



ASIIN Seal

Accreditation Report

Bachelor's Degree Program

Information Technology Education

Informatics Engineering

Information Systems

Provided by

Universitas Negeri Surabaya - Indonesia

Version: 26 September 2025

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A About the Accreditation Process

Name of the degree program (in original language)	(Official) English translation of the name	Labels applied for ¹	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC) ²
Sarjana Pendidikan Teknologi Informasi	Undergraduate Program of Information Technology Education	ASIIN	BAN-BT ³ 2021 - 2026	04
Sarjana Teknik Informatika	Undergraduate Program of Informatics Engineering	ASIIN	BAN-BT 2024 - 2029	04
Sarjana Sistem Informasi	Undergraduate Programs of Information Systems	ASIIN	BAN-BT 2022 - 2027	07
Date of the contract: 01.03.2024 Submission of the final version of the self-assessment report: 26.02.2025 Date of the onsite visit: 06.-07.05.2025 at: Ketintang Campus and Lidah Wetan Campus, Surabaya				
Expert panel: Prof. Dr. Michael Amberg, Friedrich-Alexander-University Erlangen-Nürnberg Prof.Dr.Ing. Helena Szczerbicka, Leibniz University Hannover Prof. Dr. Prof. h.c. Bettina Harriehausen-Mühlbauer, Darmstadt University of Applied Sciences Mr. Affandy Fahrizain, MSc, Kata.ai (industry representative)				

¹ ASIIN Seal for degree programs

² TC: Technical Committee for the following subject areas: TC 04 – Informatics/Computer Science and TC 07 – Business Informatics/Information Systems.

³ Indonesian National Accreditation Body for Higher Education

Ms. Atilla Rizkyara, student at Universitas Negeri Jakarta
Representative of the ASIIN headquarter: Dr Emeline Jerez
Responsible decision-making committee: Accreditation Commission for Degree Programmes
Criteria used: European Standards and Guidelines as of 15.05.2015 ASIIN General Criteria as of 28.03.2023 Subject-Specific Criteria of Technical Committee 04 – Informatics/Computer Science as of 29.03.2018 Subject-Specific Criteria of the Technical Committee 07 – Business Informatics/Information Systems as of 08.12.2017

B Characteristics of the Degree Programs

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF ⁴	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Undergraduate Program of Information Technology Education	Sarjana Pendidikan/ Bachelor of Education	1. Software Engineering and Gaming 2. Intelligent Multimedia 3. Network Computing Techniques	6	Full time	-	8 Semester	144 CP / 228,96 ECTS	Annually 2012
Undergraduate Program of Informatics Engineering	Sarjana Komputer/ Bachelor of Computer	-	6	Full time	-	8 Semester	144 CP / 228,96 ECTS	Annually 2015
Undergraduate Programs of Information Systems	Sarjana Komputer/ Bachelor of Computer	-	6	Full time	-	8 Semester	144 CP / 228,96 ECTS	Annually 2015

The experts acknowledged and considered the contextual framework within which the Bachelor's study programs currently being assessed are offered:

Universitas Negeri Surabaya (UNESA) is a public university located in East java. It was originally established in 1950 as an Institute for Teacher Training and Education and served as a center for teacher education until 1999, when it was officially designated as a university by presidential decree.

UNESA received an extended mandate allowing it to offer both education and non-education study programs. Currently it is divided into seven faculties: (1) Faculty of Education, (2) Faculty of Languages and Arts, (3) Faculty of Mathematics and Natural Sciences, (4) Faculty

⁴ EQF = The European Qualifications Framework for lifelong learning

of Social Sciences and Law, (5) Faculty of Engineering, (6) Faculty of Sport Science and (7) Faculty of Economics.

All academic staff at UNESA engages in education, research and community service (the *Tridharma* or three higher education pillars in Indonesia). In 2020, UNESA issued a strategy and roadmap to increase the quality and quantity of its research outputs. The strategy includes fostering UNESA's research culture, as well as multidisciplinary research activities on a national and international level.

UNESA's vision is "to be excellent in education and strong in science." Its strategic plan outlines a long-term development master plan for 2011–2035, divided into five-year phases. After implementing international study programs across departments, UNESA is now focused on enhancing its reputation through international accreditation. From 2024 to 2029, the university aims to establish itself as a recognized national research university. To achieve this goal, UNESA has outlined the following mission and goals:

Mission:

1. "To conduct education and learning centred on students by using effective instructional approaches, and optimizing the use of technology
2. To conduct research in educational sciences, natural sciences, social and cultural sciences, arts, and/or sports, and developments of technologies whose findings are beneficial for the development of sciences and public welfares
3. To disseminate science, technology, arts, culture and sports, and research results through community service oriented towards empowering and civilizing society
4. To realize Unesa an educational centre, especially for primary and secondary educations as well as a scientific center based on the noble values of national culture
5. To conduct an autonomous, accountable, and transparent high educational governance for a sustainable quality assurance and improvement."

Goals:

1. "Graduate an intelligent, religious, noble, independent, professional and excellent student;
2. Produce excellent scientific and creative works in education and science as well as become a reference in both science and/or technology application;
3. Engage in community service through science and/or technology application to create an independent, productive, and prosperous society;
4. Make the Universitas Negeri Surabaya as education and science centre carrying the noble values of national culture; and

5. Produce effective and efficient institutional performance by creating a humanistic academic climate as well as a transparent, accountable, responsive, and just institutional management to ensure the implementation quality of the tri-dharma of higher education sustainably.”

UNESA received institutional accreditation as “excellent” by the National Accreditation Board of Higher Education. According to the Times Higher Education Ranking, UNESA is listed 22nd in Indonesia, and 601 in Asia.

The three study programs under review are based at the Faculty of Engineering and associated with the Department of Informatics. Each program is detailed with specific profiles in the Self-Assessment Report.

i. Bachelor of Information Technology Education (UPITE)

Vision

“Becoming a national standard information technology education study program in 2022 will produce professional graduates, have character, and have an entrepreneurial spirit.”

Mission

1. “Organizing education in the field of Information Technology Education (ITE) that is relevant to the needs of the local labor market and the development of science and technology. The scientific fields of multimedia, Computer Network Engineering, and Device Engineering and expertise programs needed by vocational schools and related industries.
2. Organizing research related to the field of Information Technology Education (ITE) and applying it in learning.
3. Applying the field of Information Technology Education (ITE) in the form of community service.
4. Establishing cooperation with business/industry and domestic and foreign education to improve the quality and performance of the Information Technology Education study program.”

ii. Bachelor of Informatics Engineering (UPIE)

Vision

“To establish a study program that is excellent and innovative in the fields of artificial intelligence, software engineering, and computer networks based on entrepreneurship in Southeast Asia by the year 2029.”

Mission

1. “Implement credible, accountable, and transparent program management in accordance with quality assurance standards.
2. Produce graduates who are competent and have strong character.
3. Conduct research in the field of information technology and publish the results at least at the national level.
4. Carry out community service by applying the knowledge.
5. Establish sustainable collaborations with various institutions and industries.”

iii. Bachelor of Information Systems (referred as to UPIS)

Vision

“To become a strong, adaptive, and innovative study program in IS Enterprise, IS Management Strategic, and IS Data and Software Management based on entrepreneurship by 2027.”

Mission

1. “The Mission of UPIS aims to produce graduates in the field of information systems (IS) who have abilities:
2. Having a solid understanding of the information systems fields of IS Enterprise, IS Management Strategic, IS Data Management, and IS Development and how to apply them to solve problems in their line of work.
3. Demonstrating advanced cognitive skills, including effective verbal and written communication, proactive decision-making, and the ability to lead and coordinate teams in relevant fields.
4. Having a collaborative mindset in the technology sector, along with the ability to work well with others, uphold honesty, and take accountability for one's contributions within the relevant expertise.
5. Being able to continually learn and grow through formal or informal education throughout one's life.”

C Expert Report for the ASIIN Seal

1. The Degree Program: Concept, Content & Implementation

Criterion 1.1 Objectives and Learning Outcomes of a Degree Program (Intended Qualifications Profile)

Evidence:

- Self-Assessment Report
- Academic guidelines for bachelor's programs
- Diploma supplement
- UNESA webpage <https://en.unesa.ac.id/>
- Ba Information Technology Education webpage: <https://pendidikan-ti.ft.unesa.ac.id/>
- Ba Informatics Engineering webpage: <https://ti.ft.unesa.ac.id/>
- Ba Information Systems webpage: <https://si.ft.unesa.ac.id/>
- Discussion during the audit

Preliminary assessment and analysis of the experts:

The expert panel refers to the Subject-Specific Criteria (SSC) of the Technical Committees 04 – Informatics/Computer Science and 07 – Business Informatics/Information Systems, as a basis for judging whether the intended learning outcomes of the Bachelor's program Information Technology Education, Bachelor's program Informatics Engineering and Bachelor's program Information Systems, as defined by UNESA, correspond with the competences as outlined by the SSC. They come to the following conclusions:

Learning Outcomes

At the program level, the experts observe two tiers of development for the educational objectives of the programs under review (details in the Appendix):

- **Program-specific Objectives** (PEOs), which describe the ultimate goal of education based on the university and faculty's vision and mission statements, and industry needs.

- **Program Learning Outcomes (PLOs)**, which derive from the study program objectives and guide the design and assessment of the curriculum.

PLOs are developed based on each program's educational objectives, a process involving internal (lecturers, administrative staff and students) and external (professional associations, employers and relevant experts) stakeholders. The PLOs align with the requirements set by the Indonesian National Qualification Framework (*Kerangka Kualifikasi Nasional Indonesia, KNNI*) and the National Standards for Higher Education (*Standar Nasional Pendidikan Tinggi, SN-DIKTI*).

Within the documentation, UNESA provides an Objectives-Module Matrix for each program to verify that the intended learning outcomes of the degree programs are aligned with the respective SSC. In addition, UNESA presents tabular linkages between PEOs and PLOs, and PLOs and the modules in the curriculum. PEOs and PLOs can be accessed through the Academic Guidelines and the study program websites.

The experts are generally satisfied with how the program's objectives and learning outcomes are formulated. Most of the objectives and learning outcomes are well-established, align with the targeted academic qualifications, and ensure professional qualifications at level 6 of the European Qualifications Framework.

Graduate Qualification Profile

As described in the Self-Assessment Report, the graduate profile of each study program is shaped by analyzing the results of tracer studies. The programs align with standards from professional associations while also addressing the needs of stakeholders, who are regularly invited to provide input through surveys and focus groups.

Drawing on this stakeholder process, graduates of the Information Technology Education study program are expected to embark on the following career paths:

1. Information Technology Education Teacher in Vocational High School with expertise divided into Software and Game Development or Computer Network and Telecommunications Engineering.
2. Computer Science Programmer with competence in creating IT-based learning modules, applications, android/web or desktop-based tools.
3. Entrepreneur with the ability to create IT-based applications for entrepreneurship in the field of Android/web and desktop-based systems and applications.

Graduates of the Informatics Engineering study program are expected to contribute their knowledge and skills as:

1. Software Developers with skills in analysis, design, implementation, and maintenance of software systems.
2. Information Technology Support who provide technical support and solutions for computer and network issues.
3. Entrepreneurs who have an understanding of technology and business skills to establish and manage their technology ventures.

Graduates of the Information Systems study program are anticipated to pursue the following career paths:

1. Information System Analysts able to analyze organizational needs and design information systems solutions that align with business objectives.
2. Technology Consultants who provide consultancy services to organizations regarding implementing, maintaining, and optimizing information technology systems.
3. Database Administrators who manage databases efficiently, ensuring data security, integrity, and accessibility.
4. Systems Developers who develop and customize software solutions tailored to specific business organizational requirements.
5. Project Managers able to plan, execute, and oversee information system projects, ensuring they meet deadlines, budgets, and quality standards.

During the audit, the program coordinators explained to the experts that tracer studies are conducted annually and target alumni from the two most recent cohorts. For example, for 2024, the focus of analysis was on graduates from 2022 and 2023. As part of the process, participating alumni are required to complete a structured questionnaire designed to gather insights into their post-graduation employment status and career development. The coordinators noted that a high proportion of students secure employment before graduation, often due to company recruitment following internship programs. Additionally, 57% of alumni find employment within six months of graduating.

