Accreditation Report

University of Bengkulu (Sumatra/Indonesia)

Bachelor of Civil Engineering, Bachelor of Architecture,
Bachelor of Mechanical Engineering, Bachelor of Electrical Engineering,
Bachelor of Informatic System, Bachelor of Computer Science

I.   Procedure

Date of contract: 31 March 2022

Date of the submission of self-assessment report: 11 November 2022

Date of site visit: 15-17 November 2022

Attendance by ACQUIN office: Clemens Bockmann

Accreditation decision: 26 June 2023

Peer review experts:

- **Professor Hans Edin**, KTH Royal Institute of Technology, Professor in Electrical Systems, Head of Department of Electrical Engineering, Division of Electromagnetic Engineering, School of Electrical Engineering and Computer Science

- **Professor Mag. Arch. Wolfgang Grillitsch**, University of Applied Sciences Kärnten, Study program manager Architecture

- **Professor Kari T. Koskinen**, Tampere University, Mechatronics Research Group, Faculty of Engineering and Natural Sciences

- **Professor Dr. Ulrike Lechner**, University of the German Federal Armed Forces in Munich, Chair of Information Systems

- **Professor Thomas Asmus Pedersen**, University of Southern Denmark, Associate Professor, Head of Section, SDU Civil and Architectural Engineering Representative of Science – Bachelor of Electrical Engineering

- **Professor Dr. Thomas Richter**, Rhine-Waal University of Applied Sciences, Professor of web-based systems development

- **Sabine Gothe**, Software Developer, SkyGate internetworking GmbH

- **Carsten Schiffer**, RWTH Aachen University, Student of Industrial Engineering (B.Sc.) and Mechanical Engineering (B.Sc.)

The **Assessment Report** of the peer-review experts is based on the self-assessment report of the Higher Education Institution (HEI) and extensive discussions with the HEI management, deans and/or heads of the departments, heads of study programme(s), lecturers, staff representatives, students, and alumni.

The basis of the **Assessment Criteria** is part 1 of the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG) in the current official version. At the same time the national context, particularly the national regulations regarding the establishment of study programmes, are taken into account.

Content

II.   Introduction

The experts would like to thank the representatives of the HEI as well as students that they have taken part in the discussions and willingly shared information and their views during the site visit. The discussions are valuable not only for the assessment of the institution, but also for a better understanding of the legal and sociocultural context of the local higher education system.

Evaluation basis for the peer-review experts is the self-assessment report of the HEI as well as intensive discussions during the site visit with the HEI management, deans and/or heads of the departments, head(s) of the study programme(s), study programme(s) coordinators, teachers, lecturers, administrative staff, students, and graduates.

Main objective of the accreditation procedure is to assess the quality of the study programmes and compliance with the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG). The ESG standards are applied as main assessment criteria in the international accreditation procedure. In addition, the respective country-specific criteria and standards are taken into account.

A group of experts was set up, which ensured that all areas relevant to the accreditation procedure (e.g. legal, structural, social etc. aspects) as well as the ESG and national criteria were considered. The peer-review experts include professors, representatives of the professional practice and the student representative. A certificate with the ACQUIN seal is awarded upon accreditation of the study programmes.

1.   The Higher Education System in Indonesia

1.1.   Historical development

The modern Indonesian Higher Education System evolved from the colonial education system of the Dutch East Indies. The need for professionally trained personnel who could be used in the administration led to the establishment of a number of higher education institutions (HEIs) in the late 19th century and the first decades of the 20th century, and to the establishment of a number of colleges mainly on the island Java with the largest population. The institutions primarily provided practical vocational education in the fields of medicine (Medical College in Batavia, 1902), Engineering (Technical College in Bandung, 1920), agriculture (Bogor Agricultural College) and law (Jakarta Law College, 1924) and were less research oriented. These education institutions predominantly benefited a small number of European and, to a lesser extent, native indigenous elites – in 1930, only a little over 100 indigenous students were enrolled in the country's universities, where teaching was conducted in Dutch.

After Indonesia's declaration of independence in 1945, the education system underwent a massive expansion, reflecting the increased value of education for the young nation. Numerous foundations of universities like the Universitas Gadjah Mada in Yogyakarta (1949) and the Universitas Indonesia in Jakarta (1950, which emerged from earlier institutions) date from this period. A particularly important role with regard to the diversification of the higher education system was played by the higher education legislation of the early 1960s. The Higher Education Act No. 22 of 1961 stipulated that every province in Indonesia had to have at least one state university, which led to the establishment of 23 new HEIs.

In addition, the law established comparable structures at the universities, the "Tri Dharma" (three pillars) of higher education (teaching, research, and service to the community service), which are still valid today. Private universities were recognized as equal to public HEIs, which led to a significant expansion of the private sector.

While particularly the primary and secondary education sector experienced significant growth in the first decades after independence, the development of the tertiary education sector was much slower. Favoured by strong economic growth and – associated with it – an increasing demand for a well-educated labour force as well as an expanding middle class changed this situation from the mid-1970s onwards: While 260,000 students were enrolled at Indonesian universities in 1975, the numbers increased by more than one million each decade. In the mid to late 1970s, the structure of the study programmes was standardised along the lines of the Anglo-American system with bachelor's, master's and PhD degrees, a credit point system, and the division into fully academic and vocational study programmes were introduced.

Today, vocational training in Germany is regarded as a model for the development and expansion of vocational training structures in Indonesia's TVET sector (Technical and Vocational Education). The new dual study programmes are attracting great interest in Indonesia. Germany enjoys an extremely positive reputation here as a country of engineers, not least due to the popularity of the former President of the Republic of Indonesia, Dr. Bacharuddin Jusuf Habuf – he had studied aerospace engineering at RWTH Aachen.

1.2.   Contemporary situation

With currently 4,593 private and public institutions in tertiary education, Indonesia has one of the largest and most divergent higher education systems in the world (Pendidikan Tinggi 2020 statistics, p. 8, as of December 2020). 633 of these higher education institutions are considered universities (universitas). Since the state-run HEIs cannot meet the demand for primary, secondary, and tertiary education, there is a very broad market for private providers. Of the 4,593 HEIs, 122 are public, state-funded institutions and 3,044 are private. In addition, there are 187 state-owned higher education institutions (e.g. military and administrative colleges) and 1,240 religious colleges. These are not only higher education institutions for the training of religious functionaries, but also – religiously based – institutions with a variety of faculties and a wide range of courses of study and training. Thus, less than 10 per cent of all tertiary education institutions are state-run, more than 90 per cent are private universities. The state universities are generally regarded as particularly qualified and also have most of the country's current 739 doctoral programmes.

Despite the large number of private colleges, "only" about 52 percent of students study there, while 35 percent are enrolled at state colleges. The remaining 17 per cent study at religious colleges or state-owned colleges that are under neither the Ministry of Education nor the Ministry of Religion.

The majority of the state-run higher education institutions are administered and financed by DIKTI (Directorate for Higher Education at the Ministry of Education and Culture). The Ministry of Religion, on the other hand, is responsible for the large number of denominationally oriented higher education institutions. However, there are also higher education institutions that are administered and financed by other ministries, for example the Ministry of Finance and the Ministry of Defence. The private university sector is anchored in DIKTI with regionally organised so-called KOPERTIS networks.

In terms of their legal status, state universities are divided into three categories: autonomous universities (PTN-BH: Perguruan Tinggi Negeri – Badan Hukum); universities with partial fi-

nancial flexibility (PTN-BLU: Perguruan Tinggi Negeri – Badan Layanan Umum); and universities as full state educational institutions (PTN). Initial efforts to grant universities more autonomy date back to 1999 and were expanded in the following years, gradually first to seven state universities – including the country's top four universities – which were granted the status of autonomous universities (PTN-BH). Currently, twelve state universities out of the 122 belong to this group. They are all characterised by a higher degree of self-governance and independent financial management, as well as a dual management structure: in all academic as well as development-related matters, decisions are made by a senate composed of members of the faculties. Financial supervision and the election of the rector, on the other hand, are subject to a university council, which includes representatives of the Ministry of Education. (For comparison: in the non-autonomous universities, the rectors are still appointed by the ministry). In financial terms, these universities are allowed to make shifts within their overall budget, generate their own income and build up capital.

Both private and state-supported universities charge tuition fees. The amount of tuition fees varies greatly, depending on the subject studied, the socio-economic situation of the student (there is a subsidy for socially disadvantaged students) and according to the type of university:

At a state university, undergraduate studies (bachelor's degree) cost up to Rp. 10,000,000 (approx. 690 euros) per semester for Economic Studies, Social Sciences and Humanities, up to Rp. 15,000,000 (approx. 1,035 euros) for Engineering and up to Rp. 23,000,000 (approx. 1,590 euros) for medical studies. For the master's programme (in Indonesian "Sarjana 2"), the tuition fees per semester range from between 8,000,000 Rp. (approx. 550 euros) and 31,000,000 Rp. (approx. 2,140 euros); the highest tuition fees are charged in the field of management. Doctoral studies at state universities cost between 11,000,000 Rp. (approx. 760 euros) and 45,000,000 Rp. (approx. 3,100 euros).

At private universities, the tuition fees for a particular subject can vary greatly. For an undergraduate/bachelor programme, one has to pay on average between 12,000,000 Rp. (approx. 830,- Euro) and 20.000.000,- Rp. (approx. 1.380,- Euro), for a medical degree up to 54.000.000,- Rp. (approx. 3,725 euros), which does not include the sometimes very high very high enrolment fees for the first semester. In the master's programme, the tuition fees per semester at the private Atma Jaya University in Jakarta, to name just one example, range from 7,000,000 Rp. (approx. 480 euros) and 37,000,000 Rp. (circa 2,550 euros). Again, management is the most expensive field of study. For doctoral studies, which are seldom offered by private universities, one has to pay fees ranging from about 20,000,000 Rp. (approx. 1,380 euros) and 30,000,000 Rp. (approx. 2,070 euros) per semester.

The DIKTI distinguishes between the following types of HEI (in brackets the number of state and private institutions per type): Universitas (646), Institute (132), Sekolah Tinggi (1,361), Akademi (772), Akademi Komunitas (36), Politeknik (219). All these institutions can be either state as well as private.

Fully academic education with the degrees S1, S2 and S3 (which are equivalent to a bachelor's, a master's and doctoral degrees respectively) are offered at universities. In addition to the 646 state and private universities, there is also a distance learning university ("Universitas Terbuka"), which was opened in 1984 and offers mainly undergraduate courses. More than 310,000 students are currently enrolled there, with the largest proportion (over 40 per cent) studyubg at the Faculty of Teacher Education and Pedagogy. The degrees S1, S2, and S3, are also offered at subject-oriented HEIs: at institutes (Institut) and at high schools (Sekolah Tinggi).

Unlike the universities, the so-called Instituts are usually focused in certain areas of specialisation. Courses of study can be completed with a diploma as well as with a bachelor's degree. Some institutes also offer postgraduate courses. Another form of subject-oriented higher education institutions are the Sekolah Tinggi ("High School"), which often consist of only one faculty and for the most part offer courses leading to professional courses of study. They account for almost half of all higher education institutions in Indonesia and are for the most part private. The usual degrees obtained here are D 1 to D 4. These "Diploma" degrees are awarded in application-oriented courses of study; they are not recognised as academic degrees in the European Higher Education Area. The highest D degree, the Diploma 4, concludes a four-year course of study and can be equated to a bachelor's degree (S1) in Indonesia, albeit with the addition of "Bachelor of Applied Science". In addition to the Sekolah Tinggi, the Diploma degree can also be obtained at the 909 so-called academies ("Akademi").

Similar to the institutes, the Akademi are usually specialised in one field of study such as e.g. accounting, foreign languages or obstetrics, and are therefore rather small. They too are for the most part private institutions. The courses of study are concluded with a diploma degree. The 304 so-called polytechnics ("Politeknik") offer only three- and four-year programmes with diploma degrees that focus on practical vocational training. To meet the demand for qualified personnel in regions with high industrial or labour market potential, but which do not have HEIs, the establishment of 36 so-called Akademi Komunitas was started in 2012, which offer one-year and two-year courses of study leading to professional qualifications with the degrees D 1 and D 2 respectively.

Most universities still lack university teaching staff with doctoral degrees. Of the 308,600 lecturers statistically recorded, only around 47,625 have a doctorate. About 72 percent of university teachers have a master's degree as their highest qualification; all others teach with Bachelor's, Diploma or other degrees. The most qualified university teachers, by a wide margin over the other islands, are on Java, where about 26,000 hold doctorates and a good 108,700 have master's degrees. More than 60 per cent of all lecturers with a doctorate are thus employed at higher education institutions on Java.

1.3. Accreditation System in Indonesia

The issue of quality assurance plays a major role in Indonesia with its enormously diverse system of tertiary education institutions. While, for example, in Java and Sumatra 88 and 90 percent of the HEIs are accredited, in the provinces of Papua and West Papua the number is only 40 percent.

The authoritative institution for the accreditation of HEIs and study programmes in Indonesia is the National Accreditation Authority BAN-PT (Badan Akreditasi Nasional Perguruan Ting), founded in 1994. In addition, there are also independent accreditation agencies for specific disciplines, e.g. medicine.

The accreditation system is three-tiered and is carried out in a five-year rotation. An "A" accreditation is the best rating. "B" means "very good", "C" is the lowest classification level and is also used for newly established study programmes. The designations "unggul" (excellent), "baik sekali" (very good) and "baik" (good) were introduced in 2020 and have been used instead of A, B and C since then.

