each module, and the experts confirm that the curricula enable the students to achieve the PLOs. This is also confirmed by the statistics on academic success which show that the majority of students is able to graduate within the designated study period, as well as by the students and stakeholders on site. One exception is the BaFPT programme for which the average study duration is 4.4 years compared to 4 years regular study time. The programme coordinators explain that the data collection for the Bachelor´s theses used to be a problem leading to study delays in this programme which has been solved within the last curriculum review. Exemplarily, the MBKM programme is mentioned (see chapter student mobility) which allows students to already get to know companies and other institutions that could potentially serve as partners for the thesis which eases the data collection process. Data from the last cohorts show that the delays have been reduced; however, due to the data of older cohorts in the average, the value still notably exceeds the standard period of study. The experts are satisfied that the university has already constructively addressed this issue.

In summary, the experts confirm that the curricula of all programmes are well-structured, allow for individual focus points via elective modules, and include practical education in the form of internships and laboratory practice to a reasonable extent. Module-level learning outcomes are clearly defined and clearly linked to the PLOs.

Internationalisation and student mobility

According to the Self-Assessment Report, UNAIR provides its students with different opportunities for student mobility. Nationally, students are allowed and encouraged to take part in the Kampus Merdeka (MBKM, Independent learning campus), a national initiative that promotes student learning activities outside the home campus of the students. This includes, e.g. the possibility to complete modules at partner universities, participate in research projects, or do additional internships. MBKM activities are supervised by a coordinator of the programme to ensure that the respective learning outcomes are targeted, and credits can be recognised.

Moreover, UNAIR actively promotes international student exchanges and, as statistics on student mobility contained in the Self-Assessment Report, implements both inbound and outbound student exchanges mainly with universities in Malaysia and Vietnam. For the BaVM programme, there are also some partnerships in Europe already, and the programme also offers an international class which is fully taught in English and additionally attracts and facilitates hosting international students at UNAIR. As the programme coordinators explain, a crucial challenge for the implementation of exchanges is the difference in lecturing periods internationally. In response to this issue, UNAIR targets the implementation of new joint programmes with partner universities that allow short-term on-site exchanges of students and lecturers during the semester break and are complemented by hybrid sessions during the regular semester time. Moreover, summer schools present a well-used opportunity for inbound mobility. Nevertheless, limited capacities as well as the high financial cost of implementing the mobility are still limiting factors; however, the students are generally satisfied with the university´s support system for mobility and the experts get the impression that UNAIR is strongly engaged in further advancing the internationalisation and mobility opportunities.

In summary, the experts conclude that UNAIR promotes student mobility through an appropriate framework and encourage the university to further pursue this path of internationalisation which provides essential experience for students.

Periodic review

As explained in the Self-Assessment Report, all programmes have a regular review interval of five years. These reviews consist of a formal process that involves all relevant stakeholders of the programmes and target major adjustments of the programmes as a whole, if necessary (see also chapter 1.1). Minor changes to the curricula can also be made independently from these period reviews and, as the programme coordinators confirm during the on-site visit, are incorporated based on the feedback gathered through different quality assurance instruments, including the tracer study, student surveys, and direct feedback of

industrial partners. The experts recognise that UNAIR has regularly and transparently reviews the curricula to adjust them to recent changes in the disciplines, incorporate stakeholder feedback, and improve the academic learning experience of the students to successfully complete the programmes within the designated study period.

Criterion 1.4 Admission Requirements

Evidence:

- Self-Assessment Report
- UNAIR admission procedure guidelines
- UNAIR academic guidelines
- UNAIR admission website: https://iup.unair.ac.id/prospective-students/admission/
- Statistical data on the progress of studies
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
As regulated in the admission procedure guidelines, the university-level student admission centre is responsible for administering the student selection and admission procedures which are strongly regulated by the Indonesian Ministry of Research, Technology, and Higher Education. The baseline requirement for Bachelor applicants is the graduation from a high school or an equivalent secondary education institution, dating back no longer than three years. The selection scheme for Bachelor´s programmes offers three pathways according to annually pre-determined quotas:

- National achievement-based selection: students´ high school grades and achievements as admission criteria
- National test-based selection: standardised computer-based tests to assess cognitive potential, mathematical reasoning, and literacy in Indonesian and English as an admission criterion
- Independent university admission: pathway open to students who were not admitted based on the above pathways. The criterion is a subject-specific academic capability test, depending on the study programme

International applicants can apply to UNAIR within the independent selection pathway and have to additionally pass an entry interview. For students interested in the international class of the BaVM programme, there are additional procedural and qualification-related requirements, including proof of English language proficiency.

Moreover, students can also transfer to the programmes at UNAIR from related programmes at other universities under conditions outlined in the academic guidelines. Also, UNAIR allows for a one-time transfer between study programmes. Credits obtained for equivalent modules, as demonstrated by the students´ credentials and university documentation, can be recognised. The selection of transferring students as well as the independent pathway is administered by an independent university committee.

The experts are generally satisfied with the admission regulations and also appreciate the commitment to non-discrimination which is contained in the regulations and affirmed by the university representatives during the audit. This includes e.g. the support of students from minority groups and students from economically limited families with tuition waivers and scholarships. However, they are concerned about the regulation of a maximum age cap of 25 years for Bachelor´s applicants. The university argues that this is connected to the regulation about the timely completion of a high school diploma. However, the experts consider this as a discrimination of age, given that a high school equivalent diploma could also be obtained later or differently than via the regular secondary school education as an adolescent, especially for students from economically less developed regions. Therefore, they require UNAIR to abandon this regulation as the university must not exclude students and applicants based on their age.

For the DVM programme, students must have successfully completed a Bachelor programme in veterinary medicine, and most of the BaVM graduates directly continue the professional programme at UNAIR. As the programme coordinators explain, the programme would also accept graduates from other universities. However, as these programmes belong together, a change of university is uncommon in Indonesia and therefore rarely happens. Nonetheless, UNAIR´s DVM programme has more students per year than the BaVM programme because the university has an associated minor branch in the city of Banyuwangi in East Java which hosts only a BaVM programme but no own DVM programme. Graduates from this programme therefore usually join the UNAIR DVM programme.

The application system is administered via the university´s information system and procedural information as well as schedules are published on the admission website. For Bachelor´s programmes, the selection process takes place once per year in June for the following academic year starting in August. In contrast, students can start the DVM programme twice per year, which is supposed to provide more flexibility and accommodate minor delays in the completion of Bachelor´s degrees.

The capacity, number of applications, and number of enrolled students of the BaAq and BaFPT programmes are displayed in the following table taken from the Self-Assessment Report:

Academic Year	Capacity		Number of Applicants		Number of registered students	
	BoAq	BoFPT	BoAq	BoFPT	BoAq	BoFPT
2021/2022	160	140	826	603	159	139
2022/2023	160	140	789	753	166	133
2023/2024	160	140	509	519	153	128

The experts are satisfied to see that the programmes use their capacities well, but, despite the still high demand, wonder about the apparently declining interest in these programmes. According to the university representatives, this trend is apparent all over Indonesia as medical programmes have become more popular. Also, the foundation of more aquaculture and fisheries programmes at other universities has increased the competition among universities in this subject. The programmes have therefore increased their efforts to advertise the disciplines already in senior high school and vie the use of social media.

For the Faculty of Veterinary Medicine, the student numbers are displayed in the following tables:

Academic Year	Bachelor of Veterinary Medicine			Veterinary Professional Education Program		
	Capacity	Number of Applicants	Number of Registered	Capacity	Number of Applicants	Number of Registered
2021/2022	210	1437	205	300	274	274
2022/2023	210	1771	205	300	242	242
2023/2024	270	1608	267	300	269	269

Given the high demand of the industry, the experts are satisfied to see that UNAIR has increased its capacity in the BaVM programme, which is also in high demand by students from all over Indonesia. They also positively comment on the strategy of providing a higher number of places in the DVM programme to give more flexibility to the students and reduce waiting times.

However, looking at the statistical data about the progress of studies, the experts notice drop-out rates of up to 20% in the BaAq and BaVM programmes which surprises them given UNAIR´s good reputation and the high demand by students. The programme coordinators explain that these dropout rates are not unusually high. The reason for the considerable number of dropouts is that the regular admission pathways are not subject-specific but general and students then apply with their high school or admission test scores. Admitted students with good scores then tend to choose the programmes which are more in demand even though these programmes do not necessarily suit their interests, and many therefore switch after some time. UNAIR has already implemented measures to counter this trend, e.g. in the form of study orientation and advisory services. However, as not all applicants make use of them, the problem still prevails. The experts recognise UNAIR´s efforts as well as the limitations for further selective measures given the regulation of the admission scheme by the ministry. Nevertheless, they suggest further improving the study advisory services and seek to also include subject-specific criteria in the general admission tests to improve the selection of students who are interested and qualified for the specific disciplines.

In summary, the experts confirm that UNAIRS admission requirements and procedures are binding, transparent, and generally ensure sufficient prior qualification of the students. Still, the university should try to establish further measures for a subject-specific student selection to avoid costly dropouts. The experts further confirm that rules for the recognition of qualifications achieved externally are clearly defined and facilitate the transition between higher education institutions without jeopardising the achievement of learning outcomes at the desired level. However, the experts consider the maximum age cap for Bachelor´s applicants to be discriminatory and therefore require abandoning these regulations.

Criterion 1.5 Workload and Credits

Evidence:

- Self-Assessment Report
- Module handbook of each study programme
- Workload assessment survey for each study programme
- Statistical data about the progress of studies
- UNAIR credit transfer system guideline
- UNAIR study regulation

- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
To monitor and quantify the study progress and achievement, UNAIR employs the Indonesian SKS credit system. The BaAq and BaFPT programmes have a regular full-time study duration of 4 years (8 semesters) during which 145 SKS credits, equivalent to 232 ECTS credit points, need to be accomplished. The BaVM programme comprises 150 SKS credits respectively 240 ECTS credit points spread over 8 semesters, while the consecutive DVM programme encompasses 3 semesters during which 37 SKS credits, transferred to 59.2 ECTS credit points, need to be achieved. The number of credits students are supposed and allowed to take depends on their performance in terms of the GPA of the previous semesters. Each semester consists of 16 weeks of structured learning activities, including one week for mid-term and one week for final examinations each. As the experts confirm, the programme-specific content of all programmes meets the minimum requirement of an equivalent of 180 ECTS credits for a Bachelor´s degree.

The SKS credit system accounts for all types of learning activities, including the independent study load, and all compulsory parts of the curriculum are credited. As explained in the UNAIR study regulations, one credit is defined as follows:

“Semester Credit Units, hereinafter referred to as credits, are award units on the learning experience gained during 1 (one) semester through scheduled activities per week, as much as 1 (one) hour lecture/tutorial, or 2 (two) hours of practicum, or 4 (four) hours of field work, each of which is accompanied by 1-2 (one to two) hours of unscheduled structured activities and 1-2 (one up to two) hours of independent activity. 1 (One) face-to-face meeting is equivalent to 50 (fifty) minutes.”

Given this definition, the number of credits per lecture hour is higher than for practical activities which explains the comparatively low number of credits allocated, e.g., to the internship, field work, and the Bachelor´s thesis, and the corresponding imbalanced number of credits over the semesters. Based on these explanations during the audit, the experts also understand why the number of credits of the DVM programme is low (approximately 12 per semester) compared to the Bachelor´s programmes (approximately 18 per semester), although the workload in the professional programme is very high and not lower than in the BaVM programme, as the students explain.

What is problematic in that regard is that this difference in the credit allocation depending on the type of learning activity is not accounted for in the credit conversion policy applied by UNAIR. For the programmes under review, as outlined in the Self-Assessment Report, one credit for lectures is set to account for 170 minutes (50 minutes of class, 60 minutes of structured activity, and 60 minutes of independent study) times 16 lecture weeks, making

it a total of 45 working hours per SKS credit. This policy takes 28 hours per ECTS credit as reference value and, therefore, applies a fixed conversion rate of 1.6 ECTS credits per SKS credit, which is applied to all modules independent of the type of learning activity employed. However, given the difference in the SKS credit definition for different learning activities, this conversion does not fit modules that contain non-lecture parts. As a result, the ECTS numbers do not correctly reflect the actual student workload.

Therefore, the experts see the necessity to correct the ECTS credit calculation, which is crucial to ensure international comparability, credit transfer, and recognition. They stress that, given the difference of the SKS credit definition depending on the type of learning activity, a fixed conversion rate does not work. The relevant starting point for the ECTS allocation must be the total student workload per module, including all structured and independent learning activities, regardless of their kind of work, exam and exam preparation, as well as course organisation. Based on this total number of working hours, the number of ECTS credits can be determined. As demonstrated by the workload assessment study results, UNAIR has already implemented a structured and detailed system for the evaluation of the student workload, which is the basis for the correct allocation of the ECTS credits.

Independent of the credit conversion, the experts inquire about the adequacy of the student workload and are satisfied that the students confirm the overall picture given by the workload surveys, which states that the workload is high but manageable across all programmes. Filling out the online workload survey every semester is mandatory for every student, as otherwise the exam grades are not shown in the academic information system, which results in a good data basis. The statistical data on the progress of studies also shows that it is generally possible to complete all programmes within the designated time frame and that, if delays happen, they usually do not exceed more than one or two semesters. Moreover, the students confirm that their workload distribution is discussed in forums and student hearings with their academic advisors and the faculty management, and that adjustments are made if necessary.

In summary, the experts confirm that UNAIR employs a workload-based credit system that incorporates both the structured and independent study load. All compulsory components of the programmes are credited, and the workload generally appears to be realistic and reasonably distributed, which is verified by means of workload surveys. However, as the definition of one SKS credit point in terms of working hours varies depending on the type of module, the currently applied fixed ECTS conversion rate does not result in correct ECTS credit numbers which can be problematic for the recognition of the students´ achievements. Therefore, the experts require UNAIR to current the ECTS credit allocation which

needs to be based on the total student workload per module, independently from the employed learning activities.

Criterion 1.6 Didactic and Teaching Methodology

Evidence:

- Self-Assessment Report
- List of student achievements of each programme
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, all Bachelor´s programmes at UNAIR apply a student-centred learning approach to enhance student engagement, critical thinking, and practical skills. Module formats include lectures, tutorials, and practicums in laboratories, in which methods like case studies, problem-based learning, and project-based learning are applied. Moreover, the university also encourages cooperative learning through group projects, discussions, and presentations. However, in this regard, multiple stakeholders state that aspects of interpersonal skills, interprofessional collaboration, communication, and digitalisation still need to be further improved to meet the current demands of the industry. This is also confirmed by the students, and the BaAq students in particular express their preference for a stronger data-driven focus both as teaching content and methodology, the integration of data-driven methods like smart farming, automation (use of software), and AI. Therefore, the experts recommend better supporting the development of professional communication and interpersonal skills, including also digitalization as subject and methodology of teaching.

To foster the knowledge transfer from the university to practice, the BaAq and BaFPT programmes incorporate an internship (field studies) each during which students gain hands-on experience in related industries or institutions. The internship partner companies are associated with UNAIR through Memorandums of Understanding, and students have both a field supervisor of the company and an academic supervisor of the university to ensure an adequate framework and conditions for achieving the targeted learning outcomes. Students can choose their internship places from the list of partners or propose other companies, which are then checked by the university. During the on-site visit, the representatives of potential employers and professional organisations stress the importance of these internships to familiarise the students with the practical work in companies which, as they report, does not always correspond with the expectations of the students.

In veterinary education, the practical instruction for students to professionally treat and work with living animals is reserved for the DVM programme, while the BaVM programme emphasizes the theory and laboratory practice. While the experts consider the separation of the academic stage and the professional stage in veterinary education to be generally suitable, they nevertheless emphasize the necessity of BaVM students to get practical hands-on training of different treatments before applying them to living animals. In that regard, they criticise that the university currently does not have a clinical skills lab which is a standard facility to introduce students to the practical skills and give them opportunities for individual practice (see also chapter 3.3).

E-learning is integrated through the university´s digital platform Universitas Airlangga e-Learning Application (AULA), allowing synchronous and asynchronous learning. Many teachers also use a combination of traditional classroom-based learning and digital methods, e.g. in the form of the flipped classroom approach. Interactive learning is encouraged by the use of information technology and various platforms like Zoom, Google Meet, Massive Open Online Course (MOOC), and YouTube. In terms of the use of digital and hybrid teaching, the lecturers express their wish for more flexibility. Currently, the university requires at least 50% face-to-face teaching in every module. However, for some modules, especially if many guest lecturers are involved, the allowance of a higher share of digital teaching would help them. The experts generally agree but also stress the importance of face-to-face learning. Therefore, they do not give a general recommendation in that regard but express their support for the lecturers to address this matter through UNAIR´s internal quality assurance and programme development mechanisms.

