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FINAL REPORT

UNIVERSITAS PENDIDIKAN GANESHA (INDONESIA)

CLUSTER CHEMISTRY

CHEMISTRY EDUCATION (BACHELOR OF EDUCATION)

CHEMISTRY (BACHELOR OF SCIENCE)

February 2026



Content

Decision of the Accreditation Commission of AQAS	3
I. Preamble	6
II. Accreditation procedure	6
1. Criteria	6
2. Approach and methodology	6
III. General information on the university	9
IV. Assessment of the study programmes	9
1. Quality of the curriculum	9
2. Procedures for quality assurance	16
3. Learning, teaching and assessment of students	18
4. Student admission, progression, recognition and certification.....	21
5. Teaching staff.....	23
6. Learning resources and student support	24
7. Information	26
V. Recommendation of the panel of experts.....	28

DECISION OF THE AQAS STANDING COMMISSION ON THE STUDY PROGRAMMES

- “CHEMISTRY EDUCATION” (BACHELOR OF EDUCATION)
- “CHEMISTRY” (BACHELOR OF SCIENCE)

OFFERED BY UNIVERSITAS PENDIDIKAN GANESHA, SINGARAJA, INDONESIA

Based on the report of the expert panel, the comments by the university and the discussions of the AQAS Standing Commission in its 28th meeting on 23 February 2026, the AQAS Standing Commission decides:

1. The study programmes “**Chemistry Education**” (**Bachelor of Education**) an “**Chemistry**” (**Bachelor of Science**) offered by **Universitas Pendidikan Ganesha, Indonesia** are accredited according to the AQAS Criteria for Programme Accreditation (Bachelor/Master).

The accreditations are conditional.

The study programmes essentially comply with the requirements defined by the criteria and thus the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and the European Qualifications Framework (EQF) in their current version. The required adjustments can be implemented within a time period of twelve months.

2. The conditions have to be fulfilled. The fulfilment of the conditions has to be documented and reported to AQAS no later than **31 March 2027**. The confirmation of the conditions might include a physical site visit within the time period of twelve months.
3. The accreditation is given for the period of **six years** and is valid until **31 March 2032**, provided that the conditions listed below are fully met. Otherwise, the accreditation may be withdrawn.

Conditions:

For the study programme Chemistry Education (1a-d) and Chemistry (1d):

1. The intended learning outcomes must be reflected and in parts reformulated. As a consequence, the course descriptions must be revised in order to improve their competence orientation. Within this process of revision:
 - a. the intended learning outcomes (ILOs) must be more focussed on the core competencies,
 - b. the form of the exams must be oriented on the competencies formulated in the ILOs,
 - c. the literature references must be updated and
 - d. specification of the details for midterm and final assessments have to be described for both study programmes.

For all study programmes:

2. Information about the regulations that ensure checking and analysing frequently the outcomes of the exams must be provided.
3. UNDIKSHA has to provide the admission regulations in English language.

4. The English version of the website has to be completed so that it contains all relevant information about the study programmes and increases the comparability and transparency for the stakeholders.

The following **recommendations** are given for further improvement of the programmes:

1. UNDIKSHA should provide the evidence-based documents in English language. Furthermore, it is recommended to increase the