Out of approximately 4,600 higher education institutions in the country, about 62 per cent have been institutionally accredited so far. By the end of 2020, 99 institutions had been accredited with an "excellent" grade (the majority of which were state higher education institutions), 859 with a "very good" grade and 1,755 with a "good" grade. Among the study programmes that have already been accredited, 19.0 per cent received an "excellent" grade (by far the most of these in the subjects of management and accounting), 51.9 per cent a "very good" grade and 29.2 per cent a "good" grade. Clear differences can be seen between state and private higher education institutions: while more than 40 percent of bachelor's and master's programmes at state universities are accredited with an "excellent", this applies to only 7.5 percent of bachelor's and 12.9 percent of master's programmes at private universities (Pendidikan Tinggi 2020 statistics, p. 24f).

According to the government's plans, the accreditation system is to be fundamentally revised. For existing accreditation, the obligation to re-accredit is to be dropped. The previous classification will remain in place, but can be reviewed by the accreditation authority in the event of a suspected "decline in performance" of the university, in which case a downgrading is also possible. The HEIs are free to apply for re-accreditation on a voluntary basis, e.g. to move up from the "very good" to the "excellent" level.

2. Short profile of HEI

2.1. The University of Bengkulu

The University of Bengkulu (UNIB) is a state university under the authority of Ministry of Education, Culture, Research, and Technology located in Bengkulu city of Bengkulu province. The University of Bengkulu was established based on the Regulation of the President of Republic Indonesia Number 17 of 1982 on the Establishment of the University of Bengkulu on March 31st, 1982, and it was officially opened on April 24th, 1982.

The strategic plans of the Ministry that are relevant to the university emphasising on

1. Quality and relevance focused on students' development;
2. Developing the students' character;
3. Qualified educational access expansion, especially through equitable and inclusive affirmation;
4. Preserving and advancing not only Indonesian culture, language, and literature but also its main impact on education.

At the end of 2021 the UNIB had 8 faculties with 81 study programmes in all levels of tertiary education. There are 5 study programmes on doctoral level, 21 study programmes with magister degree, 44 study programmes with bachelor degree, 9 study programmes with vocational or diploma level.

UNIB employs 819 lecturers – consisting of teaching staff (18%), Assistant Professors (38%), Associate Professors (37%) and Professors (7%) – and 308 other staff (librarians, lab assistants, administrators).

The number of active students at the University of Bengkulu in the odd semester 2021/2022 is 21,932 students, consisting of 1,286 vocational students, 18,755 bachelor students, 1,563 magister students, 161 doctoral students, and 167 students in profession programmes.

2.2. The Faculty of Engineering

The Engineering Faculty of the UNIB (henceforth FT UNIB – Fakultas Teknik Universitas Bengkulu) was established in 2006 based on a permit given by the decree of the directorate of higher education No 3233/D/T/2006 dated 30 August 2006. The faculty is one of eight faculties at the University of Bengkulu. The faculty offers six study programmes i.e., informatics, civil engineering, mechanical engineering, electrical engineering, architecture, and information systems.

There are 78 permanent lecturers at the FT UNIB with 15 lecturers holding doctoral degrees (18.75%) and 63 lecturers holding magister degrees (81.25%). The number of lecturers continuing their doctoral studies is 7. The management of FT UNIB is supported by 16 civil servants personnel (45.95%) and 20 non-civil-servant personnel (54.05%). These lecturers teach some 2,000 students at the FT UNIB.

The available building infrastructures that are managed by FT UNIB consist of one Dean Building, three Laboratory Buildings, one Learning and Teaching Building, and one Senior High School-Building which was newly built in 2020. To support academic activities and lectures, FT UNIB has also been supported by several laboratory equipment and information systems.

3. General information on the study programmes

3.1. Computer Science (B.Sc.)

Location	University of Bengkulu, Faculty of Engineering
Date of introduction	2013
Faculty/ department	Department of Informatics
Standard period of study (semesters)	4 years
Number of ECTS credits	144 credits (SKS), 217.44 ECTS
Number of study places	60
Number of students currently enrolled	295
Average number of graduates per year	35
Form of study	full-time
Tuition fee	Ranges from 500.000 IDR to 5.790.000 IDR (35 USD to 399 USD) per semester for Indonesian student, depending on the financial situation.

3.2. Civil Engineering (B.Eng.)

Location	University of Bengkulu, Faculty of Engineering
Date of introduction	2013
Faculty/ department	Department of Civil Engineering
Standard period of study (semesters)	4 years
Number of ECTS credits	146 credits (SKS), 219 ECTS
Number of study places	60
Number of students currently enrolled	245
Average number of graduates per year	56
Form of study	full-time
Tuition fee	Ranges from 500.000 IDR to 5.790.000 IDR (35 USD to 399 USD) per semester for Indonesian student, depending on the financial situation.

3.3. Mechanical Engineering (B.Eng.)

Location	University of Bengkulu, Faculty of Engineering
Date of introduction	2003
Faculty/ department	Department of Mechanical Engineering
Standard period of study (semesters)	4 years
Number of ECTS credits	146 credits (SKS), 219 ECTS
Number of study places	50
Number of students currently enrolled	249
Average number of graduates per year	40
Form of study	full-time
Tuition fee	Ranges from 500.000 IDR to 5.790.000 IDR (35 USD to 399 USD) per semester for Indonesian student, depending on the financial situation.

3.4. Electrical Engineering (B.Eng.)

Location	University of Bengkulu, Faculty of Engineering
Date of introduction	
Faculty/ department	Department of Electrical Engineering
Standard period of study (semesters)	4 years
Number of ECTS credits	144 credits (SKS), 217,44 ECTS
Number of study places	50
Number of students currently enrolled	250
Average number of graduates per year	35
Form of study	Full-time
Tuition fee	Ranges from 500.000 IDR to 5.790.000 IDR (35 USD to 399 USD) per semester for Indonesian student, depending on the financial situation.

3.5. Architecture (B.Arch.)

Location	University of Bengkulu, Faculty of Engineering
Date of introduction	2016
Faculty/ department	Department of Architecture
Standard period of study (semesters)	4 years
Number of ECTS credits	146 credits (SKS), 220,46 ECTS
Number of study places	40
Number of students currently enrolled	182
Average number of graduates per year	18
Form of study	Full-time
Tuition fee	Ranges from 500.000 IDR to 5.790.000 IDR (35 USD to 399 USD) per semester for Indonesian student, depending on the financial situation.

3.6. Informatic System (B.Sc.)

Location	University of Bengkulu, Faculty of Engineering
Date of introduction	2016
Faculty/ department	Department of Informatic System
Standard period of study (semesters)	4 years
Number of ECTS credits	144 credits (SKS), 217,44 ECTS
Number of study places	40
Number of students currently enrolled	191
Average number of graduates per year	10
Form of study	Full-time
Tuition fee	Ranges from 500.000 IDR to 5.790.000 IDR (35 USD to 399 USD) per semester for Indonesian student, depending on the financial situation.

III. Implementation and assessment of the criteria

1. ESG Standard 1.1: Policy for quality assurance

Institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders.

1.1. Status

1.1.1 Overall Strategy: Vision, Mission, Values

The Quality Assurance Policy derives from the overall vision, mission, and values of the UNIB.

The university's vision is "Becoming a world-class university in 2025". UNIB strives to be excellent, cultured, and globally competitive.

To fulfil this vision, UNIB has formulated the following targets in its mission statement:
1. To develop a world-class education and research.
2. To produce works with Intellectual Properties Rights (IPR).
3. To conduct service in accordance with the needs of local, national, and international society.
4. To develop a good and clean university governance system.
5. Performing the integration of Tri Dharma activities (see below) that have an impact on the development of science, society, and national resilience.

The UNIB aims to implement the equality and diversity of the community in carrying out the educational process at the bachelor, master, and doctoral levels in science, technology, and arts. The implementation should be in accordance with the main values of UNIB. These are:
1. Culture
2. Innovation
3. Humanity
4. Leadership
5. Integrity
6. Transparency
7. Academic Freedom
8. Divinity

The UNIB formulated these values into several policies implemented at the study programme level. They are:

1. Outlining of UNIB's Long-Term Development Plan (henceforth RPJP – Rencana Pembangunan Jangka Panjang) in the form of strategic stages of medium-term development for 10 years and short-term development for 5 years in the 2020 – 2045 period.

2. The availability of a strategic programme steering target implementation based on priorities.

3. Providing guidance and guidelines in preparing the Strategic Business Plan of UNIB.

4. The achievement and assessment indicators are available to the performance monitoring and evaluation system.

5. Guideline for the academic community and educational staff to collaborate with all stakeholders. Further, to development of the Tri Dharma of higher education at the University of Bengkulu and to improve staff quality by being excellent, cultured and internationally competitive.

The implementation of vision, missions, and values of a university is called the "Tri Dharma" of higher education which includes education, research, and community service:

- The education pillar is implemented in the form of education administration including vocation, academic, and postgraduate programme study.

- The research pillar is implemented to conduct qualified, innovative, and up-to-date research to solve scientific, social, and humanity problems.

- The community service pillar is implemented to introduce and to apply lecturers' and students' ideas and research results in society to contribute to national and regional development.

The Tri Dharma is implemented through the study programmes at UNIB with the coordination of the Office of Research and Community Service.

The arrangement of the vision, mission, objectives, and strategies (VMTS) involved internal and external parties. Internal parties include lecturers and students. While external parties include potential employers and parties who use the services of the Engineering Faculty: government agencies, private companies, business communities, etc. The process was officially accommodated through a workshop.

This overall vision, mission and values are the basis for the faculty's own vision and mission. The Vision of FT UNIB is: "Becoming an excellent, unique and competitive faculty in Asia". The Mission of the FT UNIB for the year 2020-24 consists of eight elements:

1. Organising professional and service-oriented governance.

2. Organising quality education with emphasis on creativity and morality.

3. Improving the quality of scientific publications both nationally and internationally by excellence in research.

4. Creating a good academic atmosphere.

5. Setting the quality as the primary orientation in resource management.

6. Carrying out community service and national and international cooperation.

7. Utilising Information Technology (IT) for a more effective and efficient academic administration.

8. Producing creative, independent, and competitive graduates.

1.1.2 Quality Assurance Framework

The UNIB has a quality assurance system which consists of different policies of Indonesian Higher Education Quality Assurance:

- With the "Internal Quality Assurance System" (Sistem Penjamin Mutu Internal – SPMI), the University of Bengkulu always strives to improve the quality of education in a planned and sustainable manner. The implementation of SPMI at the University of Bengkulu starts from the university level to the study programme level to maintain the educational quality. SPMI of the University of Bengkulu as a sub-system from the education quality assurance system has particular functions:

  o Preparation of internal quality assurance standards both academic and non-academic.

  o Carry out monitoring, audits, and internal quality assessments.

  o Coordinate the implementation of improvement and development of academic and non-academic quality.

  o Carry out institutional administration functions from planning, budgeting, implementation, assessment, and reporting.

- The evaluation of the Implementation of Higher Education Standards is carried out through an "Internal Quality Audit" (Audit Mutu Internal – AMI). AMI is a systematic, independent, and documented assessment process. AMI ensures that the implementation of activities in the university are following the procedures and that the results are in accordance with the standards to achieve institutional goals.

- To strengthen the content of curricula and respond to changes and existing needs of the labour market, external and internal stakeholders are involved and asked for their input. External stakeholders are for example graduates, graduate employers including the government agencies, private companies, and business communities.

The Scope of the SPMI is defined as: "SPMI's policy that covers all aspects of the implementation of the Tri Dharma of higher education, research and service, with the main focus on learning aspects and other aspects that support learning aspects. This focus on learning aspects is intended as an initial or pioneering step, because gradually the focus of the SPMI policy scope will be developed."

Every faculty of the university has its own quality assurance unit (UPM) that monitors the learning process and conducts exit surveys, and checks on lecturers' teaching performance:

- The course evaluation by the students are carried out every semester at the end of each study period. The evaluation of the teachers concentrate on four aspects: pedagogic, social, personal and professional performance.

- The exit surveys are carried out biannually to evaluate implementation of thesis guidance and academic services in laboratories, study programmes, departments, and faculties.

UPM findings are followed up by the Vice Dean of the Academic Division.

1.2. Assessment

The quality assurance policy at the UNIB is highly regulated by state laws that define the purpose of the universities policies (e.g., the Tri Dharma), the organization of the quality assurance units (e.g., SPMI), and the level of operation of the study programmes (Indonesian Qualification Framework). However, as the legal framework defines the range of policies and the instruments to be used, the UNIB has to give substance to the framework. And according to the information presented and the impression of the discussions with UNIB-stakeholders, the UNIB filled the framework ambitiously.

The UNIB has a clear vision and mission statement as well as core values that formulate the policies for the next decades. These (VMTS) are constantly revised and broken down into five to ten-year development plans that are closely monitored by a strategic business plan.

At the heart of the quality assurance system sits the SPMI. It is a rather large department with 18 employees covering all aspects of quality assurance.

How far the scope of the SPMI reaches, is displayed in the Manual of Internal Quality Assurance System that covers a wide range of quality aspects including:

- Student and alumni standards
- Academic service standards
- Student admission standards
- Student enrolment standards
- Academic information system standards
- Curriculum implementation standards
- Curriculum evaluation standards
- E-Learning instruction standards
- Course materials preparation standards
- Laboratory / studio standards
- Field usage standards
- International class program standards
- Single tuition fee standards
- Development of Student and alumni standards
- Institutional cooperation
- Staff promotion standards
- Facility and infrastructure usage standards
- Environmental management standards
- Scientific publication standards
- Self-evaluation standards
- Internal quality audit standards

The expert panel had the opportunity to discuss the actual work of the SPMI with the Vice Rector for Academic Affairs and the Head of Quality Assurance of the FT UNIB. Based on recent surveys and quality assurance measurements the expert could see exemplary how the PDCA-cycle is working at the UNIB in general and the FT UNIB in particular. According to the expert's impression, the policy for quality assurance covers all relevant areas and all relevant bodies and institutions are involved in development and implementation of quality policies.