In terms of research, all programmes include a compulsory module of research methodology in preparation for the research proposal and Bachelor´s thesis. The BaAq and BaFPT programmes also offer an additional elective module called “Academic writing and presentation”. Besides that, UNAIR includes the research reference by means of independent projects, and international exposure through collaborations with foreign universities, guest lectures, and student mobility programmes. In that regard, the students are also actively encouraged and supported to participate in student research projects and academic competitions. As demonstrated by the list of student achievements, there is the possibility of recognising these achievements as additional credits.

In summary, the experts confirm that all programmes employ a variety of teaching methods and didactic means to promote achieving the learning outcomes. The distribution of digital to face-to-face teaching is, overall, deemed reasonable. Students are adequately introduced to the methodologies and applications of scientific research and, through internships, also gain insights into the practical application outside of the university. However, in that regard, the experts criticize the lack of a skills lab for veterinary students which is a

crucial instrument for individual practice of core procedures. Besides that, the experts recommend to better include communication skills, interprofessional aspects, and digitalisation in the teaching methodology. The teaching methodology is evaluated every semester as part of the regular module surveys.

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

Criterion 1.1

In its statement, UNAIR describes multiple instruments in terms of teaching methods and contents that are already used and shall be strengthened in the future to improve the graduates´ competences regarding digitalisation, which was mentioned as weakness of all programmes by the industrial representatives. The experts are satisfied with these plans.

Criterion 1.3

Regarding the module of "Fishery law and policy", UNAIR explains that this was removed as a compulsory module from the BaFPT programme during the las curriculum review process. However, the module can still be accessed via the MBKM programme. The experts are surprised that the stakeholders deem this module to be of little importance but decide not to formalise a recommendation, given that this change has been made as part of the regular curriculum review process. Nevertheless, they would deem it important to inform the students about this module and its relevance.

Criterion 1.4

Regarding the age cap for the admission, UNAIR links its admission website where no hard age cap of 25 years is outlined any more. However, there is still the constraint, that the high school diploma must date back no longer than three years which potentially excludes students that may have worked or done vocational training after their high school graduation and want to pursue higher education based on this experience. The experts understand that this regulation is based on the national selection procedure regulations which cannot be changed independently by UNAIR. Nevertheless, they stress the importance of this point and highlight the opportunities and potential benefits of having Bachelor´s cohorts with mixed age and different levels of professional experience. Thus, they reformulate the initial requirement.

Besides that, the experts notice that, on the admission website, total "no colour blindness" is outlined in the specific requirements for all three Bachelor´s programmes. As this is clearly discriminatory, the experts include a new requirement to abandon this restriction.

Furthermore, UNAIR provides explanations regarding the origin of drop-out students and the measures at different university levels to reduce the number of drop-outs and facilitate the students´ transition from secondary to higher education which have already resulted in improvements of the situation. The experts positively acknowledge that UNAIR is aware of the importance of this matter and continues to make the system more efficient.

Criterion 1.5

Regarding the ECTS credit allocation, UNAIR explains how the number of credits for the practical modules, including the internship and thesis, is allocated and converted according to the designated workload numbers. While these numbers appear realistic and are to the experts´ satisfaction, the experts stress the importance of continuously monitoring whether the actual student workload corresponds to these estimates. However, what is not addressed in the statement is the discrepancy of credits per semester between the Bachelor´s programmes and the DVM programme. As the professional students have a high workload which is not less than in the Bachelor´s programmes, the considerably lower number of credits in this programme does not accurately reflect the workload. It appears that a different number of working hours is used as basis for each credit point in professional programmes. If this is the case this must me transparently outlined in the university regulations, and also the ECTS conversion factor needs to be adapted accordingly. Therefore, the experts specify the initial requirement for the DVM programme to transparently evaluate the student workload and allocate the credits accordingly.

Criterion 1.6

Concerning the development of soft skills, including interpersonal and interprofessional collaboration, UNAIR describes how this is included in the current teaching concept. However, this view does not show in the interviews with different stakeholders. Hence, there might be a need for either offering more or other content in social skills training, or making the existing offer better visible (e.g., by giving out the description and level of skills, UNAIR has „embedded“ in their curriculum, and how the achievement of skills is verified), or even both. Therefore, the experts sustain their initial recommendation.

Final assessment

The experts are generally satisfied with the structural and content-wise design of all programmes under review. However, the admission criteria remain a point of criticism that needs to be addressed. Some of the doubts regarding the credit allocation have been dispelled but the discrepancy in the credit allocation between the undergraduate and the professional programme remains and needs to be clarified.

Overall, the experts consider this criterion to be **almost fulfilled**.

2. Exams: System, Concept and Organisation

Criterion 2 Exams: System, Concept and Organisation

Evidence:

- Self-Assessment Report
- Education guide of the Faculty of Fisheries and Marine
- Guidelines for the implementation of bachelor´s programmes at the Faculty of Veterinary Medicine
- Veterinary Professional Education programme guidelines
- UNAIR academic guidelines
- Thesis writing guideline Faculty of Veterinary Medicine
- Undergraduate thesis handbook Faculty of Fisheries and Marine
- Sample assessment form
- Examples of field work practice reports of all study programmes
- Examples of exams and final theses of all study programmes
- Statistics on the progress of studies
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:

The standard procedures for assessment of students´ process used in all study programmes are outlined in UNAIR´s academic regulation. In addition, there are faculty respectively programme-specific examination regulations in the educational guidelines. Each structured module is assessed by multiple examination components to cover all aspects of the PLOs. Fix exam components are a mid-term and a final exam, for which the dates are centrally scheduled by the university and published in the academic calendar for each semester. Besides these, every lecturer is responsible for the selection of complementary examination forms such as quizzes, projects, presentations, and homework assignments. The examination forms and their weight for the final overall grade are specified and transparently outlined in the module descriptions. Moreover, as the students explain during the on-site visit, the examination forms and dates are explained and discussed in the first class of each module, and subsequently formally agreed upon in a semester learning plan/ course contract. Overall, the students express their satisfaction with the high but manageable exam workload and stress that especially the “silent” study week which does not contain additional lectures helps to manage the workload. Feedback on the exams and associated processes can be given via the regular module surveys.

In the BaAq programme, the primary examination forms include written exams (midterm and final), group presentations, assignments, and practical reports. Students are assessed through a combination of theoretical and applied components, particularly in modules involving fish nutrition, hatchery technology, and aquatic environmental management. The use of problem-based learning and project work is common, especially in later semesters, supporting students' entrepreneurial and research skills.

The BaFPT programme employs a similar range of assessment methods, with a strong emphasis on lab-based practicals, group projects, and written exams. Due to the technological and innovation-driven nature of the programme, students often complete research-based assignments, conduct quality evaluations of fishery products, and present case analyses. Assessment strategies aim to verify students' ability to apply processing technology, quality control, and functional food development in real-world contexts.

For the BaVM programme, the main examination forms combine theoretical assessments with practical and research-oriented evaluations. Students are assessed through written exams (including multiple-choice, essays, and short-answer formats), lab practicals, oral presentations, and project-based assignments. Many modules integrate practical laboratory work, requiring students to submit lab reports and perform tasks under supervision. In contrast, in the DVM programme places a strong focus on professional competencies and consists mainly in the clinical rotation. Therefore, the assessments are more clinically oriented, including objective structured clinical examinations (OSCEs), simulations, and case presentations. These are complemented by traditional written exams, oral tests, and daily logbooks during clinical placements.

During the on-site visit, the experts review exemplary written examinations of the students and confirm that they are suitable to determine the competence attainment of the students and adequately cover the relevant topics of the competence level of EQF 6 for Bachelor´s degrees. They are satisfied that all programmes also contain practical skills assessments, and stress especially the importance of OSCEs in the DVM programme.

As the experts also acknowledge, the educational guidelines also contain provisions regarding fraud, plagiarism, and academic integrity. As exemplarily evidenced by assessment forms, grading is transparently done, which is also confirmed by the students. The following scale is applied:

Minimum Mark	Grade	Numerical Score	Qualitative Description
86-100	A	4	Exceptional
78 - 85.9	AB	3.5	Excellent
70 - 77.9	B	3	Good
62 - 69.9	BC	2.5	Satisfactory
54 - 61.9	C	2	Sufficient
40 - 53.9	D	1	Poor
< 40	E	0	Fail

In order to be admitted to take the final exam of a module, UNAIR requires a minimum attendance of 75% in theoretical classes and 100% in practicums. As there are usually multiple sessions of each practicum, students who miss one can attend another one and there appears to be no problem with this regulation. If students fail or miss the final exam for valid reasons, they are allowed to submit a follow-up exam. According to the Self-Assessment Report, valid reasons are if the student is sick and proven by a doctor's note, participation in student activities that are permitted by the Director of Student Affairs of Universitas Airlangga or the Dean, and other reasons permitted by the Dean. As the students explain during the audit, these follow-up exams are usually organised within only few days of the original exam date. If the exam is missed for other reasons, students have to take the module again at a later point in time. However, as the students explain, there is also the opportunity to use the so-called “intermediate semester” break to repeat exams that were failed and thus avoid a delay in the study time. The intermediate semester is organised during the summer break, comes at an extra cost, and offers students the chance to repeat exams or whole modules. Students can repeat not only failed exams but also passed exams if they want to improve their grades. Overall, the students express their satisfaction with the exam system and the opportunities to retake exams which pleases the experts. This overall satisfaction is also reflected in the statistics on academic success which show that students are in principle and in the majority of cases, able to complete the programmes within the designated study period.

In all programmes, the field work practice is assessed based on a report submitted to a supervisor and a consecutive oral examination. Moreover, all Bachelor´s students have to write a final thesis under the supervision of at least one (BaVM) respectively two (BaAQ and BaFPT) lecturers as the final examination component of the programmes. The thesis needs to be orally defended in front of a defence committee. Students have to propose their research interests, and the department maps their preferences with the available expertise of faculty members to determine the topics. Both faculties have established clear

guidelines for the theses which outline both content-wise, methodological, as well as formal provisions. On site, the experts also examine examples of final theses and are satisfied with their overall quality. However, they note that, for these topics which are based on experiments with living animals, there is no documentation of a review respectively approval of the experimental design by an Animal Ethics Committee, which, as the academic staff explains, is in place at the level of the university. The involvement of this committee and the respective documentation is crucial for the international recognition and publication prospects of any research, including Bachelor´s theses, and the experts therefore require UNAIR to appropriately document the involvement of the Animal Ethics Committee in the final theses.

After successfully completing all modules respectively rotations of the DVM programme, students must pass the National Competency Examination to be awarded the DVM title. This exam takes place four times per year and consists of a theoretical computer-based test and a practical OSCE component. The high success rate of almost 100% shows the quality of the DVM education and UNAIR.

In summary, the experts confirm that all programmes employ module-specific exams which are well-suited to assess the extent to which the defined learning objectives have been achieved. The Bachelor´s programmes include a final thesis which demonstrates that the students are able to work independently. The examination processes are organised well and transparently regulated by the educational guidelines, including rules for re-take exams. The suitability of the exams is regularly reviewed based on student feedback and the exam results.

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

As part of the statement, UNAIR submits further information regarding the composition and procedures of the university-level Animal Ethics Committee. The experts are satisfied with the constitution of this committee and the presented example of an ethical approval report. Given that, they acknowledge UNAIR´s explanation that this will be documented as part of the theses from now on and consider the requirement to be sufficiently addressed. Nevertheless, the experts wonder why the committee is established at the faculty level only as other faculties (e.g. medicine) also use live animals for research. Therefore, they suggest establishing a university wide protocol in that regard.

Final assessment

The experts are satisfied with UNAIR´s examination system and its implementation. They also confirm UNAIR´s adequate involvement of the Animal Ethics Committee for the clearance of research projects, including Bachelor´s theses.

Overall, the experts consider this criterion to be **fulfilled**.

3. Resources

Criterion 3.1 Staff and Development

Evidence:

- Self-Assessment Report
- Staff handbooks of all study programmes
- Inbound and outbound adjunct professor cooperation agreements
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
UNAIR´s academic staff is classified by four different academic ranks: professor, associate professor, assistant professor, and lecturer, all of which come along with different responsibilities and workload distributions. The regular lecturer workload is 12 to 15 credits per semester, distributed over the tridharma duties of teaching, research, and community service. Furthermore, the staff have to engage in university committee work as well as administrative and support tasks. The number of staff involved in the teaching of all programmes is displayed in the following table taken from the Self-Assessment Report:

	BoAq	BoFPT	BoVM	DVM
Academic position	Number of Lecturers			
Professor	6	6	38	22
Associate Prof.	6	7	10	11
Assistant Prof.	17	5	18	8
Lecturer	2	7	18	12
Total numbers	31	24	84	53

The resulting staff-student ratios are 22:1 in the BaAq programme, 23:1 in the BaFPT programme, 14:1 in the BaVM programme, and 14:1 in the Faculty of Veterinary Medicine.

These full-time staff are complemented by guest lecturers from both partner universities and related industries. The staff numbers are compliant with national standards, and as the students also report of good supervision and support by the staff, the experts confirm that the staff numbers are adequate to ensure qualitative teaching in all programmes. Detailed profiles of all staff members, among others, including module responsibilities, academic career, employment history, research interests, and publications, are outlined in the staff handbooks. In that regard, the experts find that, for the BaFPT programme, the number of staff members with core expertise in this discipline is very limited and therefore recommend increasing the staff that is related to the core field of fisheries product technology.

The minimum qualification to be eligible for teaching in a Bachelor´s programme is a Master´s degree. However, as the experts positively acknowledge, the majority of staff members are PhD holders, and multiple staff members are currently pursuing their PhD degrees. To ensure that the lecturers´ qualifications align with the programme objectives, the lecturers´ performance is evaluated annually through the "Employee Performance Target" review and every semester through the "Lecturer Workload Report". The feedback of the students on the lecturera´ performances given as part of the student surveys is considered.

In terms of continuous development, all new staff members have to complete two mandatory lecturer trainings aiming at ensuring the pedagogic competence of the staff. Furthermore, the university supports lecturers to achieve the Indonesian national lecturer certification, as well as subject-specific extra certifications like, e.g. halal supervision. Other development offers, as the lecturers report during the on-site visit, include workshops on teaching topics like the design of interactive classes and digital teaching. Moreover, both Faculties have multiple cooperation agreements with international universities, among others in Malaysia, Japan, and Thailand, that enable inbound and outbound staff exchanges for guest lecturing and research cooperations. Although these cooperations are currently limited to Eastern Asia, and the staff would like to have more opportunities to go to Europe and the Americas, the experts still positively highlight the support for staff internationalisation. While the staff members are highly satisfied with their academic development opportunities, the staff of the Faculty of Fisheries and Marine state that, overall, the industry experience within the staff body is too low which may explain some queries of the industry representatives regarding the interprofessional skillset of the graduates. The experts therefore recommend increasing the industry experience of the staff body, e.g., by focusing on this criterion the staff recruitment or by allowing staff to gain industry experience in sabbaticals.

The staff actively engages in research in their respective fields which is part of their regular workload and is therefore also assessed in their performance reviews. Staff members often incorporate higher-year students in their projects. Funding is obtained from different

faculty, universities, and government resource grants via competitive schemes, or through cooperation with foreign universities. For the management of grant proposals and competitions, UNAIR as installed the AMERTA information system. Lecturers whose projects are not funded are incorporated into the projects of other staff, and overall satisfaction with the university´s system is confirmed during the on-site interview. Each faculty annually hosts a scientific conference.

In summary, the experts confirm that the composition, professional orientation, and qualification of the teaching staff are suitable for successfully delivering the programmes. One minor exception is the core expertise in the field of fisheries product technology which is recommended to be increased, together with the industry experience of the staff of the Faculty of Fisheries and Marine. Lecturers are supported in their research activities which contribute the teaching in the programmes, and further personal and professional development training is available. The experts further confirm that the staff qualification and performance is regularly reviewed.

Criterion 3.2 Student Support and Student Services

Evidence:

- Self-Assessment Report
- Stylised results of the student feedback questionnaire
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
According to the Self-Assessment Report, UNAIR has a comprehensive, integrated student support system. Every student is assigned an academic advisor at the start of their study career at the university. The advisor is the first person of reference, mainly for academic matters but also in case of non-academic issues, and supports the students, among others, with their academic planning, course registration, GPA evaluations, as well as personal or academic challenges that may arise during their studies.

For non-academic matters, there are specialised facilities for advice and counselling regarding different matters, including:

- Career and Entrepreneurship Development Centre: assists students with career preparation, internship placement, and entrepreneurship initiatives
- Health Service Centre: provides access to medical consultations and mental health support

- Help Centre: support with handling academic and non-academic complaints and emergency assistance.
- Airlangga Global Engagement unit: facilitates international mobility, cultural exchanges, and study abroad opportunities
- Language and Culture Center: offers language courses, proficiency programmes and support for international language exams
- Social Fund Management Center: manages scholarship programmes and financial aid for students from underprivileged backgrounds

All support offers can be contacted on campus or digitally through online platforms.