The evidence gathered indicates that students are prepared to enter the job market, and employers are overall satisfied with the knowledge and technical skills of the graduates. During the discussion with the experts, representatives from various companies/schools confirmed their willingness to take in student interns and graduates, highlighting their technical knowledge. **However, feedback from industry partners and alumni also remarked upon the need for improvement in the development of general soft skills among graduates. Key areas identified include oral and written communication (e.g., presenting ideas, reporting work, public speaking to name a few), leadership, critical thinking, problem-solving, and conflict management. The experts acknowledge that UNESA incorporates**

the concept of “required 21st century skills” into the curriculum, but recommend intensified efforts to address gaps in this area, ensuring that students are better equipped with these essential skills for their professional careers.

Students and alumni also expressed satisfaction with the programs being reviewed and conveyed to the experts that they were happy to have chosen UNESA. During the discussions, they mentioned their satisfaction with the learning experience, as well as their future job and academic opportunities. Alumni specially noted that their education at UNESA met their expectations by providing a good understanding of the discipline, which has positively impacted their careers.

The experts gained the overall impression that the imparted qualification profiles meet the expectations from all sides, and allow the students to take up an occupation corresponding to their qualifications upon graduation.

Review of Learning Outcomes

As documented in the Self-Assessment Report, program objectives, learning outcomes, and curricula undergo a major review every four years to remain aligned with societal and labour market dynamics, governmental regulations, as well as emerging trends. These reviews include consultation with internal and external stakeholders, benchmarking processes, and graduate data through annual tracer studies.

Further discussion regarding the curriculum review cycles and stakeholder participation in quality management processes will be addressed under [Criterion 1.3](#) and [Criterion 5](#).

The assessment team believes that the degree programs are designed in such a way that they meet the objectives set for them and judge the objectives and learning outcomes as suitable to reflect the intended level of academic qualification. They correspond with the ASIIN Subject-Specific-Criteria (SSC) of the Technical Committees Informatics/Computer Science and Business Informatics/Information Systems, respectively, and satisfy the ASIIN Criteria for the Accreditation of Degree Programs.

Criterion 1.2 Name of the Degree Program

Evidence:

- Self-Assessment Report
- Diploma and diploma supplement
- Faculty of Engineering webpage <https://ft.unesa.ac.id/>

- Ba Information Technology Education webpage: <https://pendidikan-ti.ft.unesa.ac.id/>
- Ba Informatics Engineering webpage: <https://ti.ft.unesa.ac.id/>
- Ba Information Systems webpage: <https://si.ft.unesa.ac.id/>

Preliminary assessment and analysis of the experts:

The experts learned that the names of the study programs under review are in accordance with the regulations of the Indonesian Ministry of Research, Technology and Higher Education.

In the undergraduate program Information Technology Education, UNESA awards a Bachelor of Education (Sarjana Pendidikan or S.Pd.). Graduates from the undergraduate programs Informatics Engineering and Information Systems receive the title of Bachelor of Computer Science (Sarjana Komputer or S. Kom.).

During the audit, the experts discussed with the program coordinators about the Information Technology Education study program. They noted that both PEOs and PLOs appear to be designed primarily for teaching. However, some graduates pursue careers as programmers. The experts inquired about the relevance of the degree title (B.Ed.) for those interested in a programming career. The program coordinators explained that the degree awarded has not been a concern, as the program includes several courses related to programming, which also prepare students for careers in companies. Nevertheless, the primary focus remains on producing teachers who can teach programming, rather than aiming to develop scientists.

That said, the experts consider that the title of the study programs under review reflects the PEOs and PLOs, as well as the teaching and learning content. The names follow international terminology and are therefore well understood in their respective field.

However, upon assessing consistency, the experts observe that, for the Bachelor Informatics Engineering, the name is not consistently used in all submitted documents. For instance, the Diploma Certificate refers to the program as "Informatics." The university is therefore requested to ensure consistency in the program name, especially in the English translations of all official documentation.

Criterion 1.3 Curriculum

Evidence:

- Self-assessment report
- Academic guidelines for bachelor's programs
- Module handbook of each study program
- Statistical data on student mobility
- Ba Information Technology Education webpage: <https://pendidikan-ti.ft.unesa.ac.id/>
- Ba Informatics Engineering webpage: <https://ti.ft.unesa.ac.id/>
- Ba Information Systems webpage: <https://si.ft.unesa.ac.id/>
- Discussion during the audit

Preliminary assessment and analysis of the experts:*Structure and content*

At UNESA, each semester is equivalent to 14 weeks of learning activities. Besides these learning activities, there is one week for midterm exams and one week for final exams. Mid and final exams are regularly conducted in week 8th and week 16th, respectively. The odd semester starts in August, while the even semester starts in February.

For the study programs, the minimum study load is 144 Indonesian Credits (SKS/CSU), with 138 CU of compulsory and 6 CU of elective-compulsory courses. The expected duration is 8 semesters studying full-time.

The current curriculum in effect is the 2023 curriculum (details in the [Appendix](#)). In the first year, students are introduced to general education subjects such as Pancasila Education, Bahasa Indonesia, Religion Education, English and more. These courses help students understand socio-cultural aspects and foundational principles of their discipline.

As students advance through the programs, the courses become more focused and specific, allowing them to delve deeper into the field. Practical laboratory work is incorporated into the curricula, enabling students to gain hands-on experience.

In the later stages of the programs, the curricula further narrow their focus on advanced areas. Students take specialized courses and engage in professional development activities. The curriculum incorporates the Independent Learning on an Independent Campus program (*Merdeka Belajar - Kampus Merdeka, MBKM*), a government-led initiative regulated

by the Minister of Education and Culture decree No. 3/2020. This initiative encourages students' participation in activities outside their study program. There are eight activity types, including internships, student exchanges, and other learning opportunities.

Bachelor Information Technology Education

The knowledge developed in the study program is related to didactic methods, integration, data modelling, and information technology engineering. It offers three paths of specialization through elective courses in semester 5: (1) Software Engineering and Gaming, (2) Intelligent Multimedia and (3) Network Computing Techniques.

MBKM is implemented in semesters 6 and 7 through two activity types. In semester 6, students participate in an Internship or Work Practice program worth 20 credits. In semester 7, students take part in the MBKM School Field Introduction program, also worth 20 credits. During this program, students are assigned to Vocational High Schools (SMKs), where they actively participate in the full range of school activities. These include developing learning modules, learning how to teach, conducting student assessments, and participating in extracurricular activities.

Bachelor Informatics Engineering and Bachelor Information Systems

In semester 5, students have the option to choose elective modules—five courses are offered for the UPIE program and six for the UPIS program.

MBKM is also implemented in semesters 6 and 7 via enrichment courses. These courses take the form of internships, providing students the opportunity to combine their theoretical and practical skills in the workplace. Students are also required to do community service. Members of the teaching staff explained that community service is compulsory for all Indonesian students. It lasts a minimum of four weeks and usually takes place in villages or rural areas where students stay and live with the local people. The course is designed to enable students to apply their knowledge in their field of study in order to empower society.

In all three programs, students dedicate semester 8 to working on their thesis.

The experts discussed the curriculum with the students, who believed that UNESA has implemented a program that meets their expectations. The students expressed overall satisfaction with the curriculum and did not identify overlapping content. **However, they expressed a desire for greater integration of English into both the curriculum and the learning process.**

The positive sentiment was shared by partners from both the industry and education sectors. They expressed high satisfaction with the qualifications of students and graduates

across the three programs. They emphasized, nonetheless, the importance of placing greater emphasis on developing students' soft skills, as outlined under [Criterion 1.1](#). They would also like to see more actions in place to further enhance students' English proficiency. The partners suggested that the curriculum could be improved by providing students with more opportunities to speak and write in English. They believed this would increase the chances for UNESA graduates to thrive in an international work environment. **The experts agree with this recommendation, highlighting the importance of including a higher amount of English in the classroom. While lecturers often use English slides and reading materials, there are currently no lectures conducted entirely in English. The experts suggest that organizing fully English-taught lectures and requiring students to submit their work in English could help them practice their writing and speaking skills more regularly.**

Furthermore, based on the insights gathered during the audit, the experts suggest that expanding the range of elective options could enhance the personalization of students' learning paths. New electives could be designed to strengthen independent thinking and decision-making skills.

Although some areas for improvement were noted, the experts conclude that the presented curricula enable the students to achieve the intended learning outcomes. In the module handbooks, UNESA has defined course learning outcomes for each module, which allow the students to reach the overarching program objectives.

The experts appreciate the efforts to equip students with both theoretical knowledge and practical skills. They positively see that internships are integrated into the programs to support the students in getting experience outside the campus. The experts see evidence that UNESA supports the students in finding internships. The experts observe that the entire curricula of the study programs under review award credit points. Each module represents a well-matched unit of teaching and learning, which contributes to the knowledge, skills and competences of the students.

The experts consider the order of the modules as suitable and confirm that the studies can be completed within the defined study periods. Further comments on the sequence of the modules and prerequisites will be provided under [Criterion 4.1](#).

Student mobility

During the audit, the experts discussed the university's strategies for student mobility with UNESA management. Students have the opportunity to take courses offered by other study programs or universities, which includes both academic mobility at collaborating institu-

tions and external grants. UNESA has issued regulations that allow for the transfer of credits earned externally, contingent upon approval from the study program coordinators at UNESA. To assist students in finding suitable programs, support is provided by the Sub-Directorate of International Affairs and the Sub-Directorate for Domestic Cooperation.

The study programs provided data on student participation in external activities. At UPIE, for instance, one student won a robotics competition in Saudi Arabia, another received an IISMA scholarship for a student exchange in Taiwan, and a third took part in a community service project in Malaysia. However, most external activities generally involve competitions and conference attendance.

Table 1: Conference attendance
Source: Self-Assessment Report, UNESA.

Program	Scale	2020	2021	2022	2023	2024
UPIE	National	10	12	14	17	18
	International	8	12	15	18	20
UPIE	National	10	13	15	18	19
	International	9	14	17	20	23
UPIS	National	10	15	16	19	20
	International	10	15	17	20	23

During the meeting with the students, the experts learned that students in Information Technology Education mainly take part in field study courses outside UNESA during their internship. Most students spend their time at vocational schools located mainly in Java, although opportunities in regions outside of Java are also available.

Several students further reported spending time abroad, including, for example, in Malaysia. They indicated to the experts that their time outside UNESA was a positive experience and recommended exchange programs to their peers. The students described that they got experience for one semester abroad, during which they took five courses equivalent to 20 credits at UNESA. They reported receiving sufficient support from the university, including UNESA and government funding. Another student volunteered in Malaysia as part of a humanitarian program organized by UNESA. The students reported that UNESA informs them about programs on student mobility.

When asked about the attendance of international students in their classes, the students reported that there are currently none. The representatives from the Rector's office emphasize that UNESA is currently increasing its efforts to recruit a higher number of international students.

According to the information obtained, the experts note that UNESA promotes international student mobility through an appropriate framework. However, they support

UNESA's efforts to increase the number of international students within the study programs under review, as well as outgoing students. The experts highlight that institutional support to access scholarships is recommended.

Periodic Review of the Curriculum

As outlined under Criterion 1.1, UNESA conducts regular reviews of the curriculum and documents any adjustments. Major changes in the curricula are implemented every four years after an in-depth curriculum review considering students, lecturers, alumni, and other stakeholders. Last adaptations of the curricula, involving major changes, occurred in 2023 (structure, objectives, learning outcomes).

Together with the stakeholder's input, the curriculum also consider several regulations and references. The Information Technology Education's curriculum incorporates the competencies outlined by the Association for Computing Machinery relevant to Vocational Education Technology. It also considers guidance from organizations such as the Special Interest Group on Information Technology Education and adheres to the Teacher Education Standards emanating from the Minister of Education and Culture.

The Informatics Engineering's curriculum adheres to the guidelines from the , Institute of Electrical Electronics Engineers-Computer Society, Association for Advancement of Artificial Intelligence and Association of Informatics and Computer Universities. While, the Information Systems' curriculum considers the Association for Computing Machinery, Association for Information Systems and Association of Informatics and Computer Universities.

The panel recognizes that the curriculum undergoes periodic review. Yet, given the accelerating pace of technological change across the IT sector, they strongly recommend shortening the evaluation cycle from four years to two. This tighter rhythm will let the program respond swiftly and flexibly to breakthroughs in digital transformation, cybersecurity, artificial intelligence, and other emerging technologies that define the industry's future.