1.3. Conclusion

The criterion is **fulfilled**.

2.   ESG Standard 1.2: Design and approval of programmes

Institutions should have processes for the design and approval of their programmes. The programmes should be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme should be clearly specified and communicated, and refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

2.1.   Status

2.1.1 General

The graduates' profile learning outcomes of each study programme are determined and described in terms of learning outcomes based on the National Standard of Higher Education (SN-DIKTI) and the Indonesian Qualification Framework (IQF). This standard corresponds with the European Qualification Framework (EQF). In both cases the bachelor level is attributed to level 6. For the study programmes in engineering the IQF-Engineering has to be consulted, too. The structure of the curriculum is developed according to learning outcomes and learning materials to achieve the specified graduate profile. Learning outcomes are formulated in terms of knowledge, general and special skills, and attitude.

The structure of the curriculum is designed to facilitate the achievement of learning outcomes. For this purpose, learning units are attached with credits according to their workload. To complete a bachelor programme, students have to take a minimum of 144 credits during eight semesters. For the master programme, students have a minimum load of 36 credits during four semesters, and for the doctoral programme, students' minimum load is 42 credits which may be completed in eight semesters. Students are allowed to allocate the credits for each semester according to their abilities. Therefore, if the learning outcomes are good, then students can complete their studies faster.

To improve the content of the curriculum and to respond to the changes and existing needs of the labour market, external and internal stakeholders are involved and asked for input in the updating of the curricula. The external stakeholders include government officials, entrepreneurs of private companies, representatives from business communities, etc.

2.1.2 Bachelor of Computer Science

Currently, three consecutive curricula of the bachelor programme in "Computer Science" (B.Sc.) exist. They were created in 2010, 2015, and 2018, respectively.

In the preparation of the 2018 curriculum, there was special attention paid to the Indonesian National Qualifications Framework (IQF) as stipulated in Presidential Regulation Number 8 of 2012 and Permendikti Number 73 of 2013, concerning the application of the IQF for Higher Education. To find out how well the application of courses and the competence of the graduates match the postulated learning outcomes an evaluation of the 2010 (2015) curriculum was held at the end of the even semester for the 7th-semester students, including meetings and workshops. The curriculum evaluation workshop was conducted by faculty managers, stakeholders, and experts who were members of scientific expert associations that are linked to computer science. Besides discussions there was the distribution of questionnaires to stakeholders. The results of the curriculum evaluation were used for the revision of the 2018 curriculum.

The learning objectives of the Bachelor in Informatics are:

1. To produce graduates who can follow the development of computer science in particular and science and technology in general, are able to work and compete in the national and international job market and are able to continue studying to a higher education level.

2. To increase the contribution of the study programme in the quality of human resources, environmental conservation, science and technology development, and education.

3. To improve the quality of education and computer science research.

The "Computer Science" (B.Sc.) study programme produces graduates in four distinctive fields:

1. Software Developer: Graduates can design, build, develop, maintain, and modify applications/software and web/android – based decision support systems.

2. Network Engineer: Graduates are expected to be able to carry out architectural design, supervision, and management; all of the activities related to installation and service; and security on computer networks under existing conditions.

3. Intelligent Systems Engineer: Graduates are expected to be able to develop Artificial Intelligence System software such as soft – computing, machine learning including neural networks, information retrieval, Natural Language Processing, Deep Learning data science applications (text and data mining), knowledge – based systems, and image processing.

4. Multimedia developer: Graduates can apply methods in multimedia development which include (1) Multimedia design and design, (2) Game programming using the concept of Computer Graphics, and (3) Multimedia testing.

2.1.3 Bachelor of Civil Engineering

The "Civil Engineering" (B.Sc.) study programme was established by a Decision Letter of the General Directorate of Higher Education No. 2294/D/T/ 2003 dated September 5th, 2003. The program was accredited B by Indonesian Higher Education National Accreditation Body from April 22nd, 2021 to April 22nd, 2026. The study programme has five concentrations i.e., Transportation Engineering, Structural Engineering, Construction Management, Hydrology, and Geology Engineering.

Due to learning processes in the "Civil Engineering" (B.Sc.) study programme, there have been several revisions of the curricula in 2004, 2011, 2016, and 2020 respectively. The 2016 version implements the Indonesian Framework for National Competences, which differentiates competencies into major, supporting, and other competences. The review of the curriculum involved all the teaching staff, students, industries, and alumni.

In 2020, the curriculum was further improved. Furthermore, the "Civil Engineering" (B.Sc.) study programme will take part in a group discussion under the moderation of an expert civil and construction regulator as a speaker in the "Indonesian Deliberative Council for Civil Engineering" to revise the 2020 curricula.

The bachelor programme "Civil Engineering" (B.Sc.) produces graduates who have high civil engineering competencies, can apply their knowledge and skills in civil engineering applications, have high personality integrity, and are responsive to needs, changes, and advances in science and technology that are adaptive to the environment.

The bachelor programme "Civil Engineering" (B.Sc.) focuses on organising and developing research on infrastructure aspects while still prioritising the consideration of potential disaster factors in the field of civil engineering by raising local potentials to synergise as the best dedication to local and national communities. The study programme is dedicated to the development and research of infrastructure, geotechnical, transportation, building structures, and water resources that support disaster mitigation.

Civil Engineering graduates can work as:

1. Practitioners/professionals: The Civil Engineering graduates can design, plan, and supervise construction projects related to civil engineering (structural engineering, water

resources engineering, transportation engineering, geotechnical engineering, and management and supervise project). The graduates should behave as honest, innovative, professional, creative, and be able to work together in a team.

2. Civil Servant: The graduates can apply for civil engineering work in the government under sectors, department, and regional government.

3. Self-employed: The graduates can analyse and create opportunities to start a business in the construction sector.

4. Researcher: Civil engineering graduates can recognise, analyse, synthesise, and evaluate problems related to civil engineering fields and contribute to research and innovation in civil engineering science and technology.

5. Faculty member: Civil engineering graduates can transfer knowledge of science and technology to students to become competent practitioners in the civil engineering field.

2.1.4 Bachelor of Mechanical Engineering

Students of the bachelor programme "Mechanical Engineering" (B.Sc.) gain knowledge and technology in the fields of energy conversion engineering, materials, construction and design, and production processes. The productivity of education and research focuses on the field of new and renewable energy.

The study programme "Mechanical Engineering" (B.Sc.) has four specializations: Energy Conversion, Materials, Production Processes, and Construction and Design.

Due to learning processes in the "Mechanical Engineering" (B.Sc.) study programme, there have been several revisions of the curricula in 2004, 2009, 2016, and 2020 respectively. The 2016 version implements the Indonesian Framework for National Competences, which differentiates competencies into major, supporting, and other competences. The review of the curriculum involved all the teaching staff, students, industries, and alumni.

The "Mechanical Engineering" (B.Sc.) study programme sets the following graduate profiles:

1. An engineer that can design and evaluate equipment or systems with various existing provisions. The engineer fields of expertise include: engineering supervisor, engineering consultant, design engineer, process engineer, project engineer and research engineer

2. Technopreneur that can build or run a business engaged in engineering.

3. Educators that can transfer knowledge and build the student's character.

2.1.5 Bachelor of Electrical Engineering

The bachelor programme Electrical Engineering (B.Sc.) was established by Decree of the Directorate General of Higher Education Number 2294/D/T/ 2003 from September 5th, 2003. The study programme was accredited B by the National Accreditation Board of Higher Education on May 30th, 2015 until May 30th, 2020. The same accreditation is valid until 2025.

In the beginning, the study programme Electrical Engineering (B.Sc.) had the two concentrations "Control and Instrument Engineering" and "Electric Power Engineering". In 2021, The Study Programme added a new concentration which was "Telecommunication".

The students of Electrical Engineering (B.Sc.) acquire science and technology in the fields of electrical engineering, telecommunication, and electronic control techniques, especially for disaster management systems and the development of electric energy in coastal areas.

Due to learning processes in the Mechanical Engineering (B.Sc.) study programme, there have been several revisions of the curricula in 2004, 2008, 2015, and 2021 respectively. The 2015 and the 2021 version implements the Indonesian Framework for National Competences, which differentiates competencies into major, supporting, and other competences. The review of the curriculum involved all the teaching staff, students, industries, and alumni.

Educational and research productivity focused on areas of:

1   Disaster mitigation. The development is carried out on the disaster mitigation model and information on shelters and disaster potential.

2   Energy and food.

3   Model development and implementation of renewable energy such as ocean waves, wind, water, and solar energies.

4   The study of information systems consists of new material engineering information, new design information, urban planning, and tourism development

The graduates can choose several careers, including professional engineers, academics, managers, researchers, and technopreneurs, with the basic competencies of:

1.   Being able to identify, formulate, analyse and solve electrical engineering problems and tasks.

2.   Being able to design and carry out laboratory and/or field experiments and analyse and interpret data to strengthen electrical engineering assessments.

3.   Being able to communicate effectively in oral and written work in cross-cultural teams and being responsible to society and adhering to professional ethics in solving engineering problems.

2.1.6 Bachelor of Architecture

The legality of the establishment and implementation of the bachelor programme Architecture (B.Sc.) is based on the Decree of the Minister of Research, Technology, and Higher Education of the Republic of Indonesia, Secretary General Number 336/KPT/I/2016 from September 13th, 2016. The Architecture (B.Sc.) study programme has been accredited B from BAN PT with the Decree BAN-PT Number 2869/SK/BAN-PT/Akred/S/VIII/2019, from August 6th, 2019 until August 6th, 2024.

New student admissions for the Bachelor in Architecture Study Programme began in the winter semester of 2017/2018 and in the even summer semester of 2021/2022 the first 20 students graduated.

The competency of the bachelor programme Architecture (B.Sc.) derive from two sources:

1. The Quality Assurance Agency for Higher Education in the Field of Architecture established learning competencies, and graduate competencies are issued by the Indonesian Architectural Higher Education Association (APTARI – Asosiasi Pendidikan Arsitektur Indonesia).

2. Architectural professional practice refers to the Indonesian Architects Association (IAI – Ikatan Arsitek Indonesia) which oversees the architectural profession in Indonesia.

The competence level of graduates of the bachelor programme Architecture (B.Sc.) is level six of the IQF, therefore graduates are expected to be able to apply, study, create designs, utilise science and technology, and solve procedural problems, constraints, potentials of coastal areas, and disaster relief architecture; the expected ability of the graduates is to be able to design and master the science of architecture at a basic level.

Graduates' competencies include:

1. Being able to formulate concepts, design, present alternative solutions, and communicate creative architectural designs by integrating the results of studies of behavioural, environmental, technical, and value-related aspects of architecture that are contextual and theoretically tested against architectural principles.

2. Being able to design and conduct supervision and or implement the development of building and environment.

3. Being able to plan, develop design concepts, and make decisions on alternative architectural design solutions by integrating the results of studies on behavioural, environmental, technical, and other architectural values.

4. Being able to apply and examine the implications of the development or implementation of science and technology to make development decisions logically, critically, systematically, and innovatively in the field of architecture.

5. Being able to develop and teach analytical, logical, and measurable thinking from science and technology to produce solutions, ideas, designs, or criticisms in the field of architecture.

6. Being able to develop alternative solutions and make decisions for business development related to the field of architecture.

2.1.7 Bachelor of Informatic System

The bachelor programme Informatic System (B.Sc.) has been established in 2016. The graduate profiles of the study programme are:

1. Being able to design, test, evaluate, create business rules, and prepare information system support resources.

2. Being able to design, build, and manage organisations and produce innovations in the field of entrepreneurship based on information technology to contribute to facing global competition in 2024.

3. Being able to supervise, evaluate, and consult information technology solutions and integration of various business processes to the enterprise level to improve the structure and efficiency of information systems.

4. Being able to plan, implement, manage, evaluate, and develop intellectual attitudes and produce scientific works in the field of information systems at further academic levels of Magister and Doctoral Degrees

2.2. Assessment

2.2.1 General

In accordance with the mission, values, and long-term goals of UNIB as outlined in the in sections III.1.1.1 the study programmes are aligned with the values of the university and support its mission. They contribute to the achievement of the long-term goals in that it structurally meets international standards.

The study programmes' approval process is defined by Indonesia´s regulations. The study programmes are reviewed every some four years as part of the recurring national accreditation. The Indonesian Qualifications Framework (IQF) is used for structuring the competencies that the graduates should achieve. The IQF operates with similar termini as the EQF, providing an international comparable standard on level 6 for bachelor degrees. The process of reviewing is conducted on faculty level with support of the SPMI.

Most of the study programme have been revised multiple times. Normally, the Rector creates a team consisting of teaching staff only to revise or develop the curriculum. The new draft curriculum is also reviewed by Senate and CQALD. There are no student members in those instances, so it could be concluded that students are not involved in the process. However, in these revisions both additional internal and external stakeholders were involved, e.g. graduates and seventh semester students that submit feedback through workshops that also include faculty managers and internal and external subject matter experts. Beside these discussions, questionnaires were handed out to external stakeholders such as expert associations. Furthermore, the study programme is enhanced on the basis of student evaluations. There is no concrete involvement of students from lower semesters in corresponding committees. Maybe, a questionnaire for beginners could highlight their expectations for the study programme.