During the audit, the experts discuss various aspects of the support system with the students and are satisfied with the positive comments on the well-established and easily accessible support resources. While mental health services were described as a weak spot in the Self-Assessment Report, this issue appeared to have been resolved in the meantime, according to the students´ explanations. The experts also acknowledge that the university actively supports the inclusivity of students with disabilities and health disadvantages. However, the students are not fully satisfied with the services of the Career Development Centre and would appreciate a greater offer of job orientation activities which bring them in direct contact with different companies, such as a job fair or career week. The experts therefore issue a recommendation in that regard.

In summary, the experts confirm that there are sufficient human resources and organisational structures for both academic as well as non-academic counselling which support the students in successfully completing the programmes. These services are regularly evaluated through the student surveys. The expansion of career orientation offers is recommended.

Criterion 3.3 Funds and equipment

Evidence:

- Self-Assessment Report
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:

As a public university, UNAIR´s main sources of income are state funding and tuition fees. Additionally, there are multiple university or faculty-administered business units that generate additional income, such as the aquaponic pond of the Faculty of Fisheries and Marine and the veterinary hospital of the Faculty of Veterinary Medicine, as well as multiple

laboratories that can provide analytical services commercially. As the university representatives explain, the funding is distributed to the different faculties based on quotas of basic, fixed funding for operational expenses, and flexible target and performance-oriented funding. The budgets are determined in a combination of top-down and bottom-up procedures: the university sets a threshold, and the faculties need to argue for their budgets during annual budget hearings of the university administration with the faculties. Lecturers´ salaries are fully covered by the government.

In terms of infrastructure, UNAIR has multiple campuses in Surabaya as well as additional facilities spread over the region. Both faculties are located on the main campus C. General facilities include the faculty buildings with classrooms, computer laboratories, reading rooms, co-working spaces, offices, and support facilities. UNAIR has a central library which is complemented by the faculty sub-libraries that are equipped with the main body of subject-specific literature. The library provides a broad selection of recent journals and academic literature, both online and offline. This includes access to scientific databases both at the university and from home, among which are ScienceDirect, SpringerLink, EBSCOhost, ProQuest, SAGE Journals, JSTOR, ACS Publications, HUKUMONLINE.COM, HeinOnline, Oxford Academic, and Taylor & Francis. As the students confirm, stable Wi-Fi is provided all over the campus. In terms of digital facilities, UNAIR employs different information systems for both academic and administrative purposes. As the university representatives explain, the newly established digital intelligence centre promotes digitalisation and integration, respectively, harmonisation of the university´s information systems at different levels. Moreover, UNAIR is currently developing its own Artificial Intelligence chatbot based on Gemini.

The general classroom facilities as well as the subject-specific practical amenities of the Faculty of Fisheries and Marine are listed in the following table taken from the Self-Assessment Report:

No	Facilities	Totals	Remarks
1	Classroom	11	
2	Thesis defense room	4	
3	Seminar room	2	
4	Laboratory	8	1. Computer Laboratory 2. Biotechnology Laboratory 3. Anatomy and Cultivation Lab 4. Analytical Chemistry Laboratory 5. Fish Processing Laboratory 6. Microbiology and Fish Disease Analysis Laboratory 7. Nutrition Laboratory 8. Life Feed Laboratory
5	Student Center	1	
6	Wifi Zone and Co-working space	1	Co-working space locate in C Building and Wifi could be accessed in the Faculty area
7	Aquaponic pond	1	
8	Education pond	2	
9	Library/study room	1	
10	Prayer room	1	
11	Salt product innovation room	1	
12	Certification of Competency Unit	1	

The Faculty of Veterinary Medicine also provides well-equipped general classrooms as well as laboratories for practicums and research activities, including laboratories of parasitology, microbiology, virology, pathology, and biomolecular. The experts positively mention the quality of the anatomy and histology labs. Of particular importance for the DVM programme are the university´s veterinary hospitals as well as further facilities like stables and livestock centres, which are located outside the city centre in the town of Gresik.

During the on-site visit, the experts visit different facilities of both faculties. While they are satisfied with the Faculty of Fisheries and Marine and positively highlight the modernisation and expansion of the labs and equipment since the last accreditation, they have multiple concerns regarding the practical resources of the Faculty of Veterinary Medicine. In the first place, they find that the conditions for keeping living animals do not comply with international standards regarding animal welfare. An example is the keeping of poultry in small cages, stable floors out of perforated metal sheets, and the tethering of large animals on nose rings. The experts acknowledge that, compared to other universities in Indonesia as well as the industry, the standards are still high; however, in light of UNAIR´s goal to become an internationally recognised research and teaching centre, the adherence to these basic standards is essential, and universities need to be the first players to raise awareness for these topics and set an example. Therefore, the experts require UNAIR to

present a strategic plan for how to raise animal welfare standards in accordance with the 5 freedoms principle.

Moreover, the experts are concerned about the biosafety and hygiene standards of the pathology dissecting room and the clinical rooms of the veterinary hospital. This concerns both the material layout of the rooms which are, e.g. not fully covered by tiles and many surfaces can therefore not be adequately cleaned and disinfected, as well as the structural design of these rooms. The most prevalent problem in that regard are that that there is no adequate delivery entrance for the pathology dissecting room, and that the current entrance is located directly next to the faculty cafeteria, which poses an essential biosafety risk. In the veterinary clinic, it strikes that there are no adequate disinfecting areas with suitable washbasins that allow the staff to disinfect and put on safety equipment in a sterile environment. As the current disinfecting area is located in the corridors outside of the treatment wards, it is also not currently possible for the staff to enter the ward without touching non-sterile infrastructure. The experts see an urgent need to address these shortcomings and therefore require UNAIR to provide a concept for the update of biosafety and hygiene standards of the pathology dissecting room and its surroundings (e.g., place of delivery), and clinical rooms of the veterinary hospital. Connected to that is also the requirement to ensure that all staff and faculty working and teaching in laboratories are familiar with lab safety measures, including documentation of incidents, which, although respective safety guidelines are in place, appear not to be consequently pursued in practice.

Lastly, as mentioned in chapter 1.6, the experts wonder why there is no clinical skills lab for practicing basic veterinary practical competencies on dummies. Given the high number of students, this kind of lab is essential for giving all the students sufficient opportunities and time to practice all treatments without excessively stressing and eventually even harming the comparatively few laboratory animals that are accommodated on campus for this purpose. The programme coordinators argue that this kind of equipment is expensive and difficult to acquire but, also in this regard, the experts point towards UNAIR´s aspiration of excellence in teaching and research. Moreover, it would also me possible to manufacture at least basic dummies themselves. Therefore, also in this regard, the experts require a concept that provides a clear roadmap for the implementation of a skills lab in accordance with international standards.

Besides their own subject-specific resources, both faculties cooperate with different external partners to efficiently share resources for teaching, as outlined in the Self-Assessment Report and documented by different cooperation contracts.

Support facilities, as listed in chapter 3.2, are spread over the campus. Besides these, there are also dormitories as well as rooms for extracurricular activities, student clubs, and sports. A campus bus facilitates the transfer of students between the different buildings.

In summary, the experts confirm that the financial resources constitute a sustainable basis for delivering the study programmes. For the BaAq and BaFPT programmes, the infrastructure and equipment are also well-suited for the attainment of the learning outcomes. However, for the Faculty of Veterinary Medicine, the experts find significant shortcomings within the available resources, especially regarding biosafety and hygiene standards, animal welfare conditions, and the lack of a clinical skills lab as an essential facility of modern veterinary education. These shortcomings are required to be addressed, which why respective concepts and action plans are requested by the experts.

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

Criterion 3.1

Regarding the staff with core experience in fisheries product technology, UNAIR presents a signed statement letter expressing the plan of hiring additional staff over the next two years. The experts are satisfied with this formalised commitment and decide to abandon the initial formal recommendation.

Regarding the industry experience of staff of the Faculty of Fisheries and Marine, UNAIR explains different ways how industry professionals are involved in delivery of the programmes and how the faculty collaborates with industries. While this is certainly beneficial for the programmes, the explanation misses the experts´ point of the recommendation: New staff members should not directly come from academia but should have experience as industry professionals to better integrate this perspective in the teaching. Likewise, industry experience of current staff could be enhanced during sabbaticals or similar programmes.

Criterion 3.2

In the statement, UNAIR explains the various job orientation offers that are available both at the level of the university as well as the faculties in detail. The reasonably short transition times between graduation and employment also show, that the employability of graduates is high. The experts therefore consider the offer sufficient; although improvements based on the student feedback should always be made. However, they consider this further improvement outside the scope of this accreditation and therefore decide not to formalise the initial recommendation.

Criterion 3.3

Regarding the facilities of the Faculty of Veterinary Medicine, UNAIR states that its current Skills Lab is not a central facility (as “a dedicated and permanent skills-lab facility” is only included in the future development plan) but the Skills Lab is disseminated to different modules. Therefore, the full range of available equipment may not have been visible to the experts. While the experts acknowledge this explanation, they point towards an apparent misunderstanding regarding the definition of a Skills Lab. According to the international definition, a Skills Lab is a practical training center for veterinary skills based on simulation models rather than living animals. Here, veterinary students can apply, improve, and repeat the theoretical knowledge they have acquired during their studies in a safe space. Such simulation models were neither visible, nor did the interviewees mention that such models are located somewhere else. It is the establishment’s duty to either show requested parts of the education or by any other means provide evidence. In that sense, UNAIR may provide the current inventory of the unit they call Skills Lab. As this was not presented, the experts sustain their initial requirement.

Regarding the pathology room, UNAIR explains that, through the combined implementation of infrastructure revitalisation and strengthened procedural controls, biosafety and hygiene standards in the pathology dissecting room and its surrounding areas should be enhanced to ensure alignment with international best practices. A plan for a redesign of the facilities is presented which includes establishing a dedicated and segregated delivery route for specimens, physically separated from public and food-service areas, to minimise cross-contamination risks. Additionally, the internal layout of the dissecting room and its surroundings should be redesigned to improve zoning between clean and contaminated areas in accordance with biosafety principles. Standard Operating Procedures for the handling of necropsy in the lab are also delivered. Although the experts cannot fully understand the pictures and plans provided in the concept, they acknowledge the effort and responsiveness to the concern. However, they point out that the delivery of the carcasses and other specimen is not addressed in the SOP which is currently the crucial concern. As no physical barrier is present yet, UNAIR needs to meet the safety requirements in another way. The minimum requirement in that sense would be that carcasses arrive in closed containments (e.g., body bag). The submitted SOPs cater for job safety but do not provide enough measures to avoid contamination of the surrounding, especially not necessarily trained students (as customers of the cafeteria) or visitors. Moreover, the washing area outside of the surgical operation area also needs to be redesigned as it is a clear deficit in hygiene management, not meeting basic hygiene standards. The experts consider adequate hygiene management in clinics as a basis for state-of-the-art education on

international level. Therefore, the experts reformulate their initial requirement to ensure safety also until the planned measures are implemented.

In terms of animal welfare standards, UNAIR's commitment to increasing the national to European standards has to be well appreciated. To strengthen documentation is certainly a very good measure to make the system transparent and compliant, which indirectly surely supports the practical application of Animal Welfare. Nevertheless, in response to the university´s explanations, the experts point out that the comment about the adult male cattle nose rings is not about handling and tethering for grazing during the day, but for keeping the animals overnight. Here, a building suitable for keeping these animals without permanent tethering is required. Regarding chicken, the experts acknowledge the arguments for the necessity to keep animals according to the needs of certain research purposes. However, there was no other chicken facility shown, so the small cages are presumably not only used in the realm of defined research projects. Overall, the experts therefore decide to sustain the requirement for a strategic plan how to further raise the level to, in accordance with the university´s own goals, achieve the international standards.

Furthermore, UNAIR explains that laboratory-safety measures and the compliance of the staff, including the documentation of incidents, will be reinforce through internal monitoring and training, which satisfies the experts. They therefore decide not to formalise the preliminary requirement.

Final assessment

The experts acknowledge the action already taken by UNAIR regarding the staff and facilities. However, they still see need for further action in terms of the standards of animal welfare and biosafety, as well as, most notably, the Skills Lab. The recommendation regarding industry experience of the staff addresses the issue that academic staff should have experience outside the academic bubble to better understand industry needs and processes and consider this in their teaching.

Overall, the experts consider this criterion to be **partly fulfilled**.

4. Transparency and Documentation

Criterion 4.1 Module Descriptions

Evidence:

- Module handbooks of all study programmes
- Websites of all study programmes

Preliminary assessment and analysis of the experts:
In the documentation to the Self-Assessment Report, UNAIR has presented comprehensive module descriptions for all modules of all programmes, which contain the complete required information, including module title, module coordinator, teaching and exam methods, learning outcomes, and module contents, as well as a reading list. The module descriptions are transparently published on the programmes´ websites. The experts confirm that the module descriptions are up-to-date and cover all the necessary details of the programmes. They are transparently available to all internal stakeholders of the programmes as well as interested third parties.

Criterion 4.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report
- Exemplary Diploma Certificate, Transcript of Records, and Diploma Supplement of each study programme

Preliminary assessment and analysis of the experts:
The experts confirm that, upon graduation, the students receive comprehensive documentation of their study achievements. This includes a Diploma Certificate, a Transcript of Records which outlines the list of completed modules and the respective grades, as well as a Diploma Supplement which provides contextual information about the Indonesian education system and the specific study programme concerned. All documents are provided bilingually in Bahasa Indonesia and English. The experts confirm that all documents are well-designed and contain relevant information, including individual marks and statistical data to set them in context, and therefore adequately document the graduates´ qualifications profile and individual performance. However, they point out that, while the SKS credit numbers are transparently displayed in the Transcript of Records, the number of ECTS points is not presented, which may hinder the recognition and transfer of credits overseas. It is therefore required to, at least, display the total number of completed ECTS credits in the Transcript of Records and provide information about the credit conversion in the Diploma Supplement. To further increase transparency, the experts additionally recommend to also display the ECTS numbers of the individual modules on the Transcript of Records.

Criterion 4.3 Relevant Rules

Evidence:

- Self-Assessment Report

- All regulations provided on the university´s, faculties´, and programmes´ websites
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
The baseline regulation for programmes at UNAIR is the general academic guidelines. These are further distinguished for the individual programmes in the form of faculty- and programme-specific educational guidelines. All relevant documents are published on the university´s websites. During the on-site visit, all interview partners confirm that the rights and duties of both the university as well as the students are well-defined and that all regulations are transparently accessible to all involved parties.

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

Criterion 4.2

UNAIR explains in its statement that the template of the Diploma Certificate and Transcript of Records are standardised across the university. Therefore, changes in these documents cannot be made at the level of the faculties, but the Diploma Supplement serves as more flexible instrument to communicate information about the programme and the students´ performance. The experts recognise this and, therefore, reformulate the initial requirement to give UNAIR more flexibility in where to provide the necessary information in the final documents.

Final assessment

The experts confirm that UNAIR has well-designed, up-to-date, and transparently published documentation and regulations. However, to not hinder international recognition and credit transfer, the final documents must contain information about the total number of ECTS credits and the credit conversion policy. The display of the ECTS credit numbers for each individual modules is recommended.

Overall, the experts consider this criterion to be **almost fulfilled**.

5. Quality management: quality assessment and development

Criterion 5 Quality management: quality assessment and development

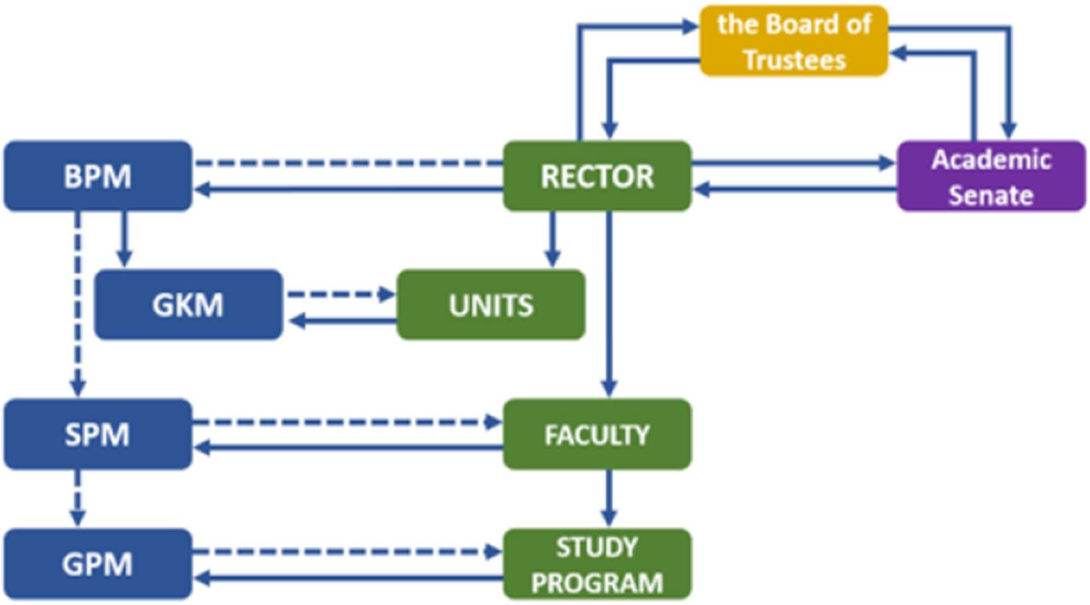
Evidence:

- Self-Assessment Report

- UNAIR quality assurance manual
- Samples of stakeholder survey templates
- Student satisfaction report for the academic year 2023/24 of each study programme
- Discussions during the on-site visit

Preliminary assessment and analysis of the experts:
According to the Self-Assessment Report and the quality assurance manual, UNAIR has implemented a comprehensive quality management system that includes elements of both internal and external quality assurance. All processes are transparently outlined in the form of guidelines and standard operating procedures, examples of which are contained in the quality assurance manual provided as part of the documentation. Multiple elements of the quality assurance system have already been mentioned in previous chapters of this report.

The internal quality management system includes different actors at all the levels of the university, as displayed in the following figure taken from the Self-Assessment Report:



At the faculty level, quality assurance is managed by the Quality Assurance Unit (SPM), and the Quality Assurance Unit (GPM) operates at the study programme level. The quality assurance cycle in all programmes has been conducted continuously with the internal planning, implementation, monitoring, evaluation, controlling, and improvement.

The most important instruments of quality monitoring are different, annually or semesterwise conducted surveys which are directed at different stakeholders, including the students, graduates, as well as external stakeholders. Different surveys collect their feedback on different aspects of the programmes, including the overall programme design and

performance, lecturers and university administration, as well as internships. The regular implementation of these surveys is confirmed by the students and external stakeholders during the audit, and the students further explain that the survey results are published on the programmes´ websites which, as the experts confirm, fulfils the purpose of a closed feedback loop. This data, together with additional key figures of the programmes like PLO attainment, GPAs, graduation times etc, is used as a basis for the annual evaluation of the programme in the form of an internal quality audit managed by the university-level Quality Assurance Agency (BPM). The research and community service activities and impact are additionally monitored by the university´s Institute for Research and Community Service.

As the university representatives explain during the on-site visit, the programmes under review have obtained excellent reviews in the last internal quality audit. To improve the overall performance review and internal as well as external benchmarking opportunities, UNAIR pursues the integration and harmonisation of all digital information systems which, as shown during the audit, enables detailed analyses and comparisons of many parameters of the study programmes. These data-driven analyses by the digital intelligence centre are used as bases for the strategic development of the university policies and programme performance. The experts are highly satisfied with UNAIR´s internal quality assurance system and highlight the outstanding digital integration approach.

In terms of external quality assurance, UNAIR programmes are subject to regular national programme accreditation and are also highly engaged in international programme accreditation by renowned agencies. The BaAq programmes, as well as the BaVM and DVM programmes, are subject to ASIIN accreditation for the second time, while the BaFPT programme is internationally reviewed for the first time.

In summary, the experts confirm that the study programmes are subject to periodical internal quality assurance and that the results of these processes are incorporated in the further programme development. The quality assurance processes and responsibilities are defined and transparently regulated in respective guidelines and standard operating procedures. Students are actively involved in the processes, and the feedback loop back to the students is closed.

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

UNAIR did not comment on this criterion.

Final assessment

The experts are satisfied with the design and implementation of UNAIR´s quality assurance system. They consider this criterion to be **fulfilled**.

E 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:

/

F Comment of the Higher Education Institution (29.01.2026)

The following quotes the comment of the institution:

"The Degree Programme: Concept, Content & Implementation

Objectives and Learning Outcomes of a Degree Programme (Intended Qualifications Profile)

Comments from experts:

> The corresponding graduate profile of the Bachelor of Aquaculture (BaAq) and Bachelor of Fisheries Product Technology (BaFPT) programmes comprise the roles as managers, entrepreneurs, researchers, and instructors in their respective fields … However, potential for improvement is seen in the graduates´ competencies regarding digitalisation. (**p. 9**)

Responses:

> The BaAq and BaFPT study programmes acknowledge the experts' feedback regarding the need to further strengthen student and graduate competencies, particularly in digitalisation. To enhance digital competencies, the programmes have integrated various digital-based teaching and learning strategies, including the systematic use of the Hebat E-Learning platform (https://hebat.elearning.unair.ac.id/hebat-v2/) as part of regular course delivery. This platform supports face-to-face learning by providing quizzes, assignments, discussion forums, and instructional videos.
>
> In addition, students are strongly encouraged to participate in microcredential programmes relevant to aquaculture and their individual academic interests (https://myamoora.unair.ac.id/course/index.php?categoryid=7). Optional training on essential software tools, such as Microsoft Word, Excel, and related applications, is also available through certification programmes organised by Information and Documentation Management Officer (PPID) (https://ppid.unair.ac.id/event/sertifikasi-microsoft-office-unair/), which BaAq and BaFPT students may access. Furthermore, several courses require final projects in the form of presentations, written reports, or poster displays, all of which encourage students to develop digital design and communication skills using tools such as PowerPoint, Canva, and other relevant software. These

initiatives demonstrate the programmes' ongoing commitment to enhancing students' digital literacy and preparing them for professional practice.

The following are examples of student projects that demonstrate the implementation of recommendations provided by the ASIIN experts.

1. Project presentations from the Coastal and Marine Management course can be accessed at: https://drive.google.com/drive/folders/1syhD2K1FqtrVjAklJBOU-ZLwYuhH38exp?usp=sharing
2. Project presentation on Food Additives course: https://drive.google.com/drive/folders/1R8oawMOnf9MKqMtbKykYdhY56I8d16Ha
3. Poster presentation on Thermal Process Technology course: https://sites.google.com/fpk.unair.ac.id/e-poster-thermal-2025/homepage?authuser=0

Comments from experts:

While the overall high satisfaction with the graduates is confirmed, the interviewees mention digitalisation, respectively the use of information technology, soft skills, experience in performing necropsy, as well as the ability to convert research into a product and mass production as potential for further improvement. While the experts consider the latter not the primary objective of the BaVM and DVM programmes, they suggest that the programme coordinators should follow up on the first three points of critique. (**p.9-10**)

Response:

The BaVM study programme appreciates insightful comments from the experts. The study program keeps pace with contemporary developments by systematically fostering a culture of digitalization that is implicitly embedded throughout the academic process. This digital integration begins during the pre-semester preparation phase (prior to the start of active lectures), continues throughout the teaching and learning process, and extends to the end of each semester. Students plan their semester study programs through the Cyber Campus website and can monitor their academic progress via their individual accounts. During the teaching and learning activities, quizzes, assignments, and examinations are conducted online through the institutional learning management system, Hebat-eLearning. Through this platform, students can access course contracts, learning materials, and assignments. In addition, various forms of assignments, such as producing anamnesis practice videos, internship logbook videos, journal studies, case discussions, and infographic posters, are designed to familiarize students with digital tools and enhance their adaptability to ongoing

digital transformation. At the end of each semester, students are also able to review their academic results through the Cyber Campus system.

Students are strongly encouraged to actively participate in non-academic activities, including sports and arts clubs as well as professional interest groups. Participation in these activities is expected to develop students' social and organizational skills, enrich their experiences, and expand their professional networks, thereby strengthening essential soft skills needed after graduation. Students accumulate points from non-academic activities, which serve as a graduation requirement. Through this mechanism, Universitas Airlangga (UNAIR) aims to ensure that its graduates excel not only academically but also possess strong complementary skills.

Students gain necropsy experience through hands-on learning activities conducted in practical sessions of the General Veterinary Pathology course and the DVM programs. Furthermore, the Pathology Division serves as a referral center for the Natural Resources and Conservation Agency in conducting necropsies on stranded marine mammals, in which students are also given opportunities to participate. To further enhance the quality of necropsy learning, the program plans to revitalize the pathology laboratory to improve facilities and ensure compliance with environmental health considerations. The Standard Operating Procedure (SOP) for conducting animal necropsies in the Veterinary Pathology Laboratory is also available.

UNAIR continuously strives to enhance the employability skills of its graduates. Students are provided with opportunities to participate in various workforce skill development programs, including those related to digital competencies. The university facilitates these initiatives through a dedicated unit, the Career Center and Alumni Empowerment Office. Information on training programs related to digitalization can be accessed through the unit's website (https://career.unair.ac.id/event).

Name of the Degree Programme

Curriculum

Comments from experts:

While the experts are generally satisfied with the curriculum, they wonder why the module "Fishery law and policy" which is contained in the BaAq programme as an elective, is not contained in this programme. The experts find this to be a relevant topic for this programme and therefore recommend UNAIR to provide access to this module for BaFPT students. (**p.12**)

Responses:

The BaFPT study programme acknowledges the suggestion from the experts. The module "Fishery Law and Policy" was previously included as a compulsory course in the BaFPT curriculum. However, based on periodic curriculum evaluations and constructive input from stakeholders (including industry partners and academic reviewers), the study programme decided to reposition this module as an elective course by taking BaAq "Fishery law and policy" module as part of Independent Learning Program (MBKM). This adjustment was made to provide greater flexibility for students and to allow the BaFPT curriculum to maintain a strong focus on its core competencies in fisheries post-harvest science, engineering, and processing technology.

Although "Fishery Law and Policy" course is no longer a compulsory subject, BaFPT students can still take it from BaAq study programme through the MBKM program. This cross-programme arrangement allows those interested in the legal and policy dimensions of fisheries to gain essential knowledge without deviating from the main BaFPT curriculum. Additionally, important legal and regulatory topics, such as food safety, quality standards, and industry compliance, are integrated into various BaFPT courses, including Quality Assurance, Sanitation and Hygiene, Industrial Management, and Fisheries Product Processing. This approach ensures students remain well-versed in regulatory frameworks closely connected with their technical and professional education.

As for implementation of this strategy, in this semester (even semester 2025-2026) we strongly encourage the student to take MBKM especially "Fisheries Law and Policy".

Admission Requirements

Comments from experts:

- The experts are generally satisfied with the admission regulations and also appreciate the commitment to non-discrimination which is contained in the regulations and affirmed by the university representatives during the audit. This includes e.g. the support of students from minority groups and students from economically limited families with tuition waivers and scholarships. However, they are concerned about the regulation of a maximum age cap of 25 years for Bachelor´s applicants. The university argues that this is connected to the regulation about the timely completion of a high school diploma. However, the experts consider this as a discrimination of age, given that a high school equivalent diploma could also be obtained later or differently than via the regular secondary school education as an adolescent, especially for students from economically less developed regions. Therefore, they require UNAIR to abandon this regulation as the university must not exclude students and applicants based on their age. (**p.16**)

- However, the experts consider the maximum age cap for Bachelor´s applicants to be discriminatory and therefore require abandoning these regulations. (**p.18**)

Responses:

UNAIR appreciate the experts' concerns regarding the regulation of a maximum age limit for bachelor's applicants. All three study programmes confirm that no age-based restrictions are applied in their admission processes. All undergraduate admissions at UNAIR are centrally managed through the central student admission (PPMB) system (https://ppmb.unair.ac.id/), and the officially published admission requirements do not specify any maximum age limit for applicants. Figure 1 shows the web page for the published admission requirements.

In accordance with UNAIR's university-wide admission regulations, eligibility for undergraduate programmes is determined solely by the possession of a valid senior high school diploma or an equivalent qualification, regardless of the applicant's age at the time of completion. Consequently, BaAq, BaFPT, and BaVM study programmes fully align with UNAIR's commitment to non-discrimination, inclusivity, and equal access to higher education for applicants from diverse educational and socio-economic backgrounds. None of the three programmes applies, nor intends to apply, any age-based restrictions in their admissions.

Figure 1. Admission requirements as presented on the PPMB website.

Comments from experts:

- Given the high demand of the industry, the experts are satisfied to see that UNAIR has increased its capacity in the BaVM programme, which is also in high demand by students from all over Indonesia. They also positively comment on the strategy of providing a higher number of places in the DVM programme to give more flexibility to the students and reduce waiting time. However, looking at the statistical data about the progress of studies, the experts notice drop-out rates of up to 20% in the BaAq

and BaVM programmes which surprises them given UNAIR´s good reputation and the high demand by students. (**p.18**)

- Nevertheless, they suggest further improving the study advisory services and seek to also include subject-specific criteria in the general admission tests to improve the selection of students who are interested and qualified for the specific disciplines. (**p.18**)
- Still, the university should try to establish further measures for a subject-specific student selection to avoid costly dropouts. (**p.18**)

Responses:

In the Indonesian higher education system, drop-out (DO) cases are commonly categorized into administrative DOs and self-withdrawals occurring after students have formally commenced their academic studies. This distinction is essential for accurately interpreting reported drop-out rates at both program and institutional levels. The reported 20% DO rate in the BaAq and BaVM programmes should therefore be understood within this broader national context. A substantial proportion of this figure consists of administrative cases, particularly students who were officially admitted but did not complete first-semester registration or did not proceed with enrollment. Although these cases are institutionally recorded as DOs, they do not reflect students who discontinued their studies after active academic participation.

At the national level, DO cases that occur after academic engagement are generally influenced by a combination of academic challenges, misalignment between students' interests and their chosen fields of study, and difficulties in adapting to the university environment. These conditions may pose significant challenges for students who lack sufficient academic preparedness, effective learning management skills, and adaptive strategies, potentially resulting in failure to meet minimum academic requirements. In addition, mismatches between students' interests, aptitudes, and selected programs, often driven by institutional prestige, parental expectations, or limited prior understanding of disciplinary demands, can lead to decreased motivation, limited academic engagement, and weakened commitment to completing the program.

Students' ability to adapt to campus life also plays a critical role in study persistence. The transition from secondary to higher education requires a high level of independence, time-management skills, and resilience in coping with academic and social pressures. Students experiencing adaptation difficulties, such as living far from family, limited social support, or sustained academic stress, are more susceptible to mental and emotional exhaustion. In the absence of effective mentoring and support systems, these conditions may accelerate decisions to discontinue studies.

However, in the case of the BaAq and BaVM study programmes, the number of students who withdraw after actively engaging in academic activities remains relatively

low. This indicates that the reported DO rate does not primarily reflect deficiencies in academic quality, learning support, or student retention mechanisms, but is largely associated with admission-stage administrative factors that are common within the national higher education environment.

In response to both administratively and academically driven DO risks, and in line with ASIIN's recommendations, UNAIR (BaAq and BaVM study programmes) have implemented a systematic and multi-layered strategy to reduce drop-out rates and strengthen student retention. Since 2024, UNAIR has conducted an early assessment of students' study readiness profiles for all new students. Based on the results of this early assessment, UNAIR provides early academic intervention programs, including matriculation courses, enrichment classes, peer tutoring, and an academic performance–based early warning system. Through regular monitoring of grade point average, attendance, and study progress, students at risk can be promptly identified and supported before repeated academic failure occurs. This monitoring system also enables faculties to identify students approaching the maximum study period and provide intensive academic mentoring.

To facilitate students' transition into higher education, all first-year students are required to take compulsory university courses such as health communication, self-development, and interdisciplinary collaboration. As a sample reference, the guidelines for the educational implementation of BaVM programme is available. The courses mentioned in the guidelines adopt integrated project-based and case-based learning approaches, enabling flexible and engaging learning while ensuring the achievement of targeted learning outcomes.

At the faculty and study program levels, the quality of academic and career guidance services has been strengthened. The role of academic advisors (*Dosen Wali*) is enhanced through structured advisory mechanisms supported by the cyber campus academic advisory system, as well as counseling services provided by the university. Each student is assigned an academic advisor from the first year until graduation, with mandatory consultations conducted at the end of each semester to review academic performance and plan subsequent study programs.

To strengthen students' professional identity and sense of belonging, professional interest groups are actively facilitated, covering specialization areas such as companion animals, wildlife, poultry, large animals, and equine practice. These groups encourage participation in seminars, internships, and professional development activities, while fostering peer support among students with similar interests. Career preparation is further supported through programs organized by the Career Development, Entrepreneurship, and Alumni Office (https://career.unair.ac.id/).

Student adaptation and well-being are also actively supported through structured orientation programs, soft skills development, and the strengthening of learning communities and student organizations. At the beginning of the academic year, students participate in a university orientation program. During this process, students are divided into small groups and mentored by senior students for one full academic year, facilitating both academic and social adjustment. Mental health services and an inclusive campus environment further enhance students' sense of belonging, which has been shown to positively correlate with study persistence and reduced drop-out rates.

These coordinated efforts have produced measurable outcomes. UNAIR's data show a steady annual decline in the number of DO students, accompanied by a significant improvement in student retention rates. For the BaAq study programme, the student retention rates vary from 88.89% for the 2023 cohort to 96.86% for the 2024 cohort (Figure 2). Likewise, the retention rates for BaVM study programme increases from 92.96% for the 2023 cohort to 96.93% for 2024 cohort (Figure 3). Additional preventive measures include expanded outreach and information dissemination to prospective students through social media platforms and high school visits, ensuring informed program selection prior to enrollment. Collectively, these results demonstrate the effectiveness of BaAq and BaVM study programmes' strategies in reducing drop-out rates and strengthening sustainable student retention within a highly competitive academic environment.

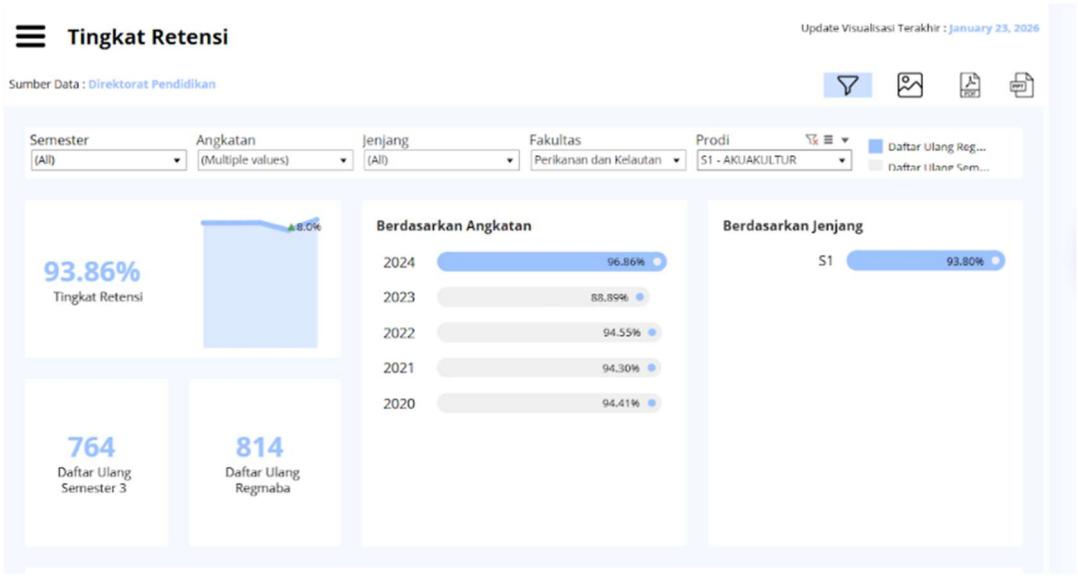


Figure 2. Student retention rates in the BaAq study programme (Source: UNAIR Satu Data Portal - https://satudata.unair.ac.id/). Retention rate reflects the percentage of students who remain enrolled in the same study program they initially entered, continuing their studies into the third semester and beyond.

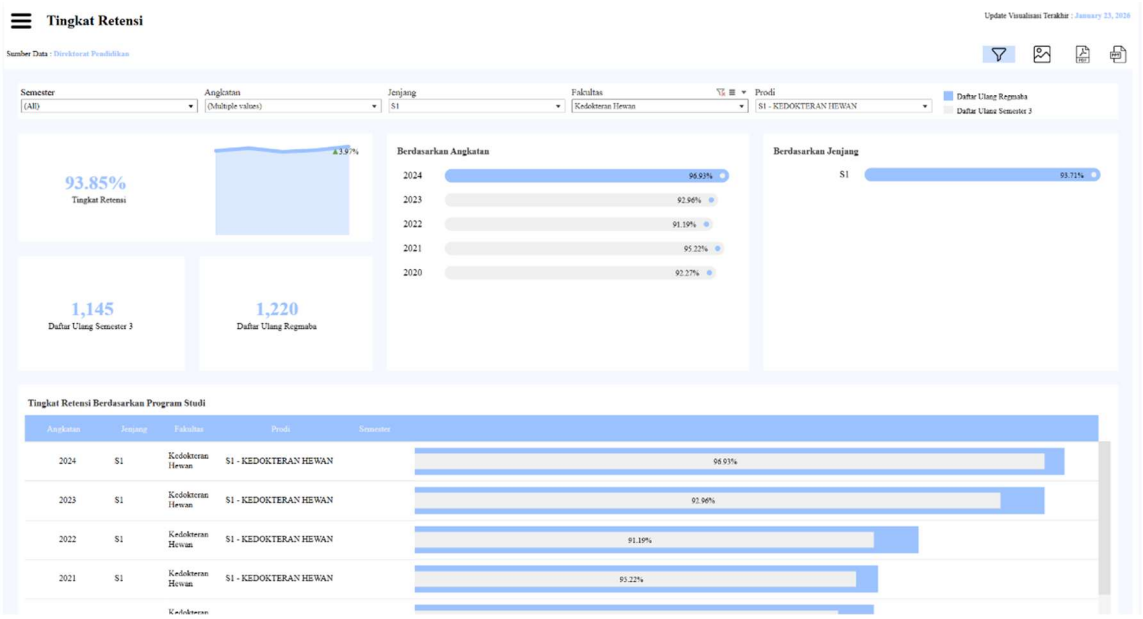


Figure 3. Student retention rates in the BaVM study programme (Source: UNAIR Satu Data Portal - https://satudata.unair.ac.id/). Retention rate reflects the percentage of students who remain enrolled in the same study program they initially entered, continuing their studies into the third semester and beyond.

Workload and Credits

Comments from experts:

- What is problematic in that regard is that this difference in the credit allocation depending on the type of learning activity is not accounted for in the credit conversion policy applied by UNAIR. (**p.19**)
- Therefore, the experts see the necessity to correct the ECTS credit calculation, which is crucial to ensure international comparability, credit transfer, and recognition. (**p.20**)
- However, as the definition of one SKS credit point in terms of working hours varies depending on the type of module, the currently applied fixed ECTS conversion rate does not result in correct ECTS credit numbers which can be problematic for the recognition of the students´ achievements. Therefore, the experts require UNAIR to current the ECTS credit allocation which needs to be based on the total student workload per module, independently from the employed learning activities. (**p.20-21**)

Responses:

The BaAq, BaFPT, and BaVM study programmes acknowledge the experts' observations regarding the inconsistency between UNAIR's previously applied fixed ECTS conversion rate and the varying definitions of one SKS depending on the type of learning activity. We recognize that this discrepancy may lead to inaccurate ECTS credit allocations and could affect international comparability, credit transfer, and recognition of students' academic achievements. In response to these concerns, all three programmes have undertaken a comprehensive review of their workload

calculations to ensure that ECTS allocation is now based strictly on total student workload per module, in accordance with ECTS principles.

In the BaAq and BaFPT programmes, a standardized workload calculation system is applied across all modules, supporting curriculum development while maintaining academic flexibility. Several modules already include explicit ECTS equivalency, such as Field Work Practice (PKL, 4 SKS) and the Bachelor Thesis (Skripsi, 6 SKS). For PKL (4 SKS), the intended learning outcomes are achieved through preparatory activities, practical implementation, and reporting. The estimated workload consists of proposal preparation and guided training (10 hours), structured practical work in an industrial or institutional setting (160 hours), and final report preparation and presentation (10 hours), resulting in a total workload of 180 hours (Table 1). Based on the applied conversion (180 hours ÷ 28 hours per ECTS), this corresponds to 6.4 ECTS, which is aligned with the assigned 4 SKS and remains proportionate within the overall undergraduate study load.

Similarly, the Bachelor Thesis (Skripsi – 6 SKS) is structured to support the development of undergraduate research competencies (Table 2 and Table 3). The workload includes literature review (18 hours), supervised research activities (140 hours), thesis writing (50 hours), and examination and revision (62 hours). The total estimated workload is 270 hours, which corresponds to 9.6 ECTS when calculated using the same conversion method (270 hours ÷ 28 hours per ECTS). This allocation reflects an appropriate balance between independent study and academic supervision at the bachelor level.

The BaVM programme has also revised its ECTS calculations, supported by detailed workload evidence from the module descriptions. The Thesis module (PNV 499) specifies a workload of 226 hours, including literature review, supervised research activities, thesis writing, and examination and revision. This workload corresponds to the assigned 8 ECTS and demonstrates that the module's credit allocation is now fully aligned with ECTS principles. Similarly, the Co-Assistant in Veterinary Public Health module (KMV 501) outlines a total workload of 132 hours across tutorials, preparation, assignments, examinations, and self-study, which is consistent with its 4.8 ECTS value. These examples confirm that BaVM has corrected earlier inconsistencies by basing ECTS allocation on actual student workload rather than a fixed SKS-to-ECTS ratio.

Table 1. Module description for Field Work Practice for BaAq and BaFPT study programmes.

Module designation	**FIELD WORK PRACTICE (KLI401)**
Semester(s) in which the module is taught.	7 / Fourth (4^{th})

Person responsible for the module	Coordinator of Field Work Practice
Language	Indonesian
Relation to curriculum	Compulsory Course
Teaching methods	Practical Work under supervisor
Workload	Proposal development and supervised briefing (10 hours), Structured practical activities conducted in industry or institutional aquaculture settings (160 hours), and Preparation plus presentation of the final report (10 hours).
Credit points	4 (0-4) credits (Lecture: 0, Practice: 4) / 6.4 ECTS
Required and recommended prerequisites for joining the module	Students have passed the first two-year evaluation with a minimum GPA of ≥ 2.0
Module objectives/intended learning outcomes	The students can improve their scientific insight into the situation in the world of work.
Content	This course is in the form of practice / work internship conducted in groups (2-3 students) to provide practical experience, application of areas of expertise by courseing a system in a company / institution, and providing alternative solutions to existing problems, and reporting them in form of scientific work.
Examination forms	Presentation in the form of closed session
Assessment weight	Report manuscript (score : 0-30); mastery of the material (score : 0-35); Ability to answer (Score : 0-35)
Study and examination requirements	Students must finish practical work activity and obtain approval from the supervisor to take the exam
Reading list	Field Work Practice Handbook. 2021. Faculty of Fisheries and Marine Universitas Airlangga.

Table 2. The module description for Bachelor Thesis in BaFPT study programme

MODULE NAME	Thesis
Code	PNI499
Semester/ Year	VIII/Fourth

Module Coordinator	Coordinator of Bachelor Thesis
Lecture (s)	Thesis Supervisor
Language	Indonesia
Classification in Curriculum	Compulsory Course
Teaching format / class	Analysis of results and discussion of research between first supervisor, co-supervisor and the researcher
hours per week during semester	270 hours/semester
Workload	Literature review (18h) supervised research activities (140 hours), thesis writing (50 hours), and examination and thesis manuscript revision (62 hours)
Credit Points	6 (0-6) credits (9.6 ECTS)
Requirements	Students have completed 139 credits
Learning Outcomes	**Attitude** Able to implement intellectual abilities based on religious morals to support performance independently in the field of fisheries. **General Skill** Able to apply logical, critical, systematic, and innovative thinking in the context of developing or implementing science and technology that focus to and applies to humanities values based on their field of expertise. **Knowledge** Able to apply fisheries development policies, especially in fisheries product technology. **Special Skills** • Able to utilize fisheries product processing technology. • Able to make decisions based on logic and scientific analysis that relevant to fisheries. • Able to identify potential sources for the development of fisheries products industry.
Competencies	-
Content	Writing Thesis report adhering to the guidelines, analyse the research result and make conclusion, prepare a journal manuscript

Soft Skill Attribute	-
Course Assessments	• Presentation skills (10%) • Mastery of the content (40%) • Clarity of answer (20%) • Mastery of knowledge relevant to the thesis (20%) • Attitude during the exam (10%)
Forms of Media	Multimedia (Computer, LCD, whiteboards, practical laboratory equipment).
Learning Methods	Project-based Learning
References	Manual book for Thesis Writing

Table 3. Revised module description for Bachelor Thesis in BaAq study programme

Module designation	**BACHELOR THESIS (PNI499)**
Semester(s) in which the module is taught	8 / Fourth (4^{th})
Person responsible for the module	Coordinator of Bachelor Thesis
Language	Indonesian
Relation to curriculum	Compulsory Course
Teaching methods	Analysis of results and discussion of research between first supervisor, second supervisor and the researcher
Workload	Literature review (18 h) supervised research activities (140 hours), thesis writing (50 hours), and examination and thesis manuscript revision (62 hours)
Credit points	6 (6-0) credits / 9.6 ECTS
Required and recommended prerequisites for joining the module	According to Faculty Educational Handbook
Module objectives/intended learning outcomes	The students are able to compile scientific work in the form of analysis of research results.

Content	Writing based on the guidelines, analyze the research result and make conclusion, create a publication paper.
Examination forms	Examination is in the form of closed session with 5 examiners
Assessment weight	Presentation techniques (10%); mastery of the content (40%); clarity of answer (20%); mastery of knowledge relevant to the thesis (20%); attitude during the exam (10%)
Study and examination requirements	Students have completed 139 credits
Reading list	Manual book for Undergraduate Thesis. 2021. Faculty of Fisheries and Marine Universitas Airlangga

Didactic and Teaching Methodology

Comments from experts:

- However, in this regard, multiple stakeholders state that aspects of interpersonal skills, interprofessional collaboration, communication, and digitalisation still need to be further improved to meet the current demands of the industry. This is also confirmed by the students, and the BaAq students in particular express their preference for a stronger data-driven focus both as teaching content and methodology, the integration of data-driven methods like smart farming, automation (use of software), and AI. Therefore, the experts recommend better supporting the development of professional communication and interpersonal skills, including also digitalization as subject and methodology of teaching. (**p.21**)
- (Summary) Besides that, the experts recommend to better include communication skills, interprofessional aspects, and digitalisation in the teaching methodology. (**p.22**)

Responses:

The study programmes BaAq, BaFPT, and BaVM acknowledge the experts' recommendation to further strengthen the development of communication skills, interpersonal competencies, interprofessional collaboration, and digitalisation within the teaching and learning process. While student-centred learning approaches, such as case-based studies (CBS), problem-based learning (PBL), project-based learning, group discussions, and collaborative assignments, are already implemented across all programmes, we recognise the need to enhance the visibility and systematic integration of these competencies in line with evolving industry expectations.

In the BaAq and BaFPT programmes, soft-skill development and digital awareness are embedded throughout the curriculum. Students engage in CBS and PBL activities that require teamwork, data analysis, problem-solving, and the communication of results in written and oral formats. Foundational university-wide courses in communication and self-development, data and reference, logic and critical thinking, and introduction to scientific or knowledge collaboration provide early preparation for these learning methods. Digitalisation is incorporated using analytical tools, aquaculture monitoring systems, automation-related applications, quality assurance systems, and digital documentation, aligned with each programme's disciplinary focus. PKL (internship/field work practice) and Skripsi (bachelor thesis) further reinforce interpersonal communication, professional conduct, collaboration, and academic communication through structured supervision, interaction with industry partners, presentations, and scientific writing. Additionally, the Faculty of Fisheries and Marine organises professional communication training, knowledge-enrichment sessions, and stakeholder sharing forums for final-year students to strengthen their readiness for professional practice.

In the BaVM programme, communication skills, interprofessional collaboration, and digitalisation are integrated across various modules through case-based learning, simulations, group discussions, and the use of digital learning platforms. These approaches support the development of professional communication and teamwork in both clinical and non-clinical contexts. The programme systematically evaluates its teaching methodology each semester through module surveys, enabling continuous improvement based on student feedback and programme development needs.

Collectively, these measures demonstrate that the three study programmes have already implemented substantial components related to communication, collaboration, and digitalisation, while remaining committed to further enhancing these aspects in accordance with the experts' recommendations and current industry demands.

Comments from experts:

- While the experts consider the separation of the academic stage and the professional stage in veterinary education to be generally suitable, they nevertheless emphasize the necessity of BaVM students to get practical hands-on training of different treatments before applying them to living animals. In that regard, they criticise that the university currently does not have a clinical skills lab which is a standard facility to introduce students to practical skills and give them opportunities for individual practice (see also chapter 3.3). **(p.22)**
- (Summary) However, in that regard, the experts criticize the lack of a skills lab for veterinary students which is a crucial instrument for individual practice of core procedures. (**p.22**)

Responses:

The BaVM study programme acknowledges the experts' remarks regarding the importance of early hands-on training prior to students' exposure to living animals. We would like to clarify that a medical/clinical skills laboratory is already available and has been actively used by veterinary students, particularly for specific courses that require structured preparation for practical examinations and core procedural skills.

The skills laboratory is utilized by students enrolled in designated modules, mainly for individual practice of essential techniques under supervised conditions. Following each training session, all equipment is systematically cleaned, organized, and returned to centralized storage in accordance with safety, hygiene, and asset management procedures. As a result, the skills lab facilities may not have been fully visible during the site visit, despite their regular use within the curriculum.

Nevertheless, the study program fully agrees with the experts' recommendation regarding the strategic importance of a permanent and more visible veterinary clinical skills lab. Accordingly, the program has included the development of a dedicated, permanent skills lab facility in its future planning to further strengthen structured skills training, individual practice opportunities, and early competence acquisition prior to clinical exposure.

Comments from experts:

However, for some modules, especially if many guest lecturers are involved, the allowance of a higher share of digital teaching would help them. The experts generally agree but also stress the importance of face-to-face learning. Therefore, they do not give a general recommendation in that regard but express their support for the lecturers to address this matter through UNAIR´s internal quality assurance and programme development mechanisms. **(p.22)**

Responses:

The study programmes BaAq, BaFPT, and BaVM acknowledge the experts' observations regarding the potential benefits of allowing a higher share of digital teaching, particularly in modules involving multiple guest lecturers. At the same time, the programmes recognise the importance of maintaining face-to-face learning as a core component of academic and professional development. During the period 2020–2022, all guest lectures across the three programmes were conducted fully online due to the COVID-19 pandemic and the associated national and institutional health regulations. This approach ensured continuity of learning while prioritising the health and safety of students and invited speakers.

As on-campus academic activities gradually resumed in 2023, the BaAq and BaFPT programmes began reintroducing offline learning activities, including selected guest lectures delivered in face-to-face or hybrid formats. Since 2024–2025, both programmes have consistently organised offline guest lectures, particularly involving adjunct professors and invited experts who visit the university for research collaboration or academic coordination. These activities provide students with direct academic interaction, professional exposure, and opportunities to engage with international experts. The programmes now adopt a blended model that integrates both online and offline delivery modes. An example of this implementation is the 2025 offline guest lecture conducted jointly by BaAq and BaFPT in collaboration with Chiang Mai University (Figure 4).

The BaVM programme likewise has implemented a combination of digital and face-to-face guest lectures. The guest lecture records demonstrate extensive engagement with international and regional experts from institutions such as King Salman International University, Tokushima University, Yamaguchi University, Hebron University, International Islamic University Malaysia, Ebonyi State University, and Universiti Putra Malaysia. These activities, conducted throughout 2024–2025, include academic lectures, adjunct professor engagements, and collaborative events. The documentation confirms that BaVM already applies a blended approach that accommodates both digital and in-person formats, ensuring flexibility while maintaining academic quality.

Collectively, these measures demonstrate that the three study programmes have already implemented a balanced approach to guest lecture delivery, combining online and offline formats in a manner that supports academic engagement, international collaboration, and student learning. The programmes will continue to address this matter through UNAIR's internal quality assurance and programme development mechanisms, in line with the experts' recommendations and the evolving needs of students and stakeholders.

Figure 4. Guest Lecture activity from Chiang Mai University.

Exams: System, Concept and Organisation

Comments from experts:

> However, they note that, for these topics which are based on experiments with living animals, there is no documentation of a review respectively approval of the experimental design by an Animal Ethics Committee, which, as the academic staff explains, is in place at the level of the university. The involvement of this committee and the respective documentation is crucial for the international recognition and publication prospects of any research, including Bachelor´s theses, and the experts therefore require UNAIR to appropriately document the involvement of the Animal Ethics Committee in the final theses. **(p.26)**

Responses:

> The study programme acknowledges the experts' observation regarding the absence of documented evidence of ethical review and approval for student research involving experiments with living animals. We fully agree that the involvement of an Animal Ethics Committee, along with the availability of formal approval documents, is

essential for ensuring international recognition, transparency, and publication prospects of academic research, including Bachelor's theses.

We would like to clarify that an Animal Ethics Committee is formally established at the faculty level and serves as the authorized body responsible for reviewing and approving all research activities involving animals. This committee operates under an official university decree and follows standardized ethical review procedures applicable to both staff and student research.

In response to the experts' requirement, the study programme has reviewed and strengthened its documentation procedures to ensure that the involvement of the Animal Ethics Committee is explicitly recorded in final theses that include experimental work with living animals. As supporting evidence, an example of an official ethical approval document issued by the faculty-level Animal Ethics Committee is attached. The original document, issued in Bahasa Indonesia, has also been translated into English to enhance clarity and international readability.

Through this clarification and the provision of formal documentation, the study programme ensures that ethical oversight of animal-based research is transparent, verifiable, and aligned with international academic and ethical standards.

Resources

Staff and Development

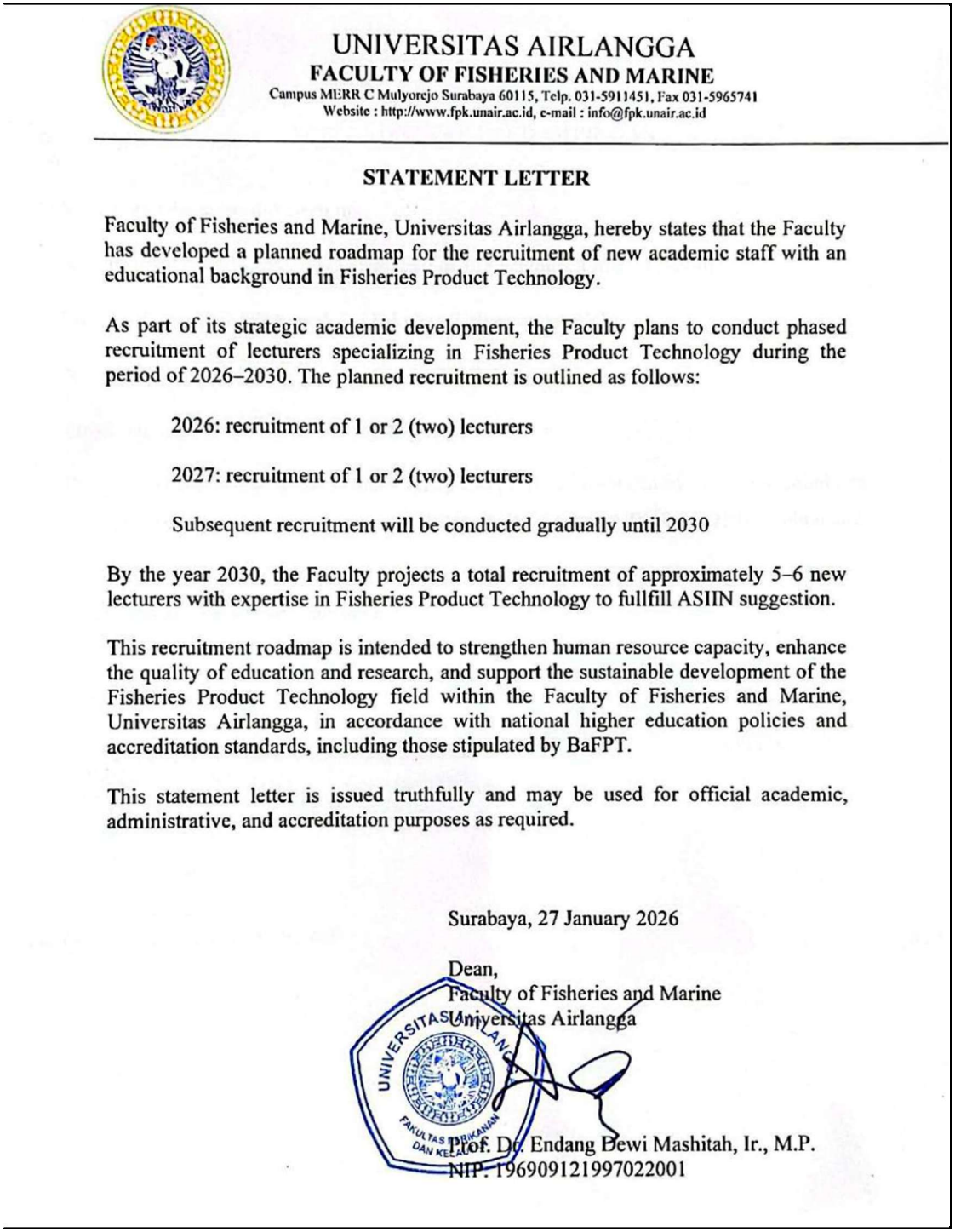
Comments from experts:

In that regard, the experts find that, for the BaFPT programme, the number of staff members with core expertise in this discipline is very limited and therefore recom mend increasing the staff that is related to the core field of fisheries product technology. **(p.28)**

Responses:

The BaFPT programme acknowledges the experts' observation regarding the limited number of staff members with core expertise in fisheries product technology. We would like to clarify that the delivery of core competencies in this field is currently supported by a multidisciplinary academic team whose expertise includes fisheries processing, food science, microbiology, chemistry, biotechnology, quality assurance, and industrial management. Although the number of lecturers holding degrees specifically in fisheries product technology is still limited, the Faculty of Fisheries and Marine has already incorporated this need into its five-year recruitment plan starting in 2026. The faculty plans to recruit six new lecturers in this field, beginning with a reorganization of the department based on academic expertise and the opening of

new lecturer positions. This commitment is formally supported by an official statement letter (Figure 5) signed by the Dean of the Faculty of Fisheries and Marine, UNAIR.



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STATEMENT LETTER

Faculty of Fisheries and Marine, Universitas Airlangga, hereby states that the Faculty has developed a planned roadmap for the recruitment of new academic staff with an educational background in Fisheries Product Technology.

As part of its strategic academic development, the Faculty plans to conduct phased recruitment of lecturers specializing in Fisheries Product Technology during the period of 2026–2030. The planned recruitment is outlined as follows:

2026: recruitment of 1 or 2 (two) lecturers

2027: recruitment of 1 or 2 (two) lecturers

Subsequent recruitment will be conducted gradually until 2030

By the year 2030, the Faculty projects a total recruitment of approximately 5–6 new lecturers with expertise in Fisheries Product Technology to fullfill ASIIN suggestion.

This recruitment roadmap is intended to strengthen human resource capacity, enhance the quality of education and research, and support the sustainable development of the Fisheries Product Technology field within the Faculty of Fisheries and Marine, Universitas Airlangga, in accordance with national higher education policies and accreditation standards, including those stipulated by BaFPT.

This statement letter is issued truthfully and may be used for official academic, administrative, and accreditation purposes as required.

Surabaya, 27 January 2026

Dean,
Faculty of Fisheries and Marine
Universitas Airlangga

Prof. Dr. Endang Dewi Mashitah, Ir., M.P.
NIP. 196909121997022001

Figure 5.Statement letter by the Dean of Faculty of Fisheries and Marine.

In addition to strengthening academic staffing, the BaFPT programme also benefits from lecturers with substantial industrial experience. For example, one of the lecturers, Terry Previo Avianto, S.Pi., M.Si, has professional expertise in managing a fisheries processing plant. His involvement enhances students' understanding of how theoretical knowledge is applied in real industrial settings. Furthermore, the programme regularly conducts guest lectures and invites industry professionals to contribute to curriculum and module development, ensuring that teaching content remains aligned with current industry practices.

These academic and professional contributions collectively demonstrate the programme's commitment to strengthening expertise in fisheries product technology and ensuring that students receive education that is academically robust, industry-relevant, and aligned with the experts' recommendations.

Comments from experts:

While the staff members are highly satisfied with their academic development opportunities, the staff of the Faculty of Fisheries and Marine state that, overall, the industry experience within the staff body is too low which may explain some queries of the industry representatives regarding the interprofessional skillset of the graduates. The experts therefore recommend increasing the industry experience of the staff body, e.g., by focusing on this criterion the staff recruitment or by allowing staff to gain industry experience in sabbaticals. **(p.28)**

Responses:

The BaAq and BaFPT study programmes acknowledge the experts' observation that the overall level of industry experience among staff members in the Faculty of Fisheries and Marine remains limited, which may contribute to concerns raised by industry representatives regarding the interprofessional skillset of graduates. In response, both the BaAq and BaFPT programmes highlight that several academic staff already possess practical experience in aquaculture and fisheries-related industries, and that ongoing efforts are being made to strengthen this dimension of staff expertise.

In the BaAq programme, industry-related experience is represented among the academic staff, such as Daruti Dinda Nindarwi, S.Pi., M.P., who has professional experience in managing fisheries and aquaculture production systems. This background enhances the learning process by connecting theoretical knowledge with real industrial practices and helping students understand how course concepts are applied in professional settings. The programme also regularly organises general lectures and invites industry practitioners to contribute to curriculum enrichment. For example, the Faculty of Fisheries and Marine Affairs recently hosted a guest lecture featuring practitioners from PT Pertamina (Persero) to strengthen collaboration with industry,

particularly in the marine and coastal resources sector (Figure 6). Additional evidence of industry engagement is provided through the inclusion of industry professionals' CVs in the staff handbook and through documented collaborations involving joint research, internships, field practice placements, and applied development projects.

Figure 6. Guest lecture with practitioners from PT Pertamina (Persero).

Similarly, the BaFPT programme incorporates lecturers with professional backgrounds in the fisheries processing industry, contributing significantly to the programme's practical and industry-oriented competencies (Table 4). These lecturers help bridge academic learning with industrial applications and ensure that students are exposed to current industry practices. Notable examples include **Dr. Muhamad Nur Ghoyatul Amin**, who collaborates with PT Realfood Winta Asia on product testing and dissemination activities, and **Dr. ENG Patmawati**, who maintains partnerships with PT Algae Park Indonesia, PT Kelola Mina Laut, and PT Mulia Bosco Sejahtera (MGM Bosco Logistics) through collaborative research, publication activities, and guest lecturing. These engagements demonstrate that the programme already benefits from staff with relevant industrial experience and maintains active partnerships with key industry stakeholders.

Table 4. Lecturers with professional backgrounds in the fisheries processing industry.

No.	Name	Industry partner	Activities
1.	Dr. Muhamad Nur Ghoyatul Amin	PT. Realfood Winta Asia, Bojonegoro, Indonesia	Fish broth product testing and dissemination of the developed products through research, and scientific publication
2.	Dr. ENG Patmawati	PT Algae Park Indonesia	Collaboration research for supporting raw material
		PT Kelola Mina Laut	Collaboration for Publication
		PT Mulia Bosco Sejahtera (MGM Bosco Logistics)	General lecturer for Material Sanitation and Hygiene

Collectively, the initiatives undertaken by BaAq and BaFPT show a clear commitment to strengthening the industry experience of the staff body, in line with the experts' recommendations. Through existing industrial collaborations, the involvement of practitioners in teaching, and the presence of lecturers with professional backgrounds, both programmes continue to enhance the relevance of their teaching and better prepare graduates for interprofessional work environments.

Student Support and Student Services

Comments from experts:

However, the students are not fully satisfied with the services of the Career Development Centre and would appreciate a greater offer of job orientation activities which bring them in direct contact with different companies, such as a job fair or career week. The experts therefore issue a recommendation in that regard. **(p.30)**

Responses:

The study programmes acknowledge the experts' observation that students are not yet fully satisfied with the services of the Career Development Centre (PKKA UNAIR) and would welcome a broader range of job-orientation activities that facilitate direct interaction with employers, such as job fairs and career weeks. While the programmes note that graduate employability, particularly in the DVM programme, remains strong, with most graduates securing employment within 0–6 months after graduation, they recognise the importance of strengthening structured career-readiness support and enhancing students' engagement with PKKA UNAIR initiatives.

In the BaVM programme, several targeted initiatives have been implemented to support students' transition into the workforce. These include walk-in interview activities organised in collaboration with industry partners, as well as pre-graduation seminars designed to prepare prospective veterinarians for professional practice. Selected final-year students also participate in soft-skills and career-development training programmes delivered by external partners such as the Wadhwani Foundation. In addition, the PKKA UNAIR regularly organises seminars, job fairs, and career-related events aimed at expanding students' professional networks and employment opportunities. In line with the experts' recommendation, the programme will place greater emphasis on improving the dissemination of PKKA UNAIR information and increasing student participation in soft-skills development activities to enhance the visibility and perceived impact of career-support services.

The BaAq programme likewise benefits from the services of the PKKA UNAIR, which provides comprehensive career-development support through its official platform (https://career.unair.ac.id/). Students have access to job vacancies, career guidance, and major events such as job fairs and career weeks, with additional information available at https://career.unair.ac.id/careerfair. At the faculty level, the Faculty of Fisheries and Marine has implemented structured career-preparation programmes in collaboration with Dayalima Recruitment, including career-development sessions, CV reviews, and interview simulations (Figure 7). Furthermore, formal partnerships established through Memoranda of Understanding (MoUs), along with alumni-based recruitment initiatives, strengthen the synergy between academia and industry. One example is the strategic partnership with PT Haida Agriculture Indonesia (Figure 8). To address students' concerns regarding limited awareness of available opportunities, the BaAq programme is enhancing the dissemination of career-related information through social media, the Academic and Student Affairs Office (SBAK), the faculty website, and information boards within the faculty.

Similarly, the BaFPT programme supports students' career readiness through access to PKKA UNAIR's career-development platform, where students can obtain information on job vacancies, employer engagement events, and university-wide job fairs. In addition, the programme facilitates direct interaction between students and industry representatives through guest lectures and discussions embedded within PKL (internship/field-work practice) activities. These engagements provide students with insight into industrial expectations and strengthen their preparedness for employment, as illustrated in Figure 9, which documents a discussion session between BaFPT students and industry partners.

Collectively, these measures demonstrate that the study programmes have already taken concrete steps to enhance career-development support while acknowledging the need for further improvement. In line with the experts' recommendation, the

programmes will continue to expand opportunities for direct engagement with employers and strengthen communication regarding available PKKA UNAIR services. These efforts are expected to increase the visibility, relevance, and perceived impact of career-orientation activities, thereby further supporting students' employability and professional readiness.

