Appendix D

AUN-QA ASSESSMENT REPORT AT PROGRAMME LEVEL

AUN-QA Assessment No.: **452nd AUN-QA Programme Assessment**	Date of Assessment: **17 – 19 June 2025**
Name of Programme Assessed: **Bachelor of Science Program in Agricultural Machinery and Mechatronics**	
Name of University: **Kasetsart University (Kamphaeng Saen Campus)**	
Name of Faculty/School: **Faculty of Agriculture at Kamphaeng Saen**	
Name and Designation of Management Representative: **Asst. Prof. Dr. Chaisit Thongjoo, Dean of the faculty of Agriculture Kamphaeng Sean** **Assoc. Prof. Dr. Ratana Tangwongkit, Head of SAR Team**	e-mail: agrrnt@gmail.com
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Report Summary

This report is based on information provided in the self-assessment report (SAR), evidences, site tours, and interviews with selected stakeholders including academic staff, support staff, students, alumni, and employers. It should be read together with the preliminary findings presented at the closing ceremony where key strengths and areas for improvement were highlighted.

The AUN-QA assessment at programme level covers eight criteria. Each criterion is assessed based on a seven-point scale. A summary of the assessment results for the **Bachelor of Science Program in Agricultural Machinery and Mechatronics** at **Kasetsart University (Kamphaeng Saen Campus)** is as follows:

Criterion	Score
1. Expected Learning Outcomes	4
2. Programme Structure and Content	5
3. Teaching and Learning Approach	5
4. Student Assessment	4
5. Academic Staff	4
6. Student Support Services	4
7. Facilities and Infrastructure	4
8. Output and Outcomes	4
Overall Verdict	**Adequate as Expected**

Based on the assessment results, the **Bachelor of Science in Agricultural Machinery and Mechatronics** programme at **Kasetsart University (Kamphaeng Saen Campus)**fulfills the AUN-QA requirements to be awarded the AUN-QA certificate. The overall quality assurance implemented by the programme is ***Adequate as Expected*.**

Criterion	Strengths	Areas for Improvement
1. Expected Learning Outcomes		
1.1. The programme shows that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university and are known to all stakeholders.	The program learning outcomes (PLOs) were formulated and updated using Bloom's taxonomy. They are also broken down into yearly learning outcomes (YLOs). PLOs are aligned with the vision and mission of KU and Agri-KPS, and the 5 areas of Thailand's National Qualifications Framework for Higher Education. Different channels are used to communicate the PLOs to the stakeholders: department website, student orientation, meetings, seminars, posters, brochures, and Facebook.	The use of the SMART principle (Specific, Measurable, Achievable, Realistic, and Time-Bound) in formulating PLOs, YLOs, and CLOs is recommended. Based on the interviews with alumni and employers, consider including PLOs on the following: data analytics; presentation skills; and leadership skills. It is suggested to include higher order thinking skills in the formulation of PLOs, YLOs and CLOs. This is to develop students' critical thinking skills, especially for complex and difficult situations. Consider including the YLOs in the dissemination of PLOs and CLOs to all stakeholders, especially students.
1.2. The programme shows that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme.	The course learning outcomes (CLOs) are formulated using Bloom's taxonomy and are guided by the specific PLOs to which the course is contributing to.	Similar with the PLOs, the use of the SMART principle in the formulation of CLOs and the use of higher order thinking skills, especially for major and specialized courses, are suggested. The continuous review of the alignment of CLOs to the achievement of PLOs is suggested.

Criterion	Strengths	Areas for Improvement
1.3. The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline).	Of the 8 PLOs, 5 are specific to AMM (PLOs 1-5) and 3 are generic learning outcomes (PLOs 6-8).	It is recommended to strengthen the English proficiency of students (in both writing and speaking) to increase their self-confidence. English is increasingly used in the workplace such as for presentations during meetings or for working in foreign companies. Refer to a similar recommendation in Criterion 3.3
1.4. The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes.	The requirements of the different stakeholders are reflected in the PLOs. Different methods are used in gathering stakeholders' feedback and requirements. This includes the following: annual stakeholder hearing at the end of the 2nd semester, annual satisfaction survey conducted for graduate users, 4th year students, and the findings from the Internal Quality Assessment of the program.	The use of other modes of gathering stakeholders' feedback is recommended. For example, to ensure validity, the results of satisfaction surveys could be the subject of focus group discussions (FGDs) with highly selected stakeholders. A systematic gathering and recording of stakeholders' feedback is suggested to ensure validity and, also for documentation purposes. The latter is important when there is a change in administration or leadership in the programme.
1.5. The programme to show that the expected learning outcomes are achieved by the students by the time they graduate.	Direct and indirect methods of measuring the PLO achievement are employed. Indirect method includes the self-evaluation of PLO achievement by 4th year students and the exit examination of 4th year students. Direct methods include the analysis of the YLO achievement of 1st to 3rd year students, and the analysis of PLO achievement of 4th year students.	It is recommended to enhance the direct method of measuring the achievement of PLOs & YLO to ensure validity. Refer to similar recommendation in criterion 4.5
2. Programme Structure and Content		