2.2.2 Bachelor of Computer Science

The goals of the study programme "Computer Science" (B.Sc.) are clearly defined. Graduates should confidently navigate the academic world and deal with academic issues in general and in computer science in particular. In doing so, they should be able to compete nationally and internationally. In addition, students should be able to pursue higher educational degrees after earning a bachelor's degree. Specifically, graduates should gain knowledge of computer science and mathematics, be able to identify and analyse problems, define the requirements for solutions, and design and develop computer-based informatics solutions to such problems. Furthermore, graduates should be able to work in a team, understand and take into account legal, ethical and other social aspects of their work, and communicate effectively.

From the point of view of the expert panel, the basic structure of the study programme "Computer Science" (B.Sc.) meets international standards and is in principle suitable to achieve the educational goals of the program. The structure and design of the program reflect the purposes of higher education of the Council of Europe. Somewhat surprising is the high number of projects, which is, however, conducive to a practice-oriented education. The university supports the organization of external internships. Apparently, an industrial internship is not mandatory.

However, the module handbook, which is apparently included partly in the Course Identity document and partly in the Course Overview document, does not meet the requirements for a comprehensive presentation of the content taught and the qualification objectives of the respective course. For all courses, the presentation of the literature used is missing in these documents. Except for the Final Project, all projects are assigned to a compulsory course and have the same name. The descriptions of the project courses mostly correspond to the descriptions of the assigned courses. It is not shown what the particular contents of the project and the qualification goals are. For almost all courses, the description is unspecific; concepts, technologies, languages and methods used are not mentioned. Some examples should highlight this point:

- Digital System: Boolean functions and their simplifications are mentioned. However, it is not shown what concepts and methods are taught for simplification. Furthermore, analysis and design of digital systems and circuits are mentioned. However, the concrete contents, concepts and methods are also not discussed.

- Data Structure and Algorithm: No single data structure (e.g. list, stack, tree, hash table, graph) and no single algorithm (e.g. search, sort, tree algorithms, graph algorithms) is even named.

- Object Oriented Programming: Here some concepts like inheritance, overwriting, polymorphism, abstraction as well as language constructs like collections and iterators are named. Even a qualification goal is listed: Students can create reliable programs. However, the naming of the programming language or the reference that the content is taught language-independently on a higher abstraction level is missing.

- Operation System: No operating system concept or structural element is mentioned.

- This lack of concretization of the contents runs through the entire module handbook. Sometimes the information in the document Course Overview is a bit more concrete. With these module descriptions, students cannot get a concrete picture of the content and requirements of the course in advance. The two documents should be merged and then the course descriptions should be made comprehensively concrete in terms of content.

According to the expectations of the expert panel the module/course descriptions should be more detailed and should align the learning outcomes better to the content and methodology taught in the respective course.

The career options represent typical occupational fields for graduates of a degree program in computer science. In view of the contents named in the documents, the graduates of the study program should in principle be able to achieve a level of education that enables entry into the named occupational fields.

The student workload is presented transparently and comprehensibly. Unfortunately, the workload shows large discrepancies between semesters. In semesters one through four, the workload is approximately 900 academic hours each; in semester five, it is approximately 1500 academic hours; and in semesters six, seven, and eight, it is 600, 400, and 270 academic hours, respectively. The workload in the fifth semester seems too high. A more balanced workload seems desirable here.

To sum up, the high proportion of projects in the course of study supports a practice-oriented education, although the academic fundamentals are not neglected. The workload could be distributed more equally, as it is apparently spread very irregularly over the semesters. The module manual, however, is in urgent need of revision. In general, information about the study programme "Computer Science" (B.Sc.) on the university's website is inadequate, difficult to find, or not current or dummy data from when the website was created.

2.2.3 Bachelor of Civil Engineering

The study programme "Civil Engineering" (B.Sc.) fits well with UNIB's and FT UNIB's strategic goals. Especially, the third pillar, the service to the community can be covered by the study programme's objectives as the growing population of Sumatra is in need of housing and proper infrastructure that civil engineers provide. The study programme five concentrations in Transportation Engineering, Structural Engineering, Construction Management, Hydrology, and Geology Engineering serve that purpose very well, because with hydrology and geology the special situation of Bengkulu as a spot for earthquakes and – consequently – tsunamis is properly reflected.

The study programme "Civil Engineering" (B.Sc.) enables the graduates to be employed in Bengkulu almost immediately, some graduates even start working with local companies during the last semesters after an internship.

The study programmes curriculum is structured in the right way that the graduates can achieve the aspired learning outcomes. However, the laboratory infrastructure and the curriculum focusses very much on "classical" material, e. g. concrete. Given the special circumstances at

Bengkulu and the global challenge of climate change, other materials than concrete should be given more weight.

Like in the other study programmes, the module description could be improved that the overall learning outcomes are better aligned with the content of the courses.

2.2.4 Bachelor of Mechanical Engineering

The structure of the study programme "Mechanical Engineering" (B.Sc.) contributes well to the university's and faculty's vision and mission goals. The presented learning outcomes harmonize well with the overall intentions of UNIB. The graduate should be an Engineer that can design and evaluate equipment or systems with various existing provisions. The engineer fields of expertise include: Engineering Supervisor, Engineering Consultant, Design Engineer, Process Engineer, Project Engineer and Research Engineer. Also careers of a Technopreneur and Educator has been mentioned. All these can be considered adequate career paths.

From point of view of the expert panel, the curriculum of the study programme "Mechanical Engineering" (B.Sc.) is well defined and structured. It does reflect the four purposes of higher education of the Council of Europe. The UNIB supports mandatory internships with research centres and offers advise through the internship office. According to curriculum overview the expected student workload is sufficiently defined and transparent.

However, the course descriptions and learning outcomes are mostly presented in Indonesian language and it is impossible to evaluate the actual workload in a course. Those course descriptions presented in English have in many different courses identical learning outcomes written in very general level. Therefore, the presentation of course descriptions and learning outcomes need more development. Also based on these learning outcomes student workload for each course should be evaluated more detail level.

2.2.5 Bachelor of Electrical Engineering

The goals of the study programme "Electrical Engineering" (B.Sc.) are clearly defined. As one of the oldest study programmes of the FT UNIB the curriculum was reviewed many times and every time adapted to new challenges, e. g. the new concentration "Telecommunication". The study programme was reviewed involving all relevant stakeholder such as teaching staff, students, industries, and alumni.

The curriculum of the study programme "Electrical Engineering" (B.Sc.) meets the goals set by UNIB's vison, mission, and values: While offering the classical elements of the electrical engineering study programmes, the teaching and research activities concentrate on specific topics that have a relevance to Sumatra and Bengkulu in particular, e. g. disaster mitigation –

Bengkulu is situated at the Sunda Trench – and development of renewable energy from ocean waves.

The career opportunities are very good and the Career Centre of the UNIB is offering advise and help for the students to get in touch with the local and regional industry and businesses.

Overall, the study programme "Electrical Engineering" (B.Sc.) meets the international and national standards for electrical engineering. The study programme is reviewed consecutively with the participation of teaching staff, students, external experts as well as business contacts of the FT UNIB.

2.2.6 Bachelor of Architecture

The curriculum of the study programme "Architecture" (B.Sc.) is well defined and encompasses the national Indonesian standards that have been incorporated when the study programme was set up in 2016. The curriculum, thus, do not deviate far from other architectural study programmes in Indonesia. As such, the curriculum is relatively conservative, e.g. like in that study programme of "Civil Engineering" (B.Sc.) the knowledge of construction materials in architecture is very much based on concrete.

However, the elective courses open up the curriculum to included specific areas of focus. For the goal to become one of the leading universities in Asia, "low energy buildings" could be a key to reach that goal. Activities or the teaching staff should be directed to attend conferences with that topic. Given the necessity of building new houses for the growing population, construction within existing contexts is understandably off topic so far. Architectural history and theory is just provided in one semester, but an additional elective course addresses this topic further. As architecture in Bengkulu should reflect not only international designs, but also incorporate local and regional traditions, there could be more weight to architectural history in particular. From the point of view of the expert panel, the course for vernacular architecture, combined with excursions and research opportunities, is a very good step in that direction.

The computer based tools are Auto Cad, Sketch Up, Revit, Rhino and Grasshopper, which is sufficient. However, BIM is not taught. For making models and mock-ups there is a very tiny workshop space, that should be enlarged (see chapter III.6).

2.2.7 Bachelor of Informatic System

The "Informatic System" (B.Sc.) study programme has been established as the newest study programme of the FT UNIB. The bachelor programme meets the guidelines established by the major international organisations as, e.g., the Association for Information Systems (AIS).

The "Informatic System" (B.Sc.) study programme provides students with the qualification to address all topics of digitalization to serve in the local economy, e.g., in IT support, business process management, or also in education and training. It is designed to qualify students for the challenges of digitalisation and for supporting the community actively. Information systems is inherently interdisciplinary, and the study programme focuses on computer science applications and business orientation of IT. It establishes a bridge from the more technical programmes at the UNIB to applications and business needs. In that regard, the study programme "Informatic System" (B.Sc.) complements the study programme "Computer Science" (B.Sc.) to enhance the existing portfolio of the FT UNIB.

As the "Informatic System" (B.Sc.) study programme has been established most recently, new trends and topics as AI and data science are addressed in the programme. Entrepreneurship is an important career option for information systems students, and the University prepares the students through activities by the career centre, community services, and respective courses. All students in the study programme "Informatic System" (B.Sc.) have do a community service course. The career centre of the UNIB is active in supporting students who want to reach out to industry and public administration for courses, internships, or training opportunities. It also manages the contacts with alumni. Students are engaged in all processes of refining the courses and the competence-oriented learning and teaching methods, all students form individual profiles according to their career plans.

There is a wide variety of career options for the students in the bachelor programme "Informatic System" (B.Sc.). This includes positions in public administration, in schools as teachers or teaching assistants, and in system administration or provisioning of services. The emphasis lies on positions in the province of Bengkulu. The range of career options for the students in information systems is adequate and in line with recommendations and career options for information systems as described by AIS.

The study programme supports career options, personal development and prepares students to participate actively as citizens. The knowledge base is broad, students and teaching staff engage in projects and research activities to innovate in the region, and these activities are considered to be a core activity that contributes to the profile of the study programme, for personal development and also for innovation for society. The alignment with international recommendations, the community services for students, and the range of methods and course formats that facilitate personal development and joint engagement of students and teachers are very positive. Positive is the ambition for international recognition of staff, students, and the programme.

However, the study programme's name should be changed to the international standard, "Information Systems".

2.3. Conclusion

The criterion is **fulfilled**. The expert panel suggest the following recommendation in all study programmes:

- The Course Manual should be more detailed and precise about the content with regard to each learning outcome.

The expert panel suggests the following recommendations for the study programme of "Architecture" (B.Sc.):

- To reach the high ambition, to be one of the best in Asia, the focus of the programme should be more clearly defined. It could be an option, to focus on the important task of sustainability in architecture and building in tropical regions. To react on climate change and adaptation in tropical regions could be a good differentiation from other architecture faculties.

- The education should clearly focus on the skills of architects, and strengthen the competence to develop a design, to construct buildings and choose the ideal materials.

3. ESG Standard 1.3: Student-centred learning, teaching, and assessment

Institutions should ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach

3.1. Status

3.1.1 Student-centred learning and teaching

The character of learning in the FT UNIB is – according to the self-evaluation report – "interactive, holistic, integrative, scientific, contextual, thematic, and collaborative". The interactive character has been applied in the learning process where lecturers and students actively communicate with each other. Holistically, the learning process in the FT UNIB is directed at efforts to develop student potential, especially academic potential, and open new thinking insights that are different from the insights when they were still in high school. Learning is also carried out integrative between the theory presented in class with practical experience in the field in the form of lectures and practical work in the field.

The FT UNIB prioritizes a scientific approach so that students can develop concepts, formulate problems and propose hypotheses, collect information to answer hypotheses, and make conclusions. Contextual learning is applied by linking learning materials with the context of their daily lives and with the latest scientific developments, including by incorporating the results of lecturers' research into learning materials. The thematic learning process is applied in the higher semesters, where the courses taught in this semester summarize the various disciplines that have been taught in the previous semester. In certain cases, students are grouped for collaborative activities such as completing structured assignments so that the learning activities are student-centred.

Learning methods feature lectures, tutorials, seminars, practicum, studio practice, workshop practice, practice fieldwork, research, and community services. Face-to-face learning in the classroom is combined with online learning. Lecturers vary learning methods according to the characteristics of the material and student learning styles. Learning is conducted in an integrative way between lectures in class and practical learning activities (in both the laboratory and field).

There are group discussions, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, or other learning methods that can effectively facilitate the fulfilment of the learning outcomes. In addition to class discussions, the teaching methods used are problem-based, discovery-inquiry, and project-based learning

which involve students actively participating in learning. To smoothen the learning process, empirical data and examples are widely used for easier understanding the academic subject and the application of methods.

UNIB has a Learning Management System (LMS) in the form of e-learning to support online classes and student learning management. During the Covid-19 pandemic, the learning process was switched to online mode. Besides being supported by LMS, online learning includes various online meeting platforms or online chat applications. In classes there are blended learning tools used, both face-to-face and virtual either synchronously or asynchronously. UNIB implements MOOCs (Massive Online Open Courses) so that learning is no longer limited by place and time. Thus, the wider community, both at home and abroad, can study at UNIB.

Lecturers are provided with university teaching training and active learning methods. They are encouraged to use interactive teaching methods make use of the available facilities and infrastructure.

3.1.2 Assessment of learning

The assessment principles applied by the University of Bengkulu are educative, authentic, objective, accountable and transparent:

- The educative principle motivates students to improve the planning and learning methods, and to achieve the graduate learning outcomes;

- The authenticity principle orientates towards a continuous learning process and learning outcomes that reflect students' abilities during the learning process;

- The objectivity principle describes that the standard is agreed by the lecturers and students and is free from the influence of the subjectivity of the assessor and the one being assessed;

- The accountability principle describes clear procedures and criteria and is agreed upon at the beginning of the lecture, and understood by students;

- The transparency principle guarantees that procedures and results can be accessed by all stakeholders.