Figure 7. Career preparation programs

Figure 8. Strategic Collaboration between FPK UNAIR x PT Haida Agriculture Indonesia.

Figure 9. Discussion between BaFPT students with industries.

Funds and equipment

Comments from experts:

- In the first place, they find that the conditions for keeping living animals do not comply with international standards regarding animal welfare. An example is the keeping of poultry in small cages, stable floors out of perforated metal sheets, and the tethering of large animals on nose rings. The experts acknowledge that, compared to other

universities in Indonesia as well as the industry, the standards are still high; however, in light of UNAIR´s goal to become an internationally recognised research and teaching centre, the adherence to these basic standards is essential, and universities need to be the first players to raise awareness for these topics and set an example. Therefore, the experts require UNAIR to present a strategic plan for how to raise animal welfare standards in accordance with the 5 freedoms principle. **(p.32-33)**

- Moreover, the experts are concerned about the biosafety and hygiene standards of the pathology dissecting room and the clinical rooms of the veterinary hospital. This concerns both the material layout of the rooms which are, e.g. not fully covered by tiles and many surfaces can therefore not be adequately cleaned and disinfected, as well as the structural design of these rooms. The most prevalent problem in that regard are that that there is no adequate delivery entrance for the pathology dissecting room, and that the current entrance is located directly next to the faculty cafeteria, which poses an essential biosafety risk. In the veterinary clinic, it strikes that there are no adequate disinfecting areas with suitable washbasins that allow the staff to disinfect and put on safety equipment in a sterile environment. As the current disinfecting area is located in the corridors outside of the treatment wards, it is also not currently possible for the staff to enter the ward without touching non-sterile infrastructure. The experts see an urgent need to address these short comings and therefore require UNAIR to provide a concept for the update of biosafety and hygiene standards of the pathology dissecting room and its surroundings (e.g., place of delivery), and clinical rooms of the veterinary hospital. Connected to that is also the requirement to ensure that all staff and faculty working and teaching in laboratories are familiar with lab safety measures, including documentation of incidents, which, although respective safety guidelines are in place, appear not to be consequently pursued in practice. **(p.33)**
- Lastly, as mentioned in chapter 1.6, the experts wonder why there is no clinical skills lab for practicing basic veterinary practical competencies on dummies. Given the high number of students, this kind of lab is essential for giving all the students sufficient opportunities and time to practice all treatments without excessively stressing and eventually even harming the comparatively few laboratory animals that are accommodated on campus for this purpose. The programme coordinators argue that this kind of equipment is expensive and difficult to acquire but, also in this regard, the experts point towards UNAIR´s aspiration of excellence in teaching and research. Moreover, it would also me possible to manufacture at least basic dummies themselves. Therefore, also in this regard, the experts require a concept that provides a clear roadmap for the implementation of a skills lab in accordance with international standards. **(p.33)**
- However, for the Faculty of Veterinary Medicine, the experts find significant shortcomings within the available resources, especially regarding biosafety and hygiene standards, animal welfare conditions, and the lack of a clinical skills lab as an essential facility of modern veterinary education. These shortcomings are required to be addressed, which why respective concepts and action plans are requested by the experts. **(p.34)**

Responses:

The BaVM study programme and Faculty of Veterinary Medicine acknowledge the experts' concerns regarding the current conditions for keeping living animals used for teaching and research activities. We fully recognise that adherence to internationally accepted animal welfare standards, particularly the Five Freedoms principle, is essential for an institution that aspires to become an internationally recognised centre for veterinary education and research. With respect to the use of nose rings in cattle, we would like to clarify that this practice is not considered a violation of animal welfare when applied and managed appropriately. Nose rings serve a clear safety function, especially for large adult male cattle in our teaching farm, which often exceed 650 kg and pose significant risks to handlers and other animals. The nasal septum is a sensitive area, allowing gentle pressure to provide effective directional control without excessive force or punitive restraint. When installed by trained personnel, the procedure causes only temporary discomfort comparable to routine livestock management practices such as ear tagging or vaccination. After healing, nose rings do not cause chronic pain or infection, and when used within welfare-oriented handling systems, they remain consistent with accepted animal-welfare principles.

Regarding poultry housing, the study programme emphasises that research-based housing systems must be evaluated according to their scientific purpose rather than production efficiency. Individual or battery-type cages may be ethically justified when required to ensure experimental validity, animal safety, and reliable data collection. Welfare assessment in this context relies on a harm–benefit analysis, ensuring that any temporary restrictions are scientifically necessary, proportionate, and minimised. When managed under strict ethical oversight, including limited duration, continuous monitoring, and appropriate enrichment, individual cages can reduce social stress, improve health surveillance, and remain compatible with welfare principles. Nonetheless, the faculty recognises the experts' recommendation and is committed to developing a strategic plan to further elevate animal-welfare standards in accordance with the Five Freedoms principle.

The study programme and faculty also acknowledge the experts' serious concerns regarding biosafety and hygiene standards in the pathology dissecting room and the clinical rooms of the veterinary hospital. The absence of a dedicated delivery entrance for the pathology laboratory and the current proximity of the entrance to the faculty cafeteria indeed pose significant biosafety risks. In response, the faculty has developed a structured plan to revitalise and upgrade the pathology laboratory to strengthen biosafety, hygiene, and environmental-health compliance. This plan includes establishing a dedicated and segregated delivery route for specimens, physically separated from public and food-service areas, to minimise cross-contamination risks. Additionally, the internal layout of the dissecting room and its surroundings

will be redesigned to improve zoning between clean and contaminated areas in accordance with biosafety principles.

Beyond infrastructure improvements, the programme already implements strict operational controls through established Standard Operating Procedures (SOPs) governing specimen handling, personnel protection, waste management, and post-procedure sanitation. These SOPs are available and enforced within the Veterinary Pathology Laboratory. Through the combined implementation of infrastructure revitalisation and strengthened procedural controls, the faculty aims to significantly enhance biosafety and hygiene standards in the pathology dissecting room and its surrounding areas, ensuring alignment with international best practices. The faculty also recognises the importance of ensuring that all staff and faculty working in laboratories consistently apply laboratory-safety measures, including the documentation of incidents, and will reinforce these practices through internal monitoring and training.

The BaVM study programme further acknowledges the experts' comments regarding the need for early practical training before students engage in procedures involving living animals. We would like to clarify that a medical/clinical skills laboratory is already in place and is routinely used by veterinary students, particularly within modules designed to prepare them for practical examinations and the acquisition of fundamental procedural competencies. The skills laboratory supports supervised individual practice, and all equipment is cleaned, organised, and stored according to safety and hygiene standards after each session. Its regular use may not have been fully visible during the site visit due to its integration within specific modules.

At the same time, the study programme fully concurs with the experts' recommendation regarding the importance of a permanent and clearly identifiable veterinary clinical skills laboratory. Accordingly, the establishment of a dedicated and permanent skills-lab facility has been incorporated into the programme's future development plans. This facility will enhance structured skills training, expand opportunities for individual practice, and support early competence development prior to clinical exposure, thereby reducing reliance on live animals and aligning with international standards for modern veterinary education.

Transparency and Documentation

Module Descriptions

Diploma and Diploma Supplement

Comments from experts:

However, they point out that, while the SKS credit numbers are transparently displayed in the Transcript of Records, the number of ECTS points is not presented, which may hinder the recognition and transfer of credits overseas. It is therefore required to, at least, display the total number of completed ECTS credits in the Transcript of Records and provide information about the credit conversion in the Diploma Supplement. To further increase transparency, the experts additionally recommend to also display the ECTS numbers of the individual modules on the Transcript of Records. **(p.35)**

Responses:

We sincerely appreciate the reviewer's recommendation to include ECTS credits in the Transcript of Records and to provide corresponding information on credit conversion in the Diploma Supplement. The format of the Transcript and Diploma Supplement at UNAIR must remain standardized across all study programs, to ensure institutional consistency and alignment with internal quality assurance as well as national regulation. This is particularly important because different programs at our university are accredited by diverse international accreditation bodies based on their respective scientific disciplines—not all of which follow the ECTS. However, the faculty given the authority to make diploma supplement which in UNAIR is known as SKPI. SKPI is not a substitute for diploma or transcript, but rather a supplementary document that provides more detailed information about the graduate's competencies and experience. Further, the information of ECTS conversion can be put in this document."

G Summary: Expert recommendations (25.02.2026)

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

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Aquaculture	With requirements for one year	30.09.2031
Ba Fisheries Product Technology	With requirements for one year	30.09.2031
Ba Veterinary Medicine	With requirements for one year	30.09.2031
Veterinary Professional Education	With requirements for one year	30.09.2031

Requirements

For all programmes

A 1. (ASIIN 1.4) Open the application/ admission process also for students whose high school diploma dates back for more than three years.

A 2. (ASIIN 1.4) Abandon the discriminatory admission restriction for students with colour blindness.

A 3. (ASIIN 4.2) Display the total number of ECTS credits in the final documents and provide information about the credit systems respectively conversion in the Diploma Supplement.

For the Veterinary programmes

A 4. (ASIIN 3.3) Provide a strategic plan how to raise animal welfare standards in accordance with the 5 freedoms principle.

A 5. (ASIIN 3.3) Update the Biosafety and hygiene standards of the pathology dissecting room and its surroundings (e.g. place of delivery), and clinical rooms of the veterinary hospital, and ensure safety via preliminary measures until the update is completed.

A 6. (ASIIN 3.3) Provide a concept for the implementation of a Skills Lab in accordance with international standards for Skills Lab in Veterinary Medicine.

For the DVM programme

A 7. (ASIIN 1.5) Transparently evaluate the student workload and allocate the credit points accordingly.

Recommendations

For all programmes

E 1. (ASIIN 1.6) It is recommended to better support the development of professional communication and interpersonal skills.

E 2. (ASIIN 4.2) It is recommended to outline the ECTS credits of the individual modules on the Transcript of Records.

For Ba Aquaculture and Ba Fisheries Product Technology

E 3. (ASIIN 3.1) It is recommended to increase the industry experience of the staff body.

H Comment of the Technical Committees

Technical Committee 08 – Agriculture, Forestry and Food Sciences (03.03.2026)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure, particularly regarding the requirement for the admission of students whose school leaving certificate is more than three years old. According to the university, this is based on national regulations, although the TC members emphasise that this has not been noticed in other procedures in Indonesia to date. However, the TC is of the opinion that this should nevertheless be closely monitored with regard to non-discrimination and should therefore be imposed. At a level of programme contents, it is specifically emphasised for the Aquaculture programme that the module 'Fisheries law and policy' is of great importance for the subject, which is why it should be compulsory in this programme, while the optional arrangement agreed for the Fish Product Technology programme is considered sufficient. In addition, a further recommendation based on E3 is included, stating that not only should teachers have more industry experience, but students should also gain a better understanding of the industry as part of their education.

The Technical Committee 08 – Agriculture, Forestry and Food Sciences recommends the award of the seals as follows:

Degree Programme	**ASIIN Seal**	**Maximum duration of accreditation**
Ba Aquaculture	With requirements for one year	30.09.2031
Ba Fisheries Product Technology	With requirements for one year	30.09.2031

Technical Committee 14 – Medicine (04.03.2026)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure and considers that, while many formal aspects as well as the organisation of studies and internationalisation are to be highlighted positively, the shortcomings with regard to equipment are significant. The issue of age discrimination is

also discussed. Even if it is not currently relevant in the Indonesian system to allow people to enter higher education a long time after leaving school, this possibility should not be ruled out in the interests of non-discrimination. The FA therefore endorses the expert opinion without changes.

The Technical Committee 14 – Medicine recommends the award of the seals as follows:

Degree Programme	**ASIIN Seal**	**Maximum duration of accreditation**
Ba Veterinary Medicine	With requirements for one year	30.09.2031
Veterinary Professional Education	With requirements for one year	30.09.2031

I Decision of the Accreditation Commission (27.03.2026)

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

The AC discusses the procedure and generally supports the recommendation of the expert group and the TCs. It also confirms the two recommendations which were reinstated by the TC 08 for the Ba Aquaculture. For all Bachelor´s programmes, the issue of discriminatory entry restrictions for students older than 25 years and/ or students whose high school diploma dates back more than three years is considered particularly important. However, given that the university has provided evidence that these regulations are imposed by higher ministerial authorities and, therefore, cannot be changed by the university itself, the AC decides not to formalise this as a requirement. Nevertheless, as these regulations are considered discriminatory and hinder the academic development of groups of people, it is strongly recommended to open the application/ admission process for this group of people. The university should approach respective authorities and work towards abandoning these restrictions.

The Accreditation Commission decides to award the following seals:

Degree Programme	**ASIIN Seal**	**Maximum duration of accreditation**
Ba Aquaculture	With requirements for one year	30.09.2031
Ba Fisheries Product Technology	With requirements for one year	30.09.2031
Ba Veterinary Medicine	With requirements for one year	30.09.2031
Veterinary Professional Education	With requirements for one year	30.09.2031

Requirements

For all programmes

A 1. (ASIIN 1.4) Abandon the discriminatory admission restriction for students with colour blindness.

A 2. (ASIIN 4.2) Display the total number of ECTS credits in the final documents and provide information about the credit systems respectively conversion in the Diploma Supplement.

For the Veterinary programmes

A 3. (ASIIN 3.3) Provide a strategic plan how to raise animal welfare standards in accordance with the 5 freedoms principle.

A 4. (ASIIN 3.3) Update the Biosafety and hygiene standards of the pathology dissecting room and its surroundings (e.g. place of delivery), and clinical rooms of the veterinary hospital, and ensure safety via preliminary measures until the update is completed.

A 5. (ASIIN 3.3) Provide a concept for the implementation of a Skills Lab in accordance with international standards for Skills Lab in Veterinary Medicine.

For the DVM programme

A 6. (ASIIN 1.5) Transparently evaluate the student workload and allocate the credit points accordingly.

Recommendations

For all programmes

E 1. (ASIIN 1.4) It is recommended to open the application/ admission process also for students whose high school diploma dates back for more than three years.

E 2. (ASIIN 1.6) It is recommended to better support the development of professional communication and interpersonal skills.

E 3. (ASIIN 4.2) It is recommended to outline the ECTS credits of the individual modules on the Transcript of Records.

For Ba Aquaculture and Ba Fisheries Product Technology

E 4. (ASIIN 3.1) It is recommended to increase the industry experience of the staff body.

For Ba Aquaculture

E 5. (ASIIN 1.3) It is recommended to make the module “Fisheries law and policy” compulsory. [neu FA 08]

E 6. (ASIIN 1.6) It is recommended to include the industry in the teaching activities to a higher extent. [neu FA 08]

Appendix: Programme Learning Outcomes and Curricula

As outlined in the educational guidelines of the programme, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor of Aquaculture:

Objectives:

1. Producing quality graduates who are able to develop science and technology in the field of aquaculture and have competitiveness based on religious morals.
2. Producing innovative research that encourages the development of science and technology in the field of aquaculture on a national and international scale.
3. Producing quality graduates who are able to develop science and technology in the field of aquaculture and have competitiveness based on religious morals.
4. Producing innovative research that encourages the development of science and technology in the field of aquaculture on a national and international scale.

PLO:

Attitude	LO-01	Able to implement intellectual abilities based on religious morals to support performance independently in the field of aquaculture.
General Skills	LO-02	Able to apply logical, critical, systematic solution, and innovative thinking in the context of developing or implementing quality science and technology independently in the field of marine and fisheries.
Special Skills	LO-03	Able to independently and systematically analyses fish pests and diseases in the field of aquaculture
	LO-04	Able to appropriately apply fish hatchery and rearing technology in the field of aquaculture by applying competency values that are in accordance with their field of expertise.
	LO-05	Able to implement the science of nutrition and fish feed technology in the field of aquaculture according to scientific principles and ethics.
	LO-06	Able to determine optimal water quality and environmental health as an alternative solution in the field of aquaculture.
	LO-07	Able to apply entrepreneurship in the field of aquaculture in accordance with their expertise
Knowledge	LO-08	Able to master fisheries and marine science comprehensively
	LO-09	Able to interpret policies in the scope of fisheries and marine appropriately in accordance with the scientific field
	LO-10	Able to clearly demonstrate the supporting potential of fisheries and marine resources development to realize sustainable management.