Criterion 1.4 Admission Requirements

Evidence:

- Self-Assessment Report
- UNESA admission webpage: <https://admisi.unesa.ac.id/>
- Discussion during the audit

Preliminary assessment and analysis of the experts:

The experts learned from the submitted documents that admission procedures and policies for new students follow national regulations and statutory provisions. The requirements, schedule, registration venue, and selection tests are announced on UNESA's admission webpage, ensuring access for all stakeholders.

There are three main routes by which students can be admitted to a Bachelor's program:

1. **National selection based on achievement** (*Seleksi Nasional Berbasis Prestasi, SNBP*). A national admission system, which is based on the academic performance during the high school or equivalent educational units.
2. **National selection based on tests** (*Seleksi Nasional Berdasarkan Tes, SNBT*). This national selection test is held every year for university candidates. It involves a computer-based written test in the form of a scholastic potential test, English language proficiency test and academic potential test.
3. **Independent selection admission** (*Seleksi Penerimaan Mahasiswa Baru, SPMB*). Students are selected based on an online test (similar to SNBT) specifically held by UNESA for prospective students who have not been accepted through SNBP or SNBT.

An undergraduate transfer program is also offered to students who have completed a Diploma or Young Bachelor program and wish to continue their education at UNESA. Participants must have received credit recognition from the relevant department or study program.

The admission quotas are set based on several factors, including strategic and development plans of the faculty/department, evaluation results from previous student admissions, and the capacity of available facilities and human resources.

The data for the Information Technology Education program shows that the number of applicants has varied from year to year, but consistently exceeds the number of available places. For example, in the 2023/24 academic year, 533 students applied, and only 183 were admitted. This is equivalent to an admission rate of 34%.

Table 2: Total Quota, Applicant, and Accepted Students in UPITE, 2021-2023
Source: Self-Assessment Report, UNESA

Admission Year	Quota	Applicants			Total	Accepted			Total
		SNBP	SNBT	SPMB		SNBP	SNBT	SPMB	
2023/2024	210	201	192	140	533	48	85	50	183
2022/2023	125	279	399	155	833	30	56	34	120
2021/2022	80	140	217	102	459	20	33	17	70

The Informatics Engineering program has seen a significant increase in applicants, with the numbers doubling over the past three years and consistently exceeding the available places. In the 2023/24 academic year, for example, 3.508 students applied, but only 391 were admitted. This is equivalent to an admission rate of 11%.

Table 3: Total Quota, Applicant, and Accepted Student in UPIE, 2021-2023
Source: Self-Assessment Report, UNESA

Admission Year	Quota	Applicants			Total	Accepted			Total
		SNBP	SNBT	SPMB		SNBP	SNBT	SPMB	
2023/2024	420	1065	1549	894	3508	94	178	119	391
2022/2023	165	752	1050	351	2153	41	70	54	165
2021/2022	80	534	707	299	1540	19	32	25	76

The Information Systems program has also experienced a growth in applicants, with the number doubling over the past three years and always higher than the number of available spots. For example, in the 2023/24 academic year, 2.497 students applied, but only 321 were accepted. This means the admission rate was about 13%

Table 4: Total Quota, Applicant, and Accepted Student in UPIS, 2021-2023
Source: Self-Assessment Report, UNESA

Admission Year	Quota	Applicants			Total	Accepted			Total
		SNBP	SNBT	SPMB		SNBP	SNBT	SPMB	
2023/2024	350	622	1105	770	2497	74	138	109	321
2022/2023	165	590	854	418	1862	42	64	44	150
2021/2022	80	361	488	281	1130	18	13	16	73

Undergraduate students at UNESA are required to pay tuition fees, which are structured into seven levels. The highest levels reaches up to 9.3 million IDR per semester, equivalent to approximately €500. The amount of tuition fees varies based on the degree program, the entrance path, and the income level of the students' parents. Several scholarships are offered to students facing financial difficulties. These scholarships are provided by the government, and include the Academic Achievement Enhancement Scholarship and scholarships for underprivileged students.

The details of the application process at UNESA and further information on admissions criteria and deadlines can be found in the UNESA Academic Regulation, which is also published on the university's webpage. During the audit, the students informed the experts that they view the admission process as fair and transparent. They had access to the necessary information when submitting their applications.

As mentioned under Criterion 1.3, during the discussion with the representatives from the Rector's office, the experts learned that UNESA aims to increase the number of its international students. Together with supporting this strategy, the experts highlight that a stronger emphasis on English in the study programs would create a more accessible and inclusive learning environment for non-Indonesian-speaking students.

That said, the experts confirm that the admission requirements and procedures are binding and transparent, and ensure the necessary prior qualification of students. Rules for the recognition of qualifications achieved externally are clearly defined and facilitate the transition between higher education institutions. The assessment team also saw evidence that the university is tracking its students' progress and achievements (more under [Criterion 1.5](#) and [Criterion 5](#))

Criterion 1.5 Workload and Credits

Evidence:

- Self-Assessment Report
- Module handbook of each study program
- Academic guidelines for bachelor's programs
- Discussion during the audit

Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report and the module handbooks, UNESA has implemented a workload-based credit-point system following guidelines from the Indonesian government. The terminology uses the Indonesian credit point (credit unit, CU or SKS in Indonesian). The credit point system considers lecturers, structured assignments and independent study.

UNESA defines that one credit point in the Bachelor's programs is equivalent to:

- 50 minutes of face-to-face activities with the lecturer per week for one semester;
- 60 minutes of structured activities (assignments, exercises) per week for one semester; and
- 60 minutes of self-study per week for one semester.

Based on the Ministry of Education and Culture's Regulation, 1 semester credit unit is equivalent to 45 hours per semester. Therefore, the student learning load for 1 credit equals 1.59 ECTS.

All three programs under review comprise 144 Indonesian credits (228,96 ECTS) distributed between 138 credits of compulsory courses and 6 credits of elective courses. The distribution per semester is as follows:

Table 4: Distribution of workload per semester
Source: *Self-Assessment Report, UNESA.*

Semester	UPITE		UPIE		UPIS	
	CU	ECTS	CU	ECTS	CU	ECTS
1	22	34,98	17	27,03	20	31,80
2	21	33,39	18	28,62	21	33,39
3	21	33,39	22	35,04	21	33,39
4	21	33,39	17	27,03	18	28,62
5	20	31,80	21	33,39	18	28,62
6	13	20,67	23	36,57	20	31,80
7	22	35,04	22	35,04	22	34,98
8	4	6,36	4	6,36	4	6,36
Total	144	228,96	144	228,96	144	228,96

The semester GPA determines the maximum number of credits students can take the following semester, with a maximum of 24 CU for high achievers according to the Academic Guidelines. Bachelor's students are required to attend their classes in accordance with established regulations. They must be present in at least 12 face-to-face sessions plus the mid-semester examination (75%). If students fail to do so, they are not allowed to attend the final examination. The maximum time to complete the bachelor's programs is 14 semesters.

According to the information provided, the experts learned that UNESA monitors whether the actual workload aligns with the number of credits awarded for each module. This assessment takes into account the time spent in face-to-face sessions, self-study, and assignments. Workload calculations for students are conducted for each course and categorized by credit hours: 2, 3, and 4 credits. For example, the figure below illustrates students' perceptions of the workload for the 3-credit course "Modelling and Simulation" in the Information Systems study program

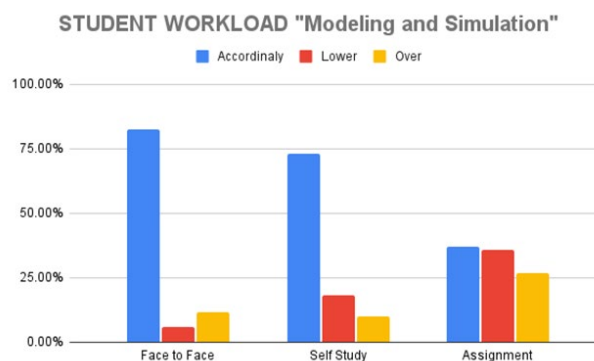


Figure 1: Example of Workload monitoring in UPIS
Source: *Self-Assessment Report, UNESA*

Asked by the experts, the program coordinators explained that for this 3-credit unit, "lower" means students perceive the activity as less than 135 minutes, "accordingly" indicates 90 to 120 minutes, and "over/upper" applies to activities over 120 minutes. In face-to-face sessions, over 75% of students reported the workload as appropriate ("accordingly"), with a small percentage feeling it was lower or higher. For self-study, about 70% viewed the workload as accordingly, but slightly more students felt it was lower or higher compared to face-to-face sessions. In assignments, student perceptions were more evenly distributed, showing greater variation in how the workload was viewed. Course adjustments are made based on these results.

In addition, the students receive a questionnaire at the end of the semester, which gathers perceptions of the learning process, including the workload. The workload of each course is listed in the respective module handbook.

During the audit, the students reported that the workload in all three study programs under review is manageable although it requires time management strategies. Overall, they expressed satisfaction with their workload, noting that they still have enough free time for hobbies, social activities, and family. This feedback aligns with the student satisfaction data provided by UNESA.

The university also provided data on dropout rates and average study duration. The data show very low dropout, but students take slightly longer to complete their studies: an average of 4.65 years for UPITE and 4.5 years for UPIS. During the audit, the experts inquired about the factors contributing to these notably low dropout rates. They learned from various stakeholders that UNESA offers strong counseling and academic support services, particularly for students who face learning difficulties.

Table 5: Dropout rate and average time to complete studies
Source: Self-Assessment Report, UNESA.

Semester	UPITE		UPIE		UPIS	
	Dropout Rate	Average Time	Dropout Rate	Average Time	Dropout Rate	Average Time
2023	0,0%	4,65	0,048%	3,5	0,015%	4,5
2022	0,0%	4,48	0,037%	3,67	1.8%	4,3
2021	0,0%	5,28	0,016%	3,94	0%	4,6
2020	0,0%	5,21	0,058%	3,98	0.7%	4,1

In conclusion, the experts confirm that a credit system based on the student workload is implemented in the three study programs under review. The workload includes contact hours and self-study time. Furthermore, all mandatory activities are awarded with credit points. The experts confirm that the estimated workload is realistic and well-founded; it

allows the students to complete their studies successfully. The experts further saw evidence that UNESA closely monitors the actual workload of the students and takes action if mismatches are identified. Students are involved in these processes.

Criterion 1.6 Didactic and Teaching Methodology

Evidence:

- Self-Assessment Report
- Module handbook of each study program
- Discussion during the audit

Preliminary assessment and analysis of the experts:

UNESA describes in its Self-Assessment Report that the teaching methods are selected to match the characteristics of each subject in the study programs to support the achievement of the PLOs. Teaching considers student-centered approaches. Lecturers aim to include project-based learning, problem-based learning, inquiry, guided discovery, case study, and demonstration.

Teaching methods can take various forms, including face-to-face lectures, e-learning, blended learning, seminars, practicums, and field practice. The following table presents a general overview for each program:

Table 6: Number of courses applying each teaching form

Source: Self-Assessment Report, UNESA.

UPITE			UPIE			UPIS		
Face-to-Face	Laboratory/Practical Activity	Internships	Face-to-Face	Laboratory/Practical Activity	Internships	Face-to-Face	Laboratory/Practical Activity	Internships
43	18	2	40	23	7	49	17	6

The UNESA learning platform, called SiDia, supports blended learning activities and provides features that lecturers and students can access, including course information, class schedules, modules, and learning materials. At the beginning of each semester, students are introduced to the learning methods used in their courses through lesson plans and module descriptions for each subject.

During the audit, the students confirmed to the experts that they participate in both online and offline activities. Online learning takes place through the UNESA learning platform, where each student has a personal account. They reported that they receive digital learning

materials for all their courses, which are provided by their lecturers. Additionally, the students mentioned that whenever they face difficulties, the lecturers are always approachable and willing to assist.

The experts observed from the submitted module handbooks that nearly all modules incorporate problem-based learning, project-based learning, case studies, and discussions. However, as noted earlier, there are no modules fully organized in English other than the English modules themselves. In some courses, bilingual materials are used. This involves mainly slides and reading materials; however, the main spoken language remains Bahasa Indonesia. During the discussion, the students expressed a wish for greater use of English in the learning process. The experts therefore identify this as an area for improvement.