Criterion	Strengths	Areas for Improvement
2.1. The specifications of the programme and all its courses are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders.	The program specification includes basic information stakeholders need to know about the AMM programme. It is discussed during the freshmen orientation. It can be accessed from the AMM's website. The course specifications are comprehensive and follow a standard format. Its unique feature is the inclusion of the results of teaching evaluation of the preceding semester and the improvements being implemented based on the results. Course specifications are discussed by the lecturer on the 1st day of classes. They can also be accessed from the KU's Edufarm platform.	To make the program specification comprehensive, it is recommended to include additional information such as the following: vision and missions of KU-KPS, admission requirements, graduation requirements, job profile or career prospects, curriculum map, course description, teaching methods, course assessment, external linkages and brief profile of the academic staff, including their areas of expertise. For the course specification, it is recommended to include rubrics for criterion-referenced assessments, and up-to-date textbooks, journal articles, references and reading materials.
2.2. The design of the curriculum is shown to be constructively aligned with achieving the expected learning outcomes.	The backward design approach was employed in curriculum development where the process starts by identifying the competencies that employers are looking for in their workers; and these competencies are used in designing a curriculum with courses that will develop them.	A continuous review of the constructive alignment of PLOs/YLOs and CLOs is suggested.
2.3. The design of the curriculum is shown to include feedback from stakeholders, especially external stakeholders.	Stakeholders' feedback are incorporated in curriculum design and improvement. Strong collaboration with the industry can be seen from the improvements made in the curriculum based on the stakeholders' feedback. These include, for example, purchase of new equipment/tools with modern technology, new teaching course Testing and Evaluation of Agricultural Machinery and Equipment (02027423), additional elective courses, additional topics on management and marketing in the course Agricultural Machinery	A re-structuring of the curriculum is recommended: o Integrate the courses Seminar (02027497) and Special Problems (02027498) into a Thesis course to strengthen the critical thinking skills of students. Also, by its nature, the completion of a thesis is in support of the mission of Agri-KPS, "To produce research works and innovation in response to the country's needs and receiving international recognition"

Criterion	Strengths	Areas for Improvement
	and Resources Management (02027425), and additional field trips.	○ The current modalities of Internship (cooperative education and non-cooperative education) present some challenges for the programme. While cooperative education is the preferred mode of employers as student interns are more prepared to do the job, it is not feasible for the majority of students, given the difficulty of completing all the courses within 3 years in order to qualify for cooperative education. Hence, it is recommended to re-design Internship such that there is only one modality or scheme for all students, ensuring that students have the knowledge, skills and attitudes (KAS) to meet the project requirements of host companies.
2.4. The contribution made by each course in achieving the expected learning outcomes is shown to be clear.	Courses contributing to the achievement of each PLO were identified in the curriculum map.	A continuous review of the curriculum map is suggested taking into consideration changes on the requirements of the industry and profession.
2.5. The curriculum to show that all its courses are logically structured, properly sequenced (progression from basic to intermediate to specialised courses), and are integrated.	The 2022 curriculum has 140 credits, classified as follows: General Education (21%); Specialized courses (75%); and free electives (4%). It is practiced-oriented, with 88% and 63.6% of compulsory specific courses and elective specific courses being laboratory-based, respectively The curriculum is logically structured with pre-determined number of credits per semester, providing a clear learning path for each student to complete the program within the prescribed 4 years.	A continuous review of the curriculum and courses is recommended. For example, given the requirements of Industry 4.0, it is recommended to include course topics on drone application and automation. Benchmarking of the curriculum with reputable local and foreign universities with similar programme is recommended for quality improvement.

