ASIIN Seal

Accreditation Report

Bachelor's Degree Program
Informatics
Information Systems

Provided by
Universitas Pembangunan Nasional "Veteran" Jawa Timur - Indonesia

Version: 26 September 2025

Table of Content

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 Informatika	Bachelor of Informatics	ASIIN	LAM INFOKOM, grade B (very good) (Dec 15th, 2022 – Dec 15th, 2027)	04
Sarjana Sistem Informasi	Bachelor of Information Systems	ASIIN	LAM INFOKOM, grade B (Dec 15th, 2023 - Apr 7th, 2028)	07
Date of the contract: 18.07.2023 **Submission of the final version of the self-assessment report:** 20.02.2025 **Date of the onsite visit:** 02.-03.07.2025 **at:** Jl. Raya Rungkut Madya, Gunung Anyar, Surabaya				
Expert panel: Prof. Dr. Dennis Riehle, Universität Koblenz Prof. Dr. Carsten Vogt, Technische Hochschule Köln Mr. Affandy Fahrizain, MSc, Kata.ai (industry representative) Mr. Kenneth Ezekiel Suprantoni, student at Institut Teknologi Bandung				

[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.

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[3]	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Informatics	Sarjana Komputer/ Bachelor of Computer	-	6	Full time	-	8 Semester	152 CP / 243,2 ECTS	Annually in the odd semester (August) / 2003
Information Systems	Sarjana Komputer/ Bachelor of Computer	-	6	Full time	-	8 Semester	151 CP / 241,6 ECTS	Annually in the odd semester (August)

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

Universitas Pembangunan Nasional "Veteran" Jawa Timur (UPN "Veteran" Jawa Timur) was established in 1968, originating from the Surabaya branch of the Veteran Company Administration Academy. Originally a private institution, it attained state university status in 2014 through a presidential decree.

The university offers a wide range of study programs. Currently, it is divided into eight faculties: (1) Faculty of Medicine, (2) Faculty of Economics and Business, (3) Faculty of Agriculture, (4) Faculty of Computer Science, (5) Faculty of Social and Political Sciences, (6) Faculty of Computer Science, (7) Faculty of Architecture and Design and (8) Faculty of Law.

All academic staff at UPN "Veteran" Jawa Timur are engaged in education, research and community service (the *Tridharma* or three higher education pillars in Indonesia). Its vision is "Becoming a Leading University with a National Defense Character." To achieve this vision, the university has outlined the following mission and goals:

Mission:

1. "Organizing and developing national defense character education.
2. Improving research culture in the development of science and technology fields that are effective for the welfare of society.
3. Organizing community service based on research and local wisdom.

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

4. Organizing good and clean governance in order to achieve accountability in budget management.
5. Developing superior quality human resources in attitudes and values, work performance, knowledge mastery, and management.
6. Improving the integrated facilities and infrastructure management system.
7. Improving institutional cooperation with stakeholders both domestically and internationally."

UPN "Veteran" Jawa Timur received institutional accreditation as "Excellent" (*Unggul)* by the National Accreditation Board of Higher Education.

Both study programs under review are based at the Faculty of Computer Science. Each program is detailed with specific profiles in the Curriculum documents.

i. Bachelor of Informatics (BoI)

Scientific Vision

"Developing excellent informatics knowledge in the field of appropriate intelligent systems with the character of Education of State Defense."

Study Program Objectives

1. "Producing Informatics graduates who have a nationalistic spirit, are professional, able to develop their potential, and are highly competitive.
2. Produce professional Informatics graduates as educators, researchers, practitioners or entrepreneurs by using their skills and knowledge in the field of informatics, which includes computing techniques and multi-platform technology that are suitable for application in the real world of work.
3. Producing Informatics graduates who are able to communicate using international languages, both written and spoken.
4. Producing Informatics Bachelors who are able to continuously develop academic abilities through further study, research and other activities both domestically and abroad."

ii. Bachelor of Information Systems (BoIS)

Vision

"The Information Systems Study Program's vision is to become a leading study program with a national defense character."

Study Program Objectives

1. “Produce graduates who have knowledge, and competence in the fields of management, planning, analysis, design, development, evaluation, audit, and governance of information system products to support organizational/business goals.
2. Produce graduates who are ethical, capable of literacy, communicate and collaborate well, and have a creative, innovative, and adaptive spirit to the dynamics of the organization/business that continues to change according to the trends of the times.
3. Produce graduates who love their homeland, are smart for the nation and state, believe in Pancasila as the basis of the state, are willing to sacrifice for the nation and state, and have the initial ability to defend the country.”

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
- UPN "Veteran" Jawa Timur webpage: https://upnjatim.ac.id/
- Ba Informatics webpage: https://if.upnjatim.ac.id/
- Ba Information System webpage: https://sisfo.upnjatim.ac.id/
- Tracer study evaluation results
- 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 Informatics, and Bachelor's program Information Systems, as defined by UPN "Veteran" Jawa Timur, 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 Educational 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 (students, lecturers, study program leaders, faculty leaders, education staff) and external (graduates, professional associations, graduate users and relevant experts) stakeholders. The PLOs align with the requirements set by the Indonesian National Qualification Framework (*Kerangka Kualifikasi Nasional Indonesia, KNNI*), the National Standards for Higher Education (*Standar Nasional Pendidikan Tinggi, SN-DIKTI*) and professional association guidelines.

In their evaluation of how the program's objectives and learning outcomes are formulated, the experts note that, particularly for the Bachelor Informatics, the PLOs related to the aspect of Knowledge (PLOs 3–5) are somewhat limited in scope. They believe that important knowledge fields, such as modelling, implementation, and performance assessment, should be explicitly mentioned. Therefore, the experts recommend that the learning outcomes be reformulated in a way that accurately reflects the fundamental objectives of the program.

Within the documentation, UPN “Veteran” Jawa Timur provides Objectives-Module matrices for both programs to verify that the intended learning outcomes align with the respective SSC. In addition, UPN “Veteran” Jawa Timur presents tabular linkages between PEOs and PLOs, and PLOs and the modules in the curriculum. PEOs and PLOs are available on the respective program websites. They can also be found on several X-Banners placed in the corners of the study program’s public areas, as well as in promotional brochures.

While there is room for refinement in the phrasing of certain PLOs, the experts believe that the program objectives and learning outcomes overall 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 surveys and tracer study evaluations. 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 group discussions.

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

GP1 **Software Engineer** - able to plan and develop systems by applying software engineering principles and methodologies to meet the needs of users.

GP2 **System Analyst** - capable of planning, analyzing organizational problems, formulating system requirements specifications, and designing software in accordance with organizational needs.

GP3 **Network Security Analyst** - able to plan and develop computer networks and security systems.

GP4 **Cloud/IoT Computing Developer** - able to plan and develop IoT (Internet of Things) systems.

GP5 **Academics** - capable of conveying their knowledge as educators or researchers.

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

GP1 **Business Analyst** – capable of detecting opportunities that can improve business operations while recommending technology to eliminate issues impacting expenses, and productivity.

GP2 **System Analyst** – able to use IT systems within an organization to help them achieve their tactical business goals.

GP3 **System Integrator** – able to analyze IT-based systems and programs that are owned, or will be created, by an organization or company.

GP4 **Data Scientist** – able to convert complex data into easy-to-read formats; able to find patterns and see trends so they can make hypotheses.

GP5 **System Auditor** – capable of monitoring and controlling the overall information technology infrastructure.

During the discussion with the assessment team, both students and alumni shared their positive experiences with both programs under review, highlighting the positive learning environment and job prospects. The team noted the enthusiastic and engaged attitude of the alumni, who expressed their satisfaction with having chosen UPN "Veteran" Jawa Timur. Additionally, the students' enthusiasm for their studies stood out as particularly noteworthy.

The experts appreciate that UPN "Veteran" Jawa Timur aims to provide high standards, giving its graduates a good chance in the national job market and a solid foundation for pursuing further education. They see evidence that the intended qualification profiles of both programs allow students to take up an occupation that corresponds to their qualifications.

When asked about how they monitor the acceptance of the competence profile in the labor market, the program coordinators explained that the study program gathers data through various methods. One key method is an annual tracer study. In this process, alumni are asked to complete a structured questionnaire aimed at collecting information about their employment status and career development after graduation. The experts were provided with the 2025 data, as presented in the table below.

Table 1: Tracer study results, 2025
Source: UPN “Veteran” Jawa Timur.

Informatics			Information Systems		
Graduate profile	n	%	Graduate profile	n	%
Software Engineer	106	34%	Business Analyst	5	5%
System Analyst	83	26%	System Analyst	22	23%
Network Security Analyst	74	24%	System Integrator	32	34%
Cloud/IoT Computing Developer	43	14%	Data Scientist	6	6%
Academics	7	2%	System Auditor	1	1%
			Non IT (Non-IT Manager, Non-IT Staff, Non-IT Entrepreneur)	30	32%

The acceptance of UPN “Veteran” Jawa Timur graduates in the labor market was further ensured after discussions with external partners who expressed willingness to accommodate interns and recruit graduates. They reported positive results regarding technical competence, personal attributes, and alumni character. However, they also identified areas for further improvement: students’ soft skills, particularly in oral and written communication. The partners emphasized the importance of preparing students to effectively present their ideas, clearly report on their work, and demonstrate public speaking and leadership skills. They recognized the value of soft skills and recommended placing greater emphasis on their development, especially in these specific areas.

Nevertheless, there is evidence that UPN “Veteran” Jawa Timur has successfully prepared its students to enter and adapt to the workforce. Users expressed satisfaction with the knowledge and technical skills of the graduates.

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 five years to remain aligned with societal and labor 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.

While a few aspects were noted for improvement, the assessment team believes that both 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. Additional discussion about the curriculum will follow under Criterion 1.3.

Criterion 1.2 Name of the Degree Program

Evidence:

- Self-Assessment Report
- Sample of diploma and diploma supplement
- Faculty of Computer Science webpage https://fasilkom.upnjatim.ac.id/
- Ba Informatics webpage: https://if.upnjatim.ac.id/
- Ba Information System webpage: https://sisfo.upnjatim.ac.id/
- Discussion during the audit

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.

Graduates from the undergraduate programs Informatics and Information Systems receive the academic title of Bachelor of Computer Science (Sarjana Komputer or S. Kom.).

During the audit, the experts asked employers and students whether they have ever found the names of the programs confusing. The employers reported that they have not experienced confusion, noting that the program names are consistent with the respective graduate profiles. They expressed confidence in understanding the competencies that graduates bring when applying for job positions. Additionally, the students indicated that, at the time of application, they received sufficient information about the programs to make an informed decision to register.

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.

Criterion 1.3 Curriculum

Evidence:

- Self-assessment report
- Academic guidelines
- Module handbook of each study program
- Statistical data on student mobility
- Ba Informatics webpage: https://if.upnjatim.ac.id/
- Ba Information System webpage: https://sisfo.upnjatim.ac.id/
- Discussion during the audit

Preliminary assessment and analysis of the experts:

The curricula, structure, and composition of both study programs are presented in the Academic Handbook and program websites.

Structure and contents

Each semester is equivalent to 16 weeks, including 14 weeks of learning activities and 2 weeks for midterm and final exams. The odd semester starts in August, and the even semester starts in February.

For the study programs, the minimum study load is 152 and 151 Indonesian Credits (SKS/CSU), respectively, including compulsory and elective courses. The expected duration is 8 semesters studying full-time.

The curriculum currently in effect is the 2022 curriculum (details in the Appendix). In the first year, students are introduced to university mandatory subjects such as Religion, Pancasila Education, English, Civic Education, Bahasa Indonesia and more. These courses aim to develop students' understanding of the socio-cultural context and foundational principles of Indonesian society.

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 several activity types, including internships and student exchanges.

Bachelor Informatics

The program offers two paths of specialization according to the laboratory:

1. Intelligent Systems and Robotics promotes Computing areas of expertise; Information Retrieval, Data Mining, Robotics, Internet of Things and Animation and Games.
2. Programming, Development and Information Technology promotes Network and Information Security areas of expertise, System Analysis and Testing, Geographic Information Systems, Virtual Reality, Augmented Reality, and Integrated Systems

During the audit, the experts engaged in discussions with the program coordinators about the Bachelor Informatics’ curriculum and its alignment with ASIIN SSC 04. The experts noted that the Subject-Specific-Criteria require the program to cover fundamental aspects for the modelling of problems and facts, such as “abstract logical and algebraic calculations, graph-theoretical notations, formal languages, and automata.” However, with the exception of Algebra, these topics seem not to be explicitly mentioned in the curriculum. The program coordinators explained that these topics are mostly covered in elective courses. Nevertheless, the experts believe that formal aspects, particularly languages and automata, are integral to the ASIIN SSC 04 criteria and must be covered in a mandatory course.

The experts also noted the absence of content on IT security and inquired with the program coordinators about where this aspect is addressed in the curriculum. The coordinators clarified that IT security is currently covered in an elective course. However, given that ASIIN SSC 04 suggest IT security as an area of technological competence for Bachelor's programs, the experts request that this topic be included in a mandatory course.

Bachelor Information Systems

In the sixth semester, students have the option to choose elective modules with seven courses offered. Each course has been affiliated with an interest field lab:

1. The Information Systems Solution Interest Field Laboratory and
2. The Information Systems Management Interest Field Laboratory.

During the audit, the experts also examined the Bachelor Information Systems’ curriculum and engaged in discussions with the program coordinators about its alignment with ASIIN SSC 07. They observed that the number of courses related to business administration is insufficient. The experts noted the absence of modules such as finance, accounting, investment, microeconomics, and macroeconomics. These skills and management-oriented thinking are essential in the field of Information Systems. Additionally, ASIIN SSC 07 stipulates that 15–35% of the curriculum in Bachelor's programs should be dedicated to business fundamentals.

The program coordinators explained that a mandatory entrepreneurship course is offered in the fifth semester. In this course, students explore various business-related topics and are challenged to create proposals that are then presented in a competition against other teams. The experts support the integration of entrepreneurial skills through this course. However, they noted that the number of courses related to Business Fundamentals does not meet the ASIIN TC-07 specification of a minimum of 15%, and this issue needs to be addressed. The experts suggest engaging with business management professionals and collaborating with the industry on projects to increase the coverage in the curriculum.

Additionally, the experts inquired with the program coordinators about where the topic of IT security is addressed within the curriculum. As with the Bachelor Informatics, the coordinators explained that this aspect is currently covered in elective courses. However, since the experts consider IT security to be a relevant area of competence for the Bachelor Information Systems, they suggest that this topic should be included in a mandatory course.

For both programs, MBKM is implemented in the sixth and seventh semesters via enrichment courses. These courses take the form of Field Work Practice (PKL/KKP/Internship), providing students the opportunity to combine their theoretical and practical skills in the workplace. Students are also required to do Community Engagement. Members of the teaching staff explained that community engagement 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. Students dedicate the eighth semester to working on their thesis.

The experts discussed the curricula with the students, who believed that UPN “Veteran” Jawa Timur has implemented study programs that meets their expectations. The students expressed overall satisfaction with the curricula and did not identify overlapping content.

The positive sentiment was shared by the external partners, users of the graduates, who expressed satisfaction with the qualifications of students and graduates across both pro-

grams. They emphasized, nonetheless, the importance of placing greater emphasis on developing students' soft skills, as outlined under Criterion 1.1. They would like to see more actions in place to further enhance students' oral and written communication. The experts agree with this recommendation, highlighting the importance of improving aspects such as presenting ideas, reporting on work, public speaking, and leadership. They propose seminars and presentations in collaboration with industry professionals to address gaps.

