



ASIIN Seal

Accreditation Report

Bachelor's Degree Programmes

Biotechnology

Food Technology

Master's Degree Programmes

Biotechnology

Provided by

Universitas Katolik Indonesia Atma Jaya

Version: 12 December 2025

Table of Content

A About the Accreditation Process.....	3
B Characteristics of the Degree Programmes	5
C Expert Report for the ASIIN Seal	9
1. The Degree Program: Concept, Content & Implementation	9
2. Exams: System, Concept and Organisation.....	37
3. Resources	41
4. Transparency and Documentation.....	50
5. Quality management: quality assessment and development	52
D Additional Documents	57
E Comment of the Higher Education Institution (31.10.2025)	58
F Summary: Expert recommendations (15.11.2025)	63
G Comment of the Technical Committees (02.12.2025).....	65
Technical Committee 08 – Agriculture, Forestry and Food Sciences (02.12.2025).....	65
Technical Committee 10 – Life Sciences (25.11.2025)	65
H Decision of the Accreditation Commission (12.12.2025)	67
Appendix: Program Learning Outcomes and Curricula	69

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 Committee (TC) ²
Sarjana Bioteknologi	Bachelor of Biotechnology	ASIIN	BAN-PT ³ ; 2021 – 2026, “Good”	10
Magister Bioteknologi	Master of Biotechnology	ASIIN	BAN-PT; 2024 - 2029, “Excellent”	10
Sarjana Teknologi Pangan	Bachelor of Food Technology	ASIIN	LAMSAMA ⁴ ; 2024 – 2029, “Excellent”	08
Date of the contract: 09.01.2025 Submission of the final version of the self-assessment report: 15.06.2025 Date of the on-site visit: 09. – 11.09.2025 At: Universitas Katolik Indonesia Atma Jaya Location: Tangerang, Indonesia.				
Expert panel: Prof. Dr. Matthias Mack University of Applied Sciences Mannheim Assoc. Prof. Dr. Elisa Herawati, Universitas Sebelas Maret Dipl.-Ing. Alexander Piek, GEA Westfalia GmbH Jasmine Tasmara, Institut Pertanian Bogor, graduate student				
Representative of the ASIIN headquarter: Rainer Arnold				

¹ ASIIN Seal for degree programs

² TC: Technical Committee for the following subject areas: TC 08 - - Agriculture, Forestry and Food Sciences, TC 10 – Life Sciences.

³ National Accreditation Board of Higher Education / Badan Akreditasi Nasional Perguruan Tinggi (BAN-PT)

⁴ Lembaga Akreditasi Mandiri Sains Alam dan Ilmu Formal (LAMSAMA)

Responsible decision-making committee: Accreditation Commission for Degree Programs	
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 08 – Agriculture, Forestry and Food Sciences as of 27.03.2015 Subject-Specific-Criteria of the Technical Committee 10 – Life Sciences as of 28.06.2019	

B Characteristics of the Degree Programmes

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Correspondin g level of the EQF ⁵	d) Mode of Study	e) Double/J oint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Bachelor Biotechnology	Sarjana Bioteknologi / Bachelor of Biotechnology	-	6	Full time	no	8 Semester	144 CSU / 216 ECTS	2002, Once a year (August)
Master Biotechnology	Magister Bioteknologi / Master of Biotechnology	-	7	Full time	no	4 Semester	39 CSU / 117 ECTS	2012, Once a year (August)
Bachelor Food Technology	Sarjana Teknologi Pangan / Bachelor of Food Technology	-	6	Full time	no	8 Semester	144 CSU / 216 ECTS	2015, Once a year (August)

⁵ EQF = The European Qualifications Framework for lifelong learning

Introduction

The Atma Jaya Foundation was formed by a group of young Catholic intellectuals on 1st June 1960 as a response to the idea of establishing a catholic university in Indonesia, which arised in a meeting of the bishops of Java held in Jakarta on 1st June 1952. The foundation then established Atma Jaya Catholic University of Indonesia on June 1, 1960. The purpose of the establishment of the Atma Jaya Foundation is to “participate in the development of the country's universe by moving on the basis of higher education, based on Pancasila and imbued with the spirit of Christianity.”

The private university has seven faculties (Economics and Business, Business Administration and Communication, Education and Language, Law, Medicine and Health Sciences, Psychology, and Bioscience, Technology, and Innovation) with 38 study programmes, consisting of 20 undergraduate programmes, twelve master's programmes, four professional programmes, and two doctoral programmes. In addition, there are six research centres at AJCUI.

The degree programme's objectives and learning outcomes are designed to embody principles that guide both organisational and educational practices. These core values—Christian Faith, Excellence, Professionalism, and Care (Kristiani, Unggul, Profesional, Peduli (KUPP)) serve as foundational pillars that inspire and motivate policymakers in fulfilling their duties with innovation and purpose. These values also play a crucial role in shaping the curriculum design, ensuring alignment with AJCUI's vision and mission both in the Bachelor's and the Master's programmes.

AJCUI has three campuses in Jakarta metropolitan area. The main campus is located in Semanggi, South Jakarta. The second campus, the centre for health development, is located in Pluit, North Jakarta, next to its teaching hospital, Atma Jaya Hospital. The new campus is located in Tangerang (also called BSD Campus).

The Faculty of Biotechnology was founded in 2002, initially offering a biology programme with a focus in biotechnology. AJCUI was the first university in Indonesia to offer a Bachelor's degree in biotechnology. In January 2025, the faculty's name has been changed to School of Bioscience, Technology, and Innovation (SBTI).

Summary

The experts positively notice the following aspects:

- Students are very satisfied with the degree programmes.
- Motivated and highly committed teachers.
- Most teaching materials are in English, students have a high English proficiency.
- Comprehensive tutorial and support system for students, motivated teaching staff.
- Good contacts to employers and alumni.
- New and spacious laboratories.
- Small classes and presently very good student to teacher ratio.
- The employers are satisfied with the degree programmes and the qualification profile of the graduates.
- Graduates have good job opportunities.
- E-books are available through the library.

In the following areas, the experts see room for improvement:

- The awarded ECTS points need to comply with the students' total workload. AJCUI needs to verify the time students need for self-studies in each course. It needs to be transparent how many hours of students' total workload are required for one ECTS point.
- The module descriptions should include the information about the students' total workload and the awarded ECTS points. The Transcript of Records and the study plans should include the ECTS point for every course.
- The PLO of the Master Biotechnology should be aligned with the respective academic level and PLO 4 and PLO 5 should be reworded.
- The engineering content in the Bachelor Biotechnology should be increase. For example, topics such as measurement and control technology, fundamentals of process engineering, bio process engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing and computer/AI based process improvement (e.g. DOE).
- The Food Technology programme should have a food processing pilot plant and the instruments for milling, extrusion, fermentation, drying, freezing, canning, and

pasteurization of the different foods (dairy, meat, fish etc.). Students should get hands-on experience with these areas and topics such as food processing and thermal process engineering should be included in the curriculum.

- Based on the employers' feedback, students' knowledge in statistics should be improved and a modern DNA sequencer should be purchased.
- Admission interviews for the Master's programme should be done by two interviewers and there should be some short guideline about its content and the criteria so that is transparent to the applicants what is expected from them.
- It is not useful to fine students if they do not fill out the satisfaction questionnaires.
- The library should have one or two copies of the current textbooks in all the relevant sciences. The students prefer longer opening hours of the library in the evenings.
- It is recommended to make students' representatives official members of the boards at faculty and programme level (e.g. the curriculum team and the quality assurance team) in order to involve them directly in further developing the degree programmes.
- It would be useful to establish an advisory board at the School of Bioscience, Technology, and Innovation with external stakeholders to discuss regularly with them the needs of the job market and new developments in the area of sciences and technology. For example, partners from the local industry and colleagues from other institutions could meet once a year to evaluate the curriculum and discuss possible adaptations (external advisory board for the faculty). The advisory board also could comment on research strategies of the faculty.

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
- Objectives-Module-Matrices
- Homepage Universitas Atma Jaya: <https://www.atmajaya.ac.id/en/>
- Homepage School of Bioscience, Technology, and Innovation: <https://www.atmajaya.ac.id/en/fakultas/teknik/>
- Homepage Ba Biotechnology: <https://www.atmajaya.ac.id/en/program/biotek/>
- Homepage Ma Biotechnology: <https://www.atmajaya.ac.id/en/program/mbio/>
- Homepage Ba Food Technology: <https://www.atmajaya.ac.id/en/program/tekpang/>
- Discussions during the audit

Preliminary assessment and analysis of the experts:

The experts base their assessment of the learning outcomes on the information provided on the websites and in the Self-Assessment Report of the three degree programmes under review.

For all programmes, Atma Jaya Catholic University of Indonesia (AJCUI) has described and published Vision, Mission, and Objectives as well as and Programme Learning Outcomes (PLO). While the Vision, Mission, and Objectives are rather general and refer to the Vision and Mission of AJCUI and the School of Bioscience, Technology, and Innovation (SBTI), the PLO cover a number of specific competences students should acquire in their respective degree programme. The PLO of each degree programme are published on the respective programme's webpage.

The experts refer to the Subject-Specific Criteria (SSC) of the Technical Committee Life Sciences as a basis for judging whether the intended learning outcomes of the Bachelor's

degree programme Biotechnology and the Master's degree programme Biotechnology, as defined by AJCUI, correspond with the competences as outlined by the SSC.

Graduates of the Bachelor's degree programme Biotechnology should be able to explain the basic laws of biochemical processes in biological objects, carry out hygienic-microbiological investigations in the laboratory, solve genetic problems and understand the general laws and mechanisms of plant activity and its individual structural elements. In addition, they should be familiar with biological safety requirements and environmental issues and be able to carry out analyses to research biological systems in order to solve problems in the production of biotechnological products. Furthermore, they should be able to compare biological processes in the cells of different groups of microorganisms in order to be able to optimise and regulate the production technology of end products. They should also be able to work in the laboratory and under production conditions with cultures of microorganisms, understand the problems of biological safety of products and modern biotechnological products and practise the technology of genetic transformation of plant cells and microorganisms with their further application in science and practice. Graduates should be able to formulate biotechnological principles for the synthesis of products based on cells of micro-organisms, plants and animals and master conceptual, logical and analytical thinking. Finally, they should acquire communication skills and be able to express their ideas orally and in writing.

A detailed correlation between the programme's learning outcome and the SSC of TC 10 – Life Sciences is provided with the Self-Assessment Report.

Graduates of the Bachelor's degree programme Biotechnology can find qualified employment primarily in the livestock, agricultural and food industries. Other possible fields of employment are in the pharmaceutical and food industries. Other possible fields of employment are in the pharmaceutical and biotechnology industry, in government offices and authorities as well as in research institutes.

The Master's degree programme Biotechnology builds on a Bachelor's degree in biosciences and students should acquire the scientific skills and interdisciplinary key qualifications to enable them to take responsibility for their own research activities and to enable them to solve scientific problems independently, to critically classify and discuss scientific findings and to act responsibly as leaders. Graduates should have an overview of the interrelationships of their chosen biotechnological specialisation, be able to apply scientific methods and findings independently in research and development, be able to plan, carry out and evaluate research projects independently and acquire the in-depth specialist knowledge and interdisciplinary qualifications necessary for the transition to professional practice in management positions.

Graduates of the Master's degree programme Biotechnology should be able to follow, analyse and interpret current developments in biotechnology, nanobiotechnology and the genetic engineering of microorganisms, plants and animals. They should also be familiar with modern methods and applications of biotechnology and acquire in-depth knowledge of microorganisms. They should therefore be able to carry out and evaluate basic biotechnological processes and be able to apply methods for analysing biologically active substances to investigate the processes of their vital activity. Furthermore, graduates should be able to use modern molecular and genetic principles of biotechnology for the evaluation and synthesis of new products in order to carry out and plan scientific research in the field of biotechnology. Finally, they should be able to obtain information from scientific sources, conduct technical-scientific discussions, carry out laboratory and experimental studies and select the necessary research methods.

Students are introduced to independent research activities and enabled to solve scientific problems independently, to critically classify and discuss scientific knowledge and to act responsibly as leaders. Occupational fields include a broad spectrum of scientific activities in biotechnological areas in industry and business as well as universities and research institutions. For example, graduates are prepared for careers in biotechnology research and development, academia, quality assurance, regulatory affairs, industrial and environmental biotechnology, and entrepreneurial ventures in the biotech sector. The Master's degree also qualifies graduates for further qualification in corresponding doctoral programmes.

The experts point out that there needs to be a distinctive difference in the PLO of the Master's degree programme Biotechnology in comparison to the PLO of a Bachelor's degree programme. A Master's degree represents a higher academic level with advanced, specialized education designed to foster deeper knowledge, greater independence, and more sophisticated skills in research, analysis, and application. Master's students are required students to engage in more in-depth study and specialization, advancing beyond the broad foundational learning of a Bachelor's programme. This distinction should also be reflected in the PLO. However, PLO 4 "Able to develop logical, critical, systematic, and innovative thinking in the field of biotechnology" and PLO 5 "Able to develop concepts and theories in molecular biology" do not fulfil this requirement as the described competencies should already be acquired in a Bachelor's programme. The programme coordinators explain that PLO 4 is not merely aimed at fostering critical thinking but is implemented through activities that require synthesis of knowledge, critical appraisal of current scientific literature, and formulation of innovative ideas. This is demonstrated in research proposals, seminars, and thesis writing. With respect to PLO 5, the programme coordinators elaborate that this is interpreted at the Master's level as the ability to construct, assess, and apply

advanced theoretical frameworks, with independent scientific inquiry expected to contribute to academic or industrial advancements. The experts are satisfied with this explanation and see that it is not a problem of conveying advanced competencies but just in the wording of the PLOs. To this end, the experts expect AJCUI to change the wording of PLO 4 and PLO 5 in order to make transparent that advanced levels of cognitive learning, such as analysis, synthesis, and evaluation are part of the objectives of the Master's degree programme Biotechnology.

Based on the Self-Assessment Report and the discussions during the on-site visit, the experts see that the graduates of both the Bachelor's and the Master's degree programme Biotechnology acquire most of the subject-specific competences defined in the Subject-Specific Criteria of the Technical Committee 10 - Life Sciences. In addition, graduates are able to solve subject-specific problems and present the results. In the course of the programmes, students also acquire social skills, such as the ability to work in a team and communicate with each other.

The study objectives and learning outcomes to be achieved in the respective modules are anchored in the individual module descriptions. The independent handling of scientific questions serves both the development of the student's personality and the ability to carry out scientific work. Overall, the stated qualification objectives provide a plausible idea of the competence profile that graduates should have acquired and the areas in which they can subsequently work.

A detailed correlation between the programme's learning outcome and the SSC of TC 10 – Life Sciences is provided with the Self-Assessment Report. The experts confirm that PLOs of the Master's degree programme Biotechnology represent competencies required in the biotechnology field. They differ from the Bachelor's Programme in terms of depth, scope, and expected level of attainment, and are clearly designed in accordance with the European Qualifications Framework (EQF) Level 7, which reflects Master's level.

As a note, even though the SSC for Life Sciences can be aligned with the PLOs of the biotechnology programmes, biotechnology is not exactly the same as life sciences. There are fundamental differences between the two fields. Life sciences focus on studying biological systems, genetics, ecology, and biochemistry, emphasising fundamental research and theoretical understanding. In contrast, biotechnology is more application-driven, integrating biology with technology to develop products in healthcare, agriculture, and industry, including genetic engineering and bioprocessing. Graduates of pure life science programmes typically pursue careers in research, conservation, or academia, while biotechnology graduates are more involved in biopharmaceuticals, industrial biotechnology, and technological innovation.

The experts refer to the Subject Specific Criteria (SSC) of the Technical Committee 08 - Agriculture, Forestry and Food Science as a basis for assessing whether the intended learning outcomes of the Bachelor's degree programme Food Technology, as defined by the AJCUI correspond to the competences as outlined in the respective SSC.

The goal of the Bachelor's degree programme Food Technology is to enable graduates to carry out activities aimed at improving the production and conservation of food, as well as the development of new products. By acquiring the necessary chemical, nutritional, toxicological and functional knowledge of raw materials and foodstuffs, graduates should be able to coordinate and develop quality control processes and quality assurance systems in the food industry, as well as be capable of making substantiated decisions that allow the continuous improvement of foodstuffs and the development of new products. In addition, they should learn about the efficient and suitable usage of physical, chemical, and biological raw materials and should be able to understand and analyse nutritious needs by applying current physicochemical, microbiological, and biological sensory techniques.

This is achieved by imparting a solid theoretical and practical scientific background in the natural sciences and by imparting the necessary knowledge and skills about the technological preparation, the analysis, the management, and the conservation of foods and food resources.

Upon completion of the programme, graduates are equipped to pursue diverse roles within the food industry. These roles encompass production planning and inventory control, production management, new product development, food quality assurance and control, regulatory compliance, warehousing, purchasing/procurement, as well as sales and marketing. Beyond the industrial sector, graduates can also pursue opportunities in research, education, financial institutions, and government agencies.

A detailed correlation between the programme's learning outcome and the SSC of TC 08 - Agriculture, Forestry and Food Science is provided with the Self-Assessment Report.

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

The employers confirm during the audit discussions that there is a high demand for biotechnology and food technology graduates. Furthermore, they emphasize that

graduates from AJCUI are highly appreciated because they are “quick learners” and able to adapt very quickly to new situations. The good job opportunities are one of the strong points of the three programmes under review.