Criterion	Strengths	Areas for Improvement
	The courses are properly sequenced and integrated with the levels of progression increasing from basic to intermediate to advanced levels.	
2.6. The curriculum to have option(s) for students to pursue major and/or minor specialisations.	The curriculum allows students to specialize in any of the following areas: (1) plant watering system; (2) agricultural buildings; (3) pre- and post-agricultural machinery; and (4) farm mechatronics. Students need to enroll in specific elective courses in any of the 4 areas.	It is recommended that there are enough elective courses under each area from which students will choose for their specialization.
2.7. The programme to show that its curriculum is reviewed periodically following an established procedure and that it remains up-to-date and relevant to industry.	The curriculum is updated every 5 years following an established process that involved gathering of stakeholders' feedback as inputs in curriculum update. The last update was 2022.	It is recommended that the curriculum review and update be made at the end of each program cycle, i.e., every four years.
3. Teaching and Learning Approach		
3.1. The educational philosophy is shown to be articulated and communicated to all stakeholders. It is also shown to be reflected in the teaching and learning activities.	The educational philosophies of both KU and the AMM program emphasize learning through real experience and hands-on practice. They serve as foundation in the formulation of the PLOs and in organizing teaching and learning activities. About 88% and 63.6% of compulsory specific courses and elective specific courses are laboratory-based, respectively, giving students real experience and hands-on practice. The educational philosophies are communicated to the stakeholders through the program's website and freshmen orientation.	To enhance the dissemination of the educational philosophies of KU and the AMM program, it is suggested to develop other collateral materials using the latest technology, for example, animation, videos, etc., to better articulate the educational philosophy to the stakeholders. The use of technology will be particularly appealing to the current generation of learners, Generation Z and Generation Alpha.

Criterion	Strengths	Areas for Improvement
3.2. The teaching and learning activities are shown to allow students to participate responsibly in the learning process.	To achieve the desired CLOs, various teaching and learning activities are used to allow students to participate responsibly in the learning process. These include: group discussion, laboratory practice, report presentation (individual/group). The practice activities require students to take responsibility and ownership of their learnings.	It is recommended to enhance the constructive alignment of teaching & learning activities and student assessments to CLOs, YLOs and PLOs.
3.3. The teaching and learning activities are shown to involve active learning by the students.	Teaching and learning activities, especially in the laboratory components of the courses, enable students to participate in the learning process, individually and in collaboration with their classmates. Laboratory work requires students to consult, provide feedback on specific tasks, and solve problems independently. Example of learning activities: assemble plumbing system, conduct agricultural surveys, draw agricultural drawings by hand or computer, assemble electrical or electronic circuit, install agricultural tools, etc.	It is recommended to provide sufficient, modern and up-to-date agriculture machine equipment and tools for the laboratory practices, for example, the shift from manual operation to automatic. It is recommended to promote an environment where English is used in teaching and learning to increase English proficiency of students. As stated in the recommendation in Criterion 1.3, proficiency in English increases students' self-confidence. The following strategies could be used to achieve this: o Bilingual approach in teaching the program (Thai and English) o Use of textbooks, references and other reading materials that are in English. The use of advanced functions of Microsoft Office for complex data analysis and presentation design is suggested.
3.4. The teaching and learning activities are shown to promote learning, learning how to learn, and instilling in students a commitment for life-long learning (e.g., commitment to critical inquiry, information-processing skills, and a willingness to experiment with new ideas and practices).	The nature of the AMM program requires students to stay up-to-date with knowledge of modern technology. Student activities, especially in courses on Seminar and Special Problems involve processing of information, asking questions, and developing new ideas to address real-world	To enhance students' leadership skills and self-confidence, participation in national and international competitions may be useful.