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, UPN “Veteran” Jawa Timur has defined course learning outcomes for each module, which allow the students to achieve 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 UPN “Veteran” Jawa Timur 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.

Student mobility

During the audit, the experts discussed the university’s strategies for student mobility with representatives from UPN “Veteran” Jawa Timur management. They learned that the university has an active International Office that supports international mobility and helps students identify suitable programs abroad. The university also engages in international MBKM programs in collaboration with international partners. Currently, financial support is available for students who wish to spend one semester abroad. The International Office works closely with the study programs to assess and facilitate financial support for eligible students.

Both study programs provided data on student mobility; however, the figures do not differentiate between domestic and international mobility, making it difficult to determine the exact number of students participating in international outbound mobility. During the meeting with the students, only one Information Systems student reported having participated in a one-semester exchange abroad, supported by the government-funded IISMA program. However, the students indicated that there is support available for attending international workshops and seminars.

About the transparency and fairness of the process for recognizing external qualifications or credits, the students stated that the process is straightforward and that they have not encountered any issues.

When asked about the attendance of international students in their classes, one Information Systems student reported having an international student from Myanmar in a general course. The university management explained that a strategy is in place to attract international students. In addition to government-funded scholarships, the university offers its own scholarships specifically for international applicants.

During discussions concerning how the university supports international students in becoming familiar with the campus environment, the university management explained that orientation sessions are provided by the International Office. These sessions cover topics such as language, cultural awareness, and local traditions. International students are also encouraged to participate in community events and activities. Additional support is provided through access to library services. Furthermore, international and local students attend classes together, promoting intercultural exchange and fostering international awareness among local students.

According to the information obtained, the experts note that UPN “Veteran” Jawa Timur promotes international student mobility through an appropriate framework. They recognize the university’s ongoing efforts to strengthen its international profile and commend the active engagement of the International Office, which has had a positive impact on mobility initiatives. However, the experts encourage further measures to increase both the number of international students enrolled in the two study programs under review and the number of outgoing students participating in international mobility programs.

During the audit, the experts noted that the students demonstrated a good level of English proficiency. Upon inquiry, the students expressed satisfaction with the use of English in their study programs, although some indicated a desire for more English content. They generally rated the English proficiency of their lecturers as good, but some noted that there is room for improvement. The experts commend the ongoing efforts to enhance the English skills of both students and teaching staff. They encourage continued progress in this area. The experts emphasize that to align with the program's goals of increasing international presence, it is crucial to sustain efforts in integrating more English into the curriculum and to provide additional English training for teachers.

Periodic Review of the Curriculum

As outlined under Criterion 1.1, UPN “Veteran” Jawa Timur conducts regular reviews of the curriculum and documents any adjustments. Routine curriculum reviews are implemented

every five years after focus group discussions considering students, lecturers, alumni, and other stakeholders. Last adaptions of the curricula, involving major changes, occurred in 2022 (structure, objectives, learning outcomes).

Together with the stakeholders’ input, the curriculum also consider several regulations and references. The Informatics’ curriculum incorporates the competencies outlined by the Indonesian Association of Higher Education in Informatics and Computing (APTIKOM) and the Association for Computing Machinery (ACM). The Informatics Systems’ curriculum adheres to the guidelines from the Association for Information System (AIS) and the Association for Computing Machinery (ACM).

The panel recognizes that the curriculum undergoes periodic review. Yet, given the accelerating pace of technological change across the IT sector, they strongly recommend considering more frequent updates to include emerging developments. A tighter rhythm will let the programs respond swiftly and flexibly to breakthroughs in technologies that define the industry’s future.

In line with this recommendation, the panel suggest that the curriculum could benefit from incorporating specific contemporary topics. These should include, for example, DevOps and recent advancements in artificial intelligence. Furthermore, the experts recommend updating the curriculum to reflect recent developments in programming technologies (e.g., the ongoing integration of desktop, web and mobile programming)

Criterion 1.4 Admission Requirements

Evidence:

- Self-Assessment Report
- UPN “Veteran” Jawa Timur New Student Information System: https://simaba.upnjatim.ac.id/index.html
- UPN "Veteran" Jawa Timur New Student Admission Center: https://ppmb.upnjatim.ac.id/
- Tuition fees 2023/2024: https://upnjatim.ac.id/wp-content/uploads/2025/06/Daftar_UKT_Prodi_S1.pdf
- 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 UPN “Veteran” Jawa Timur’s admission portal, 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 Bredasarkan 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 pathway** (*Seleksi Penerimaan Mahasiswa Baru, SPMB*). Through this pathway, prospective students has the freedom to apply directly and participate in the selection process based on predetermined criteria and mechanisms set by the university:
    a. Achievement-Based Independent Pathway
    b. Collaboration and Partnership-Based Independent Pathway
    c. Regular Independent Pathway

The admission quotas are determined based on several factors, including the faculty or department's strategic and development plans, evaluation results from previous student admissions, and the capacity of available facilities and human resources. The maximum quota for admissions via the independent pathway represents 30% of the total university quota.

The data for the Informatics program indicates that the number of applicants fluctuates each year but consistently surpasses the total available capacity. For instance, during the 2023/24 academic year, there were 2.578 applicants, while only 350 places were available. This results in an admission rate of 14%.

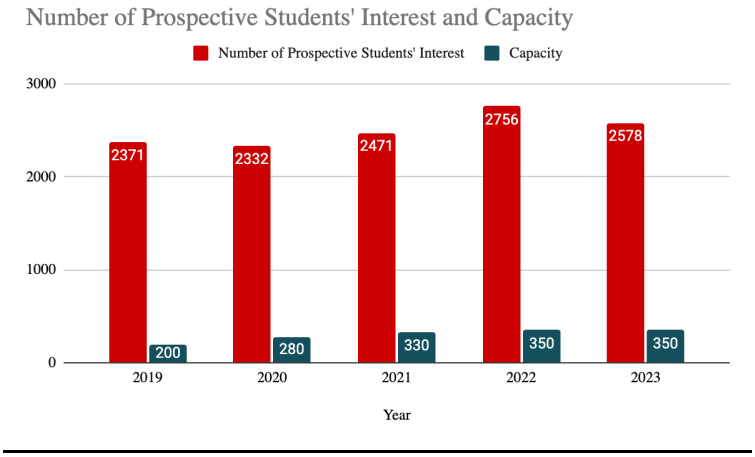


Figure 1: Number of Prospective Student Interest and Capacity 2019-2023 - Informatics
Source: Self-Assessment Report, UPN “Veteran” Jawa Timur

The data for the Information Systems program seems to be missing. Therefore, the experts are requesting statistics on the number of applicants, as well as the total number of accepted and registered students over the past five years.

Undergraduate students at UPN “Veteran” Jawa Timur are required to pay tuition fees, which are structured into seven levels for domestic students depending on their parents’ income. The highest fee levels reach up to 8 million IDR per semester for the Informatics program and 7 million IDR for the Information Systems program, equivalent to approximately €420 and €370, respectively. For international students, the tuition fee per semester is 10 million IDR, equivalent to approximately €520. Several scholarships are available for students facing financial difficulties.

The details of the application process at UPN “Veteran” Jawa Timur, as well as further information on admission criteria and deadlines, can be found in the UPN “Veteran” Jawa Timur 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 UPN “Veteran” Jawa Timur 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
- Discussion during the audit

Preliminary assessment and analysis of the experts:
According to the Self-Assessment Report and the module handbooks, UPN “Veteran” Jawa Timur has implemented a workload-based credit-point system following guidelines from the Indonesian government. The terminology uses the Indonesian credit point (also referred to as credit unit, CU or SKS in Indonesian). The credit point system considers lecturers, structured assignments and independent study.

UPN “Veteran” Jawa Timur 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 Regulation of the Minister of Research, Technology, and Higher Education No. 44 of 2015, one semester credit unit is equivalent to 45,33 hours per semester. Therefore, the student learning load for 1 credit equals 1,6 ECTS.

The Bachelor Informatics consists of 152 Indonesian credits (equivalent to 243,2 ECTS), which are divided into 146 credits of compulsory courses and 6 credits of extra courses. The Bachelor Information Systems comprises 151 Indonesian credits (equivalent to 241,6 ECTS), with 145 credits allocated to compulsory courses and 6 credits to extra courses. The distribution of credits per semester is as follows:

Table 2: Distribution of workload per semester
Source: Self-Assessment Report, UPN "Veteran" Jawa Timur.

Informatics			Information Systems		
Semester	CU	ECTS	Semester	CU	ECTS
1	19	30,4	1	19	30,4
2	19	30,4	2	20	32
3	21	33,6	3	20	32
4	21	33,6	4	20	32
5	20	32	5	21	33,6
6	20	32	6	18	28,8
7	20	32	7	18	28,8
8	6	9,6	8	9	14,4
Scientific writing	3	4,8	Student Credit Activities	3	4,8
Training and certification	3	4,8	Competency certification	3	4,8
Total	152	243,2	Total	151	241,6

The semester GPA determines the maximum number of credits students can take the following semester, with a maximum of 24 credits for high achievers, as outlined in the Academic Guidelines. Bachelor's students are required to attend their classes in accordance with established regulations. The maximum time to complete the bachelor's programs is 7 years (14 semesters).

Regarding student workload monitoring, based on the information gathered during the audit, the experts gained the impression that there is no survey asking students to evaluate the amount of time they spend outside the classroom preparing for classes and studying for exams. Since this is necessary in the ECTS framework, the experts suggest asking students directly about their experiences. This could be done by including a relevant question in the course evaluations. The experts also point out that the Faculty of Computer Science should follow the ECTS users' guide when determining the students' total workload. This refers to the time students typically need to complete all learning activities, such as lectures, seminars, projects, practical work, self-study, and examinations.

Since workload is an estimation of the average time spent by students to achieve the expected learning outcomes, the actual time spent by an individual student may differ from this estimate. Individual students differ in their progress, with some advancing more quickly and others progressing more slowly. Therefore, the workload estimation should be based on the time an "average student" spends on self-study and preparation for classes and exams. The initial estimation of workload should be regularly refined through monitoring and student feedback.

During the audit, the students reported that the workload in both study programs under review is manageable. Overall, they expressed satisfaction, noting that they still have sufficient time for hobbies, social activities, and family life. Some students also mentioned that

they are engaged in part-time jobs, as the workload allows them to balance their studies while gaining practical experience in the working world.

As shown in the table below, UPN “Veteran” Jawa Timur also presents student progression data:

Table 3: Progression data
Source: Self-assessment report, UPN “Veteran” Jawa Timur

Indicator	Informatics	Information Systems
Average starting cohort size	300 (2021-2024)	223 (2019-2024)
Average number of graduates per cohort	115 students (2019-	80 students (2019-
Average time required to complete studies	4,19 years (2017-2020)	4,48 years (2019-2024)
Average dropout rate	3,21% (2017-2021)	5,8% (2017-2023)

The data indicate a low dropout rate, suggesting that nearly all students complete both study programs. However, a closer examination reveals unclear differences in the numbers. During the discussions with the program coordinators, the experts referenced the self-assessment report (p. 10), which highlights a difference between the “average starting cohort size” and the “average number of graduates per cohort”. For instance, in the Informatics program, the average starting cohort size is 300 students, while only 115 students graduate, resulting in a gap of 185 students. A similar issue arises in the Information Systems program, where there is a difference of 143 students.

The experts request that the university clarify the status of the students not accounted for in the reported figures, which represent 62% and 64% of the starting student population, respectively. They also seek to know whether these discrepancies were taken into consideration when calculating dropout rates and the time required to complete studies.

In connection with the above, the experts remark on the importance of the university ensuring that program data, including information on the number of students and the dropout rate, is accurate and readily available upon request.

The experts confirm that regulations for the transfer of credits obtained outside of UPN “Veteran” Jawa Timur exist. The experts also attest that the program's module handbooks distinguish between credits given for various forms of supervised studies and self-study time.

In summary, the experts expect the Faculty of Computer Science to establish a mechanism to regularly monitor whether the credits awarded for each module correspond to the actual student workload, and to adjust the awarded ECTS credits accordingly. The experts also expect clarification on reported progression data.

Criterion 1.6 Didactic and Teaching Methodology

Evidence:

- Self-Assessment Report
- Module handbook of each study program
- Learning Management System: https://ilmu.upnjatim.ac.id/
- Discussion during the audit

Preliminary assessment and analysis of the experts:
UPN "Veteran" Jawa Timur outlines in its Self-Assessment Report that the chosen teaching methods are tailored to the specific characteristics of each course within the study programs, thereby supporting the achievement of the PLOs. Following government regulations, the teaching methodologies incorporate student-centered approaches. These include discussion groups, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, and other effective learning methods that facilitate the fulfillment of the program learning outcomes.

Lectures are primarily conducted in person, although online sessions are also utilized. During the audit, the teaching staff explained that, according to university regulations, up to 30% of the lectures may be delivered online. In-person lectures take place in classrooms equipped with an LCD and a whiteboard. Online lectures are delivered through platforms like Google Meet and Zoom. Support from information systems helps organize the lecture activities.

The UPN “Veteran” Jawa Timur learning management system, ILMU, supports blended learning activities and provides features that lecturers and students can access, including sharing course materials, collecting assignments, conducting quizzes, midterm and final semester examinations. At the beginning of each semester, students are introduced to the learning methods used in their courses through the semester learning plans (RPS) and module descriptions.

During the audit, the students confirmed to the experts that they participate in both online and offline activities. Online learning takes place through the UPN “Veteran” Jawa Timur 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 simulation, case study, cooperative learning, project-based learning and problem-based learning. 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, some students expressed a wish for greater use of English in the learning process. The experts support this wish and recognize that, although steps have already been taken, there is still room for further improvement.

The experts conclude that UPN "Veteran" Jawa Timur has implemented a variety of teaching methods and didactic approaches in both study programs under review to support the achievement of learning outcomes. These include the use of blended and hybrid learning strategies, supported by appropriate infrastructure and staff development opportunities provided by the university. The experts also note that the programs actively monitor the effectiveness of their teaching and learning methods. However, they recommend further strengthening the role of English in the classroom, such as by offering more courses taught in English, to enhance the international orientation of the programs.

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

The experts thank UPN "Veteran" Jawa Timur for the provided statement concerning criterion 1.

(ASIIN 1.1) Program Learning Outcomes – Informatics

The university responds that fundamental topics like modelling, implementation, and assessment are included especially in PLOs 8-10. While the experts confirm this, it is noted that these PLOs are limited to "intelligent system computing needs" (a term that could benefit from further clarification), "user interfaces and interactive applications" and "multiplatform computing solutions", respectively. In the experts’ view, this is too narrow and, therefore, recommend a reformulation that better reflects the fundamental general role of these topics (Recommendation E14).

(ASIIN 1.1, 1.3) Students’ soft skills – both programs

UPN "Veteran" Jawa Timur describes a range of initiatives implemented to improve students' communication skills, public speaking abilities, teamwork, and other related competencies. This involves participation in seminars and presentations, organized in collabora-

tion with internal faculty and external partners, including industry professionals. The experts appreciate these initiatives and recommend ongoing efforts to further develop these areas (Recommendation E1).

(ASIIN 1.3) Alignment with ASIIN SSC 04 – Informatics

The university reports on the mapping of the Informatics curriculum to align with the ACM 2023, APTIKOM 2024, and SSC 04 frameworks. A revision of the Informatics curriculum is scheduled for implementation in 2026, which will make Automata and IT Security compulsory courses in Semesters 5 and 6. The experts support these measures; however, since the draft curriculum is still under review and has not yet reached its final form, the experts issue Requirements A2 and A3.

(ASIIN 1.3) Alignment with ASIIN SSC 07 – Information Systems

UPN "Veteran" Jawa Timur states that the curriculum encompasses various mandatory and elective courses addressing essential business knowledge and competencies. The university outlines next steps in its improvement plan, which includes updating course materials and a curriculum revision for 2026. The experts acknowledge and support these measures, but considering that actions are currently in progress, this leads to the issuance of Requirement A4.

(ASIIN 1.3) IT Security – Information Systems

The university notes that that IT Security is included in the curriculum through the mandatory course 'Information System Security,' which is offered in Semester 4. The expert panel acknowledges this and recommends that the university continue to strengthen this important area in line with emerging trends and developments (Recommendation E15).

(ASIIN 1.3) Student mobility – both programs

The experts thank the disaggregated data provided, which offers an overview of the number of students participating in both domestic and international mobility programs. There are several initiatives contributing to the growth in domestic student mobility, particularly the Domestic Internship and the “Kampus Merdeka” Independent Learning programs. However, as of 2024, the experts observe that international student mobility (inbound and outbound) remains limited. Therefore, it is suggested that additional measures be taken to enhance and expand these programs (Recommendation E2).

(ASIIN 1.3, 1.6, 2, 3.1) Role of English language within the curriculum – both programs

UPN "Veteran" Jawa Timur describes actions to enhance the role of English within the programs. This includes establishing designated public areas as English-language zones, increasing the number of lecturers available for international classes, and implementing various initiatives through the UPN Language Center. Additionally, the university emphasizes the importance of its student exchange program, which provides several courses for UNISZA students. The experts endorse these initiatives and recommend sustained efforts in this area to align with the international aspirations of both study programs (Recommendation E3).

(ASIIN 1.3) Curriculum update cycle– both programs

The university has not provided a specific response to the recommendation regarding more frequent updates to reflect emerging developments. In light of this, and in the absence of additional information, the experts issue Recommendations E4, E5, and E6.

(ASIIN 1.4) Enrolment data – Information Systems

The experts appreciate the provided figures regarding the number of applicants, as well as the total number of accepted and registered students in the Information Systems program over the past five years. They have no further comments on this matter.

(ASIIN 1.5) Student workload – both programs

The experts acknowledge the university's efforts to incorporate new questions related to student workload, including time spent in class, independent study, and assignment completion. They recommend that the university continue to monitor student perceptions in this area and implement appropriate corrective measures in the event of significant deviations (Recommendation E7).

(ASIIN 1.5, 5) Student data – both programs

The experts take note of the additional data, which clarifies the status of students not included in the figures presented in the Self-Assessment Report, page 10. The data shows that a significant percentage of the students across both study programs are not graduating within the expected timeframe. The experts strongly recommend that the university implement measures to monitor the underlying reasons for these delays and enhance support systems aimed at facilitating timely graduation (Recommendation E8).

The experts consider criterion 1 to be **partially 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
- 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. The assessment and evaluation of learning outcomes at UPN "Veteran" Jawa Timur are governed by regulations outlined in a Rector's Decree. These general regulations are further specified in the university’s procedural manuals, which detail the conduct of midterm and final semester examinations. At the course level, examination questions are developed based on the guidelines provided in the Making Exam Questions book.

Exams can take different forms, including written assessments, oral examinations, seminars, and presentations. The type of assessment used depends on the course and the specific learning outcomes defined in the module description. According to the Self-Assessment Report, the assessment methods used in the programs under review are as follows:

Table 4: Assessment forms
Source: Self-assessment report, UPN “Veteran” Jawa Timur

Informatics	Information Systems
Written Assignments	Essay test
Essays and Reports	Multiple choice
Oral Presentations	Practicum
Program Demonstrations	Seminar, presentation
Class Projects	Project
	Case study
	Portfolio

The evaluation comprises five components: midterm exams, final exams, mini-exams, structured assignments, and an attitude assessment. Some courses utilize benchmark assessment (PAP), particularly those that encompass cognitive, affective, and psychomotor domains, in alignment with predetermined learning outcomes. These assessment methods and grading system apply to all courses at UPN "Veteran" Jawa Timur with a few exceptions, such as internships and theses.

During the audit, the experts were given access to samples of various types of assessments to evaluate their academic level and relevance. After inspecting the materials, the experts suggest that it would be beneficial if both study programs place greater emphasis on creating exams that assess students’ problem-solving skills. Instead of concentrating mainly on content reproduction, the assessment methods should be designed to determine whether students can apply their knowledge to real-world or practical problems.

Grading and Graduation Requirements

UPN “Veteran” Jawa Timur employs a scale from 0 to 100, using the below score conversion:

Table 5: Value Conversion
Source: Academic Guidelines as appendix to the SAR.

ANGKA	NILAI	BOBOT
≥80—100	A	4,00
≥76 – < 80	A-	3,75
≥72 – < 76	B+	3,50
≥68 – < 72	B	3,00
≥64 – <68	B-	2,75
≥58 – < 64	C+	2,50
≥56 – < 58	C	2,00
≥46 – < 56	D+	1,50
≥42 – < 46	D	1,00
0,0-<42	E	0,00

According to the academic guidelines, the minimum attendance requirement for lectures is 75%. If students fail to do so, they are not allowed to attend the final examination. Students are considered to have passed the course if they achieve a final grade of C or higher. Students who receive a grade of D+, D, or E must repeat the course in the next semester.

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 are unable to sit for an exam at the scheduled time due to illness or an accident are eligible for a makeup exam. Those facing such circumstances can complete a Request for Additional Examinations Arrangements form, which is available on the study program’s website. Students can download the form, complete it, and submit it to the department's academic staff.

UPN “Veteran” Jawa Timur stipulates that lecturers must correct final examinations within the timeframe specified in the academic calendar. The final scores of the examination and final grades are uploaded into the UPN “Veteran” Jawa Timur online system (SIAMIK), which students can access using their accounts. The university provides students with information about how to appeal their grades.

According to the Academic Regulations, students must meet several requirements to graduate from their programs. They must complete the required credits with a minimum GPA of 2.0, without exceeding the maximum study period set by the university. Students are required to demonstrate English language proficiency equivalent to a TOEFL score of 450. They must also successfully pass their thesis examination, achieving at least a grade of B. It is necessary for students to have their final project or thesis articles published in national proceedings, with an accepted or published status.

UPN “Veteran” Jawa Timur 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 who are proven to have committed plagiarism after checking a similarity test of 50% - 85% must rewrite their thesis with a different title and research.

Thesis

Every student in both study 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, lecturers offer specific topics related to their research.

During the meeting with students, the experts sought to confirm how they find suitable topics for their final projects. One student shared that their thesis topic was obtained through their internship, specifically from the company where they interned. Others mentioned that they received their topics from lecturers. Students also noted that there are opportunities to join research projects with lecturers, during which they receive guidance

and feedback. The teaching staff confirmed that they suggest potential topics for final projects based on their research projects. They noted that the programs offer interest areas, and thesis topics are generally aligned with study groups within these areas, ensuring that students receive expert supervision in their chosen topic.

The undergraduate thesis process consists of two stages: the proposal stage and the thesis examination. These assessments follow the program's scheduled regulations. Students must submit various documents, including guidance from their supervisor, a thesis report, and proof of completing the Community Engagement Course (KKN) and Field Work Practice (PKL/KKP/Internship). For proposal presentations, two members of the teaching staff act as examiners, while three do so for the final thesis defense.

In summary, the experts confirm that UPN “Veteran” Jawa Timur 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 the university provides written guidelines, giving students clear insight into the assessment formats for each module. Additionally, they observe that UPN “Veteran” Jawa Timur 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.

Both study programs under review conclude with a final thesis, where students demonstrate their ability to work independently at the expected level of the program. The expert panel examined a selection of final theses and determined that they were of an appropriate academic level.

The experts overall 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. However, as previously mentioned in this report, there is an opportunity to strengthen the role of English as examination language.

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

The experts thank UPN "Veteran" Jawa Timur for the provided statement concerning criterion 2.

(ASIIN 2) More focus on students’ problem-solving skills – both programs

UPN “Veteran” Jawa Timur indicates that problem-solving-oriented assessments have been implemented in all elective courses within the Informatics program. Looking ahead, the development of problem-solving skills will also be integrated into the credit conversion process for student mobility. The university also clarifies that the Information Systems program prioritizes problem-solving in its two primary assessment types. However, plans are in place to increase the weight of problem-solving components, particularly in courses with less emphasis on application, and to incorporate more real-world case studies to enhance students' ability to tackle complex, industry-relevant challenges. The experts support these initiatives and issue Recommendation E9.

(ASIIN 2) Role of English as examination language – both programs

Addressed under criterion 1 (Recommendation E3).

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

3. Resources

Criterion 3.1 Staff and Staff Development

Evidence:

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

Preliminary assessment and analysis of the experts:
At UPN “Veteran” Jawa Timur, 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 Informatics has 29 academic staff members, with 6 (21%) holding doctoral degrees, and the remainder holding Master's degrees. The Bachelor's degree program Information Systems is supported by 23 academic staff members, 4 (15%) of whom hold doctoral degrees, while the remaining staff possess Master's degrees.

UPN “Veteran” Jawa Timur 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 both study programs, categorized by their academic position:

Table 6: Number and qualifications of teaching staff
Source: Self-assessment report, UPN “Veteran” Jawa Timur.

Position	Informatics	Information Systems
Professor	-	-
Associate Professor	1	1
Assistant Professor	20	16
Lecturers	8	6
Total	**29**	**23**
Active students	**732**	**714**

The data shows that the lecturer-to-student ratio is 1:25 in the Bachelor’s program in Informatics and 1:31 in the Bachelor’s program in Information Systems. These figures are close to the standard set by the Ministry of Research, Technology, and Higher Education Regulation No. 2/2016, which recommends an ideal ratio of 1:30 for study programs in the natural sciences, formal sciences, and applied sciences.

In addition to academic staff, the Faculty of Computer Science 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.

During the audit, the experts discussed with representatives from the university management about the criteria for recruiting lecturers. The representatives clarified that there are two types of employees: permanent employees and non-permanent employees. Permanent employees are civil servants and follow a national selection process managed by the government. As UPN “Veteran” Jawa Timur is a state university, the process is arranged by the Ministry of Education. A key requirement for these positions is that candidates must hold at least a master's degree. On the other hand, the university manages the hiring of non-permanent employees based on the specific needs of the study programs. For these roles, candidates are required to have a minimum of a master's degree and may be recruited from industry or other institutions. Information about job vacancies is available on the university website and through social media.

The experts also observed that fewer than half of the teaching staff in the programs under review hold a doctoral degree. This led to questions about the university’s strategies for increasing the number of PhD-qualified teaching staff. In response, the university management explained that their target is to have at least 25% of academic staff holding a doctoral degree. To achieve this, they aim to support the progression of lecturers from master’s to

doctoral level, including through scholarships funded by the university. Additionally, the Ministry of Higher Education offers scholarships for lecturers, and many staff members have already benefited from this support. The university actively encourages staff to pursue doctoral studies and provides guidance and assistance throughout the process. One of the main challenges, however, is meeting the English language requirements for admission to doctoral programs abroad. To address this, the university offers language support. It was also noted that some lecturers may delay pursuing further studies due to family responsibilities.

The experts acknowledge the university’s efforts to increase the number of teaching staff members with a PhD degree. They strongly recommend that the Faculty of Computer Science continue providing English language training for lecturers and actively work to expand its academic 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 hold a doctoral degree.

During the audit, the experts also inquired about the staff's teaching load and whether sufficient opportunities exist for research activities. They learned that the average load is approximately 40% dedicated to teaching, 30% to research, 20% to community service, and 10% to administration. The teaching staff also explained that, in Indonesia, all full-time teaching staff members are required to participate in what is known as *Tridharma* activities, which include teaching/advising, research, and community service.

Overall, the audit team confirm that the ratio of lecturers to students for the Bachelor’s programs is currently 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

UPN “Veteran” Jawa Timur 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, organized by the Institute of Learning Development and Quality Assurance, 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, in addition to staff development opportunities at the university and faculty levels, the program coordinators also develop annual programs for certifying lecturer skills.

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 UPN “Veteran” Jawa Timur provides funding to support international engagement, and lecturers can apply for financial assistance through the submission of proposals.

To illustrate international engagement and academic collaboration, members of the teaching staff shared several examples. Lecturers from the Informatics program noted their participation in an international conference held last semester. They also served as guest lecturers in Malaysia, where they taught topics related to Artificial Intelligence. Similarly, lecturers from the Information Systems program have taught Malaysian students and engaged in research collaborations with international partners. These collaborations have resulted in journal publications. Communication is typically conducted via Zoom, and the teaching activities are delivered online.

The teaching staff also explained that they receive funding from the university to support international research collaborations. This financial support enables them to engage with peers from institutions abroad. In terms of establishing contact with international partners, they noted that such connections are often facilitated through the faculty. Additionally, the university's International Office plays a crucial role in providing support and guidance to enhance international collaboration efforts.

The assessment team confirms that UPN “Veteran” Jawa Timur provides effective support mechanisms and opportunities for teaching staff to enhance their professional and pedagogical skills. The experts were particularly impressed by the high percentage of women in leading positions, which highlights the university’s support for equal opportunities in leadership roles. 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 UPN “Veteran” Jawa Timur 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.

Student Support and Student Services

According to the Self-Assessment Report, UPN “Veteran” Jawa Timur has built a well-structured framework to provide students with academic and administrative support services.

Each student is assigned an academic advisor who serves as their primary point of contact in the event of any struggles or problems during their studies. The academic advisor monitors academic progress at the beginning of each semester through the academic information system SIAMIK 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.

All students have access to the ILMU learning platform, which functions as an integrated learning management system. In addition, students use the SIAMIK administrative platform to manage course schedules, complete Study Plan Cards, view grades, and communicate with academic counsellors and lecturers. The experts appreciate the availability and accessibility of these online platforms.

UPN “Veteran” Jawa Timur offers a range of services in various areas, including personal development, interests, talents, and welfare. Each service is managed by specific units within the university, including polyclinics, guidance and counselling centers, and academic support units, such as the Career and Entrepreneurship Center.

Overall, there is a positive and supportive relationship between students and teaching staff. Lecturers are highly motivated to assist students, and students receive academic and personal support. Adequate resources are in place to provide individual guidance and assistance, helping students achieve the intended learning outcomes and complete their studies successfully. A well-structured advisory system and the accessibility of supervisors are key factors contributing to this support. Additionally, students are well-informed about the available services, with information effectively communicated through channels such as the module handbook and faculty announcements, which appear to consistently reach the students. However, as an area for improvement, the experts suggest that both programs could offer students more structured support for obtaining professional certifications.

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

As a Government Agency, UPN “Veteran” Jawa Timur adopts the financial management pattern of a Public Service Agency. The annual budget plan involves leaders from each work unit. At the study program level, the leader prepares the budget based on the needs arising from annual performance targets and then submits it to the responsible faculty unit. Subsequently, the study program's budget proposal is forwarded to the university. To utilize the budget approved by the university leadership, the study program must submit an accountability report.