The following **curriculum** is presented:

Subject	credits			ECTS
	lecture	practical work	Total	
Semester 1				
Religion I	2	0	2	3.2
Pancasila	2	0	2	3.2
Citizenship	2	0	2	3.2
Indonesian	2	0	2	3.2
Data and Library	2	0	2	3.2
Basic Biology	2	0	2	3.2
Basic Chemistry	2	0	2	3.2
Basics of Fishery Product Processing	2	0	2	3.2
Basics of Aquaculture	2	0	2	3.2
Semester 2				
Logic and Critical Thinking	2	0	2	3.2
Introduction of Collaboration Science	2	0	2	3.2
Communication and Self Development	2	0	2	3.2
Ichthyology	2	1	3	4.8
Biochemistry	2	0	2	3.2
Oceanography	2	0	2	3.2
Ecology of Waters	2	1	3	4.8
Physiology of Aquatic Animals	2	1	3	4.8
Semester 3				
Water Quality Management	2	1	3	4.8

Planktonology	2	1	3	4.8
Fish Histology	2	1	3	4.8
Limnology	2	0	2	3.2
Socio- Economics of Fisheries	2	0	2	3.2
Fishery Biology	2	1	3	4.8
Fish Reproduction	2	1	3	4.8
Marine Biology	2	1	3	4.8
Semester 4				
Fish Parasitology	2	1	3	4.8
Fish Pathology	2	1	3	4.8
Technology of Fish Seeding	2	1	3	4.8
Fish Nutrition	2	1	3	4.8
Fish Genetics and Breeding	2	1	3	4.8
Microbiology	2	1	3	4.8
Basic Molecular Biology	2	0	2	3.2
Experimental Design Test	2	0	2	3.2
Semester 5				
Fish Disease Parasites	2	1	3	4.8
Management of Freshwater Aquaculture	2	1	3	4.8
Management of Mariculture	2	1	3	4.8
Fish Bacterial and Mycoses Disease	2	1	3	4.8
Entrepreneurship of Aquaculture	2	0	2	3.2
Management of Brackishwater Aquaculture	2	1	3	4.8
Research Methodology	2	0	2	3.2

KKN- Learning with the Community	0	3	3	4.8
Elective Courses	2	0	2	3.2
Semester 6				
Religion II	2	0	2	3.2
Fish Viral Disease	2	1	3	4.8
Biotechnology of Aquaculture	2	1	3	4.8
Fish Feed Technology	2	1	3	4.8
Natural Feed Cultivation	2	1	3	4.8
Pollution of Waters	2	1	3	4.8
Ornamental Fish and Aquascape	2	1	3	4.8
Elective Courses	2	0	2	3.2
Elective Courses	2	0	2	3.2
Semester 7				
Thesis Proposal	2	0	2	3.2
Practice Work Roomy	0	4	4	6.4
Enrichment Material	4	0	4	6.4
Semester 8				
Thesis	6	0	6	9.6
TOTAL			145	232
Elective Courses				
Choralogy	2	0		3.2
Fish Quarantine	2	0		3.2
Exploration Resource Aquatic	2	0		3.2

Selected Chapters Aquaculture	2	0		3.2
Fishing Methods	2	0		3.2
Fishery Product Processing	2	0		3.2
Marine Biota Industry	2	0		3.2
Fishery Law and Policy	2	0		3.2
Coastal and Sea Management	2	0		3.2
Scientific Writing and Presentation	2	0		3.2
Selected Chapters Fishery Product Technology	2	0		3.2

As outlined in the educational guidelines of the programme, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor of Fisheries Product Technology:

Objectives:

1. to produce graduate who have knowledge and skills in fisheries processing technology to support the development of biopharmaceuticals or pharmaceutical biota
2. to develop technology and innovation in the utilization of functional food sources and nutraceuticals from fisheries
3. to contribute to the quality assurance and safety of processed fisheries products through the application of quality management
4. to advance fisheries processing technology and management based on the fisheries industry.

PLO:

Attitude	A1	Able to implement intellectual abilities based on religious morals to support performance independently in the field of fisheries.
General Skill	GS1	Able to apply logical, critical, systematic, and innovative thinking in the context of developing or implementing science and technology that focus to and applies to humanities values based on their field of expertise.
Knowledge	K1	Able to apply fisheries development policies, especially in fisheries product technology.
	K2	Able to apply the concept of fisheries science and product industry.
Specific skill	SS1	Able to utilize fisheries product processing technology.
	SS2	Able to process fisheries sources into functional food products.
	SS3	Able to exploit nutraceutical sources for fisheries products.
	SS4	Able to apply the principles of quality and safety of processed fisheries products.
	SS5	Able to determine the safety of processed fisheries products.
	SS6	Able to apply fisheries products industry management.
	SS7	Able to make decisions based on logic and scientific analysis that relevant to fisheries.
	SS8	Able to identify potential sources for the development of fisheries products industry.

The following **curriculum** is presented:

NO	Code	Courses	Credit			ECTS
			Class	Prac.	Total	
1st Semester						
1	AGI101	Islamic Religion I	2	0	2	3.2
	AGK101	Catholic Religion I	2	0	2	3.2
	AGP101	Christian Religion I	2	0	2	3.2
	AGH101	Hindu Religion I	2	0	2	3.2
	AGH101	Budha Religion I	2	0	2	3.2
	AGC101	Confucius Religion I	2	0	2	3.2
2	NOP103	Pancasila	2	0	2	3.2
3	NOP103	Civics Education	2	0	2	3.2
4	BAI101	Bahasa	2	0	2	3.2
5	SIP107	Data and Reference	2	0	2	3.2
6	BID101	Basic biology	2	0	2	3.2
7	KID101	Basic Chemistry	2	0	2	3.2
8	PHP103	Logic and critical thinking	2	0	2	3.2
9	MNM107	Introduction of knowledge collaboration	2	0	2	3.2
10	MNM106	Communication and self-development	2	0	2	3.2
Total 1st semester					20	32
2nd Semester						
11	PLU108	Introduction to Fisheries Processing	2	0	2	3.2
12	PLU101	Introduction to Aquaculture	2	0	2	3.2
13	EKP212	Social economic of fisheries	2	0	2	3.2
14	PLU103	Ichthyology	2	1	3	4.8
15	PLT102	Fisheries Material	2	1	3	4.8
16	PLL103	Aquatic ecology	2	0	2	3.2
17	PLL103	Oceanography	2	0	2	3.2
18	BIK101	Biochemistry of Fisheries processing	2	1	3	4.8
Total 2nd Semester					19	30.4
3rd Semester						
19	PLT101	Fisheries product Handling	2	1	3	4.8
20	BIM209	Aquatic Pharmacognosy	2	1	3	4.8
21	PLT208	Fisheries processing technology	2	1	3	4.8
22	PLT202	Food Additive	2	0	2	3.2
23	BIF119	Fisheries processing physiology	2	1	3	4.8
24	BIM106	Microbiology of Fisheries processing	2	1	3	4.8
25	KII207	Food Chemistry	2	1	3	4.8
26	MNG311	Factory Layout and Planning	2	0	2	3.2
Total 3rd Semester					22	35.2
4th Semester						
27	PLT209	Diversification and development of fisheries product	2	1	3	4.8

28	MNG313	Fisheries Product Industrial Management	2	1	3	4.8
29	FAT312	Physiology, Formation and Degradation of Fisheries Product Metabolites	2	1	3	4.8
30	PLT211	Fisheries Product Packaging	2	1	3	4.8
31	PLT213	Technology of waste and by product aquatic utilization	2	1	3	4.8
32	PNI301	Experimental design	2	0	2	3.2
33	NUI302	Fish Nutrient	2	1	3	4.8
34	AGI401	Islamic Religion I	2	0	2	3.2
	AGP401	Catholic Religion I	2	0	2	3.2
	AGK401	Christian Religion I	2	0	2	3.2
	AGH401	Hindu Religion I	2	0	2	3.2
	AGB401	Budha Religion I	2	0	2	3.2
	AGC401	Confucius Religion I	2	0	2	3.2
Total 4th Semester					22	35.2
5th Semester						
35	BIT303	Fisheries Product Biotechnology	2	1	3	4.8
36	PLT306	Thermal Processing Technology	2	1	3	4.8
37	FAT215	Fisheries Product bio-toxicology	2	1	3	4.8
38	PLT203	Fermentation technology	2	1	3	4.8
39	KNI491	Community Service-Learning Based Community (KKN-BBM)	0	3	3	4.8
40	LKT209	Sanitation dan Hygiene	2	1	3	4.8
41	NUI201	Nutraceutical and functional food of fisheries product	2	0	2	3.2
42	MNW301	Entrepreneurship	2	0	2	3.2
43		Elective course or Program MBKM *)	2	0	2	3.2
Total 5th Semester					24	38.4
6th Semester						
44	PLT309	Marine Biota Industrial Technology	2	1	3	4.8
45	PNI497	Research methodology	2	0	2	3.2
46	KII208	Technique of Chemistry analysis	2	1	3	4.8
47	BIT311	Biotechnology of macro and microalgae	2	1	3	4.8
48	PLT316	Sensory analysis	2	1	3	4.8
49	MNG312	Marketing and Trade of Fisheries Products	2	1	3	4.8
50	PLT212	Integrated Standardization and Quality Assurance	2	1	3	4.8
51		Elective course or Program MBKM *)	2	0	2	3.2
Total 6th Semester					22	35.2
7th Semester						
52	PNI498	Research Proposal	2	0	2	3.2
53	KLI401	Field Practice	0	4	4	6.4
54		Elective course or program MBKM	4	0	4	6.4
Total 7th Semester					10	
8th semester						

55	PNI499	Thesis	6	0	6	9.6
Total credit					145	232
		Elective Courses				
	PLT315	Surimi and Derivative Product Development Technology	2	0	2	3.2
	PLT314	Chitin Development Technology and Its Derivative Products	2	0	2	3.2
	PLU301	Coralogy	2	0	2	3.2
	PLU303	Fish quarantine	2	0	2	3.2
	PLL303	Aquatic Resources Exploration	2	0	2	3.2
	PLU306	Selected Chapters on aquaculture	2	0	2	3.2
	MNG303	Marine and coastal area management	2	0	2	3.2
	PNI401	Academic Writing and Presentation	2	0	2	3.2
	KSI301	Selected Chapters on Fisheries Product Technology	2	0	2	3.2

As outlined in the educational guidelines of the programme, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor of Veterinary Medicine:

Objectives:

1. Produce knowledgeable and ethical graduates who possess a strong foundation in veterinary and animal husbandry sciences, preparing them for further professional education or to compete in related fields at the national and international levels.
2. Facilitate research-based learning that introduces students to innovative approaches in solving basic problems in veterinary science and animal husbandry, contributing to the development of science and technology.
3. Promote student involvement in community-based activities that build awareness and responsibility toward solving veterinary and animal husbandry issues within society.
4. Develop a bachelor-level program that is adaptive, creative, and responsive to developments in veterinary science, technology, and global challenges.
5. Foster an academic environment that nurtures critical thinking, ethical awareness, environmental consciousness, and the principles of animal welfare in line with national values and global standards.

PLO:

Attitude	LO 1	Students are devout, uphold humanity and diversity, demonstrate nationalism, care for society and the environment, obey the law, act responsibly, uphold academic ethics, and embody independence, entrepreneurship, and excellence with morality.
	LO2	Able to keep up with developments in veterinary and animal science, think critically, creatively, and systematically, and demonstrate a commitment to lifelong learning.
General Skills	LO 3	Students are able to think logically, critically, and innovatively in applying science and technology; demonstrate independent and measurable performance; produce scientific work in accordance with ethical standards; process and utilize data accurately; and take responsibility for their work while maintaining the authenticity of scientific outputs.
Specific Skills	LO 4	Demonstrate an understanding of veterinary professional ethics, including the principles behind the veterinary oath and code of conduct, and the role of ethics in veterinary practice and animal welfare.
	LO 5	Understand the structure and function of the national animal health system, including the basics of veterinary legislation and programs related to disease prevention and control of zoonotic and non-zoonotic diseases.
	LO 6	Demonstrate basic knowledge of medical procedures and the principles of diagnostic and therapeutic techniques used in veterinary practice.
	LO 7	Demonstrate skills in handling several diseases in large animals, small animals, poultry, exotic animals, wild animals, aquatic animals and laboratory animals.
	LO 8	Demonstrate the ability to assist in basic clinical, laboratory, and epidemiological procedures, including simple diagnostics, animal nutrition assessment, and pre- and post-mortem examination procedures.
	LO 9	Possess foundational skills in professional communication, including basic client interaction, informed consent principles, and the ethical aspects of communication in veterinary contexts.

	LO 10	Understand the principles of biosecurity, zoonotic disease prevention, and environmental management in relation to veterinary public health.
	LO 11	Demonstrate the ability to perform basic data collection such as anamnesis, physical observation, and simple laboratory tests; understand how diagnoses are formed; and practice recordkeeping under supervision.
	LO 12	Understand the fundamentals of risk analysis, veterinary economics, and entrepreneurship relevant to animal health and veterinary services.
	LO 13	Develop basic analytical, research, and reporting skills applicable to veterinary science and be able to contribute to scientific communication.
	LO 14	Understand the foundational concepts of veterinary service and health management systems and the role of veterinarians within them.

Knowledge	LO 15	Students are able to master concepts, theories, methods, and philosophical foundations of science systematically through learning, work experience, research, and community service; possess fundamental knowledge of veterinary science; demonstrate scientific reasoning and sound research practices; and are capable of implementing outreach or counseling programs related to livestock development and animal health.
	LO 16	Understand Human Rights and associated rights and obligations, animal welfare, bioethics in veterinary research and services, academic ethics, veterinary health law, veterinary code of ethics, code of conduct for veterinary health services, informed consent, and issues of negligence (malpractice) in veterinary care.

As outlined in the educational guidelines of the programme, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Veterinary Professional Education programme:

Objectives:

1. Producing high-quality, dignified graduates who are able to develop, integrate, and apply veterinary and animal husbandry science to be able to compete at the national and international levels.
2. Producing innovative research that is able to solve problems that are new phenomena that occur in society and encourage the development of science and technology in the field of veterinary and animal husbandry.
3. Producing community service works that can improve the community's ability to identify, formulate and solve problems related to the veterinary and livestock fields independently and sustainably.
4. Realizing the independence of the faculty that is adaptive, creative, and proactive to the demands of science and technology development in the veterinary and animal husbandry fields.
5. Developing a research-based entrepreneurial faculty with world-class excellence based on national values, religious morals, ethics, environmental sustainability and animal welfare.

PLO:

Attitude	LO 1	Students are devout, uphold humanity and diversity, demonstrate nationalism, care for society and the environment, obey the law, act responsibly, uphold academic ethics, and embody independence, entrepreneurship, and excellence with morality.
	LO 2	Capable of keeping up with advancements in scientific knowledge and professional expertise, thinking critically, creatively, and systematically, and demonstrating a commitment to lifelong learning.

General Skills	LO 3	Demonstrates the ability to make independent and professional decisions grounded in logical and creative reasoning; perform duties in accordance with established professional competency standards; communicate ideas and innovations in a scientifically sound and ethically responsible manner; critically evaluate work outcomes; and continuously develop professional expertise through structured training and practical experience.
	LO 4	Demonstrates the ability to lead teams, collaborate effectively with partners in addressing issues within the fields of veterinary and animal science, and establish and maintain professional networks with both the professional community and clients.
	LO 5	Capable of contributing to the evaluation and formulation of national policies to enhance the quality of professional education or to advance policy development within their area of professional expertise.
Specific Skills	LO 6	Applied veterinary ethics, the oath, and professional code of conduct, as well as the basic references for the veterinary profession.
	LO 7	Implemented the national animal health systems and veterinary legislation including disease prevention and control programs both zoonotic and non-zoonotic or infectious or emerging/re-emerging diseases.
	LO 8	Competent to perform legal medical procedures and use the latest diagnostic and therapeutic tools for animals
	LO 9	Competent to perform medical procedures of several diseases in large animals, small animals, poultry, exotic animals, wild animals, aquatic animals and laboratory animals
	LO 10	Proficient in carrying out clinical, laboratory, pathological and epidemiological diagnoses of animal diseases; nutritional preparation; antemortem and post-mortem examination of humane slaughter; pregnancy checks, treatment of reproductive disorders and application of reproductive technology; supervision of safety and quality of animal products; supervision, quality control of veterinary medicines and biological materials, their use and distribution; measuring (assessment) and monitoring animal welfare.

	LO 11	Implemented professional communication with the client (professional communication/dialogue) and approval of medical procedures (informed consent).
	LO 12	Competent to manage and overcome strategic and zoonotic diseases, biosecurity (biosecurity-biosafety), and environmental control.
	LO 13	Competent to carry out anamnesis, physical and laboratory examinations, diagnosis, prognosis, deciding on medical actions to be taken, writing medical records, writing prescriptions, animal health certificates, and client education.
	LO 14	Implement risk analysis, veterinary economic analysis and possessed entrepreneurial spirit.
	LO 15	Performed veterinary management and leadership (veterinary leadership).
	LO 16	Competent in animal health/veterinary service management.
Knowledge	LO 17	Able to master veterinary concepts, theories, methods, and codes of ethics systematically through reasoning developed from learning processes and community service.
	LO 18	Understands Human Rights along with related rights and obligations, animal welfare, bioethics in veterinary research and services, academic ethics, veterinary health law, veterinary codes of ethics, codes of conduct for veterinary health services, informed consent, issues of negligence (malpractice) in healthcare, and the professional oath, as a foundation for guiding professional reasoning and actions in veterinary healthcare services.