All assessment principles are applied and adjusted to each study programme based on its characteristics and related to the competencies and degrees to be achieved by the graduates.

Each course has a description called "Semester Course Details" (Rencana Pembelajaran Semester – RPS) that consists of the targets of learning outcomes, materials, methods, time and stages. To maintain the quality of learning in Engineering, the implementation of lectures, both

compulsory and elective courses, refers to the RPS that has been prepared for each course. This RPS becomes a reference for both lecturers and students when conducting lectures.

Periodically, the learning process at the FT UNIB is monitored and evaluated (see for more details, chapter III.9):

1. Every year the Internal Quality Audit (AMI) is conducted to evaluate the learning system in FT UNIB

2. The Quality Control Taskforce of the FT UNIB (Gugus Kendali Mutu – GKM) is tasked with evaluating the syllabus and RPS based on learning outcomes for each of the study programmes at the end of each semester. This evaluation is conducted by the lecturers of the courses and students separately. Document monitoring and evaluation report on the implementation of learning at least includes the material suitability and the accuracy of the learning assessment method.

3. At the end of the semester, the results of the GKM monitoring and evaluation, and the results of student evaluations based on the implementation of the lectures are discussed through lecturer meetings to obtain input for improvement in the next lecture period.

In addition, UPM also conducts exit surveys to assess the implementation of thesis guidance and academic services in laboratories, study programmes, departments, and faculties. The results of these surveys are integrated in the improvement process of the study programmes.

The results of the learning evaluation are analysed and followed up at least two times each semester. The method of assessing student learning outcomes is stated by each lecturer in the RPS and compiled by a team of supporting lecturers and approved by the Department. The points assessed include assignments/quizzes, midterm and final exams, and practicum scores. Assignments can be in the form of answering questions, group discussions, writing papers, presentations, etc. The weights of assessments differ from course to course. In the first meeting, the lecturer should explain the assessment procedure. At the end of each semester, the lecturer gives a final score. The lecturer inputs the final score on the academic portal at the end of the semester. Usually, the time limit for uploading the scores is within two weeks after the final test.

Students can complain if the learning process, assessment or other services are considered not appropriate. Students can submit complaints against the lecturers or other services to the department. The complaint is then resolved at the department level, submitted to the faculty level, or, if necessary, to the university level. Clarifications on grades are resolved by the relevant lecturer. If it is not resolved, students can escalate to the department level. The department then conducts a direct follow-up or coordinates with the Academic Division of the Faculty when necessary. The complaint mechanism is described in the Standard Operating Procedure.

3.2. Assessment

Particular aspects of student-centred learning, teaching and assessment can vary between programmes. From the documentation and the discussions with lecturers and students it can be concluded, however, that all programmes put a strong emphasis on teacher-student interaction, proper student supervision and responding to students' talents and abilities as well as any special needs they might have. The variety of different learning methods is very good according to the expert panel's opinion. The Covid-pandemic has further expanded the range of teaching methods by using blended-learning tools on a broad range.

The assessment procedure is clearly described for the students and the examination process promotes reliable assessment. At the beginning of each semester, the weighting of the examinations and the submission requirements for the course are communicated to the students. Generally, the formats of presented exams are in sufficient level. There is a good scientific atmosphere which encourages the student to contact teacher to discuss the assessment. It helps that not only the students are able to address their needs to the lecturers, but also that the lecturers discuss problems on a continuous basis. In Architecture, for example, the department members meet on weekly basis to exchange important and urgent matters.

The students have manifold possibilities to give feedback about the teaching by using the learning evaluation system. The detailed RPS could be seen as an obstacle to open interaction with students, but from the information gathered, for the expert panels the RPS is a reference framework that helps students and teachers alike – especially as it is revised every semester. The expert panel was presented with a many examples of evaluation results. From the discussions with the lecturers and administrative staff it became apparent that the evaluations results were not just collected, but that follow-up processes are in place to enhance the quality of the study programmes. However, not all professors take part in the evaluation process in the same way. Furthermore, the responsibility of the respective hierarchical levels of the university does not always seem clear and the evaluation procedures are not transparent to all university staff. Here, an exchange between the lecturers on the one hand and the administrative staff on the other hand should sufficiently inform each-other about tasks and responsibilities.

3.3. Conclusion

The criterion is **fulfilled.**

4.   ESG Standard 1.4: Student admission, progression, recognition, and certification

> **Institutions should consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression, recognition and certification.**

4.1. Status

4.1.1 Admission

The student recruitment system for accepted students is regulated by the Minister of Research, Technology and Higher Education of the Republic of Indonesia (Regulation no. 60 of 2018 concerning the acceptance of new undergraduate students at State Universities (PTN)). According to the ministry's regulation there are three options for applying at the UNIB:

- State University National Admission Selection (Seleksi Nasional Masuk Perguruan Tinggi Negeri – SNMPTN) is a national selection system based on screening of the applicants' academic achievements in Senior High School or Vocational High School or Vocational Islamic High School. The government bears the selection fee so that student applicants are not charged a selection fee.

- State University Independent Admission Selection – Western Region (Seleksi Mandiri Masuk Perguruan Tinggi Negeri Indonesia Bagian Barat – SMMPTN) is an independent admission selection held jointly by 15 state universities in Western Indonesia. This selection is based on a written exam with a registration fee and an additional Institutional Development Fee. SMMPTN is intended for high school graduates from the last two years ago.

- State University Joint Admission Selection (Seleksi Bersama Masuk Perguruan Tinggi Negeri – SBMPTN) is a joint selection carried out by all state universities under the coordination of a Central Committee, with selection based on the results of a paper-based written test or a computer-based test. The test materials include
  - o A Scholastic Potential Test (Tes Potensi Skolastik – TPS) to measure cognitive abilities such as quantitative knowledge, which consists of the knowledge and mastery of basic mathematics.
  - o English Language Proficiency Test and Academic Ability Test (Tes Kemampuan Akademik – TKA), which measures cognitive abilities directly related to the content of subjects studied in school. The test emphasises Higher Order Thinking Skills.

The decision whom to accept as students follows the new student admission standard of the UNIB based on the SBMPTN scores of applicants.

4.1.2 Progression

In general, the requirements for these bachelor degrees students for progression at the FT UNIB are:

- be registered as an active student in the current semester,
- passed all the courses and achieved the learning outcomes targeted by the Study Programmes,
- have a cumulative grade point average (CGPA) of at least 2.5 with maximum two D grades,
- have no D grade in the nationally compulsory general courses, and
- fulfil all other requirements set by the Study Programmes.

The average GPA of graduates according to study programmes ranges from the lowest 3.02 for the "Electrical Engineering" (B.Sc.) study programme to the highest 3.38 for the "Computer Science" (B.Sc.) study programme. In general, the average GPA of students graduating in 2020 is 3.16. The average study period for bachelor programmes varies from 4.5 years to 4.9 years.

4.1.3 Recognition

With the application of standards, all lecture activities in the Faculty of Engineering can be recognised throughout Indonesia and even internationally. Based on the Regulation of the Rector of the University of Bengkulu Number 25 of 2020 Article 20

1. Students can apply for credit transfers for courses obtained from study programmes within the university and other state universities that are accredited with at least B predicate ("Very Good"),

2. Courses that can be transferred for credit are:

    2.1. Student exchange program, Sandwich and Double Degree;

    2.2. Educational programs that have been followed before, study programmes in universities and other tertiary institutions that are accredited at least with a B predicate (good);

    2.3. Other activities carried out in non-university institutions;

    2.4. Vocational level transfer programs and fast track programs.

4.1.4 Certification

In order to obtain a bachelor degree of the FT UNIB, students must finish 144-149 credits or 217.6-225 ETCS points. Graduates of FT UNIB receive upon completion of their studies a

certificate with the grade, a transcript of records and a diploma supplement describing the learning outcomes of the study programme.

4.2. Assessment

The entry and admission requirements of UNIB and FT UNIB are clearly defined and set out transparently for applicants. The higher education entrance qualification is a prerequisite, followed by government admission tests and personal interviews. Thus, a multi-stage admission system is provided for. The government decides on the admission capacity. As a consequence, the UNIB in general and the FT UNIB cannot decide the student's entry level. However, the number of applicants surpasses the number of available study places by far so that in the meeting among the Rector, Vice-Rector for Academic Affairs, and the Dean of the Faculties to decide the list of the successful candidates a selection of the best is possible.

The progression of the students is not so much limited by the time span of the study time – a limit to the length of the study time is not set –, but by success in accomplishing all courses. However, the threshold to continue to the next semester seems not to high. The usual GPA rate of the students in all study programmes of the FT UNIB is far above the level that prohibit an advancement.

The university has procedures for the recognition of work done elsewhere. Whether these procedures work well in practice cannot be assessed by the expert panel, because the number of cases is too small to make a fair judgement of the procedures. In every study programme just few cases have gather international experience – and the majority of these cases have not had an exchange semester at another university, but have taken part in international competitions etc.

To transform the vision of "Becoming a world-class university in 2025" into a reality, the international collaboration with universities and companies in the ASEAN-region should be expanded. The possibilities for a student exchange should be enhanced and the number of intakes and outgoings should grow to better integrate the FT UNIB in the international scientific community.

The FT UNIB has submitted a diploma supplement that proves study content and degree level to employers and other universities for continuing studying on master level – an option that some 10% of the bachelor study programmes' graduates chose. For international use, the diploma could be supplemented with information on the national higher education system of Indonesia.

4.3. Conclusion

The criterion is **fulfilled**. The expert panel suggest the following recommendation:

1. The international collaboration with universities and companies in the ASEAN-region should be expanded. The possibilities for a student exchange should be enhanced and the number of intakes and outgoings should grow.

5. ESG Standard 1.5: Teaching staff

> **Institutions should assure themselves of the competence of their teachers. They should apply fair and transparent processes for the recruitment and development of the staff**

5.1. Status

The quality assurance process for teaching staff at UNIB covers the entire cycle from recruitment to termination.

5.1.1 Process of recruiting staff

The UNIB establishes and follows a clear, transparent, and fair process for the recruitment of teaching staff. This is explained in a guideline for planning and recruiting lecturers and education personnel. The selection/recruitment process of civil servants and non-civil servants are guided by the Regulation of the Minister of Administrative and Bureaucratic Reform, the National CPNS Selection Guidebook issued by the State Civil Service Administration Agency, and the Regulation of the Government of the Republic of Indonesia concerning the Authority to Appoint, Transfer, and Discharge the Civil Servants.

The recruitment process for civil-servant lecturers (Pegawai Negeri Sipil – PNS) at the UNIB applies the following steps:

1. Proposing the faculty's needs based on each study program's needs analysis.

2. Staffing technical meetings at the university level to stipulate the formation.

3. Announcing the selection process of civil servants' candidates according to the formation and requirements online and written information on the Staffing Office at the University of Bengkulu. The conditions are:

    3.1. Indonesian citizen,

    3.2. at least 18 years old, maximum 35 years old,

    3.3. physically and mentally healthy and free from drugs,

    3.4. good behaviour as proven by the Statement of Police Report (henceforth SKCK – Surat Keterangan Catatan Kepolisian),

    3.5. have never been dishonourably discharged as a civil servant/member of the Indonesian National Military (henceforth TNI – Tentara Nasional Indonesia) / Indonesian National Police (henceforth POLRI – Kepolisian Negara Republik Indonesia),

    3.6. not currently working as PNS/CPNS and

    3.7.   do not have contractual agreement/service ties with other agencies,

    3.8.   having minimum GPA 3.0 for bachelor degree (S-1) holder, and 3.25 for master degree (S-2) holder with a linear field of study from an accredited Study Programmes at least B.

4.   Accepting the online registration.

5.   The CPNS test includes a Basic Competency Test (TKD) through a computer-assisted test (CAT), and the participants who pass the section may proceed to Field Competency Test (TKB), microteaching and interviews.

6.   The announcement will be published online.

The differences between the civil-servant lecturers and the non-civil-servant lecturers are basically that the (nationally standardized) CPNS test is substituted by a procedure of the UNIB that include Basic Competency Test, Field Competency Test, micro-teaching and interviews.

The Lecturer workload describes the credit load for implementing teaching, research, and community service each semester. In general, the workload should be in the interval of 12 to 16 credits.

The faculty of engineering (FT UNIB) has 78 permanent lecturers of FT UNIB with 15 lecturers holding doctoral degrees (18.75%) and 63 lecturers holding magister degrees (81.25%). The number of lecturers continuing their doctoral studies is 7 lecturers.

The management of FT UNIB is supported by 16 civil servants personnel (45.95%) and 20 non-PNS personnel (54.05%). Half of the educational personnel of FT UNIB have a bachelor and magister degree, the other half has a junior high school or senior high school degree.

5.1.2 Opportunities for personal development

Lecturers' positions are offered at four levels:
1.   Instructor
2.   Assistant Professor,
3.   Associate Professor,
4.   Professor.

Each level has terms, rights and obligations described by the UNIB that are accessible for every teacher. UNIB focuses on implementing possibilities to accelerate the career level of lecturers through special research grants. In addition, there is also a mentoring programme where a senior lecturer guides junior lecturers to accomplish the university's Tri Dharma obligations.

In addition to the career path development, the UNIB offers professional trainings to enhance the teaching abilities of the lecturers. The opportunities include study assignments, internships, seminars, workshops, e-learning training, e-book training, e-journal training, teaching materials training, applied approach training, and training on RPS preparation based on OBE (Outcome Based Education).

5.1.3 Research opportunities

The UNIB encourages scientific activities to strengthen the link between education and research. In the research guide, there are additional outputs in the form of books or teaching materials that lecturers and students can use in class. In addition, related to the Independent Learning program and the Independent Campus, students are also entitled to do independent research, do internships in research centres or be involved in research conducted by lecturers. Thus, UNIB strongly supports student participation in local, national, and international scientific writing competitions.

5.1.4 Innovation in teaching methods and the use of new technologies

To encourage innovation in teaching methods and the use of new technologies, UNIB has undertaken:

1. Provision of a Moodle platform as a learning management system that lecturers and students can use during lectures.

2. Teaching grants finance the development of teaching materials which include books, videos, websites and others

3. Online lectures using Zoom, G-meet and other similar services.

5.2. Assessment

5.2.1 Process of recruiting staff

The UNIB's two recruiting processes for staff – for civil servants and for non-civil servants – are regulated by public records and clearly defined. Also, promotions are handled according to Indonesian regulations. The processes are fair and transparent.

Looking at the current composition of the teaching staff of the FT UNIB, there is a growing number lecturers with PhD-degree. This aligns the formal standard for faculty staff at FT UNIB with the one at international universities. However, one observation is that only Indonesian citizens are allowed to apply for position at the FT UNIB. This provision contradicts somehow the university's vision to become a world-class university, because this goal cannot be reached

if an international staff is not allowed. Consequently, the regulation for teaching staff should be altered to allow – at least to a certain degree and to certain position – international candidacies. The expert panel suggests that additional provisions should be incorporated into the selection process of teaching staff, concerning both the selection process as well as the selection criteria. Most urgent from the point of view of the expert panel are the two following provisions: Professors should be selected by an university's selection committee with the participation of (international) HEI-members and (international) representatives from the respective professions. And English proficiency should be mandatory Requirement.

According to the information presented in the discussions, just some percent of the teaching load is done by external lectures that offer a deeper insight in special fields of studying or include for example a business perspective to the teachings. At university of applied sciences in Germany the teaching load is almost a third and even at world-class universities like the (Technical) University of Munich more than 10% of the teaching load is presented by experts from the industries. FT UNIB should consider to raise the direct involvement of external experts in the teaching of the students. In the department of architecture the situation is different due to the fact that some lecturers manage their own architecture offices that closes the gap between theory and practice.

5.2.2 Opportunities for personal development

The teaching staff is qualified, and policies and processes for personal development and engagement with society are well established. The UNIB offers opportunities and promotes the professional development of teaching staff by mentoring and Tri Dharma activities outside campus. Courses and community services allow the personal development of staff in close engagement with practice and students.

The teaching staff gets regular and transparent feedback and is offered personal development opportunities. It is clear to the expert panel that advancement at the UNIB in general is not only based on scientific achievements, but the (recorded) competencies gained in teaching abilities. In that regard, UNIB provides a wide range of opportunities for staff members to excel in teaching capacities. However, the expert panel got the impression, that the research opportunities are more limited.

5.2.3 Research opportunities

The expert panel was told that the UNIB offers funds for research to the lecturers. However, specific details were not presented. Thus, the expert panel had no insight, whether or how much teaching load can be substituted by research activities of the lecturers. The number of lecturers that could obtain funds and grants for research or the amount of third-party financial

means could also not be detected. As a practice-oriented university, UNIB's main focus is directed to teaching that puts research activities a little bit in the background.

However, the FT UNIB has developed mutual agreements with some international universities (e.g. Columbus State University, US) for exchange of faculty members for research, lecturers and discussion. The expert panel supports this activities wholeheartedly. Moreover, the teaching staff presented itself to the expert panel as ambitious to enrich the programme with more exchanges, more research, and more international networking. For the future, processes and policies to encourage international exchanges and networking would be desirable.

5.2.4 Innovation in teaching methods and the use of new technologies

The UNIB offers the teacher a diverse array of possibilities to enhance the learning techniques. The Covid-pandemic in general has had the tremendous impact on advances in blended learning activities not only on the university, but also at the faculty level. These new methods require the provision and renewal of hard- and software. The expert panel got the impression from the discussion with faculty staff and students that appropriate measures are in place to facilitate blended learning activities on a broader scale. The teaching staff has access to up-to-date technology and equipment for courses and research (see chapter III.6).

5.3. Conclusion

The criterion is **fulfilled**. The expert panel recommends that

- The professors should be selected by a university's selection committee with the participation of (international) HEI-members and (international) representatives from the respective professions. English proficiency should be required.

6.   ESG Standard 1.6: Learning resources and student support

Institutions should have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided.

6.1. Status

6.1.1 General information about the campus

The UNIB occupies a land area of 24.9 ha located in Bengkulu Province. This location is easy to access by people from outside of the Bengkulu province since it is only around 30 minutes from Fatmawati airport. The UNIB has public facilities that may be used by all students of the FT UNIB including Integrated Service Building, UNIB library, clinic, sports facilities, banking facilities, and prayer facilities (mosques).

The available building infrastructures that are managed by FT UNIB consist of one Dean Building, three Laboratory Buildings, one Learning and Teaching Building (GKB), and one Building which was newly built in 2020. To support academic activities and lectures, FT UNIB has is supported by several laboratory equipment and information systems. In each of these buildings, infrastructure is available in the form of a Lecture/Classroom, Laboratory, Study Programmes Office, Lecturer Room, The Head of Faculty Office, Faculty Office Room, Multipurpose Room/Faculty Hall, and Faculty Student Affairs Secretariat Room.

There are 19 classrooms located in the Joint Lecture Building. The classrooms are shared for all Study Programmes by scheduling the use of the room. The available lecture/classroom rooms are adequate and quite comfortable for the learning process, both in terms of room size and supporting facilities. The lecture/classroom is used for lectures, seminars and student meetings.

The FT UNIB Laboratory is available in two rooms in the UNIB Workshop Building, 22 rooms in the UNIB FT Laboratory Building, and six rooms in the UNIB FT Integrated Laboratory Building. The laboratory space is used for practical activities, lectures, certain training/workshops, and research activities. In addition, two rooms for seminars and discussions located on the 2nd and 3rd floors of GKB V allow students and lecturers to interact intensively.

The Study Programmes office space is available in six rooms. The condition of the Study Programmes office space is adequate and comfortable to use, both in terms of the size of the room and its supporting facilities. Lecturer rooms are available in as many as 32 rooms spread over five FT UNIB buildings. The lecturer rooms are eight rooms for a capacity of more than one lecturer per room, and 26 rooms for a capacity of one lecturer per room.

There is one reading room located on the second floor of the Laboratory Building. The availability of the UPPS Reading Room, with various reading collections, encourages the creation of a conducive academic atmosphere. This academic atmosphere will also be more conducive by increasing the collections of textbooks and theses and the results of lecturers' research.

For office services at the "Study Programme Management Unit" (UPPS), there are seven rooms occupied by educational staff to support the main tasks of UPPS. The room is used as:

- Administration Division Room,
- Student Education Sub-Division Room (academic services),
- Student and Alumni Service Room,
- General Sub-Division Room,
- Household Service Room,
- Secretary Room located in the Dean Building,
- The lecture monitoring room located at GKB V.

Meanwhile, the heads of the faculty occupy the second floor of the Dean's Building. This rooms consists of the Dean's Room, the Vice Dean's Room, the Quality Assurance Unit's Room, the Planning Room, and the Secretary Room.

In the FT UNIB Dean Building, there are two rooms with a capacity of up to 10 people, one room with a capacity of up to 30 people, and one room with a capacity of up to 150 people. The academic community of FT UNIB can use these rooms for the purposes of meetings, sessions, seminars, workshops, and other activities by submitting an application to the Sub-Coordinator of the general sub-section through the Dean of the FT UNIB. Since 2021, in the Dean's Building, one studio room has been available for online learning and making/recording video content for the FT UNIB YouTube channel.

In supporting student activities, FT UNIB also provides a Secretariat Room for Student Activity Units (UKM) and Student Association (HIMA) Study Programs in the FT UNIB environment which is located in the UKM Secretariat Building and HIMA FT UNIB. The building consists of 2 (two) floors. On the 1st floor there are 9 secretariat rooms for UKM and HIMA FT UNIB which are equipped with 2 toilet rooms and a place for ablution. The 2nd floor is an open space that can be used for various SME and HIMA FT UNIB activities

6.1.2 Administrative student support

During the study period, the students are supported by the SIAKAD system. SIAKAD includes the KRS, LHS, transcripts, class schedules, academic guidance, and e-learning that can be accessed by students and lecturers. Students can easily consult with the best possible lecturers directly in the workspace or through the internet and SIAKAD facilities provided. Students can consult in planning their studies with their academic advisor at the beginning of the semester before the lecture starts. Lecturers as academic advisors provide advice and input regarding the student's study plans and study results of each semester.

New students are encouraged to join the student organisations or associations to develop their interests and talents in academic and non-academic fields. These activities can help students develop their potential to balance their learning activities. The division which oversees this activity is the division of student affairs of the faculty.

Students are also encouraged to seek information about career and work goals through the skill, insight, and career development. These activities may be conducted through workshops and training on entrepreneurship, seminars on career development, public lectures with practitioners according to their fields, and collaboration with the industry by involving the students.

6.1.3 Library

The UNIB library's mission is to provide access to information, to support the Tri Dharma of Higher Education, and to improve the quality of library resources to become relevant and professional. The library facilities can be accessed freely by registered users with a library membership card.

The library of UNIB and the reading room of the Faculty of Engineering currently have an area of 6,000 m2 and 250 m2, respectively. It continues to develop as the institution's commitment to improving the quality of providing facilities and learning resources so that they can contribute to the improvement of education quality. The library of UNIB collection currently includes more than 75,000 copies of textbooks, 11 national journals accredited by Dikti/LIPI, 1 international journal, 3 proceedings, 339 theses and 1,117 copies, 2 dissertations, and 11,000 undergraduate theses and 15,251 copies. Meanwhile, the Faculty of Engineering has a collection of 605 textbooks, 37 magazines, 986 journals, thousands of undergraduate theses and others. In addition to the collection of books in the library, the library of UNIB is also equipped with the digital collections for students to access the learning resources for free.

UNIB has also innovated in developing an integrated online digital library with all Faculty Reading Rooms within UNIB the website Senayan Library Information System (https://slims.unib.ac.id/index.php) or through the SlimS application. Through this application

and website, the academic community can connect to the National Library and access all books and journal collections including: the books, references, magazines, national and international journals. In addition to supporting facilities, the library of UNIB is also managed by professional librarians. They all have sufficient qualifications to properly help the academic community and employees within UNIB. The work of librarians is also assisted by the administrative staff (civil servants and honorary staff) who are placed by the university at the library of UNIB.

6.1.4 IT Service

The information system of UNIB is connected using the Local Area Network (LAN) and Wide Area Network (WAN). This system has a big data capacity and adequate accessibility with a speed of 800 Mbps. The area of UNIB has been connected using optical fibre and WiFi for LAN connection to access the internet. Therefore, these facilities will help the academic community and education personnel to access various UNIB internal information and the internet.

The Office of Development of Information, Technology and Communication (LPTIK) is an institution responsible for the utilisation and development of information systems for the benefit of learning and programme management which can be accessed at https://lptik.Unib.ac.id. The services offered by LPTIK includes New Student Registration System, Academic Portal System, Lecture Attendance System, Graduation Registration System, UNIB Academic Information System, Online Community Service System, Personnel System, Remuneration System, Planning System for UNIB PPK Bureau, Lecturer and Employee Absence System, Registration SIM, UNIB Portal PIN Making System, e-Learning System, Library System, Correspondence System, e-Journal System, Book Search System, UNIB Repository System, Learning Evaluation Information System, Database Information System, and UNIB Graduates Tracer Study application.

UNIB already has an LMS-based e-learning application (https://elearning.Unib.ac.id/) which has been used intensively to support blended learning. The system can be used to provide lecture materials and modules that the lecturers and students can use to support synchronous and asynchronous learning. The online learning is conducted through video conference applications.

The management of the information system of the FT UNIB is integrated to the one developed by UNIB. The existing information systems include SIAKAD (Academic Information System), SIRENBA (Business Plan Information System), Academic Portal, SIREMUN (Remuneration Information System), Employee Attendance Information System, SIMPEG (Employment Information System), FT UNIB Website (https://ft.unib.ac.id/), Informatics Study Programme Web-

site, Web Civil Engineering Study Programme Website, Mechanical Engineering Study Programme Web, Electrical Engineering Study Programme Website, Architecture Study Programme Web, and Informatic System Study Programme Web.

The information system of UNIB is used to improve the effectiveness in archiving, decision-making, efficient learning, and improving the quality of academic programmes. The development of the information system is a part of the internal quality assurance in learning activities. To improve the quality of academic programme implementation, each study programme can use various applications: the Academic Portal, Lecture Attendance, Unib Academic Information, Online KKN, e-Learning, Library, Correspondence, e-learning Journal, Book Search, Unib Repository, and Learning Evaluation Information System.

6.1.5 Training events and support services

UNIB conducts various approaches of training for the management, lecturers, and students to support the improvement of the learning standards, research and community service, and institutional management. Students can participate in training to increase their competence through soft skills training, student creativity programmes, entrepreneurship, and organisational management. These training programmes support the main competencies of students in their respective fields. They are conducted by the division of the student affairs of the university and faculty.

UNIB has a Career Development Centre to implement programmes to align education and professional work. In the future, this unit is expected to be able to prepare UNIB graduates to compete in the job market to increase their employability. The career and entrepreneurship guidance is also conducted by the Technology Business Incubator, which aims to grow young creative entrepreneurs at UNIB with several activities including technical business guidance, Business Competitions, Business Training based on livestock products, etc.