During the discussion with the representatives from the university management, the experts inquired about the main sources of funding to support academic activities. The representatives outlined that, as a state university, UPN “Veteran” Jawa Timur receives funding from the government. However, other sources of funding include partnerships and tuition fees from students. Currently, the distribution of funding is evenly split, with 50% coming from government sources and the remaining 50% from other sources.

Additionally, when asked about contributions from the industry, the university management acknowledged that these contributions remain relatively low, accounting for approximately 3% to 5% of total funding. The university, nonetheless, is actively working to enhance this collaboration annually to increase industry support.

According to the Self-Assessment Report, approximately 20% of the education and teaching budget is allocated to both study programs. This percentage is primarily due to the fact that most of the infrastructure is directly managed by the university and the faculty, ensuring that funding is in place to support teaching and learning activities within the study programs.

Regarding collaborations, UPN “Veteran” Jawa Timur states in its Self-Assessment Report that it has established partnerships with both domestic and international institutions to support teaching and learning activities. The experts reviewed a list of partner institutions and confirm that these collaborations include engagement with industry, research centers, government agencies, and other universities.

Infrastructure and technical equipment

During the audit, the experts visited the listed facilities in order to evaluate whether the programs under review are committed to supporting both practical work and research, with well-equipped infrastructure and technical equipment.

1. Library
2. Language Center
3. Data Center
4. International Office
5. Laboratories at the Faculty of Computer Science:
    a. Intelligent Systems and Robotics Laboratory
    b. IT Programming, Development and Strategy Laboratory
    c. SCR Lab
    d. Solution Lab
    e. Information Systems Management (MSI) Lab
6. Faculty server

The central library offers services to UPN “Veteran” Jawa Timur faculty members, administrative staff, and students. Operating hours are Monday through Thursday, 08:00-18:00, and Friday, 09:00-18:30, with continuous access to online resources. Students can access library items in the building or digitally via a VPN network. The services encompass lending physical and e-books, as well as access to scientific databases. Subscriptions include Springer, Springer Nature, Cambridge, Elsevier, Taylor & Francis and some more (selected subscriptions, journals).

The Language Center is dedicated to enhancing students' English proficiency through both face-to-face and online classes conducted in the Language Laboratory. The standard TOEFL score for undergraduates is set at 450. In addition to English instruction, the center offers free language training in other languages for both students and staff. Currently, French classes are available, and German classes were offered as recently as last year.

During the visitation to the central data center (not faculty-specific), the experts saw approximately 20 server racks containing different servers, storage systems, and associated networking equipment. It supports all university systems and operates on a virtualized environment using VMware technology. The facility benefits from a redundant power supply system, which sustains operations for approximately 30 minutes, followed by a generator. External backups are available, but it is unclear whether these backups are off-site. Notably, the data center does not possess any GPU resources.

The International Office supports both international students and those embarking on study abroad programs. The students often travel to countries such as Malaysia, the Philippines, and Taiwan. The office manages approximately 100 million Rupiah in funding, which is allocated to support around 10 students per semester. This funding covers stipends, travel expenses, and visa costs. The selection criteria for students include English proficiency, personal commitment, and parental support. The experts got a very positive impression of the activities conducted by the International Office, and particularly highlighted the engagement and motivation demonstrated by its staff.

During the visit to several laboratories within the Faculty of Computer Science, the expert team observed that the laboratories are generally equipped with computers, monitors, seats, and projectors. While the equipment is not leading-edge, it is adequate to support student learning and instructional activities. Additional resources available in the laboratories include two 3D printers, a teaching unit for robotics, and facilities for programming autonomous vessels. There is a booking system for Information Systems laboratories. Official laboratory hours are limited to 4:00 PM; however, students are permitted to stay in the laboratories beyond this time upon request. Furthermore, students may also request remote access to servers.

In summary, the experts judge the available funds, technical equipment, and infrastructure (including laboratories, the library, classrooms and student services) to comply with the requirements for adequately sustaining the degree programs. They were also impressed by the positive atmosphere and overall campus environment.

However, the experts identify areas where further improvement could enhance the learning and practical experience for both programs. Firstly, the university is encouraged to increase the availability of open workspaces for students, including more areas dedicated to individual study and group collaboration. Secondly, given the growing importance of artificial intelligence, the university should consider investing in hardware to support AI-related research. For example, access to GPU resources for the development of AI models would benefit students and researchers working in this field.

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

The experts thank UPN "Veteran" Jawa Timur for the provided statement concerning criterion 3.

(ASIIN 3.1) Staff and staff development – both programs

The experts note that new lecturer positions were added to the Information Systems program between 2022 and 2024, resulting in a lecturer-to-student ratio of 1:29 by 2025.

The experts also take note of the actions taken to increase the number of PhD holders among the teaching staff. Currently, 25% of the Informatics lecturers hold doctoral degrees, with five lecturers pursuing doctoral studies, four of whom are in their final year. By 2026, the proportion of doctoral degree holders is expected to rise to 28%. In the Information Systems program, five additional doctoral lecturers will join starting in the new academic year 2025-2026, increasing the percentage of PhD holders to 25%. The experts commend these efforts and encourage the university to continue on this path (Recommendation E10).

(ASIIN 3.1) English training for teaching staff members - both programs

Addressed also under criterion 1.
The university describes the English language support for lecturers through various programs. These include language improvement initiatives from the Language Technical Implementation Unit and programs provided by the Ministry of Education and Culture, such as the PKBI (Indonesian Language and Language Education Partnership Program). The experts appreciate these initiatives and recommend that ongoing support in this area be maintained (Recommendation E3).

(ASIIN 3.1) Students’ professional certifications – both programs

The university does not address the experts' suggestion about offering students more structured support for obtaining professional certifications. They see an opportunity for further improvement in this area and therefore issue Recommendations E11.

(ASIIN 3.2) Open workspaces for students – both programs

The university has provided information on designated open workspaces available to students for various activities, including completing assignments, working on projects, and participating in discussions. These spaces include the open workspaces in the PPSTI Lab and SCR Lab, a reading room, three faculty gazebos, and the central library’s open workspace. The experts acknowledge these provisions and recommend that continued support for such facilities be maintained in close consultation with students (Recommendation E12).

(ASIIN 3.2) Support for AI-related research – both programs

UPN "Veteran" Jawa Timur states its plans to invest in GPU-based infrastructure for better execution and management of Large Language Models (LLMs). The planned investment for the academic year 2025-2026 aims to increase computational capacity for more efficient

model training and deployment, as well as to foster innovation across various research disciplines. To support the implementation of this plan, the experts issue Recommendation E13 .

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
- Ba Informatics webpage: https://if.upnjatim.ac.id/
- Ba Information System webpage: https://sisfo.upnjatim.ac.id/
- Discussion during the audit

Preliminary assessment and analysis of the experts:
The experts acknowledge that UPN “Veteran” Jawa Timur organizes module handbooks for both study programs under review. However, the experts have identified some issues with the presented module descriptions that need to be addressed:

- 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 also observe that the literature in the reading lists is not presented with a consistent formatting style. They request that all references be standardized and properly formatted in a revision of the module handbooks.

The experts appreciate that the full module handbooks are made available on the program websites, ensuring access for all interested parties. However, they believe it would be helpful to also include direct links to individual module descriptions. Providing such links for each course under the curriculum section of both websites would facilitate accessibility, particularly for external stakeholders seeking specific information.

Criterion 4.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report

- Sample Diploma/Degree Certificate
- Sample Transcript of Records
- Sample Diploma Supplements
- Sample English Certificate

Preliminary assessment and analysis of the experts:
According to the Self-Assessment Report and the provided samples, UPN “Veteran” Jawa Timur issues a Diploma Certificate, Transcript of Records, Diploma Supplement and English Certificate shortly after graduation. The Diploma Supplement is issued bilingually in Bahasa Indonesia and English. An English version of the Diploma Certificate and Transcript of Records will be provided upon request. The documents include the student's number, degree program, program name, owner information, degree, graduation date, issuance date, and other relevant details.

After inspecting samples of the respective documents during the on-site visit, the experts confirmed that the graduates of both study programs under review are awarded a Diploma and a Diploma Supplement upon graduation. The Diploma consists of a Diploma Certificate and a Transcript of Records. The Diploma Supplement contains all necessary information about the degree programs, including acquired soft skills and awards. The Transcript of Records lists all the courses the graduate has completed, the achieved credits, grades, and cumulative GPA. However, the experts note that the achieved credit points are listed only in SKS credits. For the purpose of international comparability, the Transcript of Records has to include the credit load also in the converted ECTS unit, and the applied conversion system has to be explained in the Diploma Supplement. Moreover, the title of the final thesis is not displayed on the Transcript. The experts require UPN “Veteran” Jawa Timur to address these issues.

Criterion 4.3 Relevant Rules

Evidence:

- Self-assessment report
- UPN “Veteran” Jawa Timur webpage: https://upnjatim.ac.id/
- 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 UPN “Veteran” Jawa Timur 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 writing 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 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 UPN “Veteran” Jawa Timur has regulations in place that define the rights and duties of both the higher education institution and its 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 UPN "Veteran" Jawa Timur for the provided statement concerning criterion 4.

(ASIIN 4.1) Module descriptions – both programs

UPN "Veteran" Jawa Timur indicates that, for the Informatics program, the reading lists have been updated and references standardized and reformatted according to IEEE citation style. However, since no additional information is provided for the Information Systems program, the experts clarify that the identified areas for improvement apply to both programs. As this aspect requires further actions, the experts issue Requirement A1.

(ASIIN 4.1) Links to module descriptions – both programs

In response to the experts' comments, the university provides links to the respective curricula on the program websites. Upon clicking the links, the experts confirm that direct links to individual module descriptions for the Informatics program are available. However, such links have not been provided for the Information Systems program. Therefore, the experts maintain their recommendation for the Information Systems program (Recommendation E16).

(ASIIN 4.2) Transcript of Records – both programs

The university has updated its academic documents. Starting from the Judisium period in August 2025, the Certificate of Graduation (SKL) provided to students will now feature the conversion of study load from SKS to ECTS units. Additionally, the thesis title will also be included on the SKL. Upon reviewing a sample Certificate of Graduation, the experts confirm the adjustments.

The experts consider criterion 4 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 UPN “Veteran” Jawa Timur, university leaders include the Rector and vice-rectors, who are responsible for overseeing 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 Computer Science 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.

The university’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. 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 is supported by dedicated units: the Institute of Learning Development and Quality Assurance (LP3M), which is responsible for academic quality assurance, and the Internal Supervisory Unit (SPI), which oversees non-academic aspects, including finance, facilities, and infrastructure. The university also establishes quality assurance clusters at the study program, department and faculty levels. Internal Quality Audit (AMI)

processes are conducted annually at the study program level by internal assessors appointed by the Rector. During the audit, representatives from the university management noted that the results of these internal audits are published on the university's website.

The internal review of study programs primarily relies on feedback from students and alumni. The university conducts an end-of-semester satisfaction survey to assess various aspects, including teaching quality, learning experience, lecturers' effectiveness, and campus facilities. According to the survey results for both programs, on a 4-point scale, the teaching and learning processes have produced an average score above 3, indicating a good outcome.

As indicated by the university management, the results are used to improve the study programs, university services, and infrastructure. The survey is anonymous, enabling students to express their opinions honestly. A management meeting, attended by the Rector, reviews the survey results to address any issues and decide on necessary actions. Reports are made transparent through a public information system, where students can access survey results, university reports, and budget information. Additionally, the faculty maintains a website where students can view these results.

During the discussion with the students, they confirmed that their feedback on courses is regularly collected through surveys. The experts appreciate the existing feedback culture, noting that students feel their opinions are taken seriously and that both complaints and suggestions are acknowledged and considered.

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 their respective program.

As part of its monitoring process, the university also evaluates the achievement of Course Learning Outcomes (CLOs), Program Learning Outcomes (PLOs), and Program Educational Objectives (PEOs), using the results to inform curriculum development. This assessment is conducted through the Information System Application OBESESI, which tracks and evaluates the overall effectiveness of the learning process and curriculum implementation. OBESESI provides a cumulative view of CLO, PLO, and PEO achievement by calculating their total percentage of attainment across all courses.

UPN “Veteran” Jawa Timur also monitors the overall performance of the graduates, taking into account their GPA. For example, the Information System data show that most students graduate with a GPA surpassing 3.5 (on a scale of 0 to 4).

According to the Self-Assessment Report, quality management processes incorporate input from a diverse range of stakeholders, including students, alumni, and users. The experts value this participative approach and highlight that feedback from all external stakeholders is essential for improving the study programs.

The expert panel confirms that UPN “Veteran” Jawa Timur has established several structures to support its quality management processes. The university regularly conducts surveys to collect feedback from students, alumni, and staff, and collects users’ insights. 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.

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

UPN "Veteran" Jawa Timur does not comment on this criterion in its statement.

The experts consider criterion 5 to be fulfilled.

D Additional Documents

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

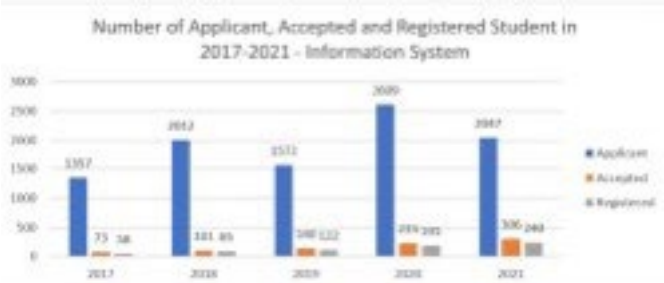
- Information Systems: Figures on the number of applicants, as well as the total number of accepted and registered students over the past five years.
- Informatics: Average GPA of graduates over the past five years.
- Clarification on the status of the students not accounted for in the figures reported in the SAR, p.10.