The experts summarize that UNESA has integrated a variety of teaching methods and didactic means in the study programs under review to promote achieving the learning outcomes. This includes strategies and guidelines from blended learning and hybrid learning to which UNESA offers a suitable infrastructure and staff development options. Furthermore, the experts acknowledge that the programs monitor the utilized learning and teaching methods. **However, they identify the need to increase the use of English in the classroom.**

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

The experts thank UNESA for the provided statements concerning criterion 1.

(ASIIN 1.1) Students' soft skills – all programs

UNESA outlines several initiatives to strengthen students' soft skills. These include participation in student organizations and extracurricular activities. University-wide student activity units (UKM) offer diverse opportunities for individuals to explore their interests, promoting communication, leadership, and teamwork. Students can also participate in academic mobility programs, such as independent studies, internships, and student exchanges. The experts support these initiatives and recommend that efforts in this area be sustained (Recommendation E1).

(ASIIN 1.2, 4.2) Program name in official documents – Ba Informatics Engineering

The experts appreciate the coordination with the relevant department to ensure that the program's name in the Diploma Certificate is updated, reflecting the correct title in all official documents. However, as evidence of this change is yet to be provided, the experts issue Requirement A2.

(ASIIN 1.3, 1.6, 2, 3.1) Integration of the English language – all programs

UNESA outlines its plan to propose a policy requiring all course materials to be prepared in both Bahasa Indonesia and English. The experts appreciate the university's initiative to enhance the use of English through bilingual course materials and see it as a positive step towards internationalization. However, they also recognize that this area requires sustained effort and recommend continued support to ensure its effective implementation and long-term success (Recommendation E2). Additionally, it might be helpful to consider offering English language training or capacity-building programs for teaching staff and students to support a smooth and effective transition.

(ASIIN 1.3) Range of elective options – all programs

The experts appreciate that the university is considering the introduction of a broader range of elective courses for students in consultation with its academic staff. These elective courses are intended to foster independent thinking and decision-making skills, with a focus on approaches relevant to computer science. The experts support this initiative, but given that changes have not yet been implemented; they continue to endorse their recommendation (Recommendation E4).

(ASIIN 1.3) Student mobility – all programs

UNESA describes its current support for international students (tuition fee waivers and free accommodation). The university anticipates a number of international student candidates from Yemen, Timor Leste, Bangladesh, and Pakistan for next semester. As noted in the report, the experts recognize that UNESA effectively promotes international student mobility through a suitable framework. However, they recommend sustained efforts to not only increase the number of international students enrolled in the study programs under review, but also to boost the number of outgoing students (Recommendation E5).

(ASIIN 1.3) Curriculum review cycle – all programs

The experts appreciate that the university is considering their recommendation to shorten the evaluation cycle. They take note of the planned initiative to conduct a curriculum review every two years as part of an internal policy. While the experts welcome this plan, it is yet to be implemented; therefore, they maintain their recommendation (Recommendation E6).

With respect to the curriculum of each program under review, the experts strongly recommend implementing concrete measures to align the content with international academic standards. This includes integrating recent developments in the respective fields, enhancing the focus on practical skills, and promoting independent thinking among students (Recommendation E3).

Considering the points mentioned above, the experts consider this criterion to be mostly fulfilled.

2. Exams: System, Concept and Organization

Criterion 2 Exams: System, Concept and Organization

Evidence:

- Self-Assessment Report
- Module handbook of each study program
- Academic Guidelines for bachelor's programs
- Exam regulations
- Samples of students' work (projects, exams and thesis)
- Discussion during the audit

Preliminary assessment and analysis of the experts:

Forms of Examinations and Exam Schedule

Formative and summative assessments are used to evaluate the student achievement of the program learning outcomes and course learning outcomes, including aspects of knowledge, attitude and skills, based on a predefined grading scale reference.

UNESA outlines in its Self-Assessment Report that the examination system adheres to the university's academic guidelines and defines four types of assessments that contribute to the final grade. These assessments include mid-term exams (held in the 8th week of the semester), final exams (scheduled for the 16th week of the semester), assignments (such as project reports and quizzes), and class participation. These assessment methods and grading system apply to all courses at UNESA with few exceptions, such as internships and theses.

For example, in Information Technology Education, the grading for internships primarily focuses on students' performance. This evaluation encompasses several components, including teaching performance, the development of teaching and learning materials by the students, the internship report, and the presentation of that report. The supervisor from UNESA will assess the students in collaboration with the supervisor from the host organization.

Grading and Graduation Requirements

The final grade for most modules is calculated as follows: 20% class participation, 30% assignments, 20% mid-term exam, and 30% final exam. UNESA employs a scale from 0 to 100, using the below score conversion:

Table 7: Value Conversion
Source: Self-Assessment Report, Academic Guidelines as appendix to the SAR.

Value Intervall	Figures	Letter
85 < A < 100	4	A
80 < A- < 85	3,75	A-
75 < B+ < 80	3,5	B+
70 < B < 75	3	B
65 < B- < 70	2,75	B-
60 < C+ < 65	2,5	C+
55 < C < 60	2	C
40 < D < 55	1	D
0 < E < 40	0	E

During their discussion with the teaching staff, the experts learned that mid-term and final examinations are primarily conducted in written format. However, alternative methods of assessment, such as project-based evaluations and practical tests, are also utilized. Students must attend at least 75% of all scheduled activities for a specific course to be eligible to take the final exam and pass with at least a C grade.

Based on the provided information, the experts confirm that students receive information about the assessment methods through both the module handbook and the lesson plan (RPS), which are introduced by the lecturers at the beginning of each course. They further confirm that exam regulations are officially in place.

Students who cannot take part in one examination due to illness or disaster can retake it after handing in a medical letter or a statement from their parents. UNESA defines that lecturers have two weeks to correct final examinations. The final scores of the examination and final grades are uploaded into the UNESA online system (SIKADU), which students can access using their accounts. UNESA provides students with information about how to appeal their grades.

To graduate from the programs, students must have completed the required 144 credits, with a minimum GPA of 2.5. As stated in the Academic Regulations, students must achieve at least a grade of C in all General Mandatory Courses (Religious Education, Pancasila Education, Civic Education, and Indonesian Language) while ensuring they receive no E grades. Additionally, the number of D grades must not exceed 5% of the total credits earned, distributed across Institutional Mandatory Courses and those specific to the faculty, department, or program level. Among other administrative requirements, students

must submit a photocopy of the TEP/TOEFL/ITP certificate with a minimum score of 425 legalized by the UNESA Language Center.

UNESA has a policy on academic integrity. If a student is found to have committed academic violations such as plagiarism, falsifying grades, or other academic misconduct, they will be subject to sanctions that correspond to the severity of their actions. To help prevent plagiarism, the university offers teachers and students access to anti-plagiarism software, which can be used to check for similarities in written work. For example, students must demonstrate that their theses contain no more than 20% similarity according to plagiarism checks.

Thesis

Every student in the three undergraduate programs under review is required to do a final project as a completion requirement. This project is conducted independently under the guidance of one supervisor. Both the student and the supervisors might decide the topic and content of the project. In many cases, the lecturers offer particular topics connected to their research.

During the audit, the teaching staff confirmed that they suggest potential topics for final projects based on their research projects. All faculty members supervise theses. Students are required to design a research proposal during a “Thesis Proposal Seminar” course, typically held in the seventh semester. This proposal involves developing a research plan outlining the direction, goals, and anticipated outcomes of the thesis research.

The expert group examined a selection of final theses and determined that they were of an appropriate academic level. **However, as noted earlier in this report, students write their theses in Bahasa Indonesia. To align with the programs' international aspirations, the experts suggest incorporating titles and abstracts in English.**

In summary, the experts confirm that UNESA has issued rules and regulations for course assessments. Exams are designed to evaluate the extent to which the intended learning objectives have been met. The experts have found that UNESA provides written guidelines, giving students clear insight into the assessment formats for each module. Additionally, they observe that UNESA offers feedback to students regarding their performance and outcomes.

During the discussion with the experts, the students reported that they are aware of the assessment methods used in their program. They noted that, in their experience, examination questions align well with the content covered in the lectures. The students also expressed satisfaction with the organization and supervision of their theses.

All three study programs under review conclude with a final thesis or final project, where students demonstrate their ability to work independently at the expected level of the program. The experts noted that a variety of examination methods are employed, including primarily written exams, assignments, quizzes, and practical work. Students confirmed to the experts that the number and distribution of exams ensure an adequate workload and allow sufficient time for preparation.

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

The experts thank UNESA for the provided statements concerning criterion 2.

(ASIIN 1.3, 1.6, 2, 3.1) Integration of the English language – all programs

The experts acknowledge and appreciate UNESA's clarification that students are required to write their thesis titles and abstracts in both Indonesian and English. They also commend the university's efforts to support students in publishing their work in English through its international journal. Nevertheless, as highlighted under Criterion 1, the experts recommend that continued and enhanced support be provided in this area to align with the programs' internationalization goals (Recommendation E2).

Considering the point mentioned above, the experts consider this criterion to be fulfilled.

3. Resources

Criterion 3.1 Staff and Staff Development
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Evidence:

- Self-Assessment Report
- Staff handbooks
- Discussion during the audit

Preliminary assessment and analysis of the experts:

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

The Self-Assessment Report indicates that the Bachelor's degree program Information Technology Education has 11 academic staff members, with 5 (45%) holding doctoral degrees, and the remainder Master's degrees. In the Bachelor's degree program Informatics Engineering, there are 15 academic staff members, with 5 (33%) holding doctoral degrees and the rest holding Master's degrees. The Bachelor's degree program Information Systems is supported by 12 academic staff members, 5 (42%) of whom hold doctoral degrees, while the remaining staff possess Master's degrees.

UNESA requires that all staff members involved in teaching bachelor's students hold at least a master's degree. Information about the academic qualifications of the teaching staff is available on the program websites. The following table outlines the composition of the teaching staff across the three undergraduate programs, categorized by their academic position:

Table 8: Number and qualifications teaching staff
Source: Self-assessment report, UNESA.

Position	UPITE	UPIE	UPIS
Professor	1	1	2
Associate Professor	3	4	3
Assistant Professor	7	10	7
Total	11	15	12
Active students (2022)	376	513	442

Data from 2022 indicates that the ratio between the number of academic staff members and students was 1:34,18 in the Bachelor's degree program Information Technology Education, 1:34,2 in the Bachelor's degree program Informatics Engineering, and 1:36,83 in the Bachelor's degree program Information Systems. This ratio fulfils the standards set by the National Accreditation Board for Higher Education (BAN-PT), which states that the ideal ratio between permanent lecturers and students is a maximum of 1:60.

In addition to academic staff, the Faculty of Engineering employs non-academic personnel, including administrative staff, librarians and laboratory technicians. The role of laboratory technicians is to assist lecturers in carrying out practical activities.

The experts noted that fewer than half of the teaching staff members hold a doctoral degree, raising inquiries about strategies to increase the number of PhD holders and the university's strategies in this area. During the visit, UNESA management emphasized that the university actively encourages and supports its teaching staff to pursue PhD-level qualifications. The university's ambition is to foster an environment that motivates faculty members to further their academic careers.

The experts acknowledge the university's efforts to increase the number of teaching staff members with a PhD degree. The experts support these initiatives; they strongly recom-

mend that the Faculty of Engineering continue to expand its teaching staff with PhD holders, particularly if one of the strategic goals is to achieve international recognition. According to international standards, all teaching staff members should possess a doctoral degree.

In connection to this, the experts also remarked upon the low number of full professors in each program—only one full professor in both UPITE and UPIE, and two in UPIS. They learned that one of the main requirements for academic staff to advance to full professorship is to hold a doctoral degree. To address the shortage of full professors, UNESA management explained that the Directorate for Human Resources is actively monitoring eligible candidates and ensuring they meet all the necessary criteria for promotion. The university has implemented an Academic Promotion Career Program aimed at supporting progression toward full professorship. This program focuses particularly on helping staff increase their research output, as meeting specific research and academic requirements is essential for achieving the rank of full professor.