6.1.6 Student research

Already during their studies, students are guided to apply for research funds. The most competitive funds are provided by the Ministry of Education, Culture, Research, and Technology. These funds were received through the "Student Creativity Programmes" (PKM) and "Student Creativity Competition Scheme". The emphasis of student's research is to follow the research roadmap of each study programme.

6.2. Assessment

6.2.1 Physical facilities

The FT UNIB has a library to which students have free access. In the library, there is ample opportunity to access various forms of literature in both physical and online form and there are reading rooms where students can study without being disturbed.

The various teaching rooms at the faculty are of suitable sizes and well equipped with various IT technical equipment which enables a modern and pedagogically up-to-date form of teaching. In all classrooms there is wi-fi which enables access to the internet and the information system used at the university.

The various laboratories of the FT UNIB used in the various engineering study programmes are of varying quality, but all have a minimum level that enables practical and experimental teaching. The laboratories meet students' needs and expectations especially in the study programmes "Computer Science" (B.Sc.) and "Informatic System" (B.Sc.). However, the laboratories of "Civil Engineering" (B.Sc.), "Mechanical Engineering" (B.Sc.) and "Electrical Engineering" (B.Sc.) need a strong quality boost in terms of the age of the equipment. In several laboratories, the quality of teaching will benefit if the number of equipment/machines/test equipment is increased. Having in mind the vision that the university will increase international cooperation, it is essential that the UNIB continuously searches for modern and up-to-date laboratory equipment that ensures validity and quality according to international standards. In addition, there should be student working spaces installed at the laboratories.

Also, the facilities of the Architecture Department should deviate from other departments offices to suit better the needs of architects, e.g., studio spaces with better lighting. There should be more space reserved to exhibit the (final) works of students to inspire their successors in the respective courses. The model-workshop should be improved, the opportunity for design build projects and hands-on projects could be developed much more.

It is pleasing that the UNIB also has various offers for the practice of sports activities, such as basketball, volleyball, and football. These sports facilities enable the students to exercise and thus ensure good conditions for a mental and physical surplus that will benefit them during busy periods of study.

6.2.2 Student Support

There are several options for the students to get help and support during their studies. Using academic counselling and support of the career centre, there is plenty of advice and guidance for the students during their studies. This help is especially important when the students must contact companies in connection with choosing an internship and later in connection with the preparation of a graduation project. In addition, several of the study programmes have a well-functioning student association where events are regularly held with visits from former students and companies who give presentations about working as an engineer in a company. These events give the students insights into the working life after their studies and opportunities to establish a network with the industry.

Based on interviews with the students, it seems that various support opportunities work well, and they also confirm that the administrative staff are good at helping when problems arise during the course of study. In addition, tutors are assigned to help new students get off to a good start in their studies.

As good as these support activities are, the expert panel misses support for international exchange as a key to become a global (visible) university. Students aiming at a student exchange should be more supported financially, conditions for an exchange should be enhanced by supporting English languages skills either on a voluntary, informal base, e.g., an English café, or by setting certain requirements like some courses in English.

A newly opened student centre at the campus will contribute to a productive learning and studying environment for all students.

6.2.3 IT-infrastructure and LMS systems

It generally seems that the university has an IT infrastructure that supports the work of all groups of employees and that ensures a quick and efficient handling of everything related to teaching and research.

The university's information system PAK and their Learning Management System (LMS) ensure students safe and quick access to various relevant information such as grades, schedules, homework, teaching material and material from various lectures, which makes it easier for students to have a continuous overview of their studies. Based on interviews with the students, it seems that the IT technical systems support their everyday life at the university, and they say that the various lecturers are good at using them.

6.3. Conclusion

The criterion is **fulfilled**. The expert panel suggest the following recommendations:

- There should be more financial support for students willing to go abroad. English requirements (some courses in English) and informal opportunities (English café) should be enhanced.

- The laboratories should have more and newer equipment.

- There should be student working spaces installed at the laboratories.

- The facilities of the Architecture Department should deviate from other departments' offices to suit better the needs of architects, e. g. studio spaces with better lighting. There should be more space reserved to exhibit the (final) works of students to inspire their successors in the respective courses. The model-workshop should be improved, the opportunity for design build projects and hands-on projects could be developed much more.

7. ESG Standard 1.7: Information management

Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.

7.1. Status

The UNIB effectively collects and evaluates not only data of students, lecturers, teaching staff, graduates, and other stakeholders, but also Key Performance Indicators and Additional Performance Indicators. The gathering of data covers the whole student-life-cycle:

- Data gathering starts with an Entry survey. This survey is conducted on new students at orientation time. The purpose of the survey is to obtain background information on students, such as area/ethnic/province origin, economic background, school origin, etc. The results of this survey can be one of the foundations for the implementation of learning methods in each Study Programme.

- The student academic progress is monitored through the academic portal system (https://pak.unib.ac.id). Academic supervisors can monitor the academic progress based on student GPA in each semester. Students with academic problems, including those who must drop out, will be addressed by this system.

- The Academic Information System (SIAKAD) is the working instrument of the students. As such it contains information about profiles, study development and progress, the record of study results (grades), student successes and failures, courses and lecturers, class schedules, academic supervisors, number of students, the status of active and inactive students, student graduation, file sharing references and guides. Students can access a list of courses, room and class schedules, lecturers, KRS, academic supervisors, reports of the semester and cumulative study results (grade), student status, and student profiles. They also us SIAKAD as the online-evaluate tool for assessing courses. SIAKAD can be accessed by relevant units to process, update, monitor and evaluate the progress of students' studies. SIAKAD is also connected with bank partners for students to carry out tuition fee payments.

- The students' satisfaction with the learning process for each lecturer can be accessed through (https://siepel.unib.ac.id/). The items of students' course evaluations of lecturer's teaching activities are:
  - Pedagogic Values
    - The lecturers clearly prepare and convey in detail the RPS.

- The lecturers prepare Learning Media & Technology, learning resources, study materials, and references.
- The lecturers create a conducive, fun, and exciting class atmosphere for students to learn.
- The lecturers use media and multimedia technology in face-to-face learning.
- The lecturers assess the results of exams and assignments objectively.
- The assignment materials, UTS, and UAS are following the RPS.
- The lecturers plan Online Learning (Online) beside face-to-face learning in RPS.
- The lecturers use virtual face-to-face applications (Online) in learning.
- The lecturers start and end classes according to the time allocated either face-to-face or online learning classes.
- The lecturers teach the student with the material and time following the RPS.
- The lecturers apply the SCL method and provide opportunities for students to be actively involved in learning by asking questions, discussing, and updating each study material according to the latest science developments.
- The lecturers use e-learning.
- The lecturers use virtual face-to-face applications (online) in learning other than e-learning such as zoom meetings, google meet, skype, WhatsApp, and others.
- The available internet hotspots are sufficient for learning.
- Each lecture room has a whiteboard, markers, LCD, and AC that are ready and suitable for use.
- The lecturers return the assignments with constructive feedback on assignments and exams given either face-to-face or in virtual class (online).

o Professional Values
  - The lecturers master the field of science with the latest issues in the field being taught.
  - The lecturers develop teaching materials with references and current issues in the field being taught.
  - The lecturers follow the latest developments in information and communication technology to improve the quality of online learning.
  - The lecturers use the results of research and community service to improve the quality of learning.

o Personality Value
  - The lecturers should be examples or role models in behaviour and attitude.
  - The lecturers show good integrity in their words and actions.

- The lecturers are fair and tolerant in treating student diversity.
- The lecturers easily adapt to any changes and developments in information and communication technology.
  - o Social Values
    - The lecturers know the students who follow their lectures.
    - Academic matters, the students should have easy access to make an appointment with their lecturers.
    - The lecturers can communicate in oral and written coherently.
    - The lecturers are easy to contact via online.
    - The lecturers use virtual interactive communication applications (Online) to provide support, motivation, enthusiasm, and improvement of discipline and responsibility.

- The Class Attendance System is created to record the attendance of student as a basis for eligibility to take exams.

- The inter-semester class registration system is an additional system to facilitate inter-semester classes whose duration is shorter than the regular one. Registration for inter-semester class is intended to record students who will take part in these activities.

- The Online community service system monitors students' participation in community service activities by tracking their location real-time. Students can document their activities and share them with their supervisors.

- There is a satisfaction survey in form of a questionnaire of 48 questions which cover: service requirements, procedures, paces, fees/tariff, facilities and infrastructures, conformity of service products according to standards, the ability/ competence and manners of service officers, complaints, suggestions, inputs handling and information provision services at UNIB. The survey is not only designed in such a way that students can address deficiencies, but also to inform about improvements of late.

- In addition, the faculty's quality assurance unit (UPM) also conducts exit surveys to assess the implementation of thesis guidance and academic services in laboratories, study programmes, departments, and faculties.

- Finally, the effectiveness and productivity of the educational process at UNIB can be represented by the length of the graduate study period and the grade point average (GPA) of the graduates that are both monitored.

In addition to information gathered from students directly, the UNIB collects data about the graduates via the "Graduate Career Information Centre" (CDC). Among its tasks is the conduct

of satisfaction survey of employers with the graduates that they employ. This survey is conducted by various methods, e.g. direct interviews or online questionnaires by using a Google form. It includes questions about graduate performance in integrity, professionalism, communication, teamwork, foreign language mastery skill, management, and IT skills.

Other information gathering systems concentrate on the lecturers:

- The Human Resources System (SISTER) collects data on lecturers and manages their portfolios for career development purposes. The data in the portfolio can be claimed in the credit score assessment process and lecturer certification. Assessors or reviewers can evaluate lecturer activities.

- The Remuneration Information System assists the remuneration team in handling employee incentive calculations and provides reports of direct incentives, indirect incentives, incentives received by employees, and the percentage of incentives divided for the needs of the management.

- An Attendance system using fingerprint mechanism records attendance of lecturers and educational staff once they are within the area of UNIB. In addition, the Class Attendance System monitors not only student attendance, but those of the lecturers as well. It is also created as a course journal to inform the quality assurance units of the conformity of lecture materials designed by the lecturers with RPS and Lesson Plan.

Of course, there are other IT-systems that provide information to the staff of the UNIB about the inventory. For example. the Library Management Information System (e-library) helps the services and library staff in managing the library. The library staff can always monitor the availability of books, the list of new books, borrowed books, and returned books. The library system at UNIB simplifies the inventory of the available books and other related information at the library.

Finally, the Career Center of UNIB plays an important role in developing and maintaining relations between the UNIB and society. It is not only a key player in establishing relations of students to potential employers. It also manages activities of teaching staff and the students for the society (community service). This third pillar of the Tri Dharma increase students' employability, plays an active role for innovations in industry and helps to readjust the study programmes to changing needs of society.

7.2. Assessment

The systems used by the UNIB meet the international standards in terms of features and functionality and fulfil the requirements for intuitive usability of modern information systems. The systems largely cover the needs of a university for the monitoring and control of its activities. According to the UNIB, the data generated can be used in the intended way for the control and further development of the university.

The UNIB does not only got information from the active and passive input of the students, but actively ask for data from teachers and employers to broaden the data base of their decision making. Whereas employers are not only ask for their assessment of the UNIB's graduates, they participate in workshops for the update of the study programmes, whereas students do not receive insight into the evaluation results and are not included in the follow-up activities, although this desire exists. As a result, students do not receive feedback on what impact the evaluation results have on the further development of the faculty, teaching staff and their respective study programmes (see for more detail chapter III.9). Regarding the evaluation results, the university should consider daring to be more open and make them available to students. If necessary, this can be accompanied by a moderation process.

Nonetheless, the comprehensive equipment with information systems to control the university's activities and to support teaching activities via digital tools should be positively emphasized.

7.3. Conclusion

The criterion is **fulfilled**.

8.   ESG Standard 1.8: Public information

Institutions should publish information about their activities, including programmes, which is clear, accurate, objective, up-to date and readily accessible.

8.1. Status

Most information of the UNIB is accessible on the university's official website (www.unib.ac.id). The website provides access to the latest data of information related to the university profile, offices, academics, scholarships, general information, and reports, admission system for the new students and the academic regulations. The website contains external links to connect UNIB with information of – for example – the Ministry of Education, governmental agencies, and professional associations. The website of the UNIB is bilingual; information are presented both in Indonesian and English.

The website is periodically updated by the "Public Relation Division" (Hubungan Masyarakat – HUMAS) that is coordinated by the "Information and Documentation Officers" (Pejabat Pengolah Informasi dan Dokumentasi – PPID).

In addition to the website, the public can access information about the UNIB through social media accounts such as Facebook, Instagram, Twitter and YouTube.

8.2. Assessment

Most members of the expert panel have no language competencies in Indonesian. Therefore, the assessment concentrates on the English version of UNIB's website.

The UNIB has made a SWOT-analysis of their website and came to the conclusion that despite the strength of a continuous updating the "design of the website is outdated [and the] layout (…) is unorganized". The immediate plans for improvement, however, concentrate on elimination of user complaint and on technical issues like stability of the website's performance in case of massive increases of users at a given time.

The expert panel strongly suggests that a relaunch of the website with a more attractive and user-friendly design and layout should be a priority. Students, employers, and other stakeholders should find their most relevant information immediately.

How informative the website is in Indonesian, the expert panel cannot assess (see above). However, the information in English is definitely not a mirrored version of the Indonesian one. In general, information about the study programmes in English are inadequate, difficult to find,

or not current or dummy data from when the website was created. For an international recognition, the website of the UNIB should be enhanced both in structure and in content, especially in English.

Furthermore, public information should not be reduced to websites or social media. The students should be given all relevant information about the study programmes they want to attend. A website may be a good introduction of key information. For an in-depth information, additional documents should be provided, e.g. syllabi of the study programmes, students guides, RPS etc. These documentation should be included on the study programmes' website. Alternatively, an information package could be presented via e-mail to interested people that at least the applicants for a study programme are thoroughly informed.

8.3. Conclusion

The criterion is **fulfilled**. The expert panel suggest the following recommendations:

- For an international recognition, the internet presence of the university should be enhanced both in structure and in content and English. The student should be given a module handbook based on the course description for the national accreditation at the beginning of their studies.

9. ESG Standard 1.9: On-going monitoring and periodic review of programmes

> **Institutions should monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews should lead to continuous improvement of the programme. Any action planned or taken as a result should be communicated to all those concerned.**

9.1. Status

The UNIB conducts regular monitoring and review of study programs to ensure the learning outcomes are set and adapted to the needs of students and the community. Systematic monitoring is a part of the Internal Quality Assurance System (SPMI) of UNIB through the Internal Quality Audit (AMI) that is conducted by the "Institute of Learning Development and Quality Assurance" (LPMPP). AMI is an objective evaluation process to ensure that the activities at UNIB are in accordance with the procedures set and that the results of these activities are in accordance with the standards set by UNIB. If the implementation of a study programme is not in accordance with the standards, corrective actions are applied. In its implementation, the LPMPP has full, independent and unlimited access to all the documents prepared by the study programmes. The auditor checks the completeness of all forms of documents and in order to obtain the necessary data and information according to the scope of the audit. AMI collects documents on the three levels of university, faculty, and of study programmes. Exemplary documents gathered from the three levels are:

- University level: Program Implementation Policy, Quality Policy/ SPMI, University Business Strategic Plan, Quality Documents (Standards, Manuals, Procedures), Academic and Non-Academic Regulations, Rector's Decree and Circular Letter;

- Faculty level: Academic Policy, Dean Decree, Standard Operating Procedure of Programme Implementation and Evaluation;

- Study programme level: Academic Manuscripts/ Curriculum Documents, Lesson Plan Document, Manual/ Work Instruction, Learning Modules, Learning Implementation Document, Learning Evaluation Document.

AMI has been introduced in 2019, so that by 2022 it has run four cycles. In 2021 AMI has been conducted on 78 undergraduate and postgraduate Study Programmes. AMI auditors were appointed by Rector's Decree. Based on the Assignment Letter, there were 61 certified auditors appointed. The evaluation was carried out in two stages. They are Desk Evaluation (adequacy audit) and Field Assessment (compliance audit). The overall evaluation results show that the average criterion score is above 3 on a scale of 0-4.

The results gathered are presented to the university's leadership first, then submitted to the faculty and at last to the directors of the study programmes. The AMI results of each study program are discussed in the Management Review Meeting (Rapat Tinjauan Manajemen – RTM) at the faculty level. The Quality Assurance Team at the faculty level and the Quality Assurance team in each study programme analyse the data in RTMs and proposes recommendations for potential future improvements. The results of the learning evaluation are also followed up by the dean, the head of study programmes, and supporting lecturers to find solutions and raise the standard of learning. The RTM results, the learning outcomes report, will be used as the basis for UNIB leaders to improve the quality of learning, including improving the infrastructure. Corrective actions determined based on the RTM are implemented in determining the Business and Budget Plan (Rencana Bisnis dan Anggaran – RBA) of the faculty in accordance with the improvement targets to be achieved. In addition, the results of the RTM are used as the basis for standard revisions so that sustainable quality improvement is achieved.

Based on the results of the internal and external evaluation, UNIB revised its standard by adding 24 additional standards in 2020. Likewise, as a follow-up to the results of the AMI at the university level, additional facilities like the Integrated Service Building and Clinic were added.

9.2. Assessment

The UNIB has implemented a continuous monitoring and readjustment process for all study programmes. The review panel can attest that the internal quality management works because all curricula include important and well-established subjects according to international standards – international literature, methods and trends are integrated into the study programmes. The content of the study programmes reflects the needs of Indonesian society and the district of Bengkulu.

All study programmes are evaluated uniformly and regularly with the relevant stakeholders involved in the readjustment of the programmes. Evaluation of the study programmes is done regularly and according to international standards. Each semester, all courses are evaluated, and the study programmes designs are evaluated every four years. Evaluation of courses is done in the form of a survey anonymously, and questions are partially tailored to individual programs. Results are communicated to students and teaching staff adequately. The measures in place are effective in meeting students' expectations, students' satisfaction, and students' successful completion of the programmes. New study programmes benefit herein

from existing standards and procedures that are already in place. The quality assurance instruments are suitable for ensuring the quality of the programmes according to international standards.

Administrative staff, teaching staff, and – in particular – students are aware of the monitoring and readjustment processes, the engagement of the stakeholders in the monitoring and readjustment processes, and the strategic goals of the UNIB and their implications for the department and the study programmes. In particular, students are aware of the potential and impact of their engagement in the processes, yet they are not informed about the results (see below). Student progress regulations comply with regulations of the Indonesian government.

The selection of evaluation reports has been limited, and it seems that all evaluation reports provided for the accreditation have been positive. The recommendation is to provide a wider selection of evaluation reports and ensure that also critical remarks are being considered in evaluation.

The integration of state of art and how it develops can be refined in the study programmes. This means intensifying student and teaching staff exchange with at an international level, and a strategic plan to integrate modern developments concerning in particular, sustainability as an important topic for society in curricula. In particular, the architecture programme and students would benefit from sustainability topics as the use of renewable materials in construction.

Students, unlike faculty and teaching staff, do not receive insight into the evaluation results, although this desire exists. As a result, students do not receive feedback on what impact the evaluation results have on the further development of the faculty, teaching staff and the study programme. The results of the course evaluations, therefore, should be presented to the student of the respective course in a suitable form.

According to the self-report and the discussions with teachers and students of the FT UNIB, students take not part in the RTM. Given that they are the ones most prominently affected by any changes of the study programme, their voice should be heard in a broader way than just filling in the course evaluation questionnaires about the lecturers' performances.

9.3. Conclusion

The criterion is **fulfilled**. The expert panel suggest the following recommendations:

- The results of the course evaluations should be presented to the student of the respective course in a suitable form.

- Student participation should be included in the RTMs.

10. ESG Standard 1.10: Cyclical external quality assurance

Institutions should undergo external quality assurance in line with the ESG on a cyclical basis

10.1. Status

The Ministry of Education, Culture, Research and Technology implements a Higher Education Quality Assurance System (SN Dikti) to ensure the quality of the study programmes and the higher education institution. The assessment is planned, implemented, documented and evaluated by the National Accreditation Board for Indonesian Higher Education (BAN-PT) or the Independent Accreditation Board (LAM) through the accreditation process based on their authority.

The External Quality Assurance System (SPME) implements an assessment every five years. The goals of SPME are to:

- determine the quality of the study programme and Higher Education based on the criteria of SN Dikti and

- ensure the quality of the study programme externally in both academic and non-academic fields.

HEIs submits a request for re-accreditation of the study programme to LAM or BAN-PT for maintaining and enhancing the accreditation status and accreditation rank.

The process of accreditation is conducted at the level of study programmes, faculty, and university. The office of "Education and Teaching Quality Assurance" (LPMPP) prepares the documents of the policy of quality management, quality management manual, quality management report, and others.

Based on the latest data of the accreditation of study programmes at the University of Bengkulu until June 2022, 20 study programmes gained "excellent" rank, 51 study programmes gained "B" rank, 10 study programmes gained "C" rank. In conclusion, 25% of the study programmes at the University of Bengkulu has gained the top rank in the last accreditation.

10.2. Assessment

UNIB's external quality assurance is performed by national regulation. Other forms of quality assurance have not been considered so far on a regular basis.

According to the self-evaluation report and the discussions of the expert panel with UNIB management, lecturers, staff, and students, the externa quality assurance of the Indonesian government is appropriate and does cover all academic levels, i.e. university, faculty, and study programme level. The external quality assurance that observers not only the internal development in a five year span, but also ensures the compliance with the legal requirements. As the UNIB is highly regulated by national legislation, the internal quality assurance system has been developed in accordance with the external standards by BAN-PT and LAM. The results of the accreditation are published, and the rating of study programmes, faculty and UNIB as a whole influence students in their decision where to start studying.

From the point of view of the expert panel, the thorough process of accreditation and re-accreditation on a recurring basis helps to promote internal quality assurance and to implement new official requirements such as the introduction of a new competency scheme in 2015 that differentiates between core competencies, additional and other competencies with respect to the learning outcomes of the study programmes.

However, it seems to the expert panel that the criteria of the external quality assurance are formal and mostly based on KPIs. The UNIB should consider to add other external quality assurance tools like an assessment of the research activities by an international expert panel. This could strengthen the commitment to the vision of "Becoming a world-class university" and could provide essential recommendations for action.

10.3. Conclusion

The criterion is **fulfilled**.

IV.   Recommendation to the Accreditation Commission of ACQUIN

1.   Assessment of compliance the Standards and Guidelines in the Higher European Area (ESG) in the actual official version

The study programmes "Computer Science" (B.Sc.), "Civil Engineering" (B.Sc.), "Architecture" (B.Sc.), "Mechanical Engineering" (B.Sc.), "Electrical Engineering" (B.Sc.), and "Informatic System" (B.Sc.) were assessed on the basis of the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG) and the national or other relevant regulations.

The expert group concludes that the ESG standards 1.1 (Policy for quality assurance), 1.2 (Design and approval of programmes), 1.3 (Student-centred learning, teaching and assessment), 1.4 (Student admission, progression, recognition and certification), 1.5 (Teaching staff), 1.6 (Learning resources and student support), 1.7 (Information management), 1.8 (Public information), 1.9 (On-going monitoring and periodic review of programmes) and 1.10 (Cyclical external quality assurance) are fulfilled.

2.   Accreditation Recommendation

The peer-review experts recommend unconditional accreditation of „ study programmes "Computer Science" (B.Sc.), "Civil Engineering" (B.Sc.), "Architecture" (B.Sc.), "Mechanical Engineering" (B.Sc.), "Electrical Engineering" (B.Sc.), and "Informatic System" (B.Sc.).

The peer group **proposes the accreditation without conditions, but with recommendations**:

General recommendations

- The professors should be selected by an university's selection committee with the participation of (international) HEI-members and (international) representatives from the respective professions. English proficiency should be required.

- The international collaboration with universities and companies in the ASEAN-region should be expanded. The possibilities for a student exchange should be enhanced and the number or intakes and outgoings should grow. There should be more financial support for students willing to go abroad. English requirements (some courses in English) and informal opportunities (English café) should be enhanced.

- The laboratories should have more and newer equipment.

- There should be student working spaces installed at the laboratories.

- For an international recognition, the internet presence of the university should be enhanced both in structure and in content and English. The student should be given a module handbook based on the course description for the national accreditation at the beginning of their studies.

- The results of the course evaluations should be presented to the student of the respective course in a suitable form.

- Student participation should be included in the RTMs.

Recommendations for the study programme "Architecture" (B.Sc.)

- To reach the high ambition, to be one of the best in Asia, the focus of the programme should be more clear. It could be an option, toto focus on the important task of sustainability in architecture and building in tropical regions. To react on climate change and adaptation in tropical regions could be a good differentiation from other architecture faculties.

- The education should clearly focus on the skills from architects, strengthen the competence to develop a design, to construct buildings and choose the idle materials.

- The facilities of the Architecture Department should deviate from other departments offices to suit better the needs of architects, e. g. studio spaces with better lighting. There should be more space reserved to exhibit the (final) works of students to inspire their successors in the respective courses. The model-workshop should be improved, the opportunity for design build projects and hands-on projects could be developed much more.

V. **Decisions of the Accreditation Commission of ACQUIN**

Based on the evaluation report of the expert group and the statements of the Higher Education Institutions the Accreditation Commission of ACQUIN makes on the 26 June 2023 the following decisions unanimously:

The study programmes "Computer Science" (B.Sc.), "Civil Engineering" (B.Sc.), "Architecture" (B.Sc.), "Mechanical Engineering" (B.Sc.), "Electrical Engineering" (B.Sc.), and "Informatic System" (B.Sc.) at the University of Bengkulu are accredited without any conditions.
The accreditation is valid until 30. September 2029.

The following general recommendations are given for the further development of the study programmes:

- The professors should be selected by an university's selection committee with the participation of (international) HEI-members and (international) representatives from the respective professions. English proficiency should be required.

- The international collaboration with universities and companies in the ASEAN-region should be expanded. The possibilities for a student exchange should be enhanced and the number or intakes and outgoings should grow. There should be more financial support for students willing to go abroad. English requirements (some courses in English) and informal opportunities (English café) should be enhanced.

- The laboratories should have more and newer equipment.

- There should be student working spaces installed at the laboratories.

- For an international recognition, the internet presence of the university should be enhanced both in structure and in content and English. The student should be given a module handbook based on the course description for the national accreditation at the beginning of their studies.

- The results of the course evaluations should be presented to the student of the respective course in a suitable form.

- Student participation should be included in the RTMs.

The following recommendations are given for the further development of the study programme "Architecture" (B.Sc.)

- To reach the high ambition, to be one of the best in Asia, the focus of the programme should be more clear. It could be an option, toto focus on the important task of sustainability in architecture and building in tropical regions. To react on climate change and adaptation in tropical regions could be a good differentiation from other architecture faculties.

- The education should clearly focus on the skills from architects, strengthen the competence to develop a design, to construct buildings and choose the idle materials.

- The facilities of the Architecture Department should deviate from other departments offices to suit better the needs of architects, e. g. studio spaces with better lighting. There should be more space reserved to exhibit the (final) works of students to inspire

their successors in the respective courses. The model-workshop should be improved, the opportunity for design build projects and hands-on projects could be developed much more.