E Comment of the Higher Education Institution (17.08.2025)

The institution provided the following additional information [links have been deactivated]:

<table>
<tr><th>No.</th><th>Comments from ASIIN experts</th><th>Pro-gram</th><th>Explanations from the Study Programme to clarify the ASIIN comments</th></tr>
<tr><td colspan="4">Additional Document</td></tr>
<tr><td>1</td><td>(Criterion 1.4 and Additional Document)

Figures on the number of applicants, as well as the total number

of accepted and registered students over the past five years</td><td>Information System</td><td>Statistics on the number of applicants, as well as the total number of accepted and registered students over the past five years. The summary of these figures is presented in the table below, providing a year-by-year breakdown of the admission process from initial application to final registration
<table>
<tr><th rowspan="2">Academic Year</th><th rowspan="2">Quota</th><th colspan="2">Number of Prospective Students</th><th colspan="2">Number of New Students</th><th colspan="2">Number of Active Students</th></tr>
<tr><th>Student Applicants</th><th>Accepted students</th><th>Regular</th><th>Transfer</th><th>Regular</th><th>Transfer</th></tr>
<tr><td>2017</td><td>70</td><td>1357</td><td>73</td><td>58</td><td>0</td><td>342</td><td>0</td></tr>
<tr><td>2018</td><td>90</td><td>2012</td><td>101</td><td>85</td><td>0</td><td>371</td><td>0</td></tr>
<tr><td>2019</td><td>120</td><td>1572</td><td>140</td><td>122</td><td>0</td><td>386</td><td>0</td></tr>
<tr><td>2020</td><td>200</td><td>2609</td><td>233</td><td>191</td><td>0</td><td>487</td><td>0</td></tr>
<tr><td>2021</td><td>240</td><td>2047</td><td>306</td><td>240</td><td>0</td><td>700</td><td>0</td></tr>
<tr><td>Total</td><td>720</td><td>9597</td><td>853</td><td>696</td><td>0</td><td>2286</td><td>0</td></tr>
</table>
A recap of these figures is also presented in the form of a chart, as shown below, to provide a clearer visual representation of trends in applicants, accepted students, and registered students over the past five years

</td></tr>
<tr><td>2</td><td>Average GPA of graduates over the past five years.</td><td>Informatics</td><td>Over the last five years, the average student GPA has been 3.648, with the highest average recorded at 3.964 and the lowest at 3.004. The study program consistently monitors students' academic performance to ensure GPA levels remain above the national minimum standard of 2.5
Link: [Link here]
This ongoing monitoring serves as part of the program’s effort to maintain the competitiveness of its graduates in the job market and further academic pursuits</td></tr>
<tr><td></td><td></td><td>Information</td><td>The average GPA over the past 5 years is 3.54, the highest average GPA is 3.87 and the lowest average GPA over the past 5 years is 2.92.</td></tr>
</table>

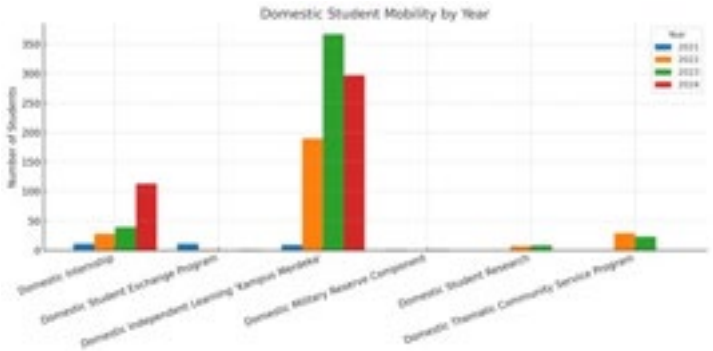
		System	LINK: GPA IS 2019-2024
3	(Criterion 1.5 and Additional Document) Clarification on the status of the students not accounted for in the figures reported in the SAR, p.10. The experts request that the university clarify the status of the students not accounted for in the reported figures, which represent 62% and 64% of the starting student population, respectively. They also seek to know whether these discrepancies were taken into consideration when calculating dropout rates and the time required to complete studies.	Informatics	The unaccounted student population, which constitutes 62% and 64% of the initial cohort, includes individuals who left the program for various reasons. These include acceptance into civil service universities, enlistment in the Indonesian National Armed Forces (TNI) or the Indonesian National Police (POLRI), financial constraints, choosing to enter the workforce, death, or being unreachable with no further contact. These cases have been considered in the calculation of dropout rates and in determining the average time to degree completion. The detail data was showed in Link: [Link here]
		Information System	From 2017 to 2019, the number of *unaccounted students* remained relatively low and stable, decreasing from 6 students in 2017 to only 2 students in 2019. However, in 2020 there was a significant spike to 12 students, followed by the highest number in 2021, with 13 students. This surge was closely related to the impact of the COVID-19 pandemic, during which many students faced financial difficulties and some chose to work instead of continuing their studies. By 2022, the number began to decline to 12, and in 2023 it dropped further to 7, indicating signs of recovery. Link: Student DO
Criterion 1			
4	(Criterion 1.1) Reformulated the learning outcomes in a way that accurately reflects the fundamental objectives of the program, such as modelling, implementation, and performance assessment	Informatics	The learning outcomes in the Informatics program already encompass the three fundamental objectives, namely modeling, implementation, and performance assessment. These three learning outcomes are stated in the program learning outcomes description, specifically PLO08, PLO09, and PLO10. Each of these learning outcomes has been mapped to several courses. The mapping matrix between the learning outcomes and the courses is presented in the following attachment. [Link here]

5	(Criterion 1.3) 1. formal aspects, particularly languages and automata, are integral to the ASIIN SSC 04 criteria and must be covered in a mandatory course. 2. ASIIN SSC 04 suggest IT security as an area of technological competence for Bachelor's programs, the experts request that this topic be included in a mandatory course.	Informatics	In response to the recommendations provided by the ASIIN assessors, the curriculum development team has conducted a comprehensive mapping of the Informatics curriculum, aligning it with the ACM 2023, APTIKOM 2024, and SSC 04 frameworks. The detailed mapping results can be accessed through the following link [Link here] Revision of Informatics Curricula will be implemented in 2026 and the revision as follows Automata and IT Security become compulsory course at Semester 5 and 6, respectively and replace two courses of Pattern Recognition and IT Audit at Semester 7, previously that compulsory course revise to elective course. Revision of Informatics Curricula from semester 5-7 can be accessed at the following link [Link here] And all Informatics Curricula can be accessed at the following link [Link here] The draft module handbook for the Automata and IT Security courses can be accessed at the following link [Link here] The draft of the curricula remains under review and has not yet reached its final form. In accordance with the principles of participatory curriculum development, further deliberations are to be conducted between the study program and both internal and external stakeholders including students, industry representatives, professional associations, alumni, and other relevant parties through a Focus Group Discussion (FGD). The objective of this process is to achieve a shared consensus on the proposed curriculum revisions. The FGD is planned for November–December 2025, with the earliest possible implementation scheduled for February 2026 in the even semester of the 2025/2026 academic year, and no later than August 2026 in the odd semester of the 2026/2027 academic year.
	3. The number of courses related to business administration is insufficient. The experts noted the absence of modules such as finance, accounting, investment, microeconomics, and macroeconomics 4. The experts recommend updating	Information System	The module handbook currently reflects curriculum in 2022. In 2023, 2024, and 2025, several updates have been made to course materials. We acknowledge the experts' observation regarding the number of courses related to business. While specific titles such as *Finance*, *Accounting*, *Investment*, *Microeconomics*, and *Macroeconomics* are not explicitly listed, **several mandatory and elective courses already cover business knowledge and competencies at both macro and micro levels**, including: ● Fundamentals of business, international trade, digital transformation, and technology's role in global competitiveness covered in

	the curriculum to reflect recent developments in programming technologies (e.g., the ongoing integration of desktop, web and mobile programming)		○ Business Process Analysis course ○ Business Knowledge course ● Consumer and producer behavior, especially in technology adoption covered in Information Technology Performance Measurement. ● Supply chain demand and supply management, supplier involvement in product design, and decision-making on costs, pricing, and quality covered in Enterprise System. ● Operational, analytical, and collaborative CRM and related technologies covered in Enterprise System. ● Digital economy, including government policies, cybersecurity, and data regulation covered in Information System Security. ● Market structure and business strategies covered in E-Business. ● Cost–benefit analysis in business and technology contexts covered in Information System Project Management. ● Economic policy and its implications for IT investment, digital projects, and corporate strategy covered in Information System Strategic Planning. Updated syllabi for the 2023–2025 period are available at the following link: RPS Updated. **Next Steps and Improvement Plan** ● In the upcoming Odd Semester of the 2025/2026 academic year, several courses will be enhanced with updated materials. The course consist of business knowledge, system enterprise, data mining, decision support systems, data warehouse and OLAP. These enhancements are intended to strengthen the curriculum's coverage of business and economic domains, encompassing both macroeconomic and microeconomic perspectives, An example of the course study plan is Odd Semester Update Study Plan ● In 2026, the program will conduct a major curriculum revision. Preparatory steps have begun, including collecting feedback from alumni and employers, as documented here: alumnee & company feedback. The draft curriculum, which will be reviewed further during the curriculum FGD in 2026, is available in Draft Curriculum 2026 - Eng Version.pdf. This draft includes a significant reduction in the number of programming courses in the mandatory course list.
	4. IT security addressed in curriculum	Information	In the Information Systems program, IT Security is addressed in the **Information System Security** course, offered in semester 4 as a **mandatory** course. The curriculum can be accessed at: https://sisfo.upnjatim.ac.id/kurikulum-akademik/

		Sys-tem	
6	(Criterion 1.3) The expert propose seminars and presentations in collaboration with industry professionals to address gaps in soft skill (presenting ideas, reporting on work, public speaking, and leadership)	Both Programs	At the end of the *Merdeka Belajar Kampus Merdeka* (MBKM) program, students are required to present their capstone projects to the MBKM partners for evaluation. Some students excel in this area, while others still show weaknesses in certain aspects. Currently, the program is making various improvements, such as scheduling workshops on hard skills and soft skills aimed at sharpening communication, public speaking, teamwork, and other related abilities. The documentation is in this report Efforts to Enhance Hard Skills and Soft Skills.pdf. this activity held regularly in laboratory. The study program also actively encourages students to participate in seminars and presentations—at both national and international levels—organized in collaboration with internal faculty as well as external partners, including industry professionals. These activities aim to give students more opportunities to present their ideas to a wider audience, example of activity can be listed as follow : a. SITASI 2023 b. SITASI 2024
7	(Criterion 1.3) Both study programs provided data on student mobility; however, the figures do not differentiate between domestic and international mobility, making it difficult to determine the exact number of students participating in international outbound mobility.	Informatics	[Link here] **Student Mobility Recap of Informatics Study Program** **a). Domestic Student Mobility** Between 2021 and 2024, the Domestic Student Mobility programs experienced a significant upward trend, particularly in the Domestic Internship scheme, which increased from 11 participants in 2021 to 113 in 2024. The Domestic Independent Learning "Kampus Merdeka" program also showed substantial growth, peaking at 367 students in 2023 before slightly decreasing to 297 in 2024. Other schemes such as the Domestic Student Exchange Program, Domestic Military Reserve Component, Domestic Student Research, and the Domestic Thematic Community Service Program recorded relatively smaller participation numbers but contributed to the overall diversity of mobility opportunities for students.

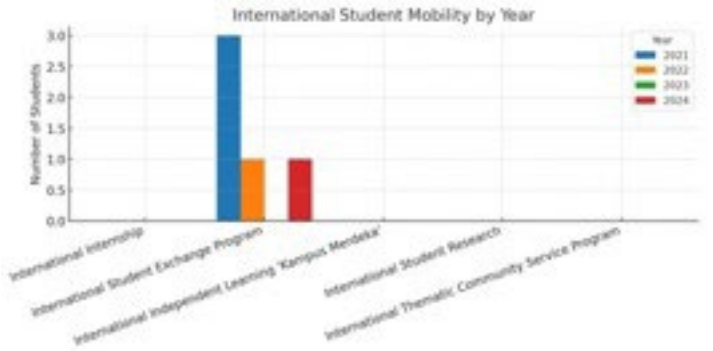
Student Mobility Scheme	2021	2022	2023	2024
Domestic Internship	11	28	39	113
Domestic Student Exchange Program	11	1	0	1
Domestic Independent Learning "Kampus Merdeka"	9	190	367	297
Domestic Military Reserve Component	1	0	1	0
Domestic Student Research	0	7	8	0
Domestic Thematic Community Service Program	0	29	23	0

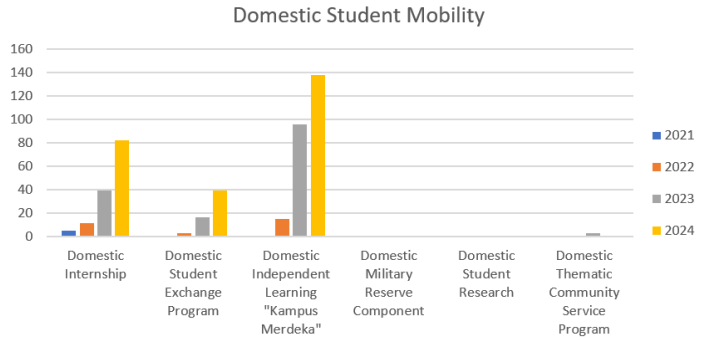


b). International Student Mobility

In contrast, International Student Mobility programs had more modest participation levels. The International Student Exchange Program was the most active scheme, with participation fluctuating up to 3 students during this period, while the International Internship, International Independent Learning “Kampus Merdeka,” International Student Research, and International Thematic Community Service Program recorded no participants.

Student Mobility Scheme	2021	2022	2023	2024
International Internship	0	0	0	0
International Student Exchange Program	3	1	0	1
International Independent Learning "Kampus Merdeka"	0	0	0	0
International Student Research	0	0	0	0
International Thematic Community Service Program	0	0	0	0



		Information System	**a). Domestic Student Mobility** **Student Mobility Scheme** 2021 2022 2023 2024 Domestic Internship 5 11 39 82 Domestic Student Exchange Program 0 3 16 39 Domestic Independent Learning "Kampus Merdeka" 0 15 96 138 Domestic Military Reserve Component 0 0 0 0 Domestic Student Research 0 0 0 0 Domestic Thematic Community Service Program 0 0 3 0 The table shows student participation in various Domestic Student Mobility Schemes from 2021 to 2024. Participation in Domestic Internships grew from 5 students in 2021 to 82 in 2024, while the Domestic Student Exchange Program rose from 3 students in 2022 to 39 in 2024. The Domestic Independent Learning "Kampus Merdeka" scheme increased sharply from 15 students in 2022 to 138 in 2024. Other schemes recorded minimal or no participation. The trend is more clearly illustrated in the chart below.  **b). International Student Mobility** **Student Mobility Scheme** 2021 2022 2023 2024 International Internship 0 0 0 0 International Student Exchange Program 1 0 1 12 International Independent Learning "Kampus Merdeka" 0 0 0 0 International Student Research 0 0 0 0 International Thematic Community Service Program 0 0 0 0 The table presents participation in International Student Mobility Schemes from 2021 to 2024. Only the International Student Exchange Program recorded activity, starting with 1 participant in 2021, none in 2022, then increasing to 1 in 2023 and 12 in 2024. All other schemes had no recorded participation during this period. The trend is more clearly illustrated in the chart below

<table>
<tr>
<td></td>
<td></td>
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<td> 
</td>
</tr>
<tr>
<td>8</td>
<td>(Criterion 1.3)

However, the experts encourage further measures to increase both the number of international students enrolled in the two study programs under review and the number of outgoing students participating in international mobility programs</td>
<td>Informatics</td>
<td>Informatic Inbound international student
The Informatics study program has several international inbound students. In 2020, there was one regular student from Yemen. And in 2024, there were 12 students from Universiti Malaysia Pahang through the Summer Camp program. Summer Camp 2024 documentation can be seen at https://fasilkom.upnjatim.ac.id/web/scamp/

https://www.instagram.com/p/C_Jnk53To-0/?igsh=MTRrZDc1d3gwZXRlYg==

In 2025, a student exchange will be held with UNISZA Malaysia. Apart from that, several lecturers also collaborate in student exchange classes.

In 2025 a Summer Camp will also be held which will be attended by students from UNISZA and UMP Malaysia.The registration form can be access on [Link here]

Informatic Outbound international mobility
Informatics study program student follow the outbound international mobility by IISMA and ICT program. From 2021 to 2024, five Informatics students participated in outbound international mobility. And this year (2025) there will be student mobility to UNISZA Malaysia, attended by 47 students (21 Informatics, 15 Information System, and 11 other). Details are shown in the following table.

<table>
<tr><th>Year</th><th>Informatics</th><th>University</th></tr>
<tr><td>2021</td><td>3</td><td>Universiti Sultan Zainal Abidin Malaysia</td></tr>
<tr><td>2022</td><td>1</td><td>University of Twente, Belanda</td></tr>
<tr><td>2023</td><td>0</td><td></td></tr>
<tr><td>2024</td><td>1</td><td>UMP Malaysia</td></tr>
<tr><td>2025</td><td>21</td><td>UNISZA</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>Evidence: International outbound data: [Link here]

Student Exchange 2025 Report:</td></tr>
<tr><td></td><td></td><td>Information System</td><td>Information System Inbound international student
Inbound International Student
<table><tr><th>Year</th><th>Number of Student</th><th>University Partner</th></tr><tr><td>2021</td><td>0</td><td></td></tr><tr><td>2022</td><td>0</td><td></td></tr><tr><td>2023</td><td>0</td><td></td></tr><tr><td>2024</td><td>11</td><td>Universiti Malaysia Pahang Al-Sultan Abdullah</td></tr><tr><td>2025</td><td>0</td><td></td></tr></table>
Information System Outbound international student
Outbound International Student
<table><tr><th>Year</th><th>Number of Student</th><th>University Partner</th></tr><tr><td>2021</td><td>1</td><td>Universitas Zainal Abidin, Malaysia</td></tr><tr><td>2022</td><td>0</td><td></td></tr><tr><td>2023</td><td>1</td><td>Lancaster University</td></tr><tr><td>2024</td><td>1</td><td>University of Adelaide</td></tr><tr><td>2025</td><td>0</td><td></td></tr></table>
The transcript evidence for these activities is available in the specified folder International Outbond Transcript</td></tr>
<tr><td></td><td></td><td>Both programs</td><td>To increase the number of international students and the number of outgoing students participating in international mobility programs in future, both program's plan are:

1. Updating the curriculum according to international standards, international stakeholders and the latest technological developments in the field of Informatics. During the next curriculum revision period in 2026, the curriculum will be adjusted to ASIIN SSC-04 (for BoI) and SSC-07 (BoIS) standards, particularly regarding the mandatory courses on automation and IT security (for BoI) and business course and IT security (BoIS). The curriculum changes can be seen in the 2026 curriculum draft document, which we will continue to discuss with the team, students, alumni, and stakeholders.

2. Providing scholarships for international students from the Ministry of DiktiSaintek (KNB Scholarship https://knb.kemdiktisaintek.go.id/) and internal UPN scholarships Pertor UPN Veteran Jawa Timur No. 15 in 2019 tentang Beasiswa bagi Mahasiswa Luar Negeri (Mahasiswa Asing)</td></tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td>[Link here]

3. Student exchange with UNISZA start at 2025

4. Dual Degree programme with Chaoyang University of Technology and Taiwan Steel University of Science and

Technology, will start in September 2026. The programme can be followed by active students and alumni.

5. Annual Summer Camp programme sincet 2024

6. Global Classroom, start 2024 with UMP

7. Annual International Seminar, ITIS, https://2025.itisconf.org/

8. International certification for the lecturer planning by each program and faculty. The study program plans to include at least two lecturers in international certification to improve their teaching skills and abilities. Currently, several lecturers hold international certification, as follows:
<table>
<tr><th>Certification</th><th>Total</th><th>Name</th></tr>
<tr><td>ITS-AI Trainer</td><td>6</td><td>Basuki, Yisti, Fetty, Eka, Irwan, Agussalim</td></tr>
<tr><td>ITS-AI</td><td>11</td><td>Basuki, Yisti, Fetty, Junaidi, Andreas, Muharrom, Eka, Irwan, Agussalim, Arista, Amalia</td></tr>
<tr><td>MCF-AI</td><td>2</td><td>Junaidi, Muharrom</td></tr>
<tr><td>AIBIZ</td><td>5</td><td>Anggraini, Eka, Afina, Agung, Made</td></tr>
<tr><td>MTCNA</td><td>3</td><td>Junaidi, Andreas, Ardhon</td></tr>
<tr><td>MOS</td><td>5</td><td>Fawwaz, Firza, Eva, Yisti, Fetty</td></tr>
<tr><td>CISA Certificate</td><td>1</td><td>Irwan</td></tr>
<tr><td>ITIL Certificate</td><td>1</td><td>Irwan</td></tr>
</table>
</td>
</tr>
<tr>
<td>9</td>
<td>(Criterion 1.3)

The experts commend the ongoing efforts to enhance the English

skills of both students and teaching</td>
<td>Both programs</td>
<td>Several steps to align study program objectives with increasing international presence include:

1. Establishing several public areas as English-language areas, for example, currently on the first floor of the Wimaya Building.</td>
</tr>
</table>

	staff. They encourage continued progress in this area. The experts emphasize that to align with the program's goals of increasing international presence, it is crucial to sustain efforts in integrating more English into the curriculum and to provide additional English training for teachers.		 2. Increasing the number of lecturers teaching international classes. Previously, starting in 2023, the Informatics study program had prepared two classes with English as the language of instruction: Digital Image Processing, taught by Mr. Achmad Junaidi, and Systems and Information Technology, taught by Mrs. Retno Mumpuni. Link slide dari mata kuliah digital image processing: [Link here] This year, Mr. Andreas prepared an international language class for the Operating Systems course.And in the coming year, two lecturers per year will be prepared their class in English. This is based on Rector Regulation Number 06 of 2025 Article 4 Paragraph 4, where study programs must prepare at least 1 course class each semester with English as the language of instruction. The Rector Regulation can be access in [Link here] 3. UPN Language Center has several programs to improve English skills for students, lecturers and educational staff as follows: a. 8 September until 10 Oktober 2025, EPT Preparation for student b. 8 September until 10 Oktober 2025,English training for educational staff c. 6 October until 7 November 2025,English training for lecturer 4. In our student exchange program with UNISZA, we offer several courses taught to UNISZA students, including: - Advanced Database - Business Intelligence - Human Computer Interaction - Digital Image Processing - Games and Gamification - Elements of Artificial Intelligence

			Network Programming
10	(Criterion 1.5) that there is no survey asking students to evaluate the amount of time they spend outside the classroom preparing for classes and studying for exams. Since this is necessary in the ECTS framework, the experts suggest asking students directly about their experiences. This could be done by including a relevant question in the course evaluations.	Both Program	Until now, surveys have only been conducted to evaluate lecturers' teaching performance. Therefore, based on input from ASIIN, the Faculty of Computer Science, specifically the Informatics and Information System programs, has introduced a survey on students' learning experiences as part of an evaluation of course workload in relation to the standard student learning time. The questionnaire includes three questions: the amount of time students spend in class, on independent study, and on completing assignments within a week for each course. The questionnaire is available at the following link and has been disseminated to students for completion. [Link here]
11	(Criterion 1.5) Therefore, the workload estimation should be based on the time an "average student" spends on self-study and preparation for classes and exams. The initial estimation of workload should be regularly refined through monitoring and student feedback.	Informatics	A survey was conducted among Informatics and Information System students to assess their weekly learning workload for each course they took. The questions focused on three main components: in-class learning time, independent study, and the time spent completing assignments throughout the week. For Informatics, the survey involved 59 students, and the results indicated an average total learning time of **8.7 hours per week per course**. For comparison, the current standard workload for students is based on an average of 3 credits (SKS) per course, with a duration of **170 minutes per credit**, totaling **510 minutes per week**—equivalent to **8.5 hours**. This shows that the surveyed workload slightly exceeds the established standard, suggesting that students' actual learning engagement aligns closely with the expected academic workload. The following is an attachment of the survey results, with the note that the data presented includes only the questions related to workload. [Link here]
		Information	The evaluated course carries 3 SKS, equivalent to 4.8 ECTS, which corresponds to approximately 8.57 hours of total learning time per week over a 14-week semester. Feedback from 30 respondents shows that the actual workload—comprising 2.67 hours of in-class

		System	learning, 2.47 hours of independent study, and 3.07 hours of structured assignments—totals around 8.21 hours per week, closely aligning with the ECTS benchmark. Students rated the workload and difficulty level at 2.90 out of 4, indicating both are perceived as appropriate. The majority agree that the SKS allocation is well-matched to the workload. Overall satisfaction is notably high at 3.6 out of 4, reflecting that the course is well-received and effectively managed. Detailed data from the survey are presented in this LINK
Criterion 2			
12	(Criterion 2) : Forms of Examinations and Exam Schedule the experts suggest that it would be beneficial if **both** study programs place greater emphasis on ***creating exams that assess students' problem-solving skills.*** Instead of concentrating mainly on content reproduction, the assessment methods should be designed to determine whether students can apply their knowledge to real-world or practical problems.	Informatics	Currently, problem-solving–oriented assessments have been implemented across all elective courses, designed to evaluate students' ability to apply theoretical knowledge to practical and real-world problems. **As a future plan**, the study program will strengthen this approach by integrating the development of problem-solving skills into the **credit conversion process for Student Mobility**. Within this scheme: • At least **one compulsory course** involved in the credit conversion process will be designed with a **clear problem-solving orientation**. • The assessment in this compulsory course will involve real-world case studies, project-based tasks, and, where possible, collaboration with industry partners. Student mobility activities (e.g., internships, independent learning "kampus merdeka", or others) will be **recognized and assessed based on their contribution to the development of problem-solving skills** relevant to the compulsory course converted under the Student Mobility scheme. The assessment will focus on real-world case studies or projects documented in student reports, **as well as through an oral presentation examination in the form of a result seminar**.
	(Criterion 2) : Forms of Examinations and Exam Schedule the experts suggest that it would be beneficial if **both** study programs place greater emphasis on ***creating exams that assess students' problem-solving***	Information System	To emphasize problem-solving skills in assessments over content reproduction, Information System study program already incorporates problem-solving through its two primary assessment types (minimum 50% of it): Problem Solving (49%, 21 out of 43 courses) and Project-Based Learning (PBL) (51%, 22 out of 43 courses), as outlined in the 2023 Study Program Performance Contract ([Link here]). Both assessment types are designed to evaluate students' ability to apply knowledge to practical and real-world problems, aligning with the experts' recommendation. In **Problem Solving-based courses**, assessments focus on case-based exercises where students analyze and solve predefined problems using course material. These assessments test critical thinking and application of concepts in structured scenarios. Conversely, **Project-Based Learning courses** enhance problem-solving

	skills. Instead of concentrating mainly on content reproduction, the assessment methods should be designed to determine whether students can apply their knowledge to real-world or practical problems.		by requiring students to identify real-world problems, propose solutions, and implement them within project guidelines, fostering creativity and practical application. The course list for the Information System program details how these assessment types are distributed across the curriculum [Link here]. For example, the **Desktop Programming** course, as specified in its Semester Learning Plan [Link here] , employs a "Non-Test" assessment approach (Column 4: Assessment Criteria and Form). It includes weekly activities such as peer discussions, group presentations, and skill demonstrations, which assess students' ability to apply programming concepts to practical tasks collaboratively and individually. These methods ensure students are not merely reproducing content but are actively solving problems and demonstrating real-world application. To further align with the experts' suggestion, the study program will increase the weight of problem-solving components in assessments, particularly in courses with lower emphasis on practical application, and integrate more real-world case studies across both assessment types to strengthen students' ability to tackle complex, industry-relevant challenges.
	(Criterion 2) : Thesis **Both** study programs under review conclude with a final thesis, where students demonstrate their ability to work independently at the expected level of the program. The expert panel examined a selection of final theses and determined that they were of an appropriate academic level. However, as previously mentioned in	Information System	Currently, there are no formal regulations mandating English for exam questions or thesis assessments. However, the use of English is encouraged, supported by the fact that all course references, including books and literature, are in English, and most lecture materials are available in English. This enables lecturers to incorporate English in assessments, including final thesis evaluations, where students are expected to demonstrate independent work at an appropriate academic level. For instance, in the Customer Relationship Management course, English is used in project-based assessments Final Project ([Link here]), which aligns with the skills required for thesis writing and defense. In alignment with university-wide regulations, English proficiency is already a key requirement for thesis progression. As outlined in the Rector's Regulations [Link here] , students must meet specific TOEFL equivalent scores: ● Undergraduate students require a TOEFL score of 450 to undertake the final thesis project. ● Master's program students need a TOEFL score of 450 as an entry requirement and 475 to sit for the thesis exam. ● Doctoral students require a TOEFL score of 500 both as an entry requirement and to take the closed dissertation exam. These requirements, supported by the English Proficiency Test Guidelines from the Language Academic Support Unit, ensure a baseline level of English competency, which can be leveraged to further integrate English into thesis assessments. The University supports this transition through the Language and

	this report, there is an ***opportunity to strengthen the role of English as examination language.***		Language Education Unit (UPA Bahasa), which offers an annual English language improvement program for students and lecturers ([Link here]). In 2023, several Information System lecturers participated in this program, contributing to a growing number of faculty members willing to create exam questions and conduct assessments in English. This trend supports the potential for greater English integration in thesis evaluations. While student actively participated each year in the english program to improve their english skill. To further strengthen English in final thesis assessments, university or faculty will implement the following: 1. **Formal Guidelines**: Introduce a policy encouraging or requiring portions of the thesis (e.g., abstract, literature review, or defense presentation) to be in English, ensuring alignment with international academic standards and building on the existing TOEFL requirements. **Gradual Integration**: Pilot English-language thesis defenses in select courses, using feedback to refine the process before full implementation, while monitoring compliance with proficiency thresholds.
		Informatics	As previously stated, the Informatics Study Program has been offering English-language classes since 2023. One of these is the Digital Image Processing class taught by Mr. Achmad Junaidi. Assessments in this course include a final project, mid-term exam, and final exam. Detailed exams can be found at the following link: [Link here] Based on Rector Regulation Number 06 of 2025 Article 4 Paragraph 4, where study programs must prepare at least 1 course class each semester with English as the language of instruction. The Rector Regulation can be access in [Link here] This year, Mr. Andreas will prepared an international language class for the Operating Systems course, and will be continued in the following semesters
Criterion 3			
13	(Criterion 3.1) These figures are close to the standard set by the Ministry of Research, Technology, and Higher Education Regulation No. 2/2016, which recommends an ideal ratio of 1:30 for study programs in	Information System	Starting from 2022 - 2024, UPN Veteran JATIM has consistently opened IS lecturer vacancies to meet the national lecturer-student ratio standards. With the addition of lecturers, the lecturer-to-student **ratio in 2025 will be 1:29**. This ratio is the ideal value based on the standard set by the Ministry of Research, Technology, and Higher Education Regulation No. 2/2016, which recommends an ideal ratio of 1:30. Additional IS lecturer data every year can be seen at the following link: [Link here]

	the natural sciences, formal sciences, and applied sciences.		
14	(Criterion 3.1) The experts acknowledge the university's efforts to increase the number of teaching staff members with a PhD degree. They strongly recommend that the Faculty of Computer Science continue providing English language training for lecturers and actively work to expand its academic 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 hold a doctoral degree.	Informatics	Out of a total of 29 lecturers, the previous proportion of doctoral degree holders was only 21%. In 2025, two lecturers have recently completed their doctoral studies, bringing the number of doctoral degree holders to 8. In the same year, 3 new lecturers joined, increasing the total to 32 Lecturer. As a result, the proportion of doctoral degree holders is now 25% of the total Informatics lecturers. Furthermore, there are currently 5 lecturers pursuing doctoral studies, 4 of whom are in their final year. so, in 2026 Informatics Program have 28% proportion of doctoral degree. The planning is, the program ensures that each year at least there are lecturers commencing their doctoral studies, with the aim of increasing the proportion of doctoral degree holders annually. However, the Informatics Study Program consistently maintains an ideal lecturer-to-student ratio. The strategy is to provide at least 29 active lecturers at all times. In 2026, six new lecturers will be added to maintain this ideal ratio. After 2026, every two years until 2033, two new lecturers with doctoral qualifications will be recruited. By 2033, the majority of lecturers in the Informatics Study Program are expected to hold doctoral degrees. Here data link for doctoral planning and recruitment in Informatics program: [Link here]
		Information System	The increase in the number of doctoral lecturers in the Information Systems study program in 2025 will be achieved by assigning additional doctoral lecturers to the faculty of Computer Science with expertise in information systems. Five additional doctoral lecturers will be assigned to teach in the new academic year of August 2025-2026. With the addition of five doctoral lecturers, the percentage of doctoral lecturers will increase to 25%. The following is a link to the data on the annual increase in doctoral lecturers: [Link here] Another effort is to assign Information Systems lecturers to continue their studies and earn doctoral degrees within the stipulated timeframe. The assignment of lecturers to study assignments is adjusted to maintain the ideal ratio between lecturer workload and Information Systems student numbers, based on the standards set out in Regulation of the Minister of Research, Technology, and Higher Education No. 2/2016, which recommends an ideal ratio of 1:30. The following is an attachment of the projected achievements of lecturers with doctoral degrees for the next 7 years: [Link here]

15	(Criterion 3.1) They strongly recommend that the Faculty of Computer Science continue providing English language training for lecturers and actively work to expand its academic staff with PhD holders, particularly if one of the strategic goals is to achieve international recognition.		Full support for lecturers to improve lecturers english skills by providing services from: 1. Language improvement programs from the Language Technical Implementation Unit (**UPT. Bahasa**). The following are the programs provided by the language unit: [Link here] [Link here] 2. Ministry of Education and Culture programs such as the **PKBI** (Indonesian Language and Language Education Partnership Program).The following is a description of the 2025 PKBI program: [Link here]
16	(Criterion 3.2) During the visit to several laboratories within the Faculty of Computer Science, the expert team observed that the laboratories are generally equipped with computers, monitors, seats, and projectors. While the equipment is not leading-edge, it is adequate to support student learning and instructional activities. Secondly, given the growing importance of artificial intelligence, the university should consider investing in hardware to support AI-related research. For example, access to GPU	Informatics and Information System	The faculty has one high-specification laboratory, the INSYDE Lab. This lab consists of 40 computers with adequate specifications and capable GPUs. The INSYDE Lab has a total area of 90 m². INSYDE Lab Fasilkom PC Specifications: - Intel Core i9-12900KF - 2 × 16 GB DDR4 RAM - NVIDIA RTX 3060 8 GB - ADATA SX NVMe SSD 1 TB - Microsoft Windows 11 Pro Here inventory of INSYDE Lab: [Link here] Additionally, when higher computational power is required, each computer can be utilized for parallel computing. Here the Photo of INSYDE Lab: [Link here] As part of its strategic initiative to advance artificial intelligence research and education, In the new academic year 2025-2026 the university is committed to investing in GPU-based infrastructure to support the execution and management of Large Language Models (LLMs). The planned investment is aimed at enhancing computational capacity, enabling more efficient model training and deployment, and fostering innovation across research disciplines. Among the leading solutions under active evaluation is the H3C LinSeer AI

<table>
<tr><td></td><td>resources for the development of AI models would benefit students and researchers working in this field.</td><td></td><td>Server, recognized for its high-performance capabilities in AI research, large-scale data processing, and advanced computational tasks.</td></tr>
<tr><td>17</td><td>(Criterion 3.2)

Firstly, the university is encouraged to increase the availability of open workspaces for students, including more areas dedicated to individual study and group collaboration.</td><td>Informatics and Information System</td><td>This year, the Informatics Study Program has acquired new rooms in the Menara Wimaya 2 building, located on 1st and 5th. The 1st floor of Menara Wimaya is designated as an open workspace, which students can utilize for various activities such as completing assignments, working on projects, and engaging in discussions. Other spaces that can also be used as open workspaces include two laboratories (PPSTI Lab and SCR Lab), a reading room, three faculty gazebos, and the central library's open workspace.

<table><tr><th>Open Workspace</th><th>Area (m2)</th></tr><tr><td>1st floor of Menara Wimaya</td><td>370,5</td></tr><tr><td>PPSTI Lab</td><td>90</td></tr><tr><td>SCR Lab</td><td>90</td></tr><tr><td>reading room</td><td>90</td></tr><tr><td>central library open workspace</td><td>598</td></tr></table>
Here the photo of open workspaces: [Link here]</td></tr>
<tr><td colspan="4">Criterion 4</td></tr>
<tr><td>18</td><td>(Criterion 4.1)

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 also observe that the literature in the reading lists is not presented with a consistent formatting style. They request that all</td><td>Informatics</td><td>1. The reading lists have been updated to replace outdated literature with the most recent and relevant publications in each subject area.

2. The references have been standardized and reformatted according to the IEEE citation style, ensuring consistency across all module handbooks.

https://if.upnjatim.ac.id/kurikulum/</td></tr>
</table>

	references be standardized and properly formatted in a revision of the module handbooks.		
19	(Criterion 4.1) The experts appreciate that the full module handbooks are made available on the program websites, ensuring access for all interested parties. However, they believe it would be helpful to also include direct links to individual module descriptions. Providing such links for each course under the curriculum section of both websites would facilitate accessibility, particularly for external stakeholders seeking specific information.	Informatics and information system	The handbook module is linked to each individual course file. Simply click on the handbook module table to be directed to the relevant file. https://if.upnjatim.ac.id/kurikulum/ and https://sisfo.upnjatim.ac.id/kurikulum-akademik/
20	After inspecting samples of the respective documents during the on-site visit, the experts confirmed that the graduates of both study programs under review are awarded a Diploma and a Diploma Supplement upon graduation. The Diploma consists of a Diploma Certificate and a Transcript of Records. The Diploma Supple-	Information system	We greatly appreciate the recommendations to improve transparency and international comparability in our graduate documentation, particularly regarding Transcripts and Diploma Supplements. We will continue to accept these recommendations and will forward them to the university. The study program has published course conversions, which are now accessible on the study program website https://sisfo.upnjatim.ac.id/.
		Both Study Programs	We consider the assessors' input to be very useful in improving the quality of academic documents, therefore, it was immediately followed up. Currently, the Faculty of Computer Science has prepared adjustments to academic documents, where the Certificate of Graduation (SKL) given to students starting the Judisium period this August in Year 2025 includes the conversion of the study load from SKS to ECTS units. Furthermore, the thesis title has also been included in the SKL. Thus, the recommended improvements have

	ment contains all necessary information about the degree programs, including acquired soft skills and awards. The Transcript of Records lists all the courses the graduate has completed, the achieved credits, grades, and cumulative GPA. However, the experts note that the achieved credit points are listed only in SKS credits. For the purpose of international comparability, the Transcript of Records has to include the credit load also in the converted ECTS unit, and the applied conversion system has to be explained in the Diploma Supplement. Moreover, the title of the final thesis is not displayed on the Transcript. The experts require UPN “Veteran” Jawa Timur to address these issues.		been implemented to ensure transparency in study program management and the completeness of graduates' academic information. In addition, for broader interests, the University has also started to create a draft of the Student Transcription which includes the ECTS conversion value including the title of the thesis. A sample Certificate of Graduation can be found at the link: [Link here]

F Summary: Expert Recommendations (21.08.2025)

Taking into account the additional information and the comments given by five 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 Informatics	With requirements for one year	30.09.2031	–	-
Ba Information Systems	With requirements for one year	30.09.2031	–	

Requirements

For both programs

A 1. (ASIIN 4.1) Ensure that the module descriptions contain up-to-date literature and references are consistently formatted.

For the Bachelor Informatics

A 2. (ASIIN 1.3) Ensure that formal aspects, especially Languages and Automata, are covered in a mandatory course.

A 3. (ASIIN 1.3) Ensure that IT security is covered in a mandatory course to foster further alignment with the SSC 04.

For the Bachelor Information Systems

A 4. (ASIIN 1.3) Ensure that the number of courses related to Business Fundamentals meets the specification of the SSC 07 (minimum 15% of the curriculum).

Recommendations

For both programs

E 1. (ASIIN 1.1, 1.3) It is recommended to further develop the students' soft skills, especially in oral and written communication, as well as leadership.

E 2. (ASIIN 1.3) It is recommended to provide more opportunities for student mobility.

E 3. (ASIIN 1.3, 1.6, 2, 3.1) It is recommended that the role of English as a teaching and examination language be further strengthened to foster internationalization (e.g., more classes taught in English, more English training for teaching staff).

E 4. (ASIIN 1.3) It is recommended to consider more frequent updates of the curriculum to include new developments, given the rapid and changing environment in IT.

E 5. (ASIIN 1.3) It is recommended that the curriculum include topics such as DevOps and recent advancements in Artificial Intelligence.

E 6. (ASIIN 1.3) It is recommended to update the curriculum to reflect recent developments in programming technologies (e.g., the ongoing integration of desktop, web and mobile programming).

E 7. (ASIIN 1.5) It is recommended to include a more specific question on the students’ total workload in the course questionnaires.

E 8. (ASIIN 1.5) It is recommended to further support the students to ensure timely graduation.

E 9. (ASIIN 2) It is recommended that exams place greater emphasis on the assessment of problem-solving skills.

E 10. (ASIIN 3.1) It is recommended to increase the number of teaching staff holding doctoral degrees, given the currently low proportion.

E 11. (ASIIN 3.1) It is recommended to offer students more structured support for obtaining professional certifications.

E 12. (ASIIN 3.2) It is recommended that more open workspaces be provided to support students in both individual study and group work.

E 13. (ASIIN 3.2) It is recommended to invest in hardware to support AI research (esp., GPUs for the development of AI models).

For the Bachelor Informatics

E 14. (ASIIN 1.1) It is recommended that the program learning outcomes be reformulated in a way that better states the fundamental objectives of the program.

For the Bachelor Information Systems

E 15. (ASIIN 1.3) It is recommended that IT security be covered within the curriculum in a mandatory course.

E 16. (ASIIN 4.1) It is recommended to include direct links to individual module descriptions, as this would be particularly useful for external stakeholders.

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 8 (timely graduation) and E 10 (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. The E 8 and the corresponding text in the report indicate to the experts that a significant number of students do not complete their studies on time and that this is not being systematically addressed by the university. That is why the TC is in favour of a corresponding requirement. In the TC's view, E 10 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 proposes editorial changes to the A 2 (A 4 after the suggestions) and E 16 for clarification. Otherwise, the TC follows the assessment of the experts without any further 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 Informatics	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 primarily discusses requirement A 4 regarding the required courses in the area of ‘business fundamentals’. Although it acknowledges the point, it is in favour of making only two corresponding recommendations instead of one requirement, as deviation from the

rule is generally possible in the SSC. This is also intended to ensure consistency with previous decisions. Furthermore, in the TC's opinion, recommendation E 5 does not apply to the Ba Information Systems program. The TC also proposes an editorial change to E 15. 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 both programs

A 1. (ASIIN 4.1) Ensure that the module descriptions contain up-to-date literature and references are consistently formatted.
A 2. (ASIIN 1.5) Define measurements on how to ensure timely graduation.
A 3. (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

A 4. (ASIIN 1.3) Ensure that formal aspects, especially Languages and Automata, are covered within mandatory courses.
A 5. (ASIIN 1.3) Ensure that IT security is covered in a mandatory course to foster further alignment with the SSC 04.

Recommendations

For both programs

E 1. (ASIIN 1.1, 1.3) It is recommended to further develop the students’ soft skills, especially in oral and written communication, as well as leadership.
E 2. (ASIIN 1.3) It is recommended to provide more opportunities for student mobility.
E 3. (ASIIN 1.3, 1.6, 2, 3.1) It is recommended that the role of English as a teaching and examination language be further strengthened to foster internationalization (e.g., more classes taught in English, more English training for teaching staff).

E 4. (ASIIN 1.3) It is recommended to consider more frequent updates of the curriculum to include new developments, given the rapid and changing environment in IT.

E 5. (ASIIN 1.3) It is recommended to update the curriculum to reflect recent developments in programming technologies (e.g., the ongoing integration of desktop, web and mobile programming).

E 6. (ASIIN 1.5) It is recommended to include a more specific question on the students' total workload in the course questionnaires.

E 7. (ASIIN 2) It is recommended that exams place greater emphasis on the assessment of problem-solving skills.

E 8. (ASIIN 3.1) It is recommended to offer students more structured support for obtaining professional certifications.

E 9. (ASIIN 3.2) It is recommended that more open workspaces be provided to support students in both individual study and group work.

E 10. (ASIIN 3.2) It is recommended to invest in hardware to support AI research (esp., GPUs for the development of AI models).

For the Bachelor Informatics

E 11. (ASIIN 1.1) It is recommended that the program learning outcomes be reformulated in a way that better states the fundamental objectives of the program.

E 12. (ASIIN 1.3) It is recommended that the curriculum include topics such as DevOps and recent advancements in Artificial Intelligence.

For the Bachelor Information Systems

E 13. (ASIIN 1.3) It is recommended that IT security be covered within the curriculum.

E 14. (ASIIN 4.1) It is recommended to include direct links on the programme's website to individual module descriptions, as this would be particularly useful for external stakeholders.

E 15. (ASIIN 1.3) It is recommended to increase the number of courses related to Business Fundamentals to at least 15% of the curriculum.

E 16. (ASIIN 1.3) It is recommended to assign the individual courses to the four areas: business fundamentals, business informatics, informatics fundamentals, and other fundamentals.

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 agrees with TC 04 on upgrading the original E 8 to a requirement. However, the AC also speaks in favour of an additional related requirement (A 3). In addition, the AC agrees with TC 07 on deleting requirement A 2 and issuing two related new recommendations instead. The AC disagrees on upgrading E 10, as a review of the documents indicates that there appears to be sufficient qualified personnel. The AC follows the expert assessment in this regard and maintains it as a recommendation. The AC agrees with the editorial changes to A 4, E 5, E 16 and E 17 proposed by both TCs. 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 Informatics	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 both programs

A 1. (ASIIN 4.1) Ensure that the module descriptions contain up-to-date literature and references are consistently formatted.

A 2. (ASIIN 1.5) Define measures on how to ensure timely graduation.

A 3. (ASIIN 1.5) Analyze reasons for the high drop-out rates and define measures respectively.

For the Bachelor Informatics

A 4. (ASIIN 1.3) Ensure that formal aspects, especially Languages and Automata, are covered within mandatory courses.

A 5. (ASIIN 1.3) Ensure that IT security is covered in a mandatory course to foster further alignment with the SSC 04.

Recommendations

For both programs

E 1. (ASIIN 1.1, 1.3) It is recommended to further develop the students’ soft skills, especially in oral and written communication, as well as leadership.

E 2. (ASIIN 1.3) It is recommended to provide more opportunities for student mobility.

E 3. (ASIIN 1.3, 1.6, 2, 3.1) It is recommended that the role of English as a teaching and examination language be further strengthened to foster internationalization (e.g., more classes taught in English, more English training for teaching staff).

E 4. (ASIIN 1.3) It is recommended to consider more frequent updates of the curriculum to include new developments, given the rapid and changing environment in IT.

E 5. (ASIIN 1.3) It is recommended to update the curriculum to reflect recent developments in programming technologies (e.g., the ongoing integration of desktop, web and mobile programming).

E 6. (ASIIN 1.5) It is recommended to include a more specific question on the students’ total workload in the course questionnaires.

E 7. (ASIIN 2) It is recommended that exams place greater emphasis on the assessment of problem-solving skills.