During the audit, the experts also inquired about the teaching load of the staff and whether sufficient opportunities exist for research activities. They learned that the average teaching load is approximately 14 hours per week, with a total workload ranging from 12 to 16 credits. If a lecturer exceeds 16 credits, they are eligible for a performance-based reward.

The teaching staff also explained that, in Indonesia, all full-time faculty members are required to participate in what is known as *Tridharma* activities, which include teaching/advising, research, and community service. When asked by the experts, they specified that community service involves the practical application of research for the benefit of society and may also encompass training and outreach activities.

Overall, the audit team confirm that the ratio of lecturers to students for the Bachelor's programs is appropriate to fulfil the current needs of the programs. During the audit, they gained the impression that the teaching staff are satisfied with their working conditions. Staff members reported having a fair workload and expressed appreciation for the support currently available to them from the university.

Staff Development

UNESA supports the professional development of its teaching and technical staff by promoting ongoing training to enhance their educational skills. Lecturers have access to a range of pedagogical and professional development programs, including PEKERTI (Instructional Technique Basic Skill Training) and the Applied Approach (AA). These initiatives are specifically designed to help staff implement diverse teaching methods and effectively develop course syllabi and content.

As outlined in the Self-Assessment Report, teaching staff across all three programs have obtained various certificates of competence and are members of both national and international professional associations. For instance, in the Informatics Engineering study program, several lecturers hold the Microsoft Certified Educator credential and the Big Data Scientist certification from the Indonesian National Professional Certification Board (BNSP). In addition, many lecturers are active members of professional organizations such as the Institute of Electrical and Electronics Engineers (IEEE), the Indonesian Association of Higher Education in Informatics and Computing (APTIKOM), and the International Association of Engineers (IAENG).

During the audit, the experts asked the teaching staff why it is necessary for lecturers to obtain these certificates. The staff explained that program coordinators require lecturers to obtain at least one competence certificate per year. This policy aligns with the Rector's directive, which follows the national framework mandating that universities continuously improve the professional certification of their academic staff.

The experts also inquired about opportunities for lecturers to engage in international activities, such as spending time abroad or participating in collaborative projects. The teaching staff explained that UNESA provides funding to support international engagement, and lecturers can apply for financial assistance through proposal submissions. In addition, the Ministry of Research, Technology, and Higher Education offers funding for international activities. To illustrate this, one staff member shared an example of conducting joint research with partners from universities in Japan. Such collaboration also extends to online academic networking, including connections with institutions in the US.

In addition to this, the experts discussed whether lecturers are involved in collaborative projects or research with industry. They found that only a limited number of staff members are currently working with industry partners. The experts noted that cooperation with industry could be further strengthened, as it would not only provide students with more internship opportunities but also enhance the relevance and impact of the teaching staff's research activities.

That said, the assessment team confirms that UNESA provides effective support mechanisms and opportunities for teaching staff to enhance their professional and pedagogical skills. Staff members expressed satisfaction with the internal qualification programs, the opportunities to improve their teaching competencies, and the chance to participate in international conferences, workshops, and seminars. While the experts acknowledge that UNESA provides adequate resources and organizational structures to support the study programs under review, they recommend that the university continue to encourage its teaching staff to pursue doctoral studies. Furthermore, they emphasize the need to

strengthen collaboration with industry, as this would expand internship opportunities for students, attract additional external funding, and enhance the impact of research outcomes.

Student Support and Student Services

According to the Self-Assessment Report, UNESA has built a well-structured framework to provide students with academic and administrative support services.

Each student is allocated an academic advisor who is their first point of contact in case of any struggles or problems during their studies. The academic advisor monitors academic progress at the beginning of each semester through academic guidance books and identifies necessary improvement actions.

Support staff includes librarians, laboratory assistants, technicians, operators, programmers, and administrative personnel.

During the audit, the students emphasized that the teaching staff are approachable and maintain a positive relationship with them. Students reported feeling comfortable approaching lecturers outside of the classroom, and stated that the lecturers are open to questions and feedback. The students believe that the teaching staff value their opinions and suggestions, and changes are made when necessary.

Students preparing for their Bachelor's thesis have a supervisor allocated based on their research topic. During the audit, the teaching staff explained that each study program has research groups. Lecturers join a specific research group and align their teaching to support the group's focus areas. They also introduce students to their research activities and offer related topics for thesis projects, ensuring that each student's thesis is connected to an active research group. Lecturers involve students in their research projects and funded research grants, in line with the university's policy requiring the inclusion of at least two students in each research grant.

When asked about the student-to-supervisor ratio, the teaching staff explained that, on average, each supervisor oversees 8 to 10 students, with the institutional policy setting a maximum limit of 12 students per supervisor. The role of the thesis supervisor is to guide students throughout the final project, including the research process and the writing of the final report. For students conducting their research off-campus, supervision is maintained through online communication platforms, such as WhatsApp groups. Additionally, if a student is not satisfied with their assigned supervisor, they have the option to request a change.

All students have access to the SiDia learning platform, which functions as an integrated learning management system and includes tools such as Zoom and Google Meet. In addition, students use the SIAKADU administrative platform to manage course schedules, complete Study Plan Cards, view grades, and communicate with academic counselors and lecturers. The experts appreciate the availability and accessibility of these online platforms.

UPITE, UPIE and UPIS provide various services, including extracurricular activities, guidance and counselling, scholarships, a clinic, prayer rooms, libraries, cafeterias and parking lots. Additionally, there are various student organizations at UNESA, including activity clubs that are categorized into arts, sports and religious groups.

Overall, there is a positive relationship between the students and the teaching staff, as well as effective mentoring by teachers and an open atmosphere between students and staff. Resources are available to provide students with individual assistance, advice and support. The support structures help students achieve the intended learning outcomes and complete their studies. Good mentoring by the teaching staff is an important criterion of success. The students are well-informed about the services available to them.

Criterion 3.2 Funds and equipment

Evidence:

- Self-assessment report
- Visitation of participating institutes and laboratories
- Discussion during the audit

Preliminary assessment and analysis of the experts:

Funds and collaborations

According to the Self-Assessment Report, each year, every faculty or school submits a work plan and budget proposal in the form of a Budget Business Plan. This plan takes into account UNESA's strategic and operational plans, alongside the strategic plans of the faculties/working units and data collected by the internal management information system. UNESA's main funding sources include the government, society and tuition fees.

The Faculty of Engineering manages funds from the source society funding, while government funding and tuition fees are centrally managed by the university. The faculty distributes the allocated funds to education, research, community service, infrastructure, facilities, human resources, administration and student affairs.

When asked about the main investments made over the last five years for the three programs under review, the program coordinators highlighted key developments. The Information Technology Education study program established a new computer laboratory on the third floor of the faculty building in 2024. The facility was designed to support teaching and enhance students' practical skills. Additionally, the program has expanded its academic staff by recruiting faculty members with qualifications that align with the program's educational objectives and subject areas.

The primary focus of the Informatics Engineering study program has been to recruit additional academic staff to improve the student-to-lecturer ratio. In addition, resources have been allocated to develop the computer laboratory infrastructure to support practical learning activities. This includes maintaining and upgrading servers and computer networks, procuring hands-on learning materials, and enhancing computer specifications—such as increasing RAM. Annual investments are also made to renew laboratory furniture.

For the Information Systems program, the main investment focus has been on human resources by hiring new academic staff. This is to optimize teaching capacity and align faculty expertise with the changing needs of the curriculum. Additionally, the program has improved laboratory facilities and to acquire equipment for data-driven and system-based learning.

The experts appreciate the programs' focus on improving laboratory infrastructure for students and encourage the university to continue enhancing its facilities to further support high-quality teaching and learning.

Regarding collaborations, UNESA outlines in its Self-Assessment Report that it has established partnerships with both international and domestic institutions to support academic and research activities. These collaborations involve engagement with industries, research centers, government agencies, and schools, aiming to integrate practical content into the learning process. The experts reviewed a list of these external partners. However, as noted earlier in this report, discussions with industry representatives and teaching staff suggest that these connections—particularly with industry—should be further strengthened to enhance practical learning opportunities and applied research collaboration.

Infrastructure and technical equipment

Learning facilities and infrastructure for the programs under review include laboratories, lecture halls, lecturer rooms, administration rooms, library and literacy room, discussion rooms, e-learning and multimedia rooms. During the audit, the expert group visited both Ketintang and Lidah Wetan campuses in order to evaluate whether the programs are committed to supporting both practical work and research, with well-equipped facilities.

UPITE, UPIE, and UPIS implement a resource-sharing model, utilizing the same facilities on a rotating basis due to the overlapping nature of their disciplines. These shared facilities include the Network and Computer Laboratory, the Software Engineering Laboratory, the Information Systems Laboratory, and the Multimedia Laboratory.

After visiting these laboratory facilities, the experts got the impression that the capacities are sufficient for the number of presence hours currently offered. However, with an increase in enrolments, a higher amount of equipment as well as extended room capacities would be necessary. As a conclusion, the experts recommend that UNESA develop a concept on how to increase the capacity of the laboratories for both regular courses and final project work for the programs under review.

The central library offers services to UNESA faculty members, administrative staff, and students. Operating hours are from 8.00 am to 4.00 pm from Monday to Friday, and 8.00 am to 3.00 pm on Saturdays and Sundays, with continuous access to online resources. The services encompass lending physical and e-books, as well as access to scientific databases. The students appreciate the library's online system, which provides them with 24/7 access to bibliographical resources.

Furthermore, UNESA has a Career Center that offers student consultations on career preparation, announces job vacancies, organises job fairs, and offers courses to develop soft skills. Finally, there are several supporting facilities such as the Mosque, the University Polyclinic, the Student Dormitory, the Cafeteria, the Sport Facilities, Language Center and Information Technology Development Center.

In summary, the expert group judges the available funds, the technical equipment, and the infrastructure (laboratories, library, seminar rooms, etc.) to comply – besides the mentioned restrictions – with the requirements for adequately sustaining the degree programs.

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

The experts thank UNESA for the provided statements concerning criterion 3.

(ASIIN 3.1) Teaching staff's academic qualifications – all programs

UNESA states its commitment to enhancing the academic qualifications of its teaching staff in alignment with international standards and strategic objectives. The experts appreciate this commitment and take note of the ongoing doctoral studies among current staff (1 in Informatics Engineering, 3 in Information Systems, and 3 in Information Technology Education), along with the recent recruitment of 15 doctoral degree holders for Informatics En-

gineering and 10 for Information Systems. The experts support these efforts and recommend continued strategies to further increase the number of teaching staff with doctoral qualifications reported in the accreditation submission (Recommendation E7).

(ASIIN 3.1, 1.3) Collaboration with industry – all programs

The experts appreciate that their feedback regarding collaboration with industry has been taken into consideration. UNESA explains that Indonesia has a national program called *Praktisi Mengajar* (Teaching Practitioners), which allows industry experts to participate in academic settings. The university plans to use this program to involve professionals in both teaching and research activities. As the outcomes of these strategies are anticipated to develop in the future, the experts recommend continuing efforts in this area (Recommendation E8).

(ASIIN 3.2) Infrastructure and technical equipment – all programs

UNESA notes that the feedback from the experts will be used to propose the renewal and expansion of laboratories at the study program level to the faculty. However, without a detailed plan outlining specific actions and a timeline for implementation, the experts have issued Recommendation E9.

While the experts have issued the recommendations mentioned above, they consider this criterion to be fulfilled.

4. Transparency and Documentation

Criterion 4.1 Module Descriptions

Evidence:

- Module handbook of each study program
- Discussion during the audit

Preliminary assessment and analysis of the experts:

The experts acknowledge that UNESA organizes module handbooks for each study program under review. However, the experts have identified several issues with the presented module descriptions that need to be addressed:

- Even though the module descriptions provide insight into the content of the courses, the experts believe that the content has to be revised to ensure it is up to date.

- The experts also observed that the module descriptions do not specify any prerequisites. In their view, this information is essential to help students follow the appropriate sequence of modules and ensure a coherent progression in their studies.
- Finally, the experts consider that some of the literature in the reading lists is outdated and needs therefore to be updated in a revision of the module handbooks.

The experts overall believe that the university needs to establish a structured and supervised process to ensure the module handbook is regularly reviewed and updated.

Criterion 4.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report
- Sample Diploma/Degree Certificate
- Sample Transcript of Records
- Sample Diploma Supplements

Preliminary assessment and analysis of the experts:

After studying the submitted documents, the experts confirm that UNESA issues a diploma certificate shortly after graduation, which is accompanied by a diploma supplement and a transcript of records.