In summary, the experts hold the view that the objectives and intended learning outcomes of all three degree programmes under review are reasonable and well founded – with the mentioned restrictions. The degree programmes are designed in such a way that they meet the goals set for them. The experts conclude that the objectives and intended learning outcomes of the degree programmes adequately reflect the intended level of academic qualification - EQF 6 for the Bachelor’s programmes, and EQF 7 for the Master’s programme.

Criterion 1.2 Name of the Degree Programme

Evidence:

- Self-Assessment Report

Preliminary assessment and analysis of the experts:

According to the Self-Assessment Report, the nomenclature for the degrees awarded adheres to the regulations established by the Rector Decree No.290/II/SK-OT.20.04/10/2018. The use of the programmes’ names at AJCUI in various documents, such as diplomas, transcripts, websites, promotional materials, etc., is consistent in both English and Bahasa Indonesia, which is the main teaching language.

Graduates of the Bachelor's degree programme Biotechnology are awarded the title “Sarjana Bioteknologi” (S. Biotek.). When established in 2002, the Biotechnology programme was named “Biology” with the title Sarjana Sains (S.Si.), as the nomenclature for Biotechnology did not exist at that time. After the nomenclature for biotechnology was introduced into the Indonesian higher education system in 2017, the programme’s name was changed to “Biotechnology” in May 2020, in accordance with the respective Ministerial Decree. This applies also to the Master’s degree programme Biotechnology, which was established in 2012. Its graduates now receive the title “Magister Bioteknologi” (M. Biotek.).

Graduates of the Bachelor's degree programme Food Technology are awarded the title “Sarjana Teknologi Pangan” (S.T.P.). The use of the name Food Technology and this title follow the Regulation of the Minister of Education and Culture, Republic of Indonesia, Number 154 of 2014.

The experts confirm that the English translation and the original Indonesian names of all three degree programmes properly reflect the focus and content of the respective programme.

Criterion 1.3 Curriculum

Evidence:

- Self-Assessment Report
- Study plans of the degree programmes
- Module descriptions
- Homepage Universitas Atma Jaya: <https://www.atmajaya.ac.id/en/>
- Homepage School of Bioscience, Technology, and Innovation: <https://www.atmajaya.ac.id/en/fakultas/teknik/>
- Homepage Ba Biotechnology: <https://www.atmajaya.ac.id/en/program/biotek/>
- Homepage Ma Biotechnology: <https://www.atmajaya.ac.id/en/program/mbio/>
- Homepage Ba Food Technology: <https://www.atmajaya.ac.id/en/program/tekpong/>
- Discussions during the audit

Preliminary assessment and analysis of the experts:

The Bachelor's degree programme Biotechnology at Atma Jaya Catholic University of Indonesia is a four-year undergraduate programme that is designed to provide students with a comprehensive foundation in biotechnology, including theoretical studies and practical laboratory work. The programme is delivered primarily in Indonesian and is offered by the School of Bioscience, Technology, and Innovation, which was the first of its kind in Indonesia. All three programmes under review were previously organised by the Faculty of Biotechnology, but since January 2025, the faculty's name has been changed to School of Bioscience, Technology, and Innovation (SBTI) according to Rector Decree No.288/I/SK-LL/11/2024.

The maximum time to complete one of the Bachelor's programmes is 13 semesters, while Master's students can study up to 7 semesters. In addition to the two regular semesters, a short intermediate semester is offered. It is condensed in eight weeks and organised in the summer break between even and odd semesters. Intermediate semesters are offered depending on the needs of each degree programme. The goal is to improve grades and shorten the study time of students. Students can take a maximum of four courses and the maximum number of credits is nine. Thesis courses and final projects are not offered in the intermediate semester.

The curriculum of the Bachelor's degree programme Biotechnology is aligned with the national standards in Indonesia and the recommendations of the "Indonesian Association of Biotechnology Study Programs" (Ikatan Program Studi Bioteknologi Indonesia – IPSBI). It is designed for eight semesters and encompasses 144 Indonesian credits (216 ECTS). The

students' individual study plans are different from each other but have to be approved by their academic advisors and the Vice Dean of Academic and Student Affairs.

The curriculum team regularly reviews the relevance of all-programme's objectives and learning outcomes for the labour market and society through a process that involves key stakeholders, including representatives from higher education and professional fields.

The Bachelor's degree programme Biotechnology is an interdisciplinary programme, since it integrates knowledge from biology, chemistry, engineering, data science, and bioinformatics. This approach ensures that graduates develop the necessary competencies needed to tackle complex biotechnological challenges and to adapt to diverse professional roles, such as researchers, entrepreneurs, and academic staff.

Future biotechnologists learn to develop new forms of vaccines, in particular to combat infectious diseases in livestock and to breed new agricultural breeds and varieties of crops. During the programme, students first acquire a grounding in basic sciences such as chemistry, biochemistry, genetics, molecular biology, and microbiology. In addition, they should develop practical skills in laboratory techniques, biomolecular analysis, tissue culture, and bioprocess engineering. Specialized topics include subjects such as enzyme biotechnology, fermentation technology, bioinformatics, biophysics, genetics, physiology, bioanalytical chemistry, environmental biotechnology, and plant and animal biotechnology. In addition, the students learn about the ethical, regulatory, and safety aspects of biotechnology, including the handling of genetically modified organisms. Moreover, students gain experience in scientific writing, communication, and entrepreneurship, preparing them for diverse roles in research, industry, and innovation.

Upon completion, graduates of the Bachelor's degree programme Biotechnology are expected to possess a robust understanding of biotechnology and the practical skills necessary to manage various aspects of biotechnological practice. Graduates can pursue a professional career as researcher, lab specialist, quality assurance manager, product marketing specialist, and teachers in higher education.

The Bachelor's degree programme Food Technology at Atma Jaya Catholic University of Indonesia is a four-year undergraduate programme that is designed to provide students with a comprehensive foundation in food technology, including theoretical studies and practical laboratory work.

The curriculum of the Bachelor's degree programme Food Technology is aligned with the national standards in Indonesia and the recommendations of the "Indonesian Food Technology Experts Association" (PATPI). It is designed for eight semesters and encompasses 144 Indonesian credits (216 ECTS). The students' individual study plans are

different from each other but have to be approved by their academic advisors and the Vice Dean of Academic and Student Affairs.

The curriculum team regularly reviews the relevance of all-programme's objectives and learning outcomes for the labour market and society through a process that involves key stakeholders, including representatives from higher education and professional fields.

With respect to the Bachelor's degree programme Biotechnology, the experts suggest increasing the engineering content in the curriculum. There is some engineering content in courses such as "Fermentation Technology" and "Bioreactor Engineering" but from the experts' point of view the engineering content should be increased for example, by including topics such as measurement and control technology, fundamentals of process engineering, bio process engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing, and computer/AI based process improvement (e.g. DOE). As the Faculty of Biotechnology has just recently been joined with the Faculty of Technology it should be no problem to offer more engineering content by cooperating with the engineering departments, which are now in the same faculty and located on the same campus as the biotechnology and food technology programmes.

The Bachelor's degree programme Food Technology is an interdisciplinary programme, as it includes various subjects such as chemistry and biochemistry, microbiology, biotechnology, process engineering, nutrition and health, and food management and economics. This interdisciplinary approach equips the graduates to work in different sectors, such as the food industry, research, new product development, and the enhancement of food quality and safety.

The curriculum is designed to impart the necessary skills for applying food science and technology principles in the processing of food materials, ensuring the production of safe, high-quality, and nutritious food products and beverages on an industrial scale. To achieve this, students first receive a comprehensive education in the fundamental sciences that serve as the building blocks of food science, including chemistry, biochemistry, biology, physics, mathematics, calculus, and statistics. The core courses include subjects such as molecular biotechnology, nutrigenomics, food safety (HACCP), food processing technologies (e.g., starch, legumes, oil & fat, seaweed), packaging, production management, functional and traditional food technology, plus entrepreneurship and scientific communication. This way, students should receive a solid education related to the application of food science throughout the entire food handling chain to produce safe and quality products, from the harvesting stage, post-harvest handling, processing, preservation, packaging, storage, distribution, to ready-to-eat products.

The experts see that the graduates of the Bachelor's degree programme Food Technology are well prepared to enter the Indonesian job market and can pursue a professional career in food quality assurance, R&D, production, safety auditing, food engineering, or entrepreneurship within national and multinational industries, research institutions, academia, and public institutions.

The experts stress that the Bachelor's degree programme Food Technology should have a food processing pilot plan, which is a very valuable facility for exposing students to scaled-down versions of industrial equipment. It helps to provide hands-on experience for students in food processing technologies and serves a bridge between classroom theory, laboratory analysis, and industrial practice. Additionally, there should be instruments for milling, extrusion, fermentation, drying, freezing, canning, and pasteurization of the different foods (dairy, meat, fish etc.). Students should get hands-on experience with these areas and topics such as food processing and thermal process engineering should be included in the curriculum.

Based on the employers' feedback, students' knowledge in statistics should be improved. This point of view is supported by the experts who emphasise that it is important for biotechnology and food technology students are familiar with statistics as both programmes rely heavily on experiments and students should know about their statistical design of experiments, this includes choosing the right sample size, using control variables, bias reduction, and knowing how to analyse and interpret results from lab experiments or field trials. Additionally, one international mentioned that AJCUI students could further strengthen their competences in computer and digital skills, especially in data processing and analysis. The partner emphasised the importance for students to continuously upgrade these skills in today's increasingly digital environment.

The learning processes in both Bachelor's programmes do not only take place in classrooms and laboratories, but also directly in companies, where students are introduced to general technical and technological practices at leading enterprises in Indonesia. To this end an internship (Field Training) is part of both Bachelor's degree programmes. There are two types of internships: formal internships listed in the curriculum and the credit transfer programme for internships or research through MBKM. AJCUI ensures the quality of the internships by coordinating with participating companies and supervising students. The selection of hosting institutions is done by students and supported/reviewed by their supervisors, with final approval from the internship coordinator. Students report their activities weekly through a logbook, which is monitored by the supervisor. The quality of the internship is regularly evaluated, and if a placement fails to meet standards, AJCUI can recommend discontinuing its use or issue a formal notice to the host organisation.

Usually during the last year of studies, Bachelor students must complete the community service. The experts discuss with the programme coordinators about the content and goal of this course. The programme coordinators explain that community service is compulsory for all Indonesian students. It has a minimum length of eight weeks and often takes place in villages or rural areas where students stay and live together with the local people. The course is designed “to allow students to apply their knowledge based on their field in order to empower society.” Since the community service usually takes place in remote areas, the students cannot attend any classes during this time. The students work in interdisciplinary teams during the community service in order to advance the society and bring further development about. This course was introduced at all Indonesian Universities in 1971. The assessment of the community service consists of a work plan, programme implementation, and activity report. The experts understand that students should work for the benefit of the community and the Indonesian society during the community service and support this concept.

The Master’s degree programme Biotechnology encompasses 39 CSU (117 ECTS), consisting of compulsory courses (21 CSU), electives (11 CSU), seminar (1 CSU) and Master’s thesis (6 CSU). It is designed for four semesters. Compulsory courses are designed to be completed within the first two semesters, allowing students in the third semester to take elective courses while commencing their thesis research in the field of biotechnology. The compulsory courses are: Advanced Microbiology, Advanced Biochemistry, Bioinformatics, Molecular Biotechnology, Experimental Methods in Biotechnology, Biotechnology Capita Selecta, Philosophy of Science, and Special Topics in Biotechnology. In addition, students can choose electives from a list of 12 courses, which includes topics such as: Food and Industrial Biotechnology, Environmental Biotechnology, Medical Biotechnology, Business in Biotechnology, Advanced Food Technology, Pharmaceutical Biotechnology, Nutrigenomics, Biochemistry Instrumentation, Regulation and Gene Expression, and Advanced Science Communication.

A significant component of the Master’s degree programme Biotechnology is the thesis, which is conducted in the last year of studies. In the Master’s thesis, students conduct research activities under faculty supervision, culminating in a seminar presentation and thesis defence.

The experts observe that the Master’s degree programme Biotechnology is designed to equip students with advanced knowledge and research skills in biotechnology, preparing them for leadership roles in academia, industry, and applied research. The graduates can find suitable positions as researchers and academicians in biotechnology, managers in biotech-based industries, entrepreneurs for developing biotech products, professionals in

government or private organizations, working across food technology, pharmaceuticals, environmental biotech, and other related areas.

All courses taught in the three study programmes under review are delivered in Bahasa Indonesia (Indonesian language). However, most study materials are also provided in English. If there are international students in the classes, the lectures are usually held in English. Furthermore, students are encouraged to attend summer courses that are held in English with international students and guest lecturers. Moreover, international guest lectures are regularly invited, who teach their courses in English, the university's Language Centre offers English language courses and there is an English debating club. The students confirm in the discussion with the experts that they are satisfied with the existing opportunities to improve their English proficiency and the experts cannot see any deficits in this respect. On the contrary, all students participating in the discussions during the audit showed a high English proficiency.

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

The curriculum review of all study programmes at AJCUI is conducted independently, involving internal stakeholders such as faculty leaders, programme coordinators, teachers, and external stakeholders (alumni, employers). Major reviews are done every four years; minor revisions can be applied every year. The individual courses are evaluated each year at the beginning of the new semester to ensure that they are aligned with the PLOs mandated to each course. At the end of semester, the degree programme also conducts portfolio analysis to measure the achievement of the PLOs of each course. As the tracer studies show, a large share of the graduates will find jobs in the health sector, for this reason, AJCUI will offer more courses in this area and introduce a minor in health biotechnology.

After analysing the module descriptions and the study plans the experts confirm that all degree programmes under review are divided into modules and that each module is a sum of coherent teaching and learning units. All courses and internships are well integrated into the curriculum and the supervision by the School of Bioscience, Technology, and Innovation guarantees for their respective quality in terms of relevance, content, and structure. The study plans are meticulously crafted to ensure a balance between theoretical knowledge and practical application, preparing graduates for various roles within the biotech and food industry.

The experts confirm that the graduates of all three degree programme under review are well prepared for entering the labour market and can find adequate jobs in Indonesia. During the discussion with the experts, AJCUI's partner from the industry/public sector confirm that the graduates have a broad scientific education, are very adaptable, and have manifold competences, which enables them to secure and excel in suitable employment opportunities.

International Mobility

Atma Jaya Catholic University of Indonesia has 68 international and 57 domestic collaborations. International collaborations relate to research and education with institutions such as Oxford University, Monash University, Northwestern University, Radboud University, and University Malaya. Domestic collaborations focus on research, community service, and education.

The International Office at Atma Jaya manages a wide range of international activities, including academic partnerships, student and faculty exchange programs, and hosting international conferences. It also supports participation in initiatives like Passage to ASEAN (P2A), the Indonesian International Student Mobility Awards (IISMA), and collaborates with networks such as the International Federation of Catholic Universities (IFCU).

Student mobility is strongly encouraged by AJCUI and SBTI, especially for outbound activities. These outbound activities include the Merdeka Belajar Kampus Merdeka (MBKM) programme, such as the Indonesian International Student Mobility Awards (IISMA)—with two biotechnology students participating in 2023—and national initiatives like the MBKM programme from the National Research and Innovation Agency. These opportunities allow students to transfer credits without needing to take a study leave.

Students' international academic mobility is explicitly supported by the Indonesian Government. For example, through Indonesian International Students Mobility Awards (IISMA), a scholarship programme from the Ministry of Higher Education, Science, and Technology starting from 2021. However, on April 29, 2025, the Ministry confirmed that IISMA will continue under a new paradigm called "Kampus Berdampak" (Impactful Campus). However, it will no longer be directly funded by the Indonesian government. Instead, universities are expected to run the programme independently — working with their own international partners and possibly involving private contributions. As clarified by the Ministry, the decision to withdraw direct funding is due to IISMA's relatively small scale and high cost. The goal now is for universities to manage the programme with external partners or sponsors.

The new policy of the Indonesian government actively supports any activities outside of the university by releasing a regulation on the Merdeka Belajar-Kampus Merdeka (MBKM), which requires the university to promote undergraduate students who want to spent part of their academic education outside AJCUI (Minister of Education and Culture Regulation Number 3, Year 2020). AJCUI recognizes the courses taken by the students outside the university based on the comparability of the intended learning outcomes. For example, in 2021, AJCUI has signed an agreement with Taylor's University: "The purpose of each student exchange would be to enable students, to take classes at, but not to pursue a degree from, the host institution. Courses passed at the host institution will normally be accepted for credit towards the degree at the student's home institution. The exchange of students will be based on the principle of reciprocity during the duration of this Agreement. On an annual basis, each Party will nominate four (4) qualified students to the other for a semester or two (2) qualified students for the period of one year". The experts consider this regulation as sufficient.

As described in the Self-Assessment Report, over the past five semesters, outbound participation from the Bachelor's degree programme Biotechnology has been consistently high, with a peak of 28 students joining in 2022. Inbound student mobility has also become a growing component of the Biotechnology programme. In 2023, 11 students participated in inbound activities, and in 2024, two more joined. These inbound students primarily came through the Pertukaran Mahasiswa Merdeka (PMM) programme and the Indonesia Cyber Education Institute (ICEI) collaboration. These programmes provide Biotechnology students and their peers from other institutions with rich opportunities for academic exchange, cross-cultural engagement, and broader perspectives in biosciences. SBTI, for example, has signed MoUs with Soonchunhyang Institute of Medi-bioscience (Korea), Catholic University of Korea, Kasetsart University, Wakayama College (Japan), and Thammasat University (Thailand). Other universities, such as UCSI University (Malaysia), National Center for Genetic Engineering and Biotechnology (BIOTEC, Thailand), and Genome Institute of Singapore (GIS) are also having a good relationship with SBTI, so that teachers and students can join mutual projects and participate in 'cross-border' field works. The following diagram shows the numbers of inbound and outbound students for the last five years.