E 8. (ASIIN 3.1) It is recommended to increase the number of teaching staff holding doctoral degrees, given the currently low proportion.

E 9. (ASIIN 3.1) It is recommended to offer students more structured support for obtaining professional certifications.

E 10. (ASIIN 3.2) It is recommended that more open workspaces be provided to support students in both individual study and group work.

E 11. (ASIIN 3.2) It is recommended to invest in hardware to support AI research (esp., GPUs for the development of AI models).

For the Bachelor Informatics

E 12. (ASIIN 1.1) It is recommended that the program learning outcomes be reformulated in a way that better states the fundamental objectives of the program.

E 13. (ASIIN 1.3) It is recommended that the curriculum include topics such as DevOps and recent advancements in Artificial Intelligence.

For the Bachelor Information Systems

E 14. (ASIIN 1.3) It is recommended that IT security be covered within the curriculum.

E 15. (ASIIN 4.1) It is recommended to include direct links on the programme’s website to individual module descriptions, as this would be particularly useful for external stakeholders.

E 16. (ASIIN 1.3) It is recommended to increase the number of courses related to Business Fundamentals to at least 15% of the curriculum.

E 17. (ASIIN 1.3) It is recommended to assign the individual courses to the four areas: business fundamentals, business informatics, informatics fundamentals, and other fundamentals.

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 *Informatics*

PEOs:

PEO-1 To graduate the Bachelor Degree of Informatics who have a nationalist spirit, sel development and high competitiveness on national and international.

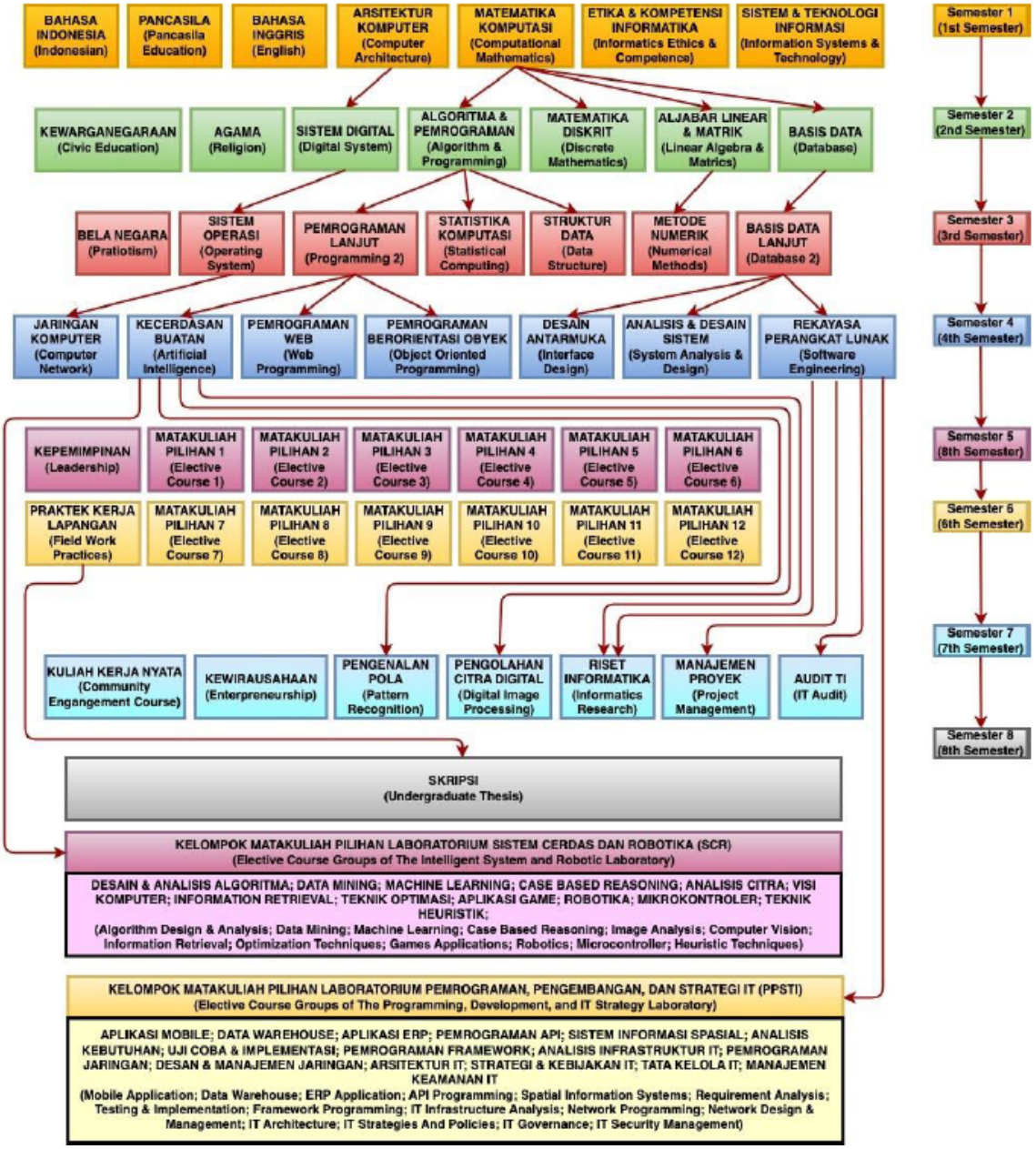
PEO-2 To graduate the Bachelor Degree of Informatics who are professionals as an educator, researcher, practitioner, or entrepreneur by using his skills and knowledge in the field of informatics, which includes computing techniques and multi-platform technology that are suitable for application in the real world of work.

PEO-3 To graduate the Bachelor Degree of Informatics who are able to continuously develop academic abilities through further study, research and other activities both domestically and abroad.

PLOs:

No	Description
PLO1	A - Have integrity, discipline, entrepreneurship and national defense.
PLO2	A - Have social sensitivity, care for the environment, respect for diversity, and play a role in the progress of the nation
PLO3	K - Have adequate knowledge regarding how computer systems work and be able to apply/use various algorithms/methods to solve problems in an organization.
PLO4	K - Have the competence to analyze complex intelligent system computing problems to identify technology project management solutions in the field of informatics/computer science by considering insights into the development of transdisciplinary science.
PLO5	K - Mastering theoretical concepts in the field of Computer Science/Informatics knowledge in designing and simulating multi-platform technology applications that are relevant to the needs of industry and society.
PLO6	GS - Able to apply scientific thinking, make appropriate decisions in solving problems, uphold academic and professional integrity, and prevent plagiarism.
PLO7	GS - Able to use international languages and apply science and technology to social life.
PLO8	SS - Ability to implement intelligent system computing needs by considering various appropriate methods/algorithms.
PLO9	SS - Ability to analyze, design, create and evaluate user interfaces and interactive applications by considering user needs and transdisciplinary scientific developments.
PLO10	SS - Ability to design, implement and evaluate multi-platform computing-based solutions that meet the computing needs of an organization.

The following **curriculum** is presented:



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

PEOs:

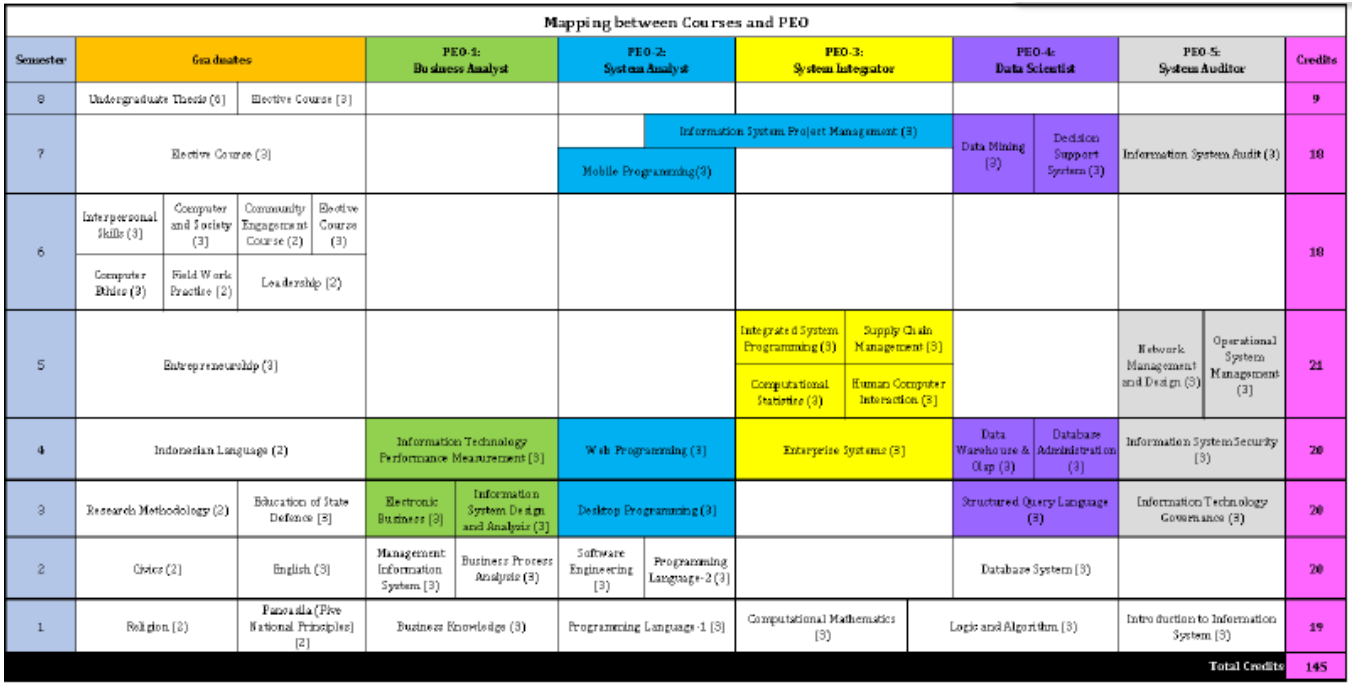
1. Produce graduates who have knowledge, and competence in the fields of management, planning, analysis, design, development, evaluation, audit, and governance of information system products to support organizational/business goals.
2. Produce graduates who are ethical, capable of literacy, communicate and collaborate well, and have a creative, innovative, and adaptive spirit to the dynamics of the organization/business that continues to change according to the trends of the times.
3. Produce graduates who love their homeland, are smart for the nation and state, believe in Pancasila as the basis of the state, are willing to sacrifice for the nation and state, and have the initial ability to defend the country.

PLOs:

Aspect	Code	PLO
Attitude	S1	Believing in the oneness of God and able to demonstrate religious attitude
	S2	Upholding human values in carrying out tasks based on religion, morals, and ethics
	S3	Contributing in improving the quality of community life, nation and state and the advance of civilization based on Pancasila
	S4	Playing a role as a citizen who loves his/her homeland, having a nationalism and responsibility to the country and nation
	S5	Appreciating the diversity of cultures, point of view, religion and beliefs as well as opinion or the original findings of others
	S6	Working together, having social sensitivity and caring for community and environment
	S7	Law abiding and disciplined in community and state life
	S8	Internalizing values, norms and academic ethics
	S9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
	S10	Internalizing spirit of independence, struggle and entrepreneurship
General Skills	KU1	Able to apply logical, critical, systematic, and innovative thinking in the context of the development or implementation of science and technology that pays attention to and applies humanities values in accordance with their field of expertise;
	KU2	Able to demonstrate independent, quality, and measurable performance;
	KU3	Able to examine the implications of the development or implementation of science and technology that pays attention to and applies humanities values according to their expertise based on scientific principles, procedures and ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the results of their studies in the form of a thesis or final project report , and upload it on the college website;
	KU4	Able to compile a scientific description of the results of the studies mentioned above in the form of a thesis or final project report, and upload it on the university's website;

	KU5	Able to make appropriate decisions in the context of solving problems in their area of expertise, based on the results of information and data analysis;
	KU6	Able to maintain and develop a network with supervisors, colleagues, colleagues both inside and outside the institution;
	KU7	Able to be responsible for achieving group work results and supervising and evaluating the completion of work assigned to workers under their responsibility;
	KU8	Able to carry out the process of self-evaluation of the work group under their responsibility, and able to manage learning independently;
	KU9	Able to document, store, secure, and retrieve data to ensure validity and prevent plagiarism.
	KU10	Able to perform analysis & design using software and hardware engineering rules as well as algorithms by using tools and can show maximum results and conditions for business applications.
	KU11	Have the ability to become a professional for database processing, software engineering, computer networks, computer graphics, and multimedia applications and have the ability to write research reports well and manage Information System projects, presenting the work.
	KU12	Have life skills at the level of the S1 program (APTIKOM).
Special Skill	KK1	Able to develop theories and methods/techniques in the domain of Management and Governance (MAGO) or Informatics Concepts (INCO).
Knowledge	P1	Mastering theoretical concepts of Information Systems knowledge in general and theoretical concepts of specific sections in the field of knowledge in depth, and able to formulate procedural problem solving.
	P2	Mastering theoretical concepts that examine, apply and develop as well as being able to formulate and be able to make the right decisions in solving problems.
	P3	Have knowledge in the preparation of programming algorithms that are effective and efficient and can design, build and manage information system applications appropriately and accurately for decision-making support.
	P4	Having knowledge in accordance with the learning achievement of the S1 Information Systems (APTIKOM) study program.

The following **curriculum** is presented:



Mapping between Courses and PEO							
Semester	**Graduates**	**PEO-1: Business Analyst**	**PEO-2: System Analyst**	**PEO-3: System Integrator**	**PEO-4: Data Scientist**	**PEO-5: System Auditor**	**Credits**
8	Undergraduate Thesis (6) / Elective Course (3)						9
7	Elective Course (3)		Information System Project Management (3) / Mobile Programming(3)		Data Mining (3) / Decision Support System (3)	Information System Audit (3)	18
6	Interpersonal Skills (3) / Computer Ethics (3) / Computer and Society (3) / Field Work Practice (2) / Community Engagement Course (2) / Leadership (2) / Elective Course (3)						18
5	Entrepreneurship (3)			Integrated System Programming (3) / Supply Chain Management (3) / Computational Statistics (3) / Human Computer Interaction (3)		Network Management and Design (3) / Operational System Management (3)	21
4	Indonesian Language (2)	Information Technology Performance Measurement (3)	Web Programming (3)	Enterprise Systems (3)	Data Warehouse & Olap (3) / Database Administration (3)	Information System Security (3)	20
3	Research Methodology (2) / Education of State Defence (3)	Electronic Business (3) / Information System Design and Analysis (3)	Desktop Programming (3)		Structured Query Language (3)	Information Technology Governance (3)	20
2	Civics (2) / English (3)	Management Information System (3) / Business Process Analysis (3)	Software Engineering (3) / Programming Language-2 (3)		Database System (3)		20
1	Religion (2) / Pancasila (Five National Principles) (2)	Business Knowledge (3)	Programming Language-1 (3)	Computational Mathematics (3) / Logic and Algorithm (3)		Introduction to Information System (3)	19
						Total Credits	145

Table 19. List of Elective Courses

List of elective courses			
Informatic & Information System Contepts	*Geographic Information System (3)*	*Semantic Network (3)*	*Knowledge Based System (3)*
	Big Data And IOT (3)	*Simulation And Modelling (3)*	*Executive Information System (3)*
Management & Governance Information Systems	*Quality Management (3)*	*Information System Strategic Planning (3)*	*Information Technology Service Management (3)*