The diploma supplement contains all necessary information about the degree program (PLOs, general skills, specific skills and knowledge) including acquired achievements, awards, and activities (extracurricular and co-curricular activities). The Transcript of Records lists all the courses that the graduate has completed, the achieved credits, grades, cumulative GPA, and mentions the seminar and thesis titles.

The experts acknowledge that all documents are issued bilingually in Bahasa Indonesia and English. However, as noted under [Criterion 1.2](#), they expect that the university takes steps to ensure consistency and accuracy in the English translation, particularly with regard to the title of the degree awarded.

Criterion 4.3 Relevant Rules

Evidence:

- Self-assessment report

- Webpage UNESA
- Academic guidelines for bachelor's programs
- Discussion during the audit

Preliminary assessment and analysis of the experts:

After analyzing the submitted documents, the experts confirm that UNESA has issued rules and regulations to manage its facilities and human resources. The experts observe that guidelines are in place to manage the structure of each study program. In addition, the students receive guidelines for the writing of their thesis.

During the audit, the students informed the experts that they are aware of their responsibilities. They have access to the established rules and regulations on the website (<https://www.unesa.ac.id/page/kebijakan/bidang-pendidikan-kemahasiswaan-dan-alumni>) and through their online system. Additionally, they indicated that the module handbooks and similar documents provide sufficient information about their study programs.

Therefore, the experts confirm that UNESA has regulations in place, which define the rights and duties of both the higher education institution and students. These are clearly defined and binding for both parties. All relevant course-related information is available in the language of the degree program and accessible to anyone involved.

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

The experts thank UNESA for the provided statements concerning criterion 4.

UNESA states that steps will be taken to update the module handbook in response to the experts' comments. In this context, lecturers will be encouraged to revise and enhance their module handbooks to ensure they align with the latest technological developments.

UNESA does not respond to the experts' comment regarding the need for a structured and supervised process to ensure the module handbook is regularly reviewed and updated.

In the absence of further information and considering that revisions are yet to be implemented, the experts have issued Requirement A1.

The experts consider this criterion to be partially fulfilled.

5. Quality management: quality assessment and development

Criterion 5 Quality management: quality assessment and development

Evidence:

- Self-Assessment Report
- Discussion during the audit

Preliminary assessment and analysis of the experts:

At UNESA, university leaders are the Rector and vice-chancellors, who are tasked with carrying out the overall management functions of the university. The University Academic Senate serves as the highest authority for academic decision-making and the development of institutional policies. The Dean leads the Faculty of Engineering and is responsible for overseeing all teaching and learning activities within the faculty. Additionally, each degree program is managed by a coordinator who is responsible for implementing all educational activities specific to that program.

UNESA's quality management system has been institutionalized in compliance with government regulations. This system incorporates elements and mechanisms of both internal and external quality assurance.

Internal quality assurance involves dedicated units at the university, faculty, and program levels. Staff at these units are tasked with collecting and analyzing data and ensuring the implementation of established guidelines. External quality assurance focuses on both national and international accreditations. National accreditation is mandatory for each study program and can be conducted by agencies approved by the Indonesian government.

Internal quality assurance processes involve periodic evaluations to ensure educational effectiveness. These evaluations include Learning Monitoring and Evaluation, which is conducted once every semester to assess the effectiveness of teaching and learning. Additionally, a Curriculum Audit is carried out periodically to ensure that the curriculum remains relevant and aligned with educational standards. Annually, Research and Community Service Evaluation measures the quality and impact of research and community engagement activities. Finally, Program Learning Outcomes (PLO) Analysis is performed once every curriculum cycle to evaluate the achievement of learning outcomes.

Through the submitted documentation, the experts reviewed data gathered via various monitoring processes. The experts commend UNESA for its data-driven approach, but suggest a review and improvement of reporting practices. Some reports are presented only in

Bahasa Indonesia, are overly lengthy, and include charts/figures not adequately explained within the accompanying text. In the context of international accreditation procedures, it would be beneficial to enhance the clarity, conciseness, and bilingual accessibility of these reports.

The internal evaluation of the quality of the study programs is mainly provided through student and alumni surveys. At the end of each semester, students provide feedback on their courses through online questionnaires. They evaluate various aspects, including their understanding of the material, the responsiveness of the lecturers, the effectiveness of course delivery, the lecturers' proficiency, the clarity of the course objectives, and the quality of the references in each enrolled course. Lecturers can view their average scores based on student feedback through their accounts in SIAKADU. Additionally, other surveys assess management services and satisfaction levels with human resources. According to the 2023 Student Satisfaction Survey Report, the largest negative gap is observed in the availability and adequacy of academic facilities and infrastructure (library, learning/laboratory/workshop/electrical/internet installation, information systems). This finding correlates with the comments provided in [Criterion 3.2](#).

In addition, each program regularly conducts an alumni tracer study. By taking part in this survey, alumni can comment on their experiences while studying, the waiting period for employment after graduation, and their professional careers. They can also give suggestions on how to improve the program. Data from 2022/2023 show that 58% of alumni respondents from the [Information Technology Education](#) program (39 individuals) and 62.5% from the [Information Systems](#) program (15 individuals) secured employment within six months of graduation. However, similar data for the [Computer Engineering](#) program were not available in the provided tracer study, reinforcing the experts' earlier recommendation to ensure greater consistency and quality in reporting across all programs.

As part of the monitoring process, the university also evaluates the achievement of Program Learning Outcomes (PLOs) and Program Educational Objectives (PEOs), and takes action based on the results, which inform curriculum development. The data presented show that PLOs and PEOs generally receive high achievement ratings (excellent or good), indicating strong alignment and effective learning strategies.

UNESA furthermore monitors the overall performance of the graduates considering their GPA. The data show that most students graduate with a GPA surpassing 3.6 in the study programs under review (on a scale of 0 to 4).

According to the Self-Assessment Report, quality management processes involve various stakeholders, including students, alumni, and users. However, during discussions with industry partners, the experts were unable to confirm whether these stakeholders are invited

to participate in user surveys, and no corresponding reports were provided. The experts emphasize that feedback from all external stakeholders is crucial for the improvement of study programs. They suggest conducting regular surveys with industry partners to gather feedback on the qualification profile, PEOs, PLOs, and the curriculum. It is important to incorporate these results into the study program development processes.

The expert panel confirms that UNESA has established several structures to support its quality management processes. Although the extent of industry partners' involvement remains unclear, the university conducts regular surveys to collect feedback from students, alumni, and staff. The panel also confirms that students have access to the survey results. The program coordinators and lecturers demonstrate a clear motivation to improve the quality of the programs. However, for future accreditation cycles, the experts strongly recommend that the university ensure that the information in the Self-Assessment Report is relevant, focused, and presented in a more concise way.

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

UMN does not comment on this criterion in its statement.

(ASIIN 5, 1.1) Industry partners' involvement – all programs

UNESA does not respond to the experts' comment regarding the extent of industry partners' involvement in the quality management processes of the programs under review. The experts note that structurally involving industry partners—such as through an advisory board—would significantly enhance program relevance and provide students with valuable real-world exposure. They encourage the university to give this involvement more serious consideration.

In the absence of further information, the experts issue Recommendation E10.

While the experts have issued the recommendations mentioned above, they consider this criterion to be fulfilled.

D Additional Documents

No additional documents needed.

E Comment of the Higher Education Institution (02.07.2025)

The institution provided the following additional information:

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
1	However, feedback from industry partners and alumni also remarked upon the need for improvement in the development of general soft skills among graduates. Key areas identified include oral and written communication (e.g., presenting ideas, reporting work, public speaking to name a few), leadership, critical thinking, problem solving, and conflict management. The experts acknowledge that UNESA incorporates the concept of “required 21st century skills” into the curriculum, but recommend intensified efforts to address gaps in this area, ensuring that students are better equipped with these essential skills for their professional careers.	11-12	all study program	The development of students’ soft skills is supported through participation in student organizations and extracurricular activities. In the Informatics Engineering program, the student association HIMTI (<i>Himpunan Mahasiswa Teknik Informatika</i>) provides a platform for students to enhance their soft skills through various structured programs and events. In addition, students are encouraged to join university-wide student activity units (<i>UKM=Unit Kegiatan Mahasiswa</i>), which offer a variety of opportunities tailored to individual interests, further fostering communication, leadership, teamwork, and other essential soft skills. In addition, students also have chance to follow ministry program that are academic mobility such as independent study, internship, student exchange, etc.
2	However, upon assessing consistency, the experts observe that, for the Bachelor Informatics Engineering, the name is not consistently used in all submitted documents. For instance, the Diploma	13	Bachelor of Informatics	Upon review, we have confirmed that the inconsistency in the program name originated from an error in the translation system. The correct English name of the program should be "Bachelor of Informatics Engineering." We have already coordinated

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
	Certificate refers to the program as "Informatics." The university is therefore requested to ensure consistency in the program name, especially in the English translations of all official documentation.		Engineering	with the relevant department to ensure that the translation in the Diploma Certificate is revised accordingly and reflects the correct program title in all official documents going forward.
3	The experts discussed the curriculum with the students, who believed that UNESA has implemented a program that meets their expectations. The students expressed overall satisfaction with the curriculum and did not identify overlapping content. However, they expressed a desire for greater integration of English into both the curriculum and the learning process. The experts agree with this recommendation, highlighting the importance of including a higher amount of English in the classroom. While lecturers often use English slides and reading materials, there are currently no lectures conducted entirely in English. The experts suggest that organizing fully English-taught lectures and requiring students to submit their work in	15-16	all study program	We acknowledge the students and partner's input regarding the integration of English in the curriculum and learning process. In response, we plan to reflect this feedback by proposing a policy that requires all course materials to be prepared in both Bahasa Indonesia and English. This approach aims to enhance the use of English in the teaching and learning process, thereby better supporting students' language development and international readiness. For the next semester, there are several students from Yaman, Timor Leste, Bangladesh, Pakistan

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
	English could help them practice their writing and speaking skills more regularly.			
4	Furthermore, based on the insights gathered during the audit, the experts suggest that expanding the range of elective options could enhance the personalization of students' learning paths. New electives could be designed to strengthen independent thinking and decision-making skills.	16	all study program	We appreciate the suggestion regarding the expansion of elective course options. In response, we will coordinate with all academic staff to explore the possibility of offering a wider variety of elective courses that students can choose from. These electives will be designed to enhance independent thinking and decision-making skills, particularly through approaches relevant to computer science.
5	According to the information obtained, the experts note that UNESA promotes international student mobility through an appropriate framework. However, they support UNESA's efforts to increase the number of international students within the study programs under review, as well as outgoing students. The experts highlight that institutional support to access scholarships is recommended.	17	all study program	Thank you for the recommendation, we support scholarship opportunities, with the aim of increasing the number of international students in the study program. Currently, scholarships for international students include tuition fee waivers and free accommodation. For example, in the next semester we would have several international student candidates from Yaman, Timor Leste, Bangladesh, Pakistan.
6	The panel recognizes that the curriculum undergoes periodic review. Yet, given the accelerating pace of technological change across the IT sector, they strongly recom-	18	all study program	We acknowledge and accept the recommendation regarding the curriculum review cycle. In principle, the university policy allows for curriculum reviews to be conducted at a maximum interval of four years.