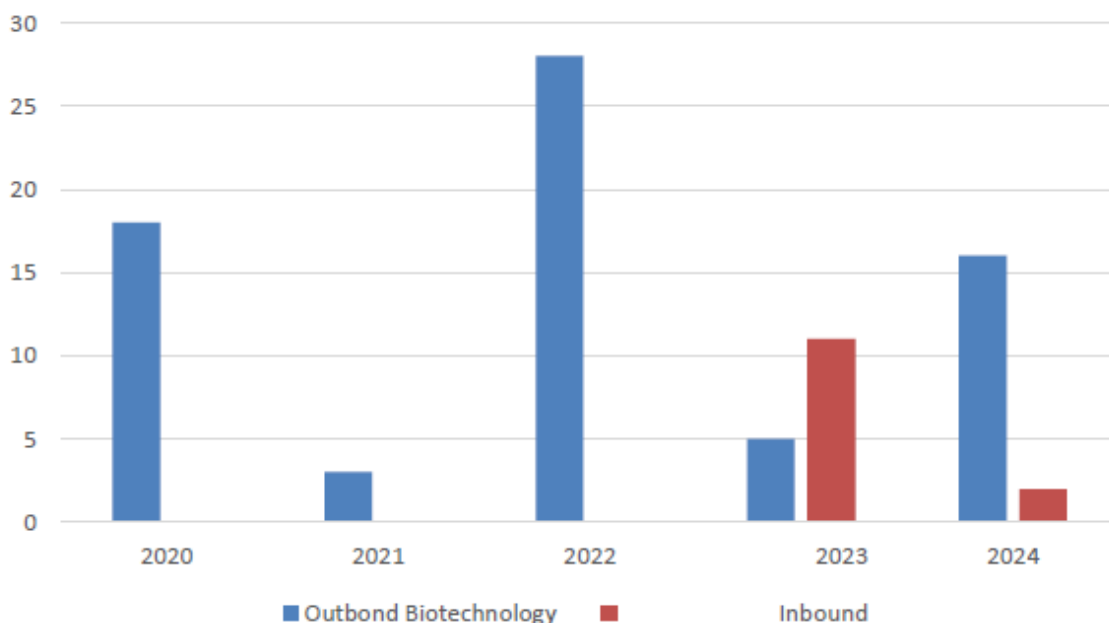


Diagram 1: Academic Mobility, Ba Biotechnology, Source: SAR AJCUI

To further strengthen research depth and expertise, a one-year student mobility programme is offered for the Master's degree programme Biotechnology. This programme starts in the third semester and involves placements at international partner institutions such as the Soonchunhyang Institute of Medi-Bio Science (SIMS) in South Korea. This opportunity enables students to engage in research activities in the field of medical biotechnology while also enrolling in relevant coursework where necessary. Up until 2024, students participating in this mobility programme have successfully conducted research activities under the supervision of both external supervisors at the host institution and internal supervisors from the Master's degree programme Biotechnology. The following diagram shows the numbers of inbound and outbound Master's students for the last five years.

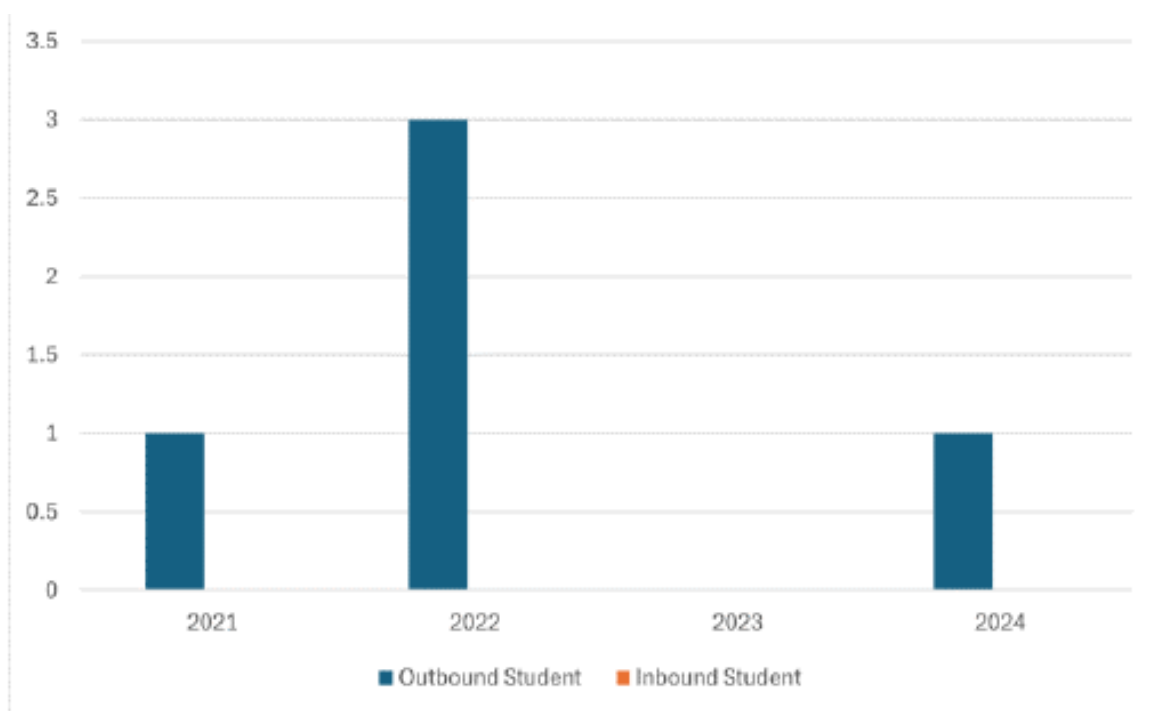


Diagram 2: Academic Mobility, Ma Biotechnology, Source: SAR AJCUI

Academic mobility is also supported in the Bachelor's degree programme Food Technology. Here, students from other Indonesian universities have participated in the *Pertukaran Mahasiswa Merdeka* programme, while international inbound activities are facilitated through short courses conducted in partnership with institutions such as Taylor's University, Malaysia, Universiti Teknologi Brunei, Faculty of Science, Thammasat University, Thailand, Soonchunhyang University, South Korea, Catholic University Korea, South Korea, and University Malaysia Pahang. In addition, the Food Technology programme has a fast-track programme (accelerated completion of the bachelor's and Master's degree in 10 semesters instead of the typical 6 years) with Università Cattolica del Sacro Cuore (UCSC), Italy. The following diagram shows the numbers of inbound and outbound food technology students for the last five years.

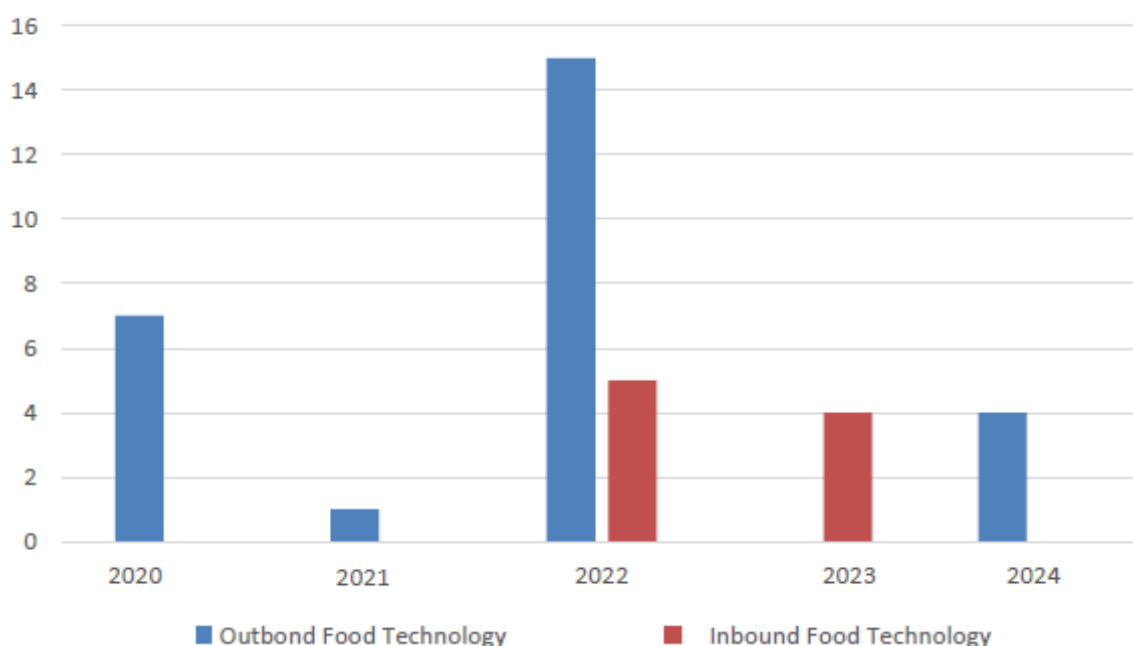


Diagram 3: Academic Mobility, Ba Food Technology, Source: SAR AJCUI

The experts see that AJCUI and SBTI are committed to promoting students' and teachers' academic mobility. 50 full scholarships per year for international students (e.g. from Malaysia, France, Germany, Korea) for covering the tuition fees are awarded by AJCUI every year to attract incoming students.

Outgoing students and are supported by the International Office and also the teachers offer advice and use their international contacts. The students confirm during the discussion with the experts that several opportunities for international academic mobility exist and they are in general satisfied with the provided support and information.

In summary, the experts appreciate the efforts to foster international mobility and support both SBTI and AJCUI to further pursuing this path.

Criterion 1.4 Admission Requirements

Evidence:

- Self-Assessment Report
- Homepage Universitas Atma Jaya: <https://www.atmajaya.ac.id/en/>
- AJCUI "Standard Acceptance Process"
- Discussions during the audit

Preliminary assessment and analysis of the experts:

The admission and selection process for prospective Bachelor's students at AJCUI is described in the "Standard Acceptance process". The admission information is publicly accessible via AJCUI's homepage.

Admissions are not limited to national students but also extend to prospective international students. International applicants follow the same admission pathway, though they are required to submit different supporting documents, such as a passport, among others.

There are two different admission tracks available for new Bachelor's students:

1. test-based track: Academic Potential Test (TPA) and English Language, Test average score for Biotechnology programme 55 and Food Technology programme 50.
2. test-free track: Eligibility is based on academic performance, specifically on the high school grades from classes X and XI. The minimum average score is ≥ 80 for Mathematics, Bahasa Indonesia, Physics, Chemistry, and Biology.

Through the Academic Potential Test (TPA), critical thinking, comprehension, and reasoning skills are assessed as foundational abilities necessary for successfully completing academic studies. Similarly, the English Language Test helps to select new students with foreign language skills in line with the university's graduation requirements for each programme. Meanwhile, for the test-exempt track, the minimum passing grade is relatively high to ensure that students admitted without tests possess above-average academic abilities.

The admission numbers for the two Bachelor's programmes are shown in the following diagram.

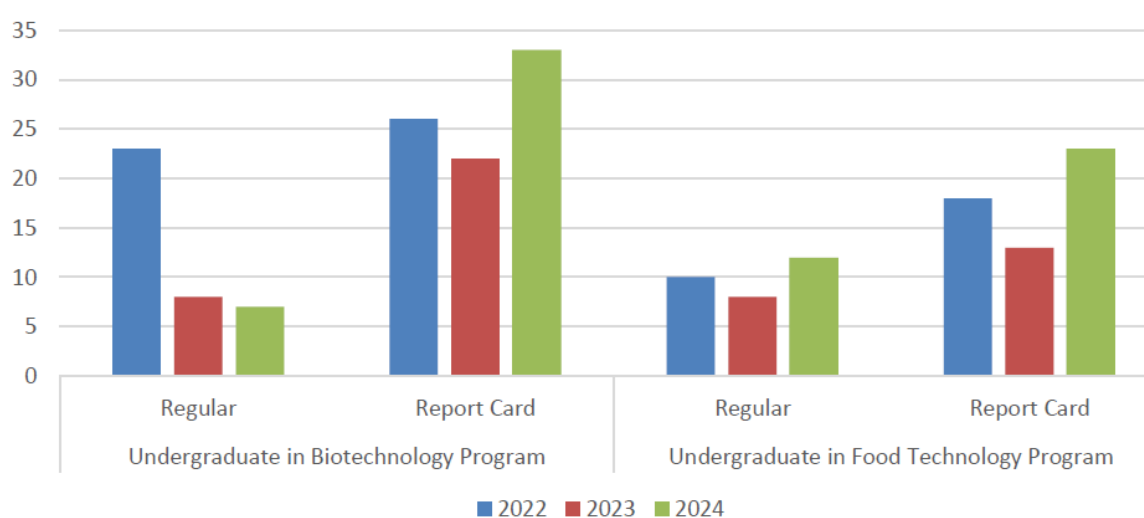


Diagram 4: Admission numbers by track Bachelor's programmes, Source: SAR AJCUI

Over the past five years, both the Biotechnology and Food Technology programmes have experienced fluctuating trends in student admissions, caused by external challenges and shifting student preferences. Interest in both programmes peaked in 2022, with Biotechnology receiving 303 applications and Food Technology 223 — reflecting strong curiosity and demand for science-based programmes during that period. However, this surge in interest did not translate into high enrolment numbers, with only 49 and 28 students respectively joining each programme that year.

The highest enrolment for both programs occurred in 2020, when 72 Biotechnology students and 53 Food Technology students enrolled, corresponding with solid application numbers and strong acceptance rates. The subsequent years (2021–2023) saw a notable decline in both applications and enrolment, particularly in 2023, where Biotechnology only enrolled 30 students and Food Technology 21. These trends were significantly influenced by the COVID-19 pandemic, which affected students' educational decisions, financial readiness, and overall access to higher education.

Both programmes showed signs of recovery in 2024. Biotechnology received 198 applications with 43 students enrolled, while Food Technology had 137 applicants and 36 enrolments. These signals suggest that awareness of the relevance of applied science programmes, particularly in biotechnology and food technology, is beginning to grow again. Continued efforts in outreach activities, programme branding, and alignment with industry needs will be key to sustaining and enhancing this recovery in the years ahead. The maximum capacity of both undergraduate programmes is an annual intake of 80 students. The details are shown in diagrams 5 + 6.

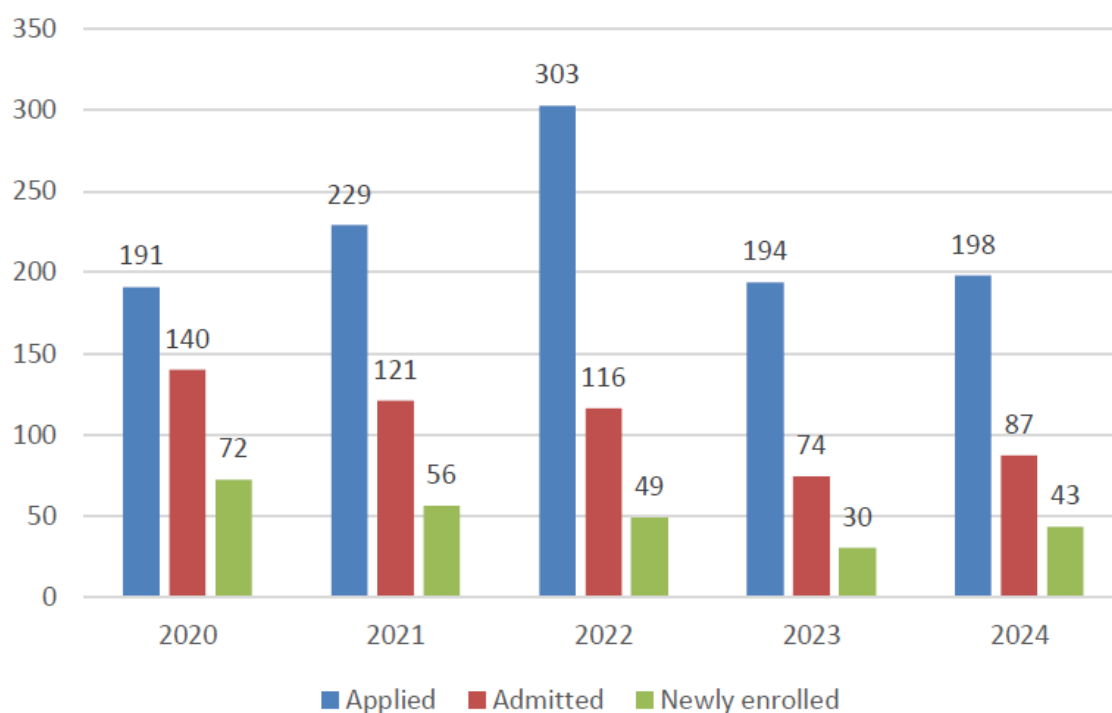


Diagram 5: Application, Admission, and Enrolment numbers Bachelor Biotechnology, Source: SAR AJCUI

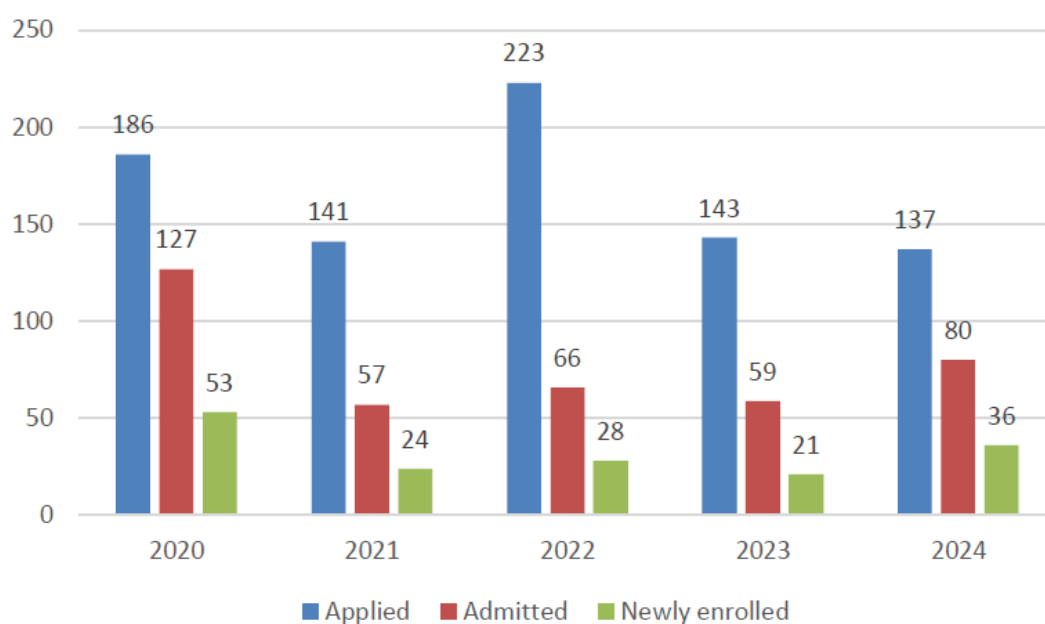


Diagram 6: Application, Admission, and Enrolment numbers Bachelor Food Technology, Source: SAR AJCUI

Undergraduate students at AJCUI have to pay tuition fees. Among universities offering a Bachelor's degree programme Food Technology or a Bachelor's degree programme Biotechnology, AJCUI is positioned in the upper-middle range in terms of tuition fees, with total costs of IDR 268 million for each undergraduate programme. This is equivalent to

tuition fees of 14.136€ for the whole programme or 1.767€ per semester. While not the most expensive, AJCUI's tuition is higher than several other private universities, suggesting a positioning that balances cost with perceived quality. The tuition fees for similar programmes ranges from IDR 329.2 million (17.365€) to IDR 111.5 million (5.881€). This wide span illustrates a wide spectrum of cost structures within food technology and biotechnology programmes in Indonesia, with AJCUI offering a competitive mid-to-high tier alternative that may appeal to students seeking both quality and value.

For the Master's degree programme Biotechnology, there are three different admission tracks:

1. Alumni track: Tailored for university alumni. Does not require Academic Potential Test and Molecular Biology Test. Admission is based on undergraduate records.
2. Regular track: Standard application. Required to pass the Academic Potential Test, Molecular Biology Test, and Interview. Passing mark is the aggregate score > 60.
3. B2B track: Designed for specific business-to-business partnerships. Candidates are employees of business partner of the university. Selections are done by the business entity with the applicants' undergraduate education background in chemistry or biology is a must.

The three different admission pathways apply to both domestic and international students, with the only difference being the document requirements to be submitted to admissions. To meet quality standards in biotechnology, particularly in molecular biology, prospective Master's students who are not graduates from biology or biotechnology programmes but have passed the selection test may participate in a matriculation programme. This programme includes laboratory activities in molecular biology. As the experts learn during the audit, the matriculation programme is designed for new master's students who lack some of the required competencies in biotechnology. These students are identified during the admission interviews and are offered to take part at the matriculation programme, which last for two weeks and is organised before the regular classes start. It includes intensive lectures and practical courses. However, this option has not been applied in recent years.

Enrolment numbers for the Master's degree programme Biotechnology has been at a record low in the last few years, with only five new students in 2023 and 2024 compared to average of 15 students from 2020 to 2023 (which is also the maximum capacity). This low enrolment numbers can be due to the COVID-19 pandemic, with low student numbers in the in undergraduate programme, resulting in a lower number of graduates. The number of new students from the business partners (B2B track) also decreased because of most of

the employees which are eligible for further education have already enrolled in the programme in the previous years. The details are depicted in the following diagram:

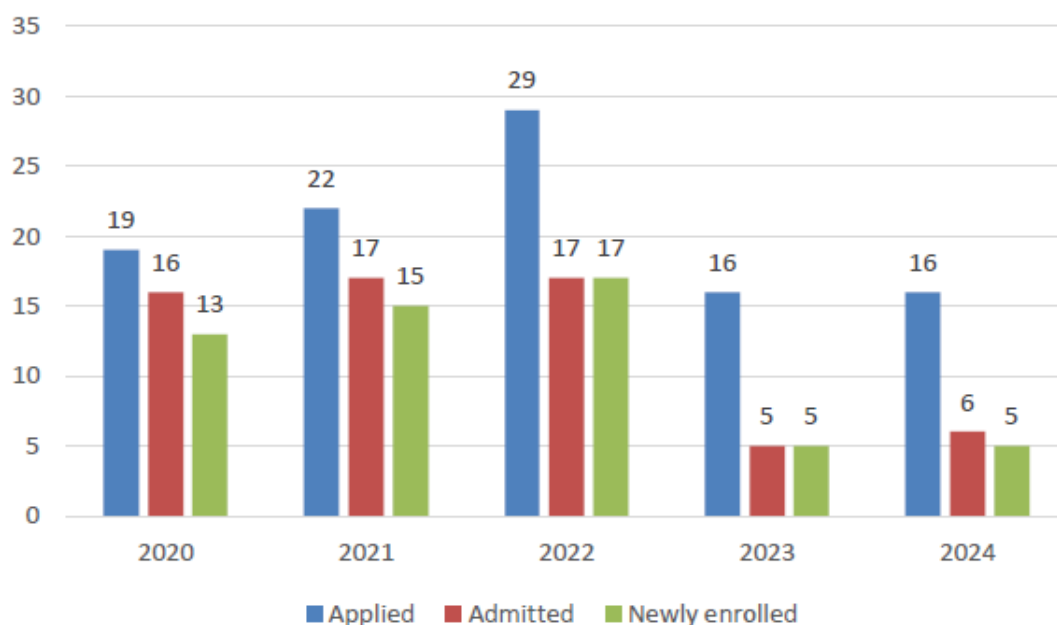


Diagram 7: Application, Admission, and Enrolment numbers Master Biotechnology, Source: SAR AJCUI

The tuition fee for the Master's degree programme Biotechnology is higher than for other graduate programmes in Biotechnology. The costs are IDR 62.45 million (3.294€) for the whole programme or 832€ per semester. However, the only similar programmes are offered by public universities. Currently there is no other similar programme offered by a university in the Jakarta metropolitan area.

The experts observe that the number of applications and enrolled students has dropped significantly in the Master's degree programme Biotechnology in the last two years. According to the programme coordinators this is mostly due to the fact that most master's students already have a job and are sent to receive a Master's degree at AJCUI by their employers. The number of potential students from the business partners has decreased because most of the employees, which are eligible for further education, have already enrolled in the programme in the previous years. The experts point out that it would be very useful to increase the number of applications and consequently of new Master's students. This could, for example, be achieved by increasing the programme's outreach to new business partners and affiliated universities. This could include hosting open days, sample lectures, and digital events, which showcase the programme and provide prospective students an opportunity to experience the academic environment at AJCUI. Additionally, the experts suggest increasing the effort to attract international students by promoting

international cooperations and exchange opportunities as well as by offering more courses in English.

With respect to the admission interview for the Master's programme, the experts point out that there should always be at least two interviewers. Having more than one interviewer in an admission interview is generally considered a best practice in higher education because it improves fairness, reliability, and the quality of decision-making. A single interviewer's judgment might be inconsistent or subjective. With multiple interviewers, perspectives are balanced—reducing the impact of gender, cultural, or personal preferences on the decision.

Additionally, the experts suggest providing applicants with an information sheet or guidelines before their admission interview. This is a smart, fair, and effective practice. Sharing standardized information or questions with every candidate helps levelling the playing field. It ensures that all applicants are evaluated under the same criteria and format—thus minimizing the risk of unconscious bias or interviewer-led deviations. This creates a more transparent and objective admissions process. When applicants know what to expect, they can better prepare for the interview.

In summary, the experts find the terms of admission to be binding and transparent. They confirm that the admission requirements support the students in achieving the intended learning outcomes.

Criterion 1.5 Workload and Credits

Evidence:

- Self-Assessment Report
- Module Handbooks
- Study Plans
- Discussions during the audit.

Preliminary assessment and analysis of the experts:

All degree programmes at AJCUI must follow the Indonesian credit system (CSU) regulations. Each Indonesian credit point is distributed between guided and independent learning activities, as well as between face-to-face activities, laboratory activities/practicum, and project and field practice. According to the National Standards for Higher Education (SNPT), the learning activities are lectures, responses and tutorials, seminars, and practicum.

For regular classes in the Bachelor's and Master's programmes, 1 CSU of academic load for the undergraduate programme is equivalent to 3 academic hours, which equals 170 minutes. This includes:

- 50 minutes of scheduled contact with the teaching staff in learning activities,
- 60 minutes of structured activities related to lectures, such as doing the assignments, writing papers, or studying literature,
- 60 minutes of independent activities outside the classroom to obtain a better understanding of the subject matters and to prepare academic assignments such as reading references.

For lab work, final project, fieldwork, and other similar activities, 1 CSU is equivalent to 170 minutes a week of students' activities.

In the first and second semesters, Bachelor's students may take a maximum of 20 credits in accordance with the guidelines of Permendikbud No. 3/2020 on the National Standards for Higher Education. From the third to the sixth semester, the credit load ranges between 19 and 23 CSU. In the seventh and eighth semesters, students typically take between 7 and 15 CSU to accommodate the community service, internship, and Bachelor's thesis.

According to the Self-Assessment Report, AJCUI uses a fixed conversion factor of 1.5 between CSU and ECTS points. The reasoning behind this calculation is that one CSU equals 170 minutes (2.83 hours). As the semester lasts for 16 weeks $2.83 \times 16 = 45.28$ hours per semester. If 30 hours of students' workload are required for one ECTS point, this total workload is then divided by 30 to get the conversion factor: $45.28 / 30 = 1.5$.

The experts point out that there can be no fixed conversion rate between CSU and ECTS points. Therefore, the ECTS points need to be calculated separately for each course. This is necessary, because the time students need for self-studies is different for each course. Especially the courses with the high share of self-studies (Master's and Bachelor's thesis) show, that the students spend much more time on their final projects than is currently reflected in the awarded ECTS points. AJCUI should follow the ECTS Users' Guide to determine the students' total workload. As described in the ECTS Users' Guide, the estimation of students' workload should include all learning activities. This is the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations). In other words, a seminar and a lecture may require the same number of contact hours, but one may require significantly greater workload than the other because of differing amounts of independent preparation by students.

As 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: some progress more quickly, while others progress more slowly. Therefore, the workload estimate should be based on the time an “average student” spends on self-studies and preparation for classes and exams. The initial estimation should then be verified via students’ satisfaction questionnaires.

The experts stress that the need to verify the students’ total workload, especially the time spent on self-studies, for each course separately is most apparent when looking at the theses. In addition, it needs to be defined how many hours of students’ workload are required for one ECTS points.

For example, for the Master’s thesis 6 CSU are awarded (which is a fixed value given by the Ministry), this results in only 9 ECTS points if the fixed conversion factor of 1.5 is applied. In reality students spend almost half the semester on the Master’s thesis, so almost 30 ECTS should be awarded and not only 9. The problem is similar for the Bachelor’s thesis, here also 6 SKS and consequently 9 ECTS points are awarded. However, undergraduate students spend at least 10 weeks to work full time on the final project, which would result in a workload of around 400 hours. If divided by 30, then around 13 ECTS points should be awarded.

The experts stress that the need to verify the students’ total workload, especially the time spent on self-studies, for each course separately is most apparent when looking at the theses.

According to the programme coordinators the internship lasts at least for 23 working days. Given a working time of 8 hours per day, then the students’ total workload is 184 hours. Consequently $184 / 30 = 6$ ECTS points should be awarded. The requirement of a minimum of 23 days and the resulting workload should be mentioned in the respective module description. Currently a range in the length of 7 to 21 weeks is mentioned in the module description, which is misleading. If students voluntarily prolong the internship, they will usually not receive more credits. However, the MBKM programme gives students also the opportunity to conduct an additional internship for which they can receive credits.

The experts expect AJCUI to verify the students’ total workload and to correctly calculate the awarded ECTS points for each course. This could e.g. be done by including a respective question in the satisfaction questionnaires. In any case, AJCUI must make sure that the actual workload of the students and the awarded ECTS credits correspond with each other and make that information transparent in the module descriptions, the Transcript of Records, and the study plans.

Criterion 1.6 Didactic and Teaching Methodology
--

Evidence:

- Self-Assessment Report
- Discussions during the audit.

Preliminary assessment and analysis of the experts:

AJCUI has the goal to support the transition from a teacher-centered to a student-oriented teaching method, in order to involve all students in the learning process and to develop their thinking and analytical skills. In addition, blended learning is introduced as a modern way of teaching. The use of e-learning elements in the learning process allows for class activity without physical attendance.

Both Bachelor's programmes make use of several different educational methods for each course such as practical laboratory work, field trips, lectures, internship, Community Service, and Bachelor's thesis.

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

In the Master's programme, lectures, seminars, case-based studies, small group discussions, and independent academic research activities are conducted. Almost all courses include student-centred/active learning in the form of case-based lectures, small group discussion and presentations, which involves students individually or in groups to actively communicate their ideas by explaining or describing the analysis of case studies, reports, or other specific presentation topics systematically. This method is also used for disseminating students' research proposals and theses.

Problem and project-based learning and a student-centred teaching approach are applied in most of the advanced courses. These methods comprise several steps, which requires students to gather information, solve problems, make reports, and discuss and present the results. These teaching methods focus on analysing problems and acquiring the skills to draw conclusions based on evidence. In addition, students should learn to work together in a team, to design their learning goals, and to take responsibility for their implementation.

Students are given the opportunity to develop their own products through hands-on projects, culminating in events like the Food Festival and the Mushroom Festival. As part of the project, students can gain practical experience in marketing, promoting their

products, and engaging with the public. These projects are designed to not only enhance students' entrepreneurial skills but also to provide valuable insights into product development and marketing.

Lectures are enhanced with field visits to provide students with practical insights and real-world experience, either on-site or virtually. This should help to bridge the gap between theory and practice. For instance, biotechnology students visit the Polytechnic of Agricultural Engineering Indonesia for the Plant Biotechnology and Sustainable Agriculture course. Additionally, food technology students participate in on-site visits to food processing facilities, such as PT Mane Indonesia, where they observe production processes and quality control measures. Virtual field trips are also available, such as a company visit to PT Amerta Indah Otsuka.

The experts note positively that AJCUI has just recently issued an AI guideline. This is very useful, because it provides clarity, consistency, and ethical direction for students, faculty, and staff. Additionally, teaching students the correct AI use is important to give them the tools, knowledge, and mindset to thrive in a digital, AI-augmented world. This way, students and teachers know what constitutes acceptable vs. inappropriate use—e.g. when it is allowed to use AI for brainstorming vs. when it counts as plagiarism or academic misconduct.

In summary, the expert group judges the teaching methods and instruments to be suitable to support the students in achieving the intended learning outcomes. In addition, they confirm that the study concepts of all pharmacy programmes comprise a variety of teaching and learning forms as well as practical parts that are adapted to the respective subject culture and study format. It actively involves students in the design of teaching and learning processes (student-centred teaching and learning).

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

The experts appreciate that AJCUI has reworded PLO4 and PLO5 of the master's programme Biotechnology as follows:

PLO-4: Able to formulate and solve health, environmental, and agricultural problems by applying biotechnology.

PLO-5: Able to conduct and manage research and development in the field of biotechnology in innovative, useful, and verifiable way."

However, the experts suggest emphasising that complex and advanced problems should be discussed in a Master's programme by adding this to PLO4:

“Able to formulate and solve **advanced** health, environmental, and agricultural problems by applying biotechnology.”

The experts point out that AJCUI needs to verify that the Bachelor’s programme Biotechnology already includes engineering topics such measurement and control technology, fundamentals of process engineering, bioprocess engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing, and computer/AI-based process improvement (e.g., DOE). For example, AJCUI can provide a table showing which engineering topic is treated to what extent in what module. The respective module descriptions also need to make transparent that these topics are included.

The experts thank AJCUI for explaining that a 3-credit Biostatistics course is already offered in the Bachelor’s programme Biotechnology. However, the employers were quite explicit in their comment that, students’ knowledge in statistics should be improved. To this end, AJCUI should verify the learning outcomes of the Biostatistics course and make sure that the requirements of the job market are achieved.

The experts are glad to read that the Master Programme in Biotechnology will ensure that admission interviews are conducted by two interviewers and will issue an interview guideline by the end of 2025.

The experts understand that AJCUI has established a formal mechanism for calculating ECTS points, which state that one Indonesian credit (SKS) equals 1.5 ECTS point (30 hours). This provision is consistent with the Regulation of the Minister of Higher Education, Science, and Technology of the Republic of Indonesia), which stipulates that one SKS is equivalent to 45 hours of student workload.”

However, the experts point out that the students’ actual workload needs to be verified for each course not only for the final project. Additionally, AJCUI needs to follow the ECTS Users’ Guide when calculating the ECTS points. To this end, AJCUI should ask the students, e.g. by placing a respective question in the satisfaction surveys, how high their workload really is. This information is needed if AJCUI wants to award the ECTS points correctly. Additionally, the information that 30 hours of students’ workload are required for one ECTS point needs to be made transparent in the programme specific documents.

The experts consider criterion 1 to be mostly fulfilled.

2. Exams: System, Concept and Organisation

Criterion 2 Exams: System, Concept and Organisation
--

Evidence:

- Self-Assessment Report
- Module handbooks
- Student Guidebook
- Academic Calendar
- Samples of student's work (projects, exams and thesis)
- Discussions during the audit.

Preliminary assessment and analysis of the experts:

Prior to the start of each semester, the course coordinators, in collaboration with their teaching teams, prepare and evaluate assignment designs and scoring rubrics alongside the course plan (Rencana Pembelajaran Semester, RPS). Various forms of assessment, including assignments (e.g. presentations, papers, case studies), mid-term exams, and final exams, are developed to measure the achievement of Programme Learning Outcomes (PLOs) for each course. A course contract detailing assessment and grading requirements is then distributed to students at the first class meeting, and both the lecturer and a student representative sign the document to indicate agreement on course plans, assessment criteria, and course regulations.

In order to inform students about their learning progress and to avoid the failure of studies, a mechanism is in place to warn students if their grades are not sufficient. For example, a first warning is given in the form of a verbal reprimand by the students' advisor if the GPA is below 2.0 at the end of the first semester.

Starting from the 2021 academic year, the Faculty of Biotechnology removed course prerequisites to prevent students from extending their study duration due to failing prerequisites. This decision was made following discussions among the Dean, Heads of Departments, and faculty members.

However, provisions are in place for students who are unable to attend due to unavoidable circumstances, such as illness, family emergencies, or participation in valuable personal development activities. Students can request exemption from attendance requirements by providing supporting documentation, such as a doctor's note. Historically, the number of students barred from final exams due to attendance issues has been minimal.

If a student fails a mid-term or final exam, the opportunity to have a make-up exam is usually given within the same semester. In practice, teachers may choose to provide either a make-up exam or an additional assignment or project that allows students to earn extra credits to improve their overall course grade.

In cases where students miss a scheduled exam due to illness or other justified reasons (e.g., family emergency, personal hardship), they may apply for a make-up exam by submitting valid documentation (such as a doctor's note). These cases are handled in accordance with university's policy and are coordinated by the respective teacher and the Head of Department. If the student is unable to meet the course requirements through these measures and fails the overall course, they are required to retake the whole course in a coming semester when it is next offered.

The Special Remedial Exam (SRE) mechanism allows students nearing thesis defence or final project completion to address any missing course requirements without delaying graduation. For undergraduates, up to two courses can be requested if still within the study period, and up to five courses if the study period has ended. Master's students can apply for the SRE only after their study period has expired, with a maximum of two courses. The total credits, including the SRE, must not exceed 24 per semester for undergraduates and 14 for Master's programmes. From 2022-2024, only one student from the Master in Biotechnology programme has required this mechanism to prevent delaying graduation.

Teachers are responsible for providing assessment results and allowing students to appeal if they have objections to their grades. Students may appeal directly to the teacher before final grades are announced. If the grade has already been issued, students can request a revision by contacting the teacher, who will complete a grade revision form.

To ensure that students have sufficient time for exam preparation, the academic calendar is published yearly through MyAtma. The detailed exam schedule is announced to students and lecturers 1.5-2 months before the exam period via student WhatsApp groups and a mailing list for all faculty members. Students' feedback on exam preparation time is collected through student forums and surveys.

Undergraduate students are required to complete the internship (field practise) in semester 7 to apply their abilities in real-world settings. An internship typically lasts for one month and can be conducted in various types of companies. The goal is to ensure that students not only possess theoretical knowledge but also gain practical experience in professional environments. The internship coordinator develops a guideline in coordination with the Heads of Department, which is communicated to students and faculty members.

During the internship, students are supervised by two persons: one external supervisor from the company or institution hosting the student and one internal supervisor, who is a faculty member in School of Bioscience, Technology, and Innovation. While the external supervisor is responsible for guiding the students during practical work in the host institution, the internal supervisor monitors internship progress through a weekly report submitted by the student. To demonstrate what they have learned during the internship, students are required to prepare a report describing the company or organisation profile, a literature review, and the internship activities. After the report has been approved by both the external and internal supervisors, students present it to the internal supervisor, followed by a question-and-answer session. The final grade is calculated based on assessment from both the external and internal supervisors.

Every Bachelor's and Master's student at AJCUI is required to do a final thesis. Prior to the actual research work, students need to prepare a research proposal, which is submitted to the Thesis Committee. Students are asked to find a suitable topic by discussing with the lecturers, developing own ideas, or joining a lecturer's research project. The process begins in the 7th semester for the Bachelor's students, when they select a research topic and develop a proposal under the guidance of one or two faculty supervisors. Once the proposal is approved, students proceed with their research in the 8th semester, working independently while receiving regular mentorship from their supervisors.

The assessment process includes three stages: proposal, seminar, and thesis defence. In the proposal stage, students undergo two exams: mid-term exam and final exam. In the seminar, students write a two-page paper and present their research progress and preliminary findings to other students, followed by a Q&A (Question and Answer) session. The thesis defence follows the completion of the research activities, when students submit a written thesis and undergo an anti-plagiarism check. During the defence, students present their findings to a panel comprising of their supervisors and two faculty examiners, followed by a Q&A session. The final grade is calculated based on assessments from the supervisors, the presentation, the written thesis, and the defence performance.

The Master's thesis is designed to advance research capabilities and foster innovative contributions to biotechnology. The process comprises three main stages: proposal, seminar, and thesis defence, with an additional sidang komisi (Commission Review) stage to certify readiness for the defence. The process begins with students developing a proposal in consultation with two supervisors, which is approved after the proposal defence. Master's students conduct their research over one or two semesters, emphasising originality and applicability. The seminar provides an opportunity for students to present their progress and receive critical feedback from faculty members and other students, ensuring that the research meets high academic and professional standards.

Before the thesis defence, students undergo a review, where a faculty panel, comprised of the thesis supervisors, assesses the research to certify that the student is ready for formal defence. The thesis defence involves submitting a written thesis, undergoing an anti-plagiarism check, and presenting findings to a panel comprising of the supervisors and two other faculty members. The final grade is based on the assessment from the supervisor, the written thesis, the presentation, and the ability to respond to questions in the defence.

Students from each study program are required to attend at least 75% of all class meetings from the beginning of the semester. If the attendance of lectures is less than 75%, students are not entitled to take the final exam (UAS).

The grading follows the following table:

Numerical Value Grade Range	Letter Values Letter Grade	Equivalent Equivalent	Predicate Predicate / Grade Description
80 – 100	A	4,00	Excellent
75 – 79	A -	3,70	Good
71 – 74	B+	3,30	
67 – 70	B	3,00	
63 – 66	B -	2,70	Sufficient
59 – 62	C+	2,30	
55 – 58	C	2,00	
45 – 54	D	1,00*	Less /Unsatisfactory
< 45	E	0,00*	Fail/File
* Not counted in GPA (CGPA)			

Table 1: Grading Scheme, Source: SAR AJCUI

The experts also inspect a sample of examination papers and final theses and are overall satisfied with the general quality of the samples.

Bachelor's students need a GPA of at least 2.00 and Master's students of at least 3.00 for graduation. In addition, Bachelor's and Master's students need to pass an English proficiency test (TOEFL, TOEIC, ES) with a defined minimum score.

In summary, the experts confirm that the different forms of examination used are competence-oriented and are suitable overall for verifying the achievement of the intended learning outcomes as specified in the respective module descriptions. The form of examination is determined individually for each course and published in the respective module description. The forms of examination are based on the main content of the modules, and the level is appropriate for the respective degree programme.

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

AJCUI does not comment on this criterion in its statement.

The experts consider criterion 2 to be fulfilled.

3. Resources

Criterion 3.1 Staff and Staff Development
--

Evidence:

- Self-Assessment Report
- Staff handbooks
- Study plans
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the experts:

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

Over the past three years up to the present a total of 36 academic staff has been regularly involved in teaching in the three programmes. This includes 20 homebase lecturers, 14 non-homebase lecturers (lecturers from other faculties within Atma Jaya Catholic University of Indonesia), and 2 honorary lecturers. Homebase lecturers are permanent academic staff officially registered under the study programme in the national higher education database managed by the Ministry of Education. Non-homebase lecturers are permanent academic staff from other faculties who are assigned to teach courses in the study programmes based on their expertise. For example, lecturers from the Faculty of Engineering are assigned to teach Calculus, which is relevant to their field. Honorary lecturers are professionals or academics from industry, government institutions, or other universities who possess specific expertise relevant to certain courses not covered by the academic staff within AJCUI. Among the homebase teachers, there are two full professors,

three associate professors, and 15 assistant professors (data from 2024). The share of academic staff holding a doctoral degree (PhD) has ranged from 57% to 60% over the past three years, compared to those holding a Master's degree.

Staff-to-student ratio is planned annually by the faculty, which is then reported to the university to decide the quota of first-year student intake for the study programme. This plan is made under several considerations, such as the current number of staff and students, and the capacity of teaching and research laboratories. The ratios of teachers to students in 2024 were 1:5.05 for the Bachelor's degree programme Biotechnology programme, 1:4.26 for the Bachelor's degree programme Food Technology, and 1:1.23 for the Master's degree programme Biotechnology.

All members of the teaching staff are obliged to be involved in teaching, research, community service, and administration. As the experts learn during the audit, all teachers have a workload between 12 and 16 credits per semester (one credit equals 170 minutes of activities per week). However, the workload can be distributed differently between the three areas from teacher to teacher.

The teaching staff's promotion to a higher academic position is based on several factors, such as achievement in teaching, research (publications), and community service activities.

The experts discuss with AJCUI's management, how new staff members are recruited. They learn that every year the faculties and departments announce their vacancies to AJCUI's management. Since AJCUI is a private university, they can decide themselves what staff members to hire. One way to recruit new teachers is to hire promising Master's graduates as teachers and support them to join PhD programmes – either in Indonesia or abroad. As the experts learn during the audit, salaries paid by AJCUI are higher than the standards for university teachers at public universities in Indonesia. For this reason, AJCUI receives a lot of applications from qualified academics if they announce a vacancy.

AJUIC does hire lecturers who do not yet hold a PhD, although a doctoral degree is preferred and strongly encouraged. AJUIC sometimes hires lecturers who have completed a Master's degree, with the intention of supporting them to pursue a doctoral degree later on. The university provides financial assistance for PhD studies.

Recruitment of academic and non-academic staff members is managed by the Biro Sumber Daya Manusia (BSDM) or Bureau of Human Capital at the university level. BSDM places job advertisements in the mass media and internally. BSDM receives incoming applications and forwards eligible applications to the respective Dean, who invites the suitable candidates for an interview.

In summary, the experts confirm that the composition, scientific orientation and qualification of the teaching staff are suitable for successfully implementing and sustaining the degree programmes.

The experts are impressed by the motivation and dedication of the teachers; this is one of the strong points of the degree programmes.

Staff Development

AJCUI encourages the training of its academic and technical staff, so it has developed a programme for improving the didactic abilities and teaching methods. One part of the capacity-building programme focuses on subject-specific skills (to keep up with current developments and trends in sciences), whereas other training courses are intended to further improve the teachers' didactic skills and to introduce new teaching methods (e.g. blended learning).

The Bureau of Human Capital (BSDM) provides training opportunities for every department at AJCUI, including internal and external training, such as management skill training, English lessons, or administrative service training. The BSDM provides general skills training for all support staff; specific skills training is conducted especially for laboratory staff. For the laboratory staff, laboratory skills training, especially for maintaining and running advanced machines are given to new staff, including external laboratory skill training. The academic staff development aims at providing the opportunities for the academic staff to improve their competences and updating their knowledge in their field of expertise.

All lecturers who begin their teaching careers at AJCUI will undergo an orientation programme organised by AJCUI called "Prajabatan," which includes various teaching techniques, workshops, and practical teaching exercises conducted in front of a class. Additionally, the government offers the mandatory Programme for the Development and Enrichment of Basic Instructional Techniques (Program Pengembangan Keterampilan Dasar Teknik Instruksional – PEKERTI) to support lecturers in enhancing their professional competence and instructional skills in their functional positions.

All teachers at AJCUI are obligated to attend the lecturer certification programme held by the Directorate General of Higher Education (Direktorat Jenderal Pendidikan Tinggi Ditjen, DIKTI). An official teaching certificate is issued after the faculty member has completed the certification process.

Moreover, lecturers are provided with pedagogical training and development programmes such as Pelatihan Keterampilan Teknik Instruksional (PEKERTI) or Basic Instructional Technique Skills, particularly for junior lecturers, and the Applied Approach (AA) for both junior and senior lecturers. These programmes are facilitated by BSDM (Bureau of Human

Capital) and Lembaga Inovasi Pendidikan dan Pembelajaran (LIPP) or Institute for Educational and Learning Innovation. LIPP also provides training for e-learning and teaching material writing programmes.

Annually, the SBTI sends around 10% of its academic staff to participate in research projects or international symposia at reputable overseas institutions and associations, including Singapore, Thailand, Malaysia, India, Taiwan, the Philippines, Japan, and the USA. All seminar, workshop, and training activities undertaken by the academic staff are recorded in the Atma Jaya Performance Management System (SEKATA).

The departments and faculties facilitate the staff development by enabling them to participate in national and international seminars and conferences. Sabbatical leaves are also possible.

The experts discuss with the members of the teaching staff the opportunities to develop their personal skills and learn that the teachers are satisfied with the internal qualification programme at AJCUI.

Overall, the experts confirm that AJCUI offers sufficient support mechanisms and opportunities for members of the teaching staff who wish to further develop their professional and teaching skills.

Criterion 3.2 Student Support and Student Services

Evidence:

- Self-Assessment Report
- Discussions during the audit.

Preliminary assessment and analysis of the experts:

AJCUI offers a comprehensive advisory system for all students. At the start of the first semester, every student is assigned to an academic advisor. Each academic advisor is a member of the academic staff and is responsible for several students from her or his classes. She or he is a student's first port of call for advice or support on academic or personal matters.

The role of the academic advisor is to help the students with the process of orientation during the first semesters, the introduction to academic life and the university's community. They also offer general academic advice, make suggestions regarding relevant careers and skills development and help if there are problems with other teachers. This guidance includes, among others: (1) directing students in determining the courses and credit load to be taken, (2) helping to solve students' academic and social problems, (3) monitoring the progress of studies, including the thesis, and (4) taking anticipatory steps

and/or giving consideration to students who are in danger of dropping out of studies. The students confirm during the discussion with the experts that they all have an academic advisor.

At the University level, Campus Ministry and Atma Jaya Pastoral provide religious programmes and psychological support for students experiencing difficulties during their studies.

The Bureau of Students, Alumni, and Student Career provides training and workshops for co-curricular and soft skills development (leadership training programmes, writing), facilitates fresh graduates in applying for job positions, and holds a job fair twice a year. Under this Bureau, there is Career Development Center, which provide a range of services to support the career journeys of AJCUI students and alumni. Discover various compelling opportunities for full-time job and internships, career seminars and workshop, and educational resources designed to enhance your insights into the world of careers.

In addition, there are student organizations that are also formed at the Faculty level such as the Student Senate, Science Club, Everest Nature and Environment Explorers Association, Microbes, and I-Club.

All students at AJCUI have access to the digital academic portal (myAtma), which includes information on the students' profiles (student history, study plan, academic transcript and grade point average/GPA, lecturer evaluation, course list).

In general, students stress that the teachers are open minded and communicate well with them and take their opinions and suggestions into account and changes are implemented if necessary.

The experts notice the good and trustful relationship between the students and the teaching staff; there are enough resources available to provide individual assistance, advice and support for all students. The support system helps the students to achieve the intended learning outcomes and to complete their studies successfully and without delay. The students are well informed about the services available to them.

Criterion 3.3 Funds and equipment
--

Evidence:

- Self-Assessment Report
- Visitation of participating institutes and laboratories
- Discussions during the audit.

Preliminary assessment and analysis of the experts:

As a private University, AJCUI manages its finances independently. Around 80 % of the income comes from tuition fees the rest from donations, alumni contributions, research grants, and collaborations with companies and international institutions. Tuition fees are redistributed among the faculties, because some programme like biotechnology are more expensive than others (e.g. economics and law).

Funds for the implementation of the study programmes at the School of Bioscience, Technology, and Innovation are allocated based on the operational plan made by the faculty leadership based on input from teachers, administrative staff, and students. This budget is submitted to the University's management to obtain approval from the foundation. In 2024, SBTI had a budget of € 644,584.93 for educational purposes, laboratory and infrastructure investment, and research activities.

Teachers from AJCUI can apply for additional research funding from the Indonesian Ministry of Education, Culture, Research, and Technology. Academic staff are encouraged to apply for competitive research grants funded by the ministry through the Direktorat Jenderal Pendidikan Tinggi (Ditjen Dikti) and BRIN (Badan Riset dan Inovasi Nasional). These schemes are open to lecturers from both public and private institutions. In addition, there are several cooperations with industrial partners.

SBTI has eight research and two teaching laboratories. The research laboratories include Biochemical and Enzyme Technology Laboratory, Cell and Tissue Culture Laboratory, Microbiology and Fermentation Technology Laboratory, DNA Technology and Bioinformatics Laboratory, Food Microbiology Laboratory, Food Processing Laboratory, Food Chemistry Laboratory, and Food Molecular Laboratory. Students who are working on their thesis projects are given the opportunity to work in these laboratories directly under the supervision of a laboratory technician. Additionally, there are two teaching laboratories with a capacity of 120 students each.

AJCUI has also six research centres:

Centre for Community Development Studies (PKPM)

PKPM focuses on social problems in urban areas. The studies conducted ranged from the issue of children who need special protection, reproductive health, and sexuality (adolescents in particular), education and learning, population and employment, and gender issues).

Centre for Language and Cultural Studies (PKBB)

PKBB has a vision to become a centre of excellence in the fields of linguistics, language teaching, and culture. Therefore, this centre carries out the main activities of (i) language and culture research, (ii) organizing seminars, conferences and other scientific meetings as well as training related to linguistics, language and culture teaching, (iii) publishing books and working papers on the theme of linguistics, language teaching, and culture.

Center for Ethical Development (PPE)

This centre has competence in terms of developing the teaching of philosophy and ethics as well as multiculturalism within Atma Jaya University. In addition, this centre has competence in terms of developing philosophical and ethical studies on ethical issues that develop in society, especially medical ethics, political ethics and business ethics.

HIV-AIDS Research Center - Center of Excellence for Health Policy and Social Innovation (PPH PUK2IS)

Focus attention on issues related to HIV/AIDS issues, especially in vulnerable and marginalized communities (street children, sex workers, women and children's groups). Basically, the centre has competence in terms of training and workshops in order to build research capacity that is able to contribute to the quality of interventions. The establishment of this centre is a follow-up to the collaboration between Atma Jaya University and the University of Illinois at Chicago (UIC) regarding the development of research in the field of HIV/AIDS.

Community Empowerment Center (PPM)

This centre is responsible for community service implementation, which is typically deals with issues such as the manufacture of clean water, the development of green pharmacies, and the development of pre-school programs. The centre also offers various courses that are affordable for the lower middle class, such as taxation courses, brevet etc. PPM is also responsible for assisting villages with the basic concepts of entrepreneurship.

Institute of Public Policy (IPP)

The goal is to make a high-quality contribution to the discourse on public policy through research and publication, evaluation, as well as discussion and consultation with experts and practitioners. IPPs also want to bridge public policy, the private sector, and universities through the procurement of conferences and seminars. Researchers at IPP are currently focusing their activities on the transformations triggered by the Fourth Industrial Revolution or "Industry 4.0" in various fields, such as biotechnology, robotics, artificial intelligence, and data science.

Intellectual Property Rights Center (SHKI)

SHKI was established to deal with the protection of intellectual works and rights. This includes assisting the academic community in the process of obtaining IPR; spurring efforts to commercialize IPR products; and implementing a technology transfer programme from research activities.

During the onsite visit at AJCUI the experts also visit the teaching as well as the research laboratories for biotechnology and food technology. They see that SBTI provides an adequate infrastructure with very well maintained, spacious, and modern laboratories. Additionally, the safety measures are up-to-date and are aligned with international standards. Nevertheless, there is some room for improvement. As mentioned before (Criterion 1.3), the experts suggest increasing the engineering content in the curriculum of the Bachelor's degree programme Biotechnology. In order to offer courses in areas such as measurement and control technology, fundamentals of process engineering, bio process engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing, and computer/AI based process improvement (e.g. DOE), SBTI should provide the necessary technical equipment so that students can get hands-on experiences with modern instruments. As the Faculty of Biotechnology has just recently been joined with the Faculty of Technology, some of the required technical equipment and facilities might already be available, otherwise it should be purchased. In particular, the experts recommend purchasing a modern NGS DNA sequencer. DNA sequencing is an important part of modern diagnostics, what was also mentioned by the partners from the industry/private sector. Of course, the principles are the basis, however, it is also important to show the students how modern devices look like and how they are operated. Additionally, some of the instruments (e.g. the autoclaves) are quite old and should be replaced step-by-step. It is important for the students' education to have state-of-the art equipment, which is also later used in a professional environment.

With respect to the Bachelor's degree programme Food Technology the experts stress that it is necessary to have a food processing pilot plant, which is a very valuable facility for exposing students to scaled-down versions of industrial equipment. It helps to provide hands-on experience for students in food processing technologies and serves a bridge between classroom theory, laboratory analysis, and industrial practice. Additionally, there should be instruments for milling, extrusion, fermentation, drying, freezing, canning, and pasteurization of the different foods (dairy, meat, fish etc.). Students should get hands-on experience with these areas and topics such as food processing and thermal process engineering should be included in the curriculum (see Criterion 1.3). It is important that students in a food technology study programme should have access to hands-on food processing instruments and equipment that mirror real-world industry applications and cover key operations such as preparation, transformation, preservation, and packaging.

These tools not only allow practice with basic techniques but also expose students to advanced food engineering processes. The expert group understands that modern equipment for all areas of laboratory work, sufficient in terms of quality and quantity, is not readily available and that the funds are limited. For this reason, the experts expect AJCUI to provide a concept, a reliable financial plan, and a timetable for stepwise increasing and the technical equipment in the area of food processing technology and for setting up a technicum with a pilot plant.

The students express their satisfaction with the library and the available literature. The central library that offers direct access to international literature, scientific journals, and publications e.g. via SpringerLink and Elsevier. From the students' point of view, there is sufficient access to current international literature and databases, and a remote access is possible. However, the students explicitly ask for longer opening hours in the evening. Currently, the library closes at 4:00 pm. The experts support this wish, because many students have classes or labs until 4:00 pm. Additionally evening is often when students prefer to focus on coursework, group projects, or exam prep. And group projects usually happen after class hours, and the library is one of the best spaces for quiet teamwork with access to resources.

Moreover, the experts notice that there are only a few standard teaching books in the library and that most of them are outdated. Even if the current literature is available as e-books, the experts think that it would be useful to have at least one or two copies of the current textbooks in all the relevant sciences. This ensure that all students can access the core materials, regardless of their digital access.

The experts conclude that the available funds, the technical equipment, and the infrastructure (laboratories, library, seminar rooms etc.) comply with the requirements for sustaining the degree programmes.

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

The experts appreciate that starting 5 November 2025, the BSD campus library will extend its opening hours to Monday – Friday from 08:00 to 21:00 and Saturday from 08:00 to 14:00. This information has been officially communicated through the University Library's Instagram account and various communication media.

The experts understand that the focus of the University's Library is on e-books. Nevertheless, a university library should also provide has at least one or two copies of the current main textbooks in all relevant sciences.

The experts are glad the AJCUI recognises the need for the Bachelor's programme Food Technology to expand students' hands-on experience by developing a food processing pilot plant in collaboration with other universities with a pilot plant. The experts expect to receive a concept and financial plan on how to establish a food processing pilot plant and the instruments for milling, extrusion, fermentation, drying, freezing, canning, and pasteurization of the different foods (dairy, meat, fish etc.) within the accreditation period. Additionally, AJCUI needs to make transparent how these topics will be included in the curriculum so that students get hands-on experience with these techniques.

The experts are glad to learn that ACCUI is the process of purchasing a next generation DNA sequencing platform.

The experts consider criterion 3 to be mostly fulfilled.

4. Transparency and Documentation

Criterion 4.1 Module Descriptions

Evidence:

- Self-Assessment Report
- Module handbooks
- Homepage Universitas Atma Jaya: <https://www.atmajaya.ac.id/en/>
- Homepage School of Bioscience, Technology, and Innovation: <https://www.atmajaya.ac.id/en/fakultas/teknik/>
- Homepage Ba Biotechnology: <https://www.atmajaya.ac.id/en/program/biotek/>
- Homepage Ma Biotechnology: <https://www.atmajaya.ac.id/en/program/mbio/>
- Homepage Ba Food Technology: <https://www.atmajaya.ac.id/en/program/tekpang/>

Preliminary assessment and analysis of the experts:

The students, as all other stakeholders, have access to the module descriptions via AJCUI's homepage.

After studying the module descriptions of all three programmes, the experts confirm that they include most of necessary information. This includes information about the persons responsible for each module, the teaching methods, the intended learning outcomes, the content, the applicability, the admission and examination requirements, and the forms of assessment.

However, the experts need to point out that the information about students' workload and awarded credits is not complete. Students' total workload, including the time needed for self-studies, should be listed in hours per semester, and awarded ECTS points should be mentioned.

For this reason, the experts expect AJCUI to update the module descriptions of all three study programmes under review.

Criterion 4.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report
- Sample Transcript of Records
- Sample Diploma Certificates
- Sample Diploma Supplements

Preliminary assessment and analysis of the experts:

The experts confirm that students from all programmes under review receive a Degree Certificate and a Transcript of Records after graduation. However, they point out that the Transcript of Records should also list the ECTS points of each course, not only the awarded CSU.

Along with these documents, the graduates receive a Diploma Supplement, which is an official statement letter issued by AJCUI. It contains all necessary information about the degree program, including learning outcomes, acquired soft skills and student achievement in academic, co-curricular, extracurricular, or non-formal education.

Criterion 4.3 Relevant Rules

Evidence:

Self-Assessment Report

- Self-Assessment Report
- Homepage Universitas Atma Jaya: <https://www.atmajaya.ac.id/en/>
- Homepage School of Bioscience, Technology, and Innovation: <https://www.atmajaya.ac.id/en/fakultas/teknik/>
- Homepage Ba Biotechnology: <https://www.atmajaya.ac.id/en/program/biotek/>
- Homepage Ma Biotechnology: <https://www.atmajaya.ac.id/en/program/mbio/>
- Homepage Ba Food Technology: <https://www.atmajaya.ac.id/en/program/tekpang>

Preliminary assessment and analysis of the experts:

The experts confirm that the rights and duties of both AJCUI and the students are clearly defined and binding. All rules and regulations are published on the university's website and hence available to all relevant stakeholders. In addition, the students receive all relevant course material in the language of the degree programmes at the beginning of each semester.

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

The experts appreciate that AJCUI will include the information on the students' total in the module descriptions. The update will be finished by early 2026. The experts expect to receive the updated module descriptions in the further course of the accreditation procedure.

The experts consider criterion 4 to be mostly fulfilled.

5. Quality management: quality assessment and development

Criterion 5 Quality management: quality assessment and development

Evidence:

- Self-Assessment Report
- Academic Guidelines
- Sample students' questionnaire
- Results from tracer studies
- Discussions during the audit

Preliminary assessment and analysis of the experts:

The highest academic board at AJCUI is the University Senate, which is headed by the Rector and responsible for implementing and supervising all academic processes at AJCUI. The Dean is the head of the School of Bioscience, Technology, and Innovation with the authority and responsibility for administering all teaching and learning activities within the faculty. Finally, for each degree programme there is the Head of Study Programme, who is

responsible for implementing all educational activities within the respective degree programme.

The organisational structure of the School of Biosciences, Technology, and Innovation is shown in the following diagram:

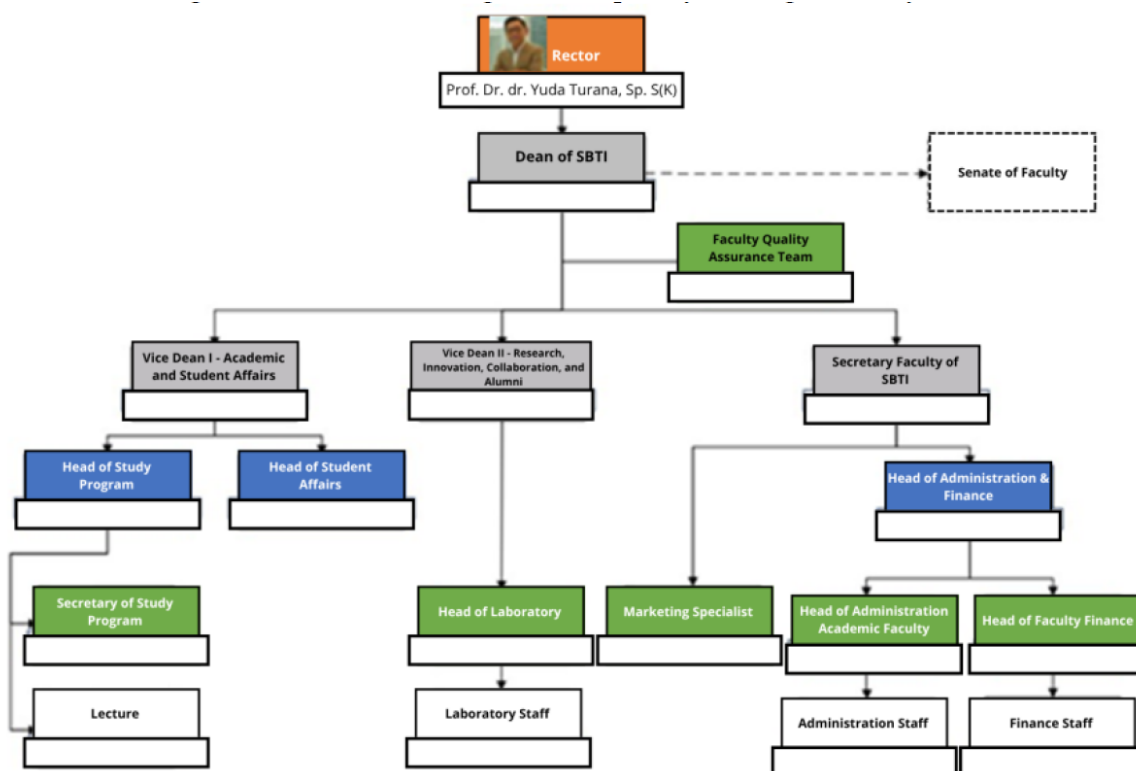


Diagram 8: Organisational Structure of SBTI, Source: SAR AJCUI

The experts discuss the quality management system at AJCUI with the programme coordinators and the students. They learn that there is a continuous process in order to improve the quality of the degree programmes, and it is carried out through internal and external evaluation. The quality assurance system at AJCUI is conducted by the Quality Assurance Agency (QAA), which is supported by the Faculty Quality Assurance Team (FQAT) at faculty level and the Curriculum Committee on programme level.

QAA is directly responsible to the Rector. The University's leadership and the University Senate determine university-level strategic policies/issues and standards. QAA coordinates the inspection activities and formulation of corrections to the processes and performance reports of the different units and departments through the implementation of internal monitoring and evaluation activities and Management Review Meetings.

The quality assurance system at AJCUI includes the Internal Quality Assurance System (IQAS) and the External Quality Assurance System (EQAS).

Internal evaluation of the quality of the degree programmes is mainly provided through student, alumni and employer surveys (annual tracer studies conducted by the university). The students give their feedback on the courses by filling out the satisfaction questionnaire online. Giving feedback on the classes is compulsory for the students; otherwise, they cannot access their account on the digital platform (myAtma), and they may be fined IDR 250000. The experts are convinced that the regulation of fining students if they do not fill out the satisfaction questionnaires should be cancelled. On the surface, fining students for not giving course feedback might seem like a way to increase response rates—but in practice, it's usually counterproductive and not useful. Students who respond only to avoid a fine are less likely to give thoughtful, constructive, or honest feedback. Instead, they may submit rushed, superficial, or even meaningless answers.

At the end of each semester, students complete feedback forms for every course they have taken. This feedback, which includes comments on assessment methods, schedule, course materials, workload, and motivation is collected and reviewed by the programme coordinators. It is discussed during pre-semester preparation meetings, which involve all faculty members, ensuring that teaching and learning methods are continually improved based on students' input. Typically, the leaders of the faculty (Dean, Vice Dean) will discuss points of improvements with relevant teachers in case there are any complaints from the students.

Results from the surveys are uploaded to the university's website and can be accessed by the public. The Students' Representative Body (BPM) annually holds a Students' Forum that involves teachers and administrative staff, who will answer to the students' complaints and grievances. Two days before the student's forum is conducted, the list of questions is sent to the Head of Student Affairs of the Faculty to be submitted to the lecturers related to the questions and asked to attend the Students' Forum. The results of the satisfaction questionnaires show that almost all aspects are rated excellent and good by the students. Only the canteen, parking area, and elevator facilities were rated poor by the students.

The alumni distribution in the labour market is monitored through tracer studies. Additionally, input from various stakeholders is collected through curriculum workshops. If necessary, the programme's objectives are adjusted based on this feedback to ensure that the competence profile allows graduates to pursue professional roles appropriate to their qualification levels.

The results of internal quality assessments are evaluated on faculty level during the Management Review Meetings (MRM), attended by the Dean, Vice Deans, programme coordinators, laboratory heads and the Quality Assurance Units. The MRM takes the final decision on all audit findings and initiates corrective actions if necessary.

The auditors gain the impression that the students', alumni, and employers' feedback is taken seriously by SBTI, and changes are made if there is negative feedback. However, during the audit the experts learn that students are not represented in the university's boards, neither on university nor on faculty or programme level. There is a Students' Representative Council (BPM), but this council mostly concentrates on organizing extracurricular activities. Thus, students are not directly involved in the decision-making processes. The experts are convinced that it would be very useful to have student members in the different boards on faculty and programme level. For this reason, they recommend that students' representatives should be members of the boards at AJCUI at least on faculty and programme level and be actively involved in the decision-making processes for further developing the degree programmes. For example, it would be useful to make students' representatives members of the Curriculum Committees and the Faculty Quality Assurance Team.

External quality assessment of the degree programmes is provided by the Board of National Accreditation (BAN-PT), the ASEAN University Network (AUN), and the Independent Accreditation Institution for Natural Sciences and Formal Sciences (LAMSAMA). The accreditation results of the three degree programmes under review are shown below:

	Ba Biotechnology	Ba Food Technology	Ma Biotechnology
BAN-PT	"Good" 2021 to 2026		
BAN-PT		"Excellent" 2024 to 2029	
LAMSAMA			"Excellent" 2024 to 2029

Table 2: Accreditation Results, Source: SAR AJCUI

AJCUI is also mentioned in the QS World University Rankings 2025, here they are listed as the 3rd best private university in Indonesia and is ranked 14th among all universities in Indonesia (public and private). Furthermore, AJCUI achieved international recognition in the Times Higher Education (THE) Interdisciplinary Science Rankings 2025. Here, AJCUI was ranked as second-best private university in Indonesia.

The experts discuss with the representatives of AJCUI's partners from public institutions and private companies if there are regular meetings with the partners on faculty level and how they are involved in further developing the degree programmes. They learn that some employers are invited to give their feedback on the content of the degree. As the experts consider the input of the employers to be very important for the further improvement of the degree programmes, they appreciate the existing culture of quality assurance with the

involvement of employers in the quality assurance process. Nevertheless, they recommend establishing an official advisory board with several external stakeholders at the School of Bioscience, Technology, and Innovation. They should meet regularly, at least once a year, with the Dean, Vice-Deans, and programme coordinators to discuss with them new developments in the area of sciences and technology and the needs of the job market. The results of these meetings should be formally recorded and used for further advancing the quality of the degree programmes. The advisory board should be designed to function as an advisory capacity to the management level of the School of Bioscience, Technology, and Innovation in order to improve and support their scientific profile and study programmes.

In summary, the expert group confirms that the quality management system is suitable to identify weaknesses and to improve the degree programmes. All stakeholders are involved in the process.

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

The experts are satisfied to learn that the practice of fining students for not completing course feedback questionnaires has been abolished by AJCUI.

The experts thank AJCUI for pointing out that students are formally involved in curriculum development as members of the Curriculum Team on programme level. They are satisfied with this solution.

The experts appreciate that the School of Bioscience, Technology, and Innovation will establish an external advisory and is already preparing a list of potential industry and academic stakeholders who may be invited to serve as members of the new advisory board.

The experts consider criterion 5 to be fulfilled.

D Additional Documents

Before preparing their final assessment, the experts ask for the following missing or unclear information together with the comment of AJCUI on the previous chapters of this report:

- none

E Comment of the Higher Education Institution (31.10.2025)

Atma Jaya Catholic University Indonesia provides the following statement:

No	Feedback from ASIIN Assessors	Comment of the Higher Education Institution (17.10.2025)
1	The awarded ECTS points need to comply with the students' total workload. AJCUI needs to verify the time students need for self-studies in each course. It needs to be transparent how many hours of students' total workload are required for one ECTS point.	The University has established a formal mechanism for calculating ECTS based on students' workload, as stipulated in University Decree No. 2121/2/SK-PAA.102.01/07/2023 and the Guidelines for Application of ECTS at Atma Jaya Catholic University of Indonesia (p.10), which state that 1 SKS equals 1.5 ECTS (30 hours). This provision is consistent with the Regulation of the Minister of Higher Education, Science, and Technology of the Republic of Indonesia Number 39 of 2025 on Quality Assurance in Higher Education, specifically Article 15 Clause (6), which stipulates: "One credit (SKS) is equivalent to 45 (forty-five) hours of student workload." For final project and other courses, where the actual workload significantly exceeds this standard, a separate Rector's Decree will be issued in 2025 for the three study programmes to ensure workload transparency.
2	The module descriptions should include the information about the students' total workload and the awarded ECTS points. The Transcript of Records and the study plans should include the ECTS points for every course.	The inclusion of workload descriptions in module handbooks has already commenced and is targeted for completion by the end of 2025, ensuring full readiness by early 2026. At the same time, the study programmes suggest including this information in certificate of completion of study program issued by the Faculty. The letter serves as an official statement confirming that the student has graduated, pending issuance of the final diploma.
3	The PLO of the Master Programme in Biotechnology should be aligned with the respective academic level and PLO 4 and PLO 5 should be reworded.	The Programme Learning Outcomes (PLO) of the Master Programme in Biotechnology have been revised and officially enacted on 22 July 2025 through Rector's Decree No. 291/II/SK-PP.30.01/07/25 on the Curriculum of the Master Programme in Biotechnology. In this revision, PLO 4 and PLO 5 were reworded as follows: PLO-4 Able to formulate and solve health, environmental, and agricultural problems by applying biotechnology

No	Feedback from ASIIN Assessors	Comment of the Higher Education Institution (17.10.2025)
		PLO-5 Able to conduct and manage research and development in the field of biotechnology in innovative, useful, and verifiable way.
4	The engineering content in the Undergraduate Programme in Biotechnology should be increased. For example, topics such as measurement and control technology, fundamentals of process engineering, bioprocess engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing, and computer/AI-based process improvement (e.g., DOE).	The Undergraduate Programme in Biotechnology affirms that engineering-related contents are already embedded in the curriculum and reflected in the course descriptions and module handbooks. Topics such as measurement and control technology, fundamentals of process engineering, bioprocess engineering, bioreactors and sterile technology, downstream processing, and the application of computer- or AI-based process improvement (e.g., DOE) are included. Detailed course syllabi are attached as supporting evidence.
5	The Undergraduate Programme in Food Technology should have a food processing pilot plant and the instruments for milling, extrusion, fermentation, drying, freezing, canning, and pasteurization of the different foods (dairy, meat, fish, etc.). Students should get hands-on experience with these areas and topics such as food processing and thermal process engineering should be included in the curriculum.	The Undergraduate Programme in Food Technology Program is committed to expanding students' hands-on experience by developing a food processing pilot plant in collaboration with other universities with a pilot plant. Food processing and thermal process engineering topics will be further explored in the food process engineering course, ensuring food thermal process engineering topics are incorporated into the course's learning design.
6	Based on the employers' feedback, students' knowledge in statistics should be improved and a modern DNA sequencer should be purchased.	We already offer a 3-credit Biostatistics course, in accordance with the standards of the Association of Biotechnology Study Programs in Indonesia (Ikatan Program Studi Bioteknologi Indonesia/IPSBI) for the undergraduate Biotechnology programme and the Indonesian Association of Food Technologists (Perhimpunan Ahli Teknologi Pangan Indonesia/PATPI) for the undergraduate Food Technology programme. The

No	Feedback from ASIIN Assessors	Comment of the Higher Education Institution (17.10.2025)
		course syllabus has been updated to adjust the workload, with face-to-face lectures now set at 2 hours and 30 minutes per week and tutorial sessions totaling 2 hours and 50 minutes, ensuring that the workload corresponds to the intended learning outcomes in statistics. During field assessment process, the University was in a process to initiate the procurement of MinION, a next generation DNA sequencing platform. This was confirmed through a written letter from the University Secretary regarding the acquisition of MinION and its Purchase Order documents.
7	Admission interviews for the Master Programme in Biotechnology should be done by two interviewers and there should be some short guideline about its content and the criteria so that it is transparent to the applicants what is expected from them.	The Master Programme in Biotechnology acknowledges the recommendation and is committed to enhancing its admission procedure. The programme will ensure that interviews are conducted by two interviewers and supported by clear and transparent guidelines. The technical guidelines are in preparation and to be completed by the end of 2025. The new protocol will be implemented in 2026.
8	It is not useful to fine students if they do not fill out the satisfaction questionnaires.	The University confirms that the practice of fining students for not completing course feedback questionnaires has been abolished (Rector's Decree No. 4109/II/SK-KM.60.02/10/2025).
9	The library should have one or two copies of the current textbooks in all the relevant sciences. The students prefer longer opening hours of the library in the evenings.	The University maintains a clear policy on the minimum number of textbook copies in the library (KT-UAJ-10-09). While the required number of hardcopy books is ensured in accordance with this regulation, the University has also shifted its strategy towards strengthening the collection and utilization of e-books, which provide broader and more flexible access for students. Starting 5 November 2025, the BSD campus library will extend its opening hours to Monday – Friday from 08:00 to 21:00 and Saturday from 08:00 to 14:00, reflecting the University's commitment to improving student access and learning support facilities. The Semanggi campus library is currently open Monday – Friday from 08:00 to 21:00 and Saturday from 08:00 to 14:00, while the Pluit campus library, effective 30 October 2025, operates Monday – Friday from 08:00 to 20:00 and Saturday from 08:00 to 14:00. This information has been officially communicated

No	Feedback from ASIIN Assessors	Comment of the Higher Education Institution (17.10.2025)
		through the University Library's Instagram account (@perpustakaanunikaatmajaya) and various communication media.
10	It is recommended to make students' representatives official members of the boards at faculty and programme level (e.g., the curriculum team and the quality assurance team) in order to involve them directly in further developing the degree programmes.	We fully agree that student participation and feedback are essential elements in the continuous improvement of academic quality. However, according to national regulations, the QA team at both university and study program levels is an internal unit that reports directly to the Rector. Therefore, its formal membership is limited to academic and administrative staff. As an alternative, we ensure active student involvement through various quality evaluation mechanisms such as satisfaction surveys, focus group discussions, and participation in self-evaluation activities of the study program. In addition, students are formally involved in curriculum development as members of the Curriculum Team, as stated in the Rector's Decree.
11	It would be useful to establish an advisory board at the School of Bioscience, Technology, and Innovation with external stakeholders to discuss regularly with them the needs of the job market and new developments in the area of sciences and technology. For example, partners from the local industry and colleagues from other institutions could meet once a year to evaluate the curriculum and discuss possible adaptations (external advisory board for the	The School of Bioscience, Technology, and Innovation has coordinated with the University, which fully supports the establishment of an external advisory board to strengthen curriculum development and research strategies. At this stage, the study programmes are preparing the proposal and compiling a list of potential industry and academic stakeholders who may be invited to serve as members of the advisory board.

No	Feedback from ASIIN Assessors	Comment of the Higher Education Institution (17.10.2025)
	faculty). The advisory board also could comment on research strategies of the faculty.	

F Summary: Expert recommendations (15.11.2025)

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

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Biotechnology	With requirements for one year	30.09.2031
Ma Biotechnology	With requirements for one year	30.09.2031
Ba Food Technology	With requirements for one year	30.09.2031

Requirements

For all degree programmes

- A 1. (ASIIN 1.5) Verify the students' total workload and award the ECTS points accordingly. Make transparent, how many hours of students' workload are exactly required for one ECTS point.
- A 2. (ASIIN 4.1) Include the information about the students' total workload and the awarded ECTS points in the module descriptions.

For the Bachelor's programme Food Technology

- A 3. (ASIIN 3.2) Provide a concept and financial plan on how to establish a food processing pilot plant and the instruments for milling, extrusion, fermentation, drying, freezing, canning, and pasteurization of the different foods (dairy, meat, fish etc.) within the accreditation period. Make transparent how these topics will be included in the curriculum so that students get hands-on experience with these techniques.

Recommendations

For all degree programmes

- E 1. (ASIIN 3.2) It is recommended that the library has at least one or two copies of the current main textbooks in all relevant sciences.

- E 2. (ASIIN 4.3) It is recommended to include the awarded ETCS point for every course in the Transcript of Records and the study plans.

For the Bachelor's programmes

- E 3. (ASIIN 1.3) It is recommended to improve students' knowledge in statistics.

For the Bachelor's programme Biotechnology

- E 4. (ASIIN 1.3) It is recommended to increase the engineering content and to include topics such as measurement and control technology, fundamentals of process engineering, bio process engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing and computer/AI based process improvement (e.g. DOE).

For the Bachelor's programme Food Technology

- E 5. (ASIIN 1.3) It is recommended to include topics such as food processing and thermal process engineering in the curriculum.

G Comment of the Technical Committees (02.12.2025)

Technical Committee 08 – Agriculture, Forestry and Food Sciences (02.12.2025)

Assessment and analysis for the award of the ASIIN seal:

The TC considers the experts' assessment to be comprehensible and well-founded. For the Food Technology degree programme, the requirement regarding the pilot plant is considered to be particularly important, and comprehensive and clear documentation is expected to demonstrate how this requirement can be met as quickly as possible. In addition, it is emphasised that appropriate safety measures, concepts and training are necessary, which should also be evident in the documentation.

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

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Food Technology	With requirements for one year	30.09.2031

Technical Committee 10 – Life Sciences (25.11.2025)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee confirms the proposal of the expert group to impose a total of three requirements. Three of these relate to the biotechnology degree programmes. These concern the verification of student workload and the ECTS credits awarded. This information must also be included in the module descriptions, and the study plans and

transcripts of records should show the ECTS credits for each module. Furthermore, five recommendations are to be made.

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

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Biotechnology	With requirements for one year	30.09.2031
Ma Biotechnology	With requirements for one year	30.09.2031

H Decision of the Accreditation Commission (12.12.2025)

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

The Accreditation Commission discusses the procedure and agrees with the assessment of the experts and the Technical Committees that the university needs to submit a concept for establishing a pilot plant for food technology. However, the AC slightly changes the respective requirement A3 to make clear that the mentioned areas are only examples.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Maximum duration of accreditation
Ba Biotechnology	With requirements for one year	30.09.2031
Ma Biotechnology	With requirements for one year	30.09.2031
Ba Food Technology	With requirements for one year	30.09.2031

Requirements

For all degree programmes

- A 1. (ASIIN 1.5) Verify the students' total workload and award the ECTS points accordingly. Make transparent, how many hours of students' workload are exactly required for one ECTS point.
- A 2. (ASIIN 4.1) Include the information about the students' total workload and the awarded ECTS points in the module descriptions.

For the Bachelor's programme Food Technology

- A 3. (ASIIN 3.2) Provide a concept and financial plan on how to establish a food processing pilot plant and the instruments e.g. for milling, extrusion, fermentation, drying, freezing, canning, and pasteurization of the different foods (dairy, meat, fish etc.) within the accreditation period. Make transparent how these topics will be included in the curriculum so that students get hands-on experience with these techniques.

Recommendations

For all degree programmes

- E 1. (ASIIN 3.2) It is recommended that the library has at least one or two copies of the current main textbooks in all relevant sciences.
- E 2. (ASIIN 4.3) It is recommended to include the awarded ETCS point for every course in the Transcript of Records and the study plans.

For the Bachelor's programmes

- E 3. (ASIIN 1.3) It is recommended to improve students' knowledge in statistics.

For the Bachelor's programme Biotechnology

- E 4. (ASIIN 1.3) It is recommended to increase the engineering content and to include topics such as measurement and control technology, fundamentals of process engineering, bio process engineering, bioreactors and sterile technology, bioreaction engineering, downstream processing and computer/AI based process improvement (e.g. DOE).

For the Bachelor's programme Food Technology

- E 5. (ASIIN 1.3) It is recommended to include topics such as food processing and thermal process engineering in the curriculum.

Appendix: Program Learning Outcomes and Curricula

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

Vision

To become a leading and adaptive Undergraduate Programme in Biotechnology that enriches the value of biodiversity and local wisdom for better human well-being and a more sustainable environment by the end of 2026.

Mission

1. To provide biotechnology education that is oriented towards the cultivation of independent human resources.
2. To conduct biology and biotechnology research by using natural resources wisely and ethically for better human well-being.
3. To contribute to the community by enriching its knowledge and introducing the advantages of biotechnology science and products for its well-being.

Objectives

1. To produce graduates with a good mastery of biotechnology and adequate skills in various biotechnology techniques and analyses.
2. To conduct biotechnology research that is oriented towards scientific publication.
3. To apply biotechnology knowledge with consideration for environment and ethics and to make use of biodiversity in Indonesia for the benefit of the community.
4. To conduct learning activities in a conducive and dynamic academic atmosphere

Programme Learning Outcomes (PLO)

1. Students master the principles of biotechnology.
2. Students are able to apply the concept of biotechnology to develop biodiversity and mitigate sustainability issues to improve the quality of human life.
3. Students are able to demonstrate practical skills in Biotechnology.
4. Students are able to analyse scientific data and information.
5. Students are able to communicate ideas, knowledge, and scientific data in oral and written form.

6. Students are able to think critically to make decisions, especially those related to biotechnology and biodiversity.
7. Students have the ability to become creative lifelong learners and appreciate biodiversity and social life.
8. Students are able to integrate KUPP (Christian, Superior, Professional, and Caring) values in academic and professional life.

The following curriculum is presented:

SMT	CODE	COURSE	SKS
1	BIO 117	English	2 (2-0-0)
	BIO 103	Basic Chemistry	3 (2-0-1)
	BIO 107	Introduction to Biotechnology	3 (3-0-0)
	BIO 121	Concept and Connection in System of Life	3 (3-0-0)
	BIO 119	Introduction to Information Technology	2 (2-0-0)
	BIO 115	Calculus	3 (3-0-0)
	UAJ 160	Logics	GG 2 (2-0-0)
	UAJ 180	Multiculturalism	GG 2 (2-0-0)
		Total	20
2	BIO 104	Genetics	3 (3-0-0)
	BIO 106	Bioanalytical Chemistry	3 (2-0-1)
	BIO 122	Biophysics	3 (3-0-0)
	BIO 110	Indonesian	2 (2-0-0)
	BIO 114	Biochemistry Laboratory	2 (0-1-1)
	BIO 116	Physiology	2 (2-0-0)
	BIO 118	Biochemistry	3 (3-0-0)
	AGA 110/ UAJ 150	Religion: Catholic Religion Education	GG 2 (2-0-0)
		Total	20

3	BIO 217	Data Processing in Biology		3 (2-1-0)
	PAN 100	Pancasila	GG	2 (2-0-0)
	BIO 207	Molecular Biology		3 (3-0-0)
	BIO 209	Microbiology		3 (3-0-0)
	BIO 211	Microbiology Laboratory		3 (0-1-2)
	BIO 213	Immunology		3 (3-0-0)
	BIO 215	Nutrigenomics		2 (2-0-0)
		Total		19
4	BIO 202	Ecology		3 (3-0-0)
	BIO 208	Fungal Biotechnology		3 (2-0-1)
	BIO 216	Biomolecular Techniques		3 (3-0-0)
	BIO 218	Biomolecular Techniques Laboratory		3 (0-0-3)
	BIO 214	Environmental Microbiology		3 (2-0-1)
	BIO 311	Industrial Microbiology		3 (3-0-0)
	WAR 130	Civic Education	GG	2 (2-0-0)
		Total		20

5	BIO 313	Industrial Management		2 (2-0-0)
	BIO 303	Cell and Tissue Culture Techniques		4 (2-0-2)
	BIO 305	Enzyme Biotechnology		3 (3-0-0)
	BIO 307	Fermentation Technology		4 (3-0-1)
	BIO 309	Bioinformatics		3 (2-0-1)
	BIO 310	Environmental Pollution Control and Bioremediation		3 (3-0-0)
	BIO 315	Molecular Diagnostics		2 (2-0-0)
		Total		21
6	BIO 304	Plant Biotechnology and Sustainable Agriculture		3 (2-0-1)
	BIO 308	Bioreactor Engineering		3 (3-0-0)
	BIO 318	High-Technology Product Marketing		2 (2-0-0)
	BIO 312	Molecular Biology of Prokaryote Diversity		3 (2-0-1)
	BIO 314	Scientific Writing and Presentation		3 (2-1-0)
	BIO 316	Entrepreneurship		2 (2-0-0)
		Elective Courses 1		2 (2-0-0)
		Elective Courses 2		2 (2-0-0)
		Elective Courses 3		2 (2-0-0)
		Total		22
7	BIO 400	Field Training	GG	4 (0-0-4)
	BIO 450	Special Topics in Biotechnology (Formerly Pre-Research Special Topics in Biotechnology)	GG	3 (0-0-3)
		Elective Courses 4		2 (2-0-0)
		Elective Courses 5		2 (2-0-0)
		Elective Courses 6		2 (2-0-0)
		Elective Courses 7		2 (2-0-0)
		Total		15
8	BIO 490	Seminar	GG	1 (1-0-0)
	BIO 500	Final Project	GG	6 (0-0-6)
		Total		7

Inter-Study Program Courses					
MLP 201	Social Entrepreneurship in Indonesia		2 (2-0-0)	-	IN/EXK
MLP 401	Artificial Intelligence		2 (2-0-0)	-	IN/EXK
MLP 501	Disaster Management		2 (2-0-0)	-	IN/EXK
MLP 502	Cyber Law		2 (2-0-0)	-	IN/EXK

Elective Courses – Odd Semester (Choose 4 courses = 8 credits)

				-
BIP 474	Industrial Product Safety Control		2 (2-0-0)	-
BIP 472	French		2 (2-0-0)	-
BIP 475	Animal Cell Culture		2 (1-0-1)	-
BIP 485	Science Communication		2 (2-0-0)	-
BIP 458	Bioenergy Principles and Applications		2 (2-0-0)	-
BIP 476	Capita Selecta in Biotechnology	GG	2 (2-0-0)	-

Elective Courses – Even Semester (Choose 3 courses = 6 credits)				
BIP 467	Virology		2 (2-0-0)	-
BIP 473	Principles of Animal Biotechnology		2 (2-0-0)	-
BIP 479	Traditional Food Fermentation Technology		2 (2-0-0)	-
BIP 468	Functional Food and Nutraceuticals		2 (2-0-0)	-
BIP 482	Microbial Bioprospecting		2 (1-0-1)	BIO 210
BIP 484	Protein Structure Modeling		2 (1-0-1)	BIO 309
BIP 463	Food Technology		2 (2-0-0)	-
BIP 466	Food Product Development Laboratory		2 (1-0-1)	-

0 Appendix: Program Learning Outcomes and Curricula

	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	
	Pengantar Bioteknologi	Genetika	Biologi Molekuler	Laboratorium Teknik Biomolekuler	Bioinformatika	Biologi Molekuler Keragaman Prokariota			
	Kimia Dasar	Kimia Bioanalitis	Imunologi	Teknik Biomolekuler	Diagnostik Molekuler	Bioteknologi Tanaman dan Pertanian Berkelanjutan		Seminar	
	Kalkulus	Biokimia	Nutrigenomika		Teknik Kultur Sel dan Jaringan	Metode Penulisan dan Penyajian Ilmiah	Topik Khusus Pra-Penelitian Bioteknologi	Tugas Akhir	
		Laboratorium Biokimia	Pemrosesan Data Biologis	Mikrobiologi Industri	Teknologi Fermentasi	Rekayasa Bioreaktor			
		Biofisika		Mikrobiologi Lingkungan	Bioteknologi Enzim	Pemasaran Produk Teknologi Tinggi			
	Konsep dan Jejaring dalam Sistem Hayati	Fisiologi	Laboratorium Mikrobiologi	Bioteknologi Cendawan	Manajemen Industri	Kewirausahaan	Praktik Lapangan		
	Logika	Agama Katolik/Pendidikan Agama	Mikrobiologi	Ekologi	Pengendalian Pencemaran Lingkungan dan Bioremediasi				
	Multikulturalisme	Bahasa Indonesia	Pancasila	Kewarganegaraan		3 MK Pilihan	4 MK Pilihan		
	Bahasa Inggris								
	Pengantar Teknologi Informasi								
MK Wajib	20 SKS	20 SKS	19 SKS	20 SKS	21 SKS	22 SKS	15 SKS	7 SKS	Total
MK Pilihan	(0 SKS)	(0 SKS)	(0 SKS)	(0 SKS)	(0 SKS)	(6 SKS)	(8 SKS)	(0 SKS)	144 SKS (14 SKS)

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

Vision

To become a leading centre for advanced biotechnology education, serving as a platform for the further development of professionalism with an international perspective while prioritising national interests.

Mission

To develop human resources with high-quality biotechnology professionalism, capable of competing at both the national and international levels.

Objective

To produce graduates who are capable of thoroughly understanding and solving problems related to biotechnology, as well as applying their knowledge in the fields of food, agriculture in its broadest sense, medicine, the environment, and industry.

Programme Learning Outcomes (PLO)

1. Upholding human values according to the core values of Atma Jaya (KUPP), morals, and ethics.
2. Showing a responsible attitude towards one's own and group actions.
3. Able to communicate effectively.
4. Able to develop logical, critical, systematic, and innovative thinking in the field of biotechnology.
5. Able to develop molecular biology concepts and theories.
6. Able to solve problems in the fields of health, environment and agriculture through the application of biotechnology.
7. Able to evaluate the application of biomolecular, biochemical and microbiology in the field of biotechnology.
8. Able to manage innovative, useful biotechnology research and development

The following curriculum is presented:

The 1st Semester			
Core Courses			
1	MBO 601	Advanced Microbiology	3
2	MBO 603	Advanced Biochemistry	3
3	MBO 605	Bioinformatics	3
4	MBO 607	Molecular Biotechnology	3
	MOP	Electives (described below)	2-4
The 2nd Semester			
Core Courses			
5	MBO 602	Experimental Method in Biotechnology	3
6	MBO 604	Biotechnology Capita Selecta	2
7	MBO 606	Philosophy of Science	2
8	MBO 608	Special Topics in Biotechnology	2
	MOP	Electives (described below)	2-7
The 3rd Semester			
Core Courses			
	MOP	Electives (described below)	9
The 4th Semester			
Core Courses			
13	MBO 650	Seminar	1
14	MBO 700	Thesis	6

Elective Courses			
15	MOP 621	Food and Industrial Biotechnology	3
16	MOP 622	Environmental Biotechnology	3
17	MOP 623	Medical Biotechnology	3
18	MOP 624	Business in Biotechnology	2
19	MOP 625	Advanced Food Technology	2
20	MOP 626	Biochemistry Instrumentation	3
21	MOP 627	Gene Regulation and Expression	3
22	MOP 628	Nutrigenomics	2
23	MOP 629	Application of Botanical Biotechnology in Industry	3
24	MOP 630	Pharmaceutical Biotechnology	3
25	MOP 631	Guided Research	2
26	MOP 633	Advanced Science Communication	2

Semester 1	Semester 2	Semester 3	Semester 4
MBO 601	MBO 602	MOP	MBO 650
Advanced Microbiology	Experimental Method in Biotechnology	Electives	Seminar
MBO 603	MBO 604		MBO 700
Advanced Biochemistry	Biotechnology Capita Selecta		Thesis
MBO 605	MBO 606	Electives	
Bioinformatics	Philosophy of Science	MOP 621 Food and Industrial Biotechnology	
MBO 607	MBO 608	MOP 622 Environmental Biotechnology	
Molecular Biotechnology	Special Topics in Biotechnology	MOP 623 Medical Biotechnology	
MOP	MOP	MOP 624 Business in Biotechnology	
Electives	Electives	MOP 625 Advanced Food Technology	
		MOP 626 Biochemistry Instrumentation	
		MOP 627 Gene Regulation and Expression	
		MOP 628 Nutrigenomics	
		MOP 629 Application of Botanical Biotechnology in Industry	
		MOP 630 Pharmaceutical Biotechnology	
		MOP 631 Guided Research	
		MOP 633 Advanced Science Communication	

Compulsory Courses = 33 ECTS

Elective Courses = 16.5 ECTS

Thesis = 9 ECTS

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

Vision

To produce food technology graduates who are adaptive, innovative, and regenerative in building a healthy and prosperous community by 2025.

Mission

1. To provide adaptive and innovative education to foster human resources in the field of food technology who are self-reliant, appreciative towards Indonesian food diversity, and competitive in the global development of the food industry.
2. To conduct food research by utilising the developing technology, such as food biotechnology, food nanotechnology, and functional food, to develop and improve the value of natural resources for human health and well-being.
3. To integrate and apply the education and research results in the field of food technology to encourage more community service for the community's well-being.

Objectives

1. To provide education with a curriculum that can produce graduates who are aware of the importance of healthy, delicious, and regenerative food products and who can utilise the developing technology, particularly food biotechnology.
2. To conduct food research by utilising the natural resources with the relevant technology and with consideration of ethics for human well-being.
3. To become a leading and competitive research centre for the use of innovative technology to develop traditional food products.

Programme Learning Outcomes (PLO)

1. Mastering the concepts and theories of science that underlie food technology.
2. Mastering the principles of food biotechnology and its application in the food sector.
3. Mastering the principles of integrated food processing based on Indonesian indigenous food and marine resources.
4. Able to apply food technology in an integrated manner in the food processing process to produce safe, quality, preferred, and sustainable food.
5. Able to apply aspects of biotechnology to solve food problems.
6. Able to communicate verbally and in writing effectively.
7. Able to think critically and analytically, to evaluate and solve problems.
8. It has a commitment to ethical values and internalizes the core values developed by Atma Jaya, namely Christianity, Excellence, Professionalism, and Caring.

The following curriculum is presented:

SMT	CODE	COURSE NAME		SKS
1	BTP 123	Introduction to Information Technology		2 (2-0)
	BTP 125	English		2 (2-0)
	BTP 115	Basic Chemistry		3 (2-1)
	BTP 117	Calculus		3 (3-0)
	BTP 119	Introduction to Food Biotechnology		3 (3-0)
	BTP 127	Human, Food and Environment		3 (3-0)
	PAN 100	Pancasila	GG	2 (2-0)
	UAJ 180	Multiculturalism	GG	2 (2-0)
		Total		20
2	BTP 128	Biophysics		3 (3-0)
	BTP 114	Indonesian		2 (2-0)
	BTP 126	Fermented Food and Indonesian Culinary		2 (2-0)
	UAJ 160	Logics	GG	2 (2-0)
	BTP 118	Biochemistry		3 (3-0)
	BTP 122	Biochemistry Laboratory		2 (0-2)
	BTP 124	Bioanalytical Chemistry		3 (2-1)
	WAR 130	Civic Education	GG	2 (2-0)
		Total		19

3	BTP 225	Molecular Aspects of Life		3 (3-0)
	BTP 227	Data Processing in Food Technology		3 (2-1)
	BTP 217	Microbiology		3 (3-0)
	BTP 219	Microbiology Laboratory		3 (2-1)
	BTP 221	Food Chemistry		3 (3-0)
	BTP 223	Nutritional Science		3 (3-0)
	AGA 110/ UAJ 150	Religion: Catholic Religion Education	GG	2 (2-0)
		Total		20
4	BTP 232	Food Process Engineering		4 (3-1)
	BTP 214	Functional Foods and Nutraceuticals		3 (3-0)
	BTP 216	Food Microbiology		3 (2-1)
	BTP 234	Food Nanotechnology		2 (2-0)
	BTP 226	Industrial Management		2 (2-0)
	BTP 228	Food Processing Technology		3 (2-1)
	BTP 311	Nutrigenomics		2 (2-0)
		Total		19

5	BTP 329	Scientific Writing and Presentation		3 (2-1)
	BTP 325	Food Packaging and Storage Technology		2 (2-0)
	BTP 327	Molecular Biotechnology in Practice		4 (2-2)
	BTP 317	Food Sensory Evaluation		3 (2-1)
	BTP 319	Fermentation Technology		4 (3-1)
	BTP 321	Enzyme Biotechnology		3 (3-0)
	BTP 323	Food Ingredients		2 (2-0)
		Total		21
6	BTP 328	Food Product Marketing		2 (2-0)
	BTP 320	Food Safety and Quality Management		3 (3-0)
	BTP 316	Bioreactor Engineering		3 (3-0)
	BTP 336	Synthetic Biology and Future Food		2 (2-0)
	BTP 338	Marine Product Technology		2 (2-0)
	BTP 342	Marine Product Technology Laboratory		2 (0-2)
	BTP 324	Food Regulation and Assessment		2 (2-0)
	BTP 332	Entrepreneurship		2 (2-0)
	BTP 334	Food Product Exhibition		1 (1-0)
		Elective Course 1		2 (2-0)
		Elective Course 2		2 (2-0)
		Total		19-23
7	BTP 411	Special Pre-Research Topics in Food Technology	GG	3 (3-0)
	BTP 413	Field Training	GG	4 (0-4)
		Elective Course 1		2 (2-0)
		Elective Course 2		2 (2-0)
		Elective Course 3		2 (2-0)
		Elective Course 4		2 (2-0)
		Total		7-15
8	BTP 412	Seminar	GG	1 (1-0)
	BTP 500	Final Projects	GG	6 (0-6)
		Total		7

Inter-Study Program Courses				
	MLP 201	Social Entrepreneurship		2 (2-0)
	MLP 401	Artificial Intelligence		2 (2-0)
	MLP 501	Disaster Management		2 (2-0)
	MLP 502	Cyber Law		2 (2-0)

Elective Courses				
	TPP 431	Flavor and Fragrance		2 (2-0)
	TPP 433	Beauty Foods and Cosmeceuticals		2 (2-0)
	TPP 447	Molecular Diagnostics		2 (2-0)
	TPP 449	Extraction Technology for Essential Oil		2 (1-1)
	TPP 439	Personalized Nutrition		2 (2-0)
	TPP 441	French		2 (2-0)
	TPP 445	Science Communication		2 (2-0)
	TPP 451	Capita Selecta in Food Technology	GG	2 (2-0)
	TPP 332	Sport Nutrition		2 (2-0)
	TPP 334	Food Product Formulation		2 (2-0)
	TPP 352	Beer and Wine Fermentation Technology		2 (2-0)
	TPP 338	Food Robotics		2 (2-0)
	TPP 346	Jamu and Herbal		2 (2-0)
	TPP 348	Capita Selecta in Food Technology	GG	2 (2-0)

0 Appendix: Program Learning Outcomes and Curricula

	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	
	Introduction to Information Technology English	Indonesian Logics	Religion Catholic	General Basic					
	Pancasila	Civic Education				Capstone	Special Pre-Research Topics in Food Technology Field Training	Seminar	
	Multiculturalism								
	Basic Chemistry	Biophysics	Microbiology		Scientific Writing and Presentation	Basic Science			
	Calculus	Biochemistry	Microbiology Laboratory						
	Human, Food, and Environment	Biochemistry Laboratory Bioanalytical Chemistry	Data Processing in Food Technology						
	Introduction to Biotechnology	Fermented Food and Indonesian Culinary	Molecular Aspects of Life	Functional Foods and Nutraceuticals	Food Sensory Evaluation	Food Safety and Quality Management			
			Food Chemistry	Food Microbiology	Food Ingredients	Synthetic Biology and Future Foods	Food Science		
			Nutritional Science	Nutrigenomics		Food Regulation and Assessment			
				Food Process Engineering	Food Packaging and Storage Technology	Bioreactor Engineering			
				Food Nanotechnology	Molecular Biotechnology in Fermentation Technology	Marine Product Technology	Food Technology		
				Food Processing Technology		Marine Product Technology Laboratory			
					Enzyme Biotechnology	Food Product Exhibition			
				Industrial Management		Food Product Marketing	Support		
						Entrepreneurship			
					Flavor and Fragrance	Sport Nutrition			
					Beauty Foods and Cosmeceuticals	Food Product Formulation			
					Molecular Diagnostics	Jamu and Herbal			
					Personalized Nutrition	Beer and Wine Fermentation	Electives		
					Extraction Technology for Essential Oil	Food Robotics			
					French	Capita Selecta in Food Technology			
					Science				
					Capita Selecta in Food Technology				
Total Credits/Semester	20 SKS	19 SKS	20 SKS	19 SKS	21 SKS	19 SKS	7 SKS	7 SKS	Total
Core Courses	(0 SKS)	(0 SKS)	(0 SKS)	(0 SKS)	(0 SKS)	(6 SKS)	(8 SKS)	(0 SKS)	144 SKS
Elective Courses									(14 SKS)