Criterion	Strengths	Areas for Improvement
	problems. These foster the development of students' life-long learning skills.	
3.5. The teaching and learning activities are shown to inculcate in students, new ideas, creative thought, innovation, and an entrepreneurial mindset.	Student activities were designed where students develop and apply their knowledge and skills to investigate and solve agricultural challenges using modern technology.	Activities that help promote the students' entrepreneurial mindset may be added among teaching and learning activities. It is recommended that the programme develops policies on the responsible use of artificial intelligence (AI) as a tool for teaching and learning to enhance students' creativity and productivity. This is to avoid AI replacing student's creativity. What is important is to develop the right mindset and attitude of students on the use of AI. Refer to similar recommendation in Criterion 4.2
3.6. The teaching and learning processes are shown to be continuously improved to ensure their relevance to the needs of industry and are aligned to the expected learning outcomes.	The program has established a system of evaluating teaching and learning activities every semester. It includes the online student satisfaction survey and learning achievement verification. The results of both assessments are analyzed, and recommendations are implemented the following academic year.	A continuous review of the survey instrument in gathering students' feedback on teaching and learning processes is recommended, given the fast changing technology in the industry.
4. Student Assessment		
4.1. A variety of assessment methods are shown to be used and are shown to be constructively aligned to achieving the expected learning outcomes and the teaching and learning objectives.	There is a variety of student assessments aligned to the achievement of the CLOs and PLOs. This includes: Quizzes, midterm and final Exams; Assignments; Case studies; Practical exams; Laboratory reports; Classroom practice (individual work); Project (group work); Project presentation.	For quality improvement, a continuous review of the constructive alignment of teaching & learning activities and student assessments to CLOs, YLOs and PLOs is recommended. Refer to similar recommendation in Criterion 3.2.

Criterion	Strengths	Areas for Improvement
4.2. The assessment and assessment-appeal policies are shown to be explicit, communicated to students, and applied consistently.	Assessment methods, criteria and evaluation dates are included in the course syllabus and are discussed by the lecturer on the first day of lecture.	Given the increasing use of artificial intelligence (AI) in academic activities, it is recommended to develop policies on AI-generated outputs and set an acceptable AI score. This is to promote ethics and integrity in academic outputs. Refer to similar recommendation in Criterion 3.5
4.3. The assessment standards and procedures for student progression and degree completion, are shown to be explicit, communicated to students, and applied consistently.	The assessment standards and procedures for student progression and degree completion are clear. They are accessible from https://registrar.ku.ac.th/edu-rules. They are also discussed during freshmen orientation as well as in the course Life Skills for Undergraduate Student (02999144). Each student is assigned an advisor who provides guidance, support and assistance in addressing any issues that may arise during their course of study.	Benchmarking the standards for degree completion is suggested.
4.4. The assessments methods are shown to include rubrics, marking schemes, timelines, and regulations, and these are shown to ensure validity, reliability, and fairness in assessment.	Course assessments include rubrics, marking schemes, timelines and regulations. These are included in the course syllabus and are discussed with the students on the first day of class.	It is recommended to include rubrics for criterion-referenced assessments.
4.5. The assessment methods are shown to measure the achievement of the expected learning outcomes of the programme and its courses.	The direct method of measuring the achievement of PLO is based on 4th year students' grades in each course.	It is recommended to enhance the current methodology of measuring achievement of PLOs & YLO to ensure validity.
4.6. Feedback of student assessment is shown to be provided in a timely manner.	The results of laboratory assessments are returned promptly. Students with a score below 60% are given the opportunity to retake the assessment.	It is recommended that timely intervention be given to students with low performance to enable them to catch up on the lessons and improve on their grades.

Criterion	Strengths	Areas for Improvement
4.7. The student assessment and its processes are shown to be continuously reviewed and improved to ensure their relevance to the needs of industry and alignment to the expected learning outcomes.	Student assessments and processes are evaluated through the KU Teaching Evaluation System (TQF 5-6) and the Learning Achievement Verification. The results from both evaluations are analyzed and used to improve assessments and course syllabus for the incoming semester.	In reviewing the assessments methods, consider evaluating their effectiveness in measuring the achievement of the CLOs.
5. Academic Staff		
5.1. The programme to show that academic staff planning (including succession, promotion, re-deployment, termination, and retirement plans) is carried out to ensure that the quality and quantity of the academic staff fulfil the needs for education, research, and service.	Clear guidelines are provided for appointments, succession and promotion from service. A knowledge transfer system has been set up to ensure the knowledge about curriculum are passed on to the new staff.	The recruitment of additional academic staff is proposed to manage teaching load, thesis supervision, research and publication. The programme may reconsider the staff planning to have more Assoc. Prof. and full-time PhD academic staff, to foster and ensure high-quality education. It is recommended to employ innovative marketing strategies through social media to attract qualified academic staff to the programs. A career advisor is recommended to help guide the academic staff to plan for professional and career growth.
5.2. The programme to show that staff workload is measured and monitored to improve the quality of education, research, and service.	The FTE of the programme is monitored. It is calculated comprehensively across six job categories: teaching, research, academic work, academic services, Thai arts & culture and student development, and administration. All KPI progress are monitored through both the KU-Work and KU-SMART-P workload reporting systems.	Given the high FTE of the prgramme, it is recommended to increase the number of academic staff to ensure work efficiency and observe work-life balance. Refer to similar recommendations in criterion 5.1

Criterion	Strengths	Areas for Improvement
5.3. The programme to show that the competences of the academic staff are determined, evaluated, and communicated.	Each academic staff member maintains an Individual Development Plan (IDP), consisting of short-term and long-term goals. Core competencies include teaching, research, academic services and student advising. The program evaluates teaching competency using two key indicators: weekly teaching load and student evaluations of each subject.	It is recommended to improve research output and publications by academic staff, particularly by publishing research conducted by students in their theses.
5.4. The programme to show that the duties allocated to the academic staff are appropriate to qualifications, experience, and aptitude.	Academic staff are assigned courses based on qualifications, experience, aptitudes, and areas of expertise. Qualified special lecturers are invited to contribute to teaching and mentoring.	Enhance academic staff expertise in emerging technologies, such as drone operation, by encouraging participation in certified drone pilot training programs.
5.5. The programme to show that promotion of the academic staff is based on a merit system which accounts for teaching, research, and service.	A promotion system is in place, following specific guidelines established by the KU-SMART-P and KU-Work systems. Performance evaluations are conducted based on real-time data from both systems.	It is recommended to set the annual targets for the academic staff on research and publication to achieve the promotion goal. It is recommended to enhance the mentoring of junior academic staff, particularly in the areas of research and publication.
5.6. The programme to show that the rights and privileges, benefits, roles and relationships, and accountability of the academic staff, taking into account professional ethics and their academic freedom, are well defined and understood.	Academic staff have the freedom to pursue research and academic services based on their expertise, abilities, and interests. KU employee handbook provides detailed guidelines and procedures related to employment, responsibilities, and institutional operations	Consider benchmarking with other programs, faculties, or other universities to see if there are other areas for improvements to ensure the academic staff have better benefits, privileges, and academic freedom.

Criterion	Strengths	Areas for Improvement
5.7. The programme to show that the training and developmental needs of the academic staff are systematically identified, and that appropriate training and development activities are implemented to fulfil the identified needs.	The programme has a structured and systematic professional development program that aligns staff competencies with the program's needs, such as active learning techniques, and quality assurance according to AUN-QA criteria.	Consider strengthening academic staff development through structured training programs on OBE, advanced Microsoft Office, English language proficiency, and external grants development and publication. It is recommended that follow-ups and post-training assessments be regularly conducted to measure improvement of specific skills among academic staff. Consider introducing follow-up mechanisms to assess the impact of participation in training and conferences.
5.8. The programme to show that performance management including reward and recognition is implemented to assess academic staff teaching and research quality.	The programme used a performance-based evaluation and incentive system that integrates professional development, research output, academic service, and clear, merit-based assessment criteria. Financial support for research efforts is offered to newly appointed staff with the amount of 90,000 Baht per research project.	It is recommended to introduce a tiered internal research grant system that supports both new and experienced staff, with amounts based on their research needs.
6. Student Support Services		
6.1. The student intake policy, admission criteria, and admission procedures to the programme are shown to be clearly defined, communicated, published, and up-to-date.	The admission process and student intake policies are straightforward and clearly defined. Admission to the AMM program is conducted through the university system and the Ministry of Higher Education, Science, Research and Innovation's central admission system. The admission information for prospective students is available on AMM's website.	The programme may consider tracking the progress and graduation of students from both admission systems to compare the performances of students from both groups for improving the student acceptance scheme in the future. Consider promoting the AMM program through social media platforms to attract a larger pool of prospective students.

Criterion	Strengths	Areas for Improvement
6.2. Both short-term and long-term planning of academic and non-academic support services are shown to be carried out to ensure sufficiency and quality of support services for teaching, research, and community service.	The formulated short term and long-term planning consider feedback from annual evaluation results and feedback from key stakeholders.	Consider increasing the number of support staffs to meet the needs of teaching practical courses.
6.3. An adequate system is shown to exist for student progress, academic performance, and workload monitoring. Student progress, academic performance, and workload are shown to be systematically recorded and monitored. Feedback to students and corrective actions are made where necessary.	A strong academic mentor-mentee system is in a place. The Education Administration Division is in-charge of systematically recording and monitoring student performance and progress. The unit has developed an in-house IT program for this function.	The program could enhance the use of technology to provide more real-time updates and personalized feedback on student progress, helping students stay on track.
6.4. Co-curricular activities, student competition, and other student support services are shown to be available to improve learning experience and employability.	AMM provides students with enriching hands-on learning experiences and opportunities in collaboration with the industry, such as the Thailand Tractor and Agri-Machinery Show (ThaiTAM). The programme also supports student participation in competitions such as in robotics and IoT. A diverse range of co-curricular and student support activities are organized to foster teamwork, promote social cohesion, cultivate respect for Thai cultural values, and enhance academic exposure.	It is recommended to re-establish the alumni association and organize more interactions between alumni and students.

Criterion	Strengths	Areas for Improvement
6.5. The competences of the support staff rendering student services are shown to be identified for recruitment and deployment. These competences are shown to be evaluated to ensure their continued relevance to stakeholders' needs. Roles and relationships are shown to be well-defined to ensure smooth delivery of the services.	All support staff undergo continuous training and skill development each year. The support staffs are always available to assist and guide students through all practical exercises involving the machinery equipment and tools.	Consider enhancing support staff expertise in emerging technologies by encouraging participation in certified drone pilot training and English language proficiency programs. Consider increasing the number of support staffs to meet the needs of teaching practical courses and to ensure work-life balance.
6.6. Student support services are shown to be subjected to evaluation, benchmarking, and enhancement.	AMM consistently evaluates support services through satisfaction assessments, which encompass academic counselling, guidance and assistance, as well as evaluations of support staff and instructors.	It is recommended to benchmark support services with other universities, particularly those related to laboratories with heavy machinery.
7. Facilities and Infrastructure		
7.1. The physical resources to deliver the curriculum, including equipment, material, and information technology, are shown to be sufficient.	Laboratories and classrooms are available and meet the requirements of the courses. The specialized laboratories are equipped with all the necessary tools for students to use. Additionally, students have access to operational test plot, appropriate facilities, and suitable machinery for practical learning.	It is recommended to expand the teaching and laboratory spaces to accommodate heavy machinery and to add more agricultural plots, such as paddy fields.
7.2. The laboratories and equipment are shown to be up-to-date, readily available, and effectively deployed.	The programme is equipped with several specialized laboratories. IoT devices, mechatronic devices, heavy tractors and agricultural equipment and tools are made available for students to use in practical training.	The BYOD (Bring Your Own Device) concept is now widely used in universities/colleges. It refers to a space where students can bring and use their own laptops, tablets, or smartphones to study, complete assignments, and access online resources. It is recommended to provide

Criterion	Strengths	Areas for Improvement
		space and facilities for a BYOD room at the faculty. It is recommended to provide sufficient, modern, and up-to-date agricultural machines, equipment and tools for the laboratory practices. For example, there is a need to update existing equipment and tools that are manual to automatic. It is recommended to incorporate auto-steering machines and drones. It is recommended that the programme collects indicators such as equipment-student ratio, lab room-student ratio, etc. and use these indicators in planning and purchasing of equipment and tools and construction of additional lab rooms. This is to ensure that students have sufficient hands-on experience by the time they graduate.
7.3. A digital library is shown to be set-up, in keeping with progress in information and communication technology.	The library has an onsite and online system to facilitate the borrowing of books and other collections.	Learning resources, including educational materials, computers, machinery, equipment, and tools, should be modern and up to date.
7.4. The information technology systems are shown to be set up to meet the needs of staff and students.	The university provides information system services to all students and staff, including the Student Information System (a registration portal for graduate students), the New Student System, an online grading system, a teaching evaluation system, and a system for requesting educational documents The program also utilizes the KU EduFarm platform, which provides access to teaching	It is recommended to ensure the scheduling system is properly maintained to prevent downtime, especially during peak hours.

Criterion	Strengths	Areas for Improvement
	materials, course syllabi, assignment submissions, grade tracking, advising, and ensures transparent management of teaching and learning activities.	
7.5. The university is shown to provide a highly accessible computer and network infrastructure that enables the campus community to fully exploit information technology for teaching, research, service, and administration.	Academic and support staff and students can access the internet through wireless LAN (WiFi) connections using the available computers, laptops, tablets, or their own devices. All academic staff, support staff, and students are provided with user accounts to access the university's Nontri network.	It is recommended to upgrade the Wi-Fi connection to increase efficiency and meet the increasing needs of the academic community.
7.6. The environmental, health, and safety standards and access for people with special needs are shown to be defined and implemented.	KU is clearly a green campus, having secured the No. 1 position in the UI GreenMetric World University Ranking (Thailand).	It is recommended to offer services and facilities that accommodate people with special needs, such as ramps and elevators.
7.7. The university is shown to provide a physical, social, and psychological environment that is conducive for education, research, and personal well-being.	The University supports a healthy and productive campus life by ensuring access to well-equipped facilities, such as the Happy Place, Sports Center, and infirmary.	It is recommended to analyze data on students facing mental health challenges, implement structured support activities for their psychological well-being, and regularly monitor their progress.
7.8. The competences of the support staff rendering services related to facilities are shown to be identified and evaluated to ensure that their skills remain relevant to stakeholder needs.	The AMM program annually assesses the satisfaction, suitability, and adequacy of services offered by various support staff, including those from the Dormitory Department, Computer Service Office, Library, and University Educational Service staff.	Skilled staff in areas like dormitory management, computer services, library operations, and academic administration are vital to delivering services that meet students' needs effectively and appropriately. It is recommended that satisfaction analysis be used to gather meaningful feedback, which can identify skill/competency gaps and guide focused training and development to continually improve staff performance and service quality.

Criterion	Strengths	Areas for Improvement
7.9. The quality of the facilities (library, laboratory, IT, and student services) are shown to be subjected to evaluation and enhancement.	The AMM program carries out an annual evaluation of the facilities utilized by students to ensure they effectively support academic activities.	It is recommended to upgrade the EduFarm Learning Platform for its usability, features, and reliability to enhance the overall learning experience.
8. Output and Outcomes		
8.1. The pass rate, dropout rate, and average time to graduate are shown to be established, monitored, and benchmarked for improvement.	The pass and dropout rates of students are determined and regularly monitored.	Student retention and success rates can be benchmarked against international universities offering comparable programs. It is recommended to either admit students with a science background or offer bridging courses for those from non-science backgrounds. To improve the number of students graduating on time by implementing a monitoring plan for those who are academically at risk.
8.2. Employability as well as self-employment, entrepreneurship, and advancement to further studies, are shown to be established, monitored, and benchmarked for improvement.	The employability of graduates is monitored, demonstrating satisfactory outcomes for the majority of graduates. The employment rate over the past 7 years (2016–2022) is 83.73%. A high number of students were employed immediately after graduation.	The program should do more benchmarking with other universities, both local and foreign, especially the universities that are ranked higher.
8.3. Research and creative work output and activities carried out by the academic staff and students, are shown to be established, monitored, and benchmarked for improvement.	The AMM programme maintains consistent commitment to the agricultural sector, which has significantly contributed to its growing income.	It is recommended to increase the number of academic staff, especially those with PhDs, to increase time devoted for research and publication. Refer to similar recommendation in criterion 5.1 It is recommended to integrate the courses on Seminar and Special Problem into a Thesis course to build students' capability to do

Criterion	Strengths	Areas for Improvement
		research and publication. Refer to similar recommendation in criterion 2.5 It is recommended that the AMM program benchmark with similar programs at international universities, particularly in areas such as research publications and grant writing.
8.4. Data are provided to show directly the achievement of the programme outcomes, which are established and monitored.	AMM graduates possess strong practical skills and are recognized for their hardworking attitude. Data is provided to demonstrate the achievement of program outcomes based on students' GPAs.	It is recommended to strengthen students' data analytics, digital competencies and English proficiency. The process of measuring ELO achievement can be further improved and continuously benchmarked for enhancement.
8.5. Satisfaction level of the various stakeholders are shown to be established, monitored, and benchmarked for improvement.	Satisfaction surveys are conducted for all stakeholders and thoroughly analyzed. Employers are satisfied with the quality of AMM graduates.	Benchmarking of satisfaction on various aspects of programme operations will help identify the strengths and pitfalls, which can be used for development planning.