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
	mend shortening the evaluation cycle from four years to two. This tighter rhythm will let the program respond swiftly and flexibly to breakthroughs in digital transformation, cybersecurity, artificial intelligence, and other emerging technologies that define the industry's future.			However, we fully recognize that Informatics Engineering is a dynamic field, deeply influenced by rapid technological advancements. Therefore, moving forward, the study program will make every effort to implement a curriculum review every two years as part of our internal policy. We believe that this shorter cycle will better enable us to adapt to emerging trends in digital transformation, cybersecurity, artificial intelligence, and other evolving areas in the IT sector.
7	Furthermore, the experts acknowledge that the programs monitor the utilized learning and teaching methods. However, they identify the need to increase the use of English in the classroom.	25	all study program	Already answered at point number 3
8	However, as noted earlier in this report, students write their theses in Bahasa Indonesia. To align with the programs' international aspirations, the experts suggest incorporating titles and abstracts in English.	27	all study program	Thank you for the suggestion. We would like to clarify that students are already required to write both the title and abstract of their theses in two versions: in Indonesian language and English. This practice is part of our ongoing efforts to support the program's international orientation. Besides that, we also support student publication in our international journal which use English. https://journal.unesa.ac.id/index.php/jetis https://ejournal.unesa.ac.id/index.php/JEISBI

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
9	The experts noted that fewer than half of the teaching staff members hold a doctoral degree, raising inquiries about strategies to increase the number of PhD holders and the university's strategies in this area. During the visit, UNESA management emphasized that the university actively encourages and supports its teaching staff to pursue PhD-level qualifications. The university's ambition is to foster an environment that motivates faculty members to further their academic careers. The experts acknowledge the university's efforts to increase the number of teaching staff members with a PhD degree. The experts support these initiatives; they strongly recommend that the Faculty of Engineering continue to expand its teaching staff with PhD holders, particularly if one of the strategic goals is to achieve international recognition. According to international standards, all teaching staff members should possess a doctoral degree.	29-30	all study program	Thank you for the recommendation. Currently, the Informatics Engineering study program has three teaching staff members who hold a doctoral degree and one staff member who is currently pursuing a doctoral degree. Besides, the information system program has one teaching staff members who hold a doctoral degree and three staff member who is currently pursuing a doctoral degree. Also, the information technology education have five teaching staff members who hold a doctoral degree and three staff member who pursuing a doctoral degree. In addition, the university has recently recruited 15 new faculty members with doctoral qualifications to support and strengthen the Informatics Engineering program and 10 new faculty members with doctoral qualifications to support and strengthen the Information System program. These efforts reflect our strong commitment to enhancing the academic qualifications of our teaching staff in line with international standards and the university's strategic goals. In addition, in June 2025, Unesa also recruited new lecturers. Here is the link to the announcement https://statik.unesa.ac.id/profileunesa_konten_statik/uploads/rekrutmen/pengumuman_periode/8dbeb81f-15ba-42cf-ab2a-5c8f2992e157.pdf

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
10	In addition to this, the experts discussed whether lecturers are involved in collaborative projects or research with industry. They found that only a limited number of staff members are currently working with industry partners. The experts noted that cooperation with industry could be further strengthened, as it would not only provide students with more internship opportunities but also enhance the relevance and impact of the teaching staff's research activities.	31	all study program	We appreciate the valuable observation regarding collaboration with industry. We will take this into consideration by enhancing partnerships between faculty members and relevant industry sectors, particularly through joint research and involvement in the learning process. In Indonesia, we have a national program called <i>Praktisi Mengajar</i> (Teaching Practitioners), which facilitates the participation of industry experts in academic settings. We plan to actively utilize this program to involve professionals in both teaching and research activities, thereby strengthening the connection between academia and industry and enriching the student learning experience.
11	After visiting these laboratory facilities, the experts got the impression that the capacities are sufficient for the number of presence hours currently offered. However, with an increase in enrolments, a higher amount of equipment as well as extended room capacities would be necessary. As a conclusion, the experts recommend that UNESA develop a concept on how to increase the capacity of the laboratories for both regular courses and final project work for the programs under review.	35	all study program	Thank you for the valuable recommendation. This will serve as a basis for us to propose laboratory renewal and expansion at the study program level to the faculty. We recognize the importance of preparing adequate laboratory capacity to accommodate potential increases in student enrolment, particularly for both regular courses and final project work.

No.	Comments from ASIIN experts	Pages	Program	Explanations from the University to clarify the ASIIN comments
12	The experts overall believe that the university needs to establish a structured and supervised process to ensure the module handbook is regularly reviewed and updated.	36	all study program	Thank you for the suggestion. We will take immediate steps to update the module handbook and will address this matter in our upcoming internal program meeting. All lecturers will be encouraged to revise and upgrade their module handbooks to ensure alignment with the latest technological developments. This initiative aims to maintain the relevance and quality of our learning materials in accordance with current industry standards.

F Summary: Expert recommendations (22.07.2025)

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

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Information Technology Education	With requirements for one year	30.09.2031	–	-
Ba Informatics Engineering	With requirements for one year	30.09.2031	–	-
Ba Information Systems	With requirements for one year	30.09.2031	–	

Requirements

For all programs

- A 1. (ASIIN 4.1, 5) Ensure that the module descriptions contain up-to-date content, literature and prerequisites and are updated regularly in a supervised way (i.e., each semester).

For the Bachelor Informatics Engineering

- A 2. (ASIIN 1.2, 4.2) Ensure that the English title of the degree program is used consistently in all official documents.

Recommendations

For all programs

- E 1. (ASIIN 1.1) It is recommended to further develop the soft skills of the students, especially in oral and written communication.

- E 2. (ASIIN 1.3, 1.6, 2, 3.1) It is recommended that the role of English within the programs be further strengthened.
- E 3. (ASIIN 1.3) It is recommended to elevate the curriculum to the international academic level regarding recent developments in the taught fields, practical skills and independent thinking of students
- E 4. (ASIIN 1.3) It is recommended to expand the range of elective courses with a focus on strengthening independent thinking and decision-making skills.
- E 5. (ASIIN 1.3) It is recommended to further promote and enlarge the students' academic mobility programs.
- E 6. (ASIIN 1.3) It is recommended to shorten the evaluation cycle from four to two years to respond swiftly and flexibly to emerging technologies.
- E 7. (ASIIN 3.1) It is recommended to increase the number of teaching staff holding doctoral degrees, given the currently low proportion.
- E 8. (ASIIN 3.1, 1.3) It is recommended that cooperation with industry be strengthened to provide students with more internship opportunities and to support the research activities of the teaching staff.
- E 9. (ASIIN 3.2) It is recommended to plan for future upgrades to laboratory facilities and equipment to accommodate potential increases in student enrolment.
- E 10. (ASIIN 5, 1.1) It is recommended to institutionalize the involvement of industry partners in the further development of the programs (advisory board).

G Comment of the Technical Committees

Technical Committee 04 – Informatics/Computer Science (11.09.2025)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure, in particular, recommendations E 3 (level of the curriculum) and E 7 (teaching staff). The TC is of the opinion that both recommendations address issues that are so crucial that they should each be made a requirement. E 3 suggests that the curriculum is not yet at the required level, which must result in a requirement. In the TC's view, E 7 also indicates that a requirement should be imposed that calls for a strategic plan outlining how teaching staff should be adequately expanded/trained in the coming years. In addition, the TC is in favour of shortening E 4. Otherwise, the TC follows the assessment of the experts without any changes.

The Technical Committee 04 – Informatics/Computer Science recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Information Technology Education	With requirements for one year	30.09.2031	–	
Ba Informatics Engineering	With requirements for one year	30.09.2031	–	-

Technical Committee 07 – Business Informatics/Information Systems (12.09.2025)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure and, in particular, requirement A 1. The TC is in favour of splitting A 1 to ensure that the module descriptions are updated in a systematic way. The

new requirement A 2 aims to ensure the introduction of a sustainable process for the continuous development of the module handbook. Otherwise, the TC follows the experts' assessment without any changes.

The Technical Committee 07 – Business Informatics/Information Systems recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Information Systems	With requirements for one year	30.09.2031	–	–

Requirements

For all programs

- A 1. (ASIIN 4.1, 5) Ensure that the module descriptions contain up-to-date content, literature, and prerequisites.
- A 2. (ASIIN 4.1, 5) Introduce measures that the module descriptions are updated regularly in a supervised way (i.e., each semester).
- A 3. (ASIIN 1.3) Elevate the curriculum to the international academic level regarding recent developments in the taught fields, practical skills, independent thinking of students, and decision-making skills.
- A 4. (ASIIN 3.1) Present a strategy for increasing the number of teaching staff holding doctoral degrees, given the current low proportion.

For the Bachelor Informatics Engineering

- A 5. (ASIIN 1.2, 4.2) Ensure that the English title of the degree program is used consistently in all official documents.

Recommendations

For all programs

- E 1. (ASIIN 1.1) It is recommended to further develop the soft skills of the students, especially in oral and written communication.
- E 2. (ASIIN 1.3, 1.6, 2, 3.1) It is recommended that the role of English within the programs be further strengthened.

- E 3. (ASIIN 1.3) It is recommended to expand the range of elective courses.
- E 4. (ASIIN 1.3) It is recommended to further promote and enlarge the students' academic mobility programs.
- E 5. (ASIIN 1.3) It is recommended to shorten the evaluation cycle from four to two years to respond swiftly and flexibly to emerging technologies.
- E 6. (ASIIN 3.1, 1.3) It is recommended that cooperation with industry be strengthened to provide students with more internship opportunities and to support the research activities of the teaching staff.
- E 7. (ASIIN 3.2) It is recommended to plan for future upgrades to laboratory facilities and equipment to accommodate potential increases in student enrolment.
- E 8. (ASIIN 5, 1.1) It is recommended to institutionalize the involvement of industry partners in the further development of the programs (advisory board).

H Decision of the Accreditation Commission (26.09.2025)

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

The Accreditation Commission (AC) discusses the procedure and, in particular, the conversion of two recommendations into two requirements proposed by TC 04. After reviewing the report and the documentation, the AC sees no justification for this upgrade and follows the experts' initial assessment. The AC agrees to the proposal from TC 07 to split requirement A 1 into two requirements. In addition, the AC agrees to the proposed editorial change to recommendation E 4. Otherwise, the AC follows the experts' assessment without any further changes.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Information Technology Education	With requirements for one year	30.09.2031	—	—
Ba Informatics Engineering	With requirements for one year	30.09.2031	—	—
Ba Information Systems	With requirements for one year	30.09.2031	—	—

Requirements and recommendations for the applied labels

Requirements

For all programs

- A 1. (ASIIN 4.1, 5) Ensure that the module descriptions contain up-to-date content, literature, and prerequisites.
- A 2. (ASIIN 4.1, 5) Introduce measures that the module descriptions are updated regularly in a supervised way (i.e., each semester).

For the Bachelor Informatics Engineering

- A 3. (ASIIN 1.2, 4.2) Ensure that the English title of the degree program is used consistently in all official documents.

Recommendations

For all programs

- E 1. (ASIIN 1.1) It is recommended to further develop the soft skills of the students, especially in oral and written communication.
- E 2. (ASIIN 1.3, 1.6, 2, 3.1) It is recommended that the role of English within the programs be further strengthened.
- E 3. (ASIIN 1.3) It is recommended to elevate the curriculum to the international academic level regarding recent developments in the taught fields, practical skills, and independent thinking of students.
- E 4. (ASIIN 1.3) It is recommended to expand the range of elective courses.
- E 5. (ASIIN 1.3) It is recommended to further promote and enlarge the students' academic mobility programs.
- E 6. (ASIIN 1.3) It is recommended to shorten the evaluation cycle from four to two years to respond swiftly and flexibly to emerging technologies.
- E 7. (ASIIN 3.1) It is recommended to increase the number of teaching staff holding doctoral degrees, given the currently low proportion.
- E 8. (ASIIN 3.1, 1.3) It is recommended that cooperation with industry be strengthened to provide students with more internship opportunities and to support the research activities of the teaching staff.
- E 9. (ASIIN 3.2) It is recommended to plan for future upgrades to laboratory facilities and equipment to accommodate potential increases in student enrolment.
- E 10. (ASIIN 5, 1.1) It is recommended to institutionalize the involvement of industry partners in the further development of the programs (advisory board).

Appendix: Program Learning Outcomes and Curricula

According to the self-assessment report, the following **Program Educational Objectives (PEOs)** and **Program Learning Outcomes (PLOs; intended qualifications profile)** shall be achieved by the Bachelor's program Information Technology Education

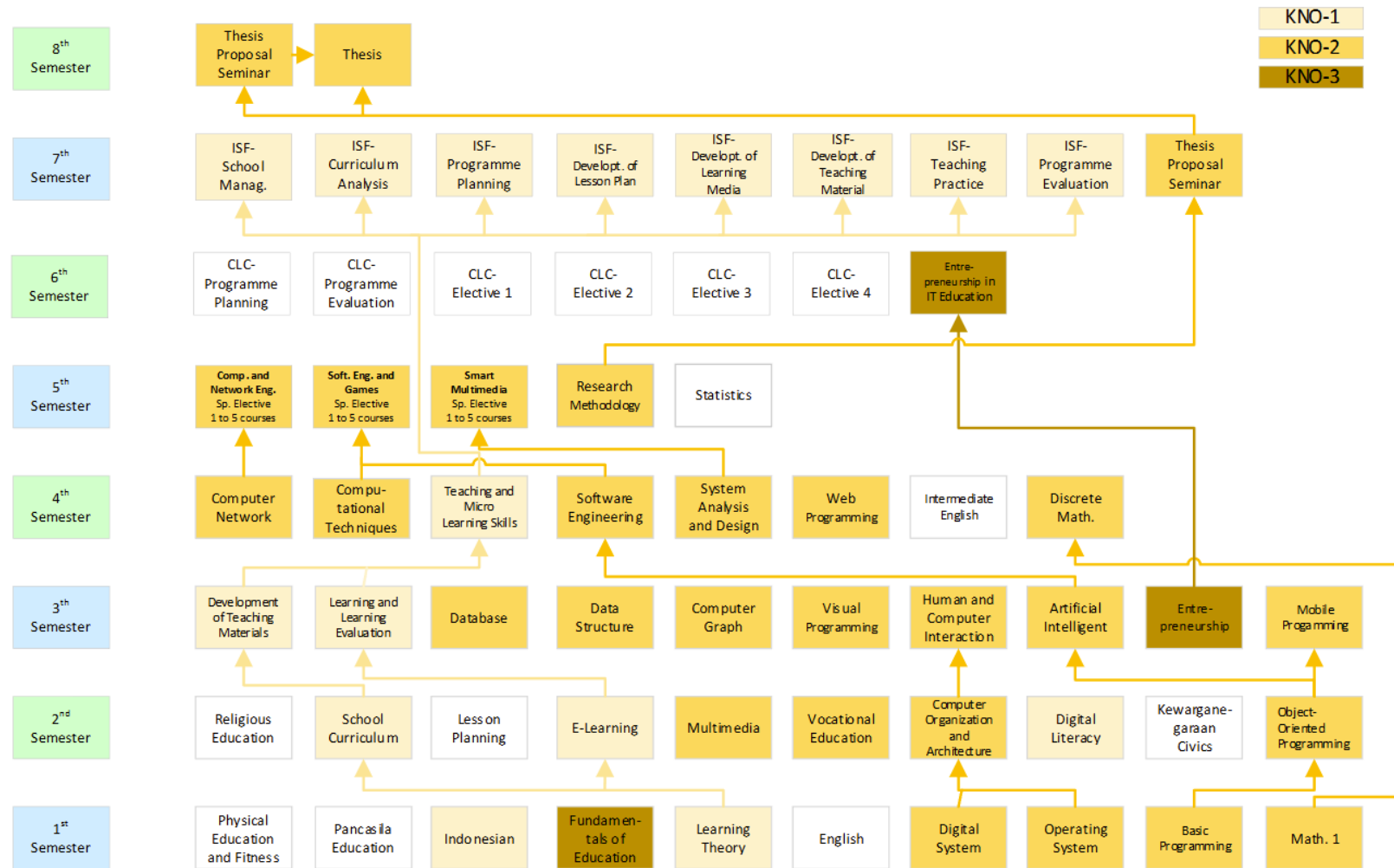
PEOs:

1. Have pedagogical competence in the field of Information Technology Education.
2. Have competence in computer science, including theory and practice in the areas of expertise of Software Engineering and Games, intelligent multimedia, and network computing techniques.
3. Ability to collaborate, innovate, and work in teams.
4. Have the ability to think critically, think creatively, communicate actively both orally and in writing, and implement in the form of products.

PLOs:

Aspects	PLO	Code
Knowledge	Mastering concepts, innovative learning models, and teaching programs in information technology relevant to the latest technological developments.	KNO-1
	Mastering the concepts and implementation in developing software engineering, games, intelligent multimedia, and network computer engineering.	KNO-2
	Mastering the concept of teacher professional ethics and professional ethics in information technology.	KNO-3
Competency	Able to implement science, technology, engineering, and mathematics (STEM) and Informatics knowledge into research in education.	COM-1
	Able to develop innovative educational products or learning resources using scientific design-based strategies to support teaching activities that can be integrated with ICT.	COM-2
	Able to develop teaching programs in information technology according to the applicable curriculum.	COM-3
Skill	Able to apply logical, critical, systematic, and innovative thinking in the context of developing or implementing science and technology.	SKI-1
	Able to make decisions based on data/information and able to solve problems in the field of information technology	SKI-2
Attitude and Social	Demonstrate personal responsibility for work in their expertise, uphold professional ethics, and be honest in carrying out their professional responsibilities.	SOC-1
	Have adaptive character, entrepreneurial spirit and ability to work in teams.	SOC-2

The following **curriculum** is presented:



The following **PEOs** and **PLOs** shall be achieved by the Bachelor's program Informatics Engineering.

PEOs:

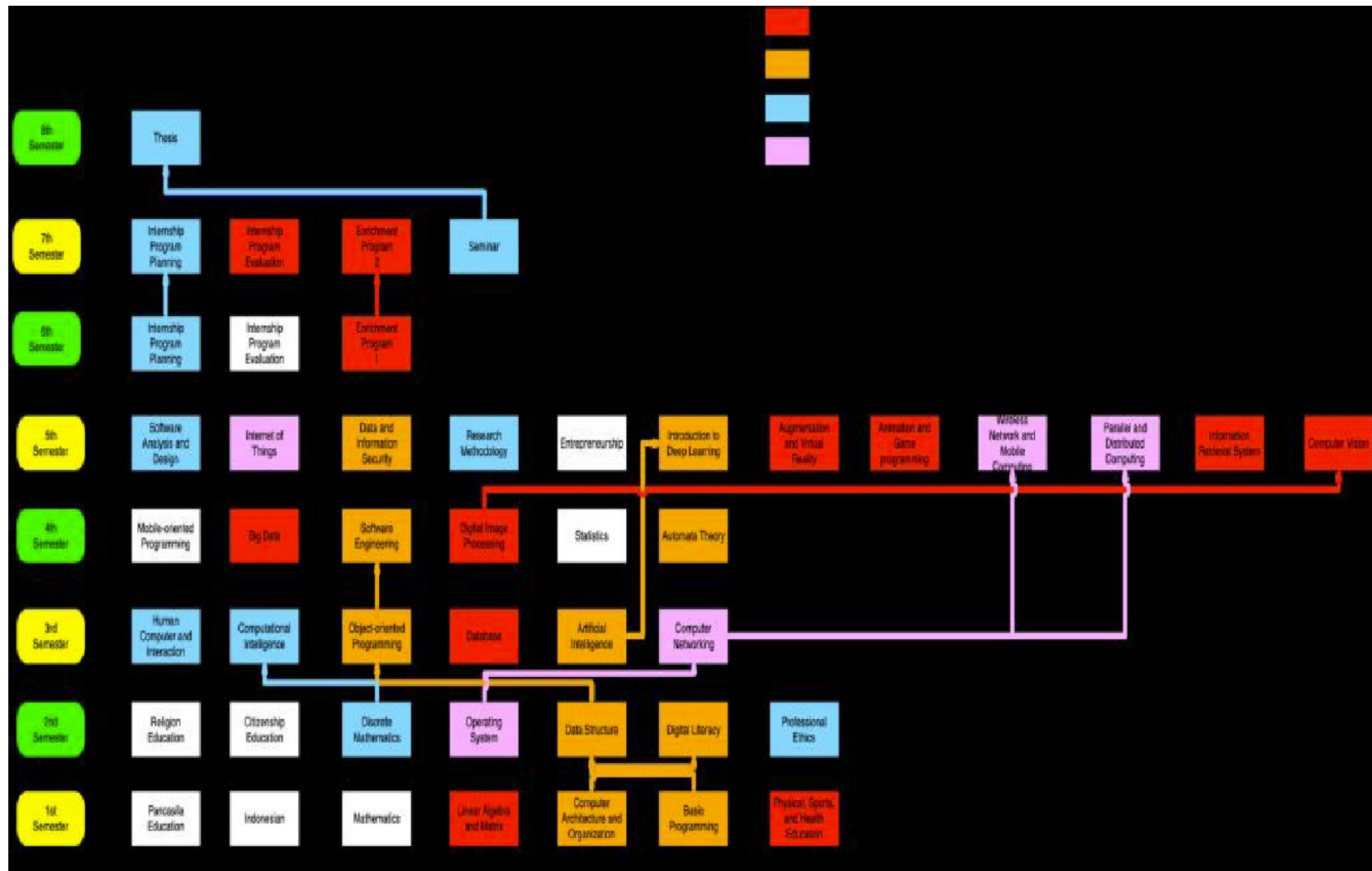
To produce graduates in the field of Informatics Engineering who have abilities:

1. Individuals with profound knowledge in software development and programming. They have developed strong skills in analysis, design, implementation, and maintenance of software systems.
2. Individuals who excel in providing technical support and solutions for computer and network issues. They possess strong technical skills, a deep understanding of IT infrastructure, and good communication abilities.
3. Individuals who not only have a deep understanding of technology but also strong business skills to establish and manage their own technology ventures. This graduate profile encompasses various aspects that reflect a combination of technological expertise and entrepreneurial spirit.

PLOs:

Aspect	PLO	Code
Knowledge	Capable of analyzing complex computing issues to identify solutions for technology project management in the field of computer science/Informatics, considering insights from the development of transdisciplinary knowledge.	KNO-1
	Capable of designing and simulating relevant multi-platform technology applications based on theoretical concepts in the field of computer science/Informatics to meet industry and societal needs.	KNO-2
	Able to apply understanding of computer system functioning to address issues in information technology.	KNO-3
Skill	Possesses teamwork skills.	SKI-1
	Capable of communicating the implications of research results in the development or implementation of information technology.	SKI-2
Competency	Capable of analyzing, designing, building, and evaluating user interfaces and interactive applications based on user needs and transdisciplinary knowledge development.	COM-1
	Ability to design, implement, and evaluate multi-platform computing-based solutions that meet organizational needs.	COM-2
	Capable of implementing computing requirements by considering various appropriate methods/algorithms.	COM-3
Attitude and Social	Committed to maintaining discipline in both societal and national contexts	SOC-1
	Demonstrates professional behavior through adherence to professional ethics, the ability to collaborate in multidisciplinary teams, understanding of lifelong learning concepts, and positive responses to social issues and technological developments (SNDIKTI).	SOC-2

The following **curriculum** is presented:



The following **PEOs** and **PLOs** shall be achieved by the Bachelor's program Information Systems

PEOs:

To produce graduates in the field of information systems who have abilities:

1. Having a solid understanding of the information systems fields of data management, software development, and information systems management and how to apply them to solve problems in their line of work.
2. Demonstrating advanced cognitive skills, including effective verbal and written communication, proactive decision-making, and the ability to lead and coordinate teams in relevant fields.
3. Having a collaborative mindset in the technology sector, along with the ability to work well with others, uphold honesty, and take accountability for one's contributions within the relevant expertise.
4. Being able to continually learn and grow through formal or informal education throughout one's life.

PLOs:

Aspect	PLO	Code
Knowledge	Demonstrating data management knowledge and insight.	KNO-1
	Demonstrating IT infrastructure and secure computing knowledge.	KNO-2
	Demonstrating system analysis, design, and application development knowledge.	KNO-3
	Demonstrating IS management, strategy, ethics, use, implications for society, and Project Management knowledge.	KNO-4
Skill	Analyze, design, implementation, evaluation, and testing of IS development.	SKI-1
	Preprocessing, modeling, visualization, and evaluation of data.	SKI-2
	Planning, managing, optimizing, and implementing information technology strategies within an organization.	SKI-3
	Implementing information security practices to protect data and information systems from security threats.	SKI-4
Competency	Communicate ideas and research results effectively orally and literally.	COM-1
	Make decisions based on data/information when solving tasks that become students' responsibility and evaluate the work that has been done.	COM-2
	Work effectively as an individual as well as a group, having an entrepreneurship spirit.	COM-3
Attitude and Social	Demonstrate scientific attitude, critical and innovative in professional tasks.	SOC-1
	Demonstrate religion values and cultures as well as academics etiquette in doing professional tasks.	SOC-2

The following **curriculum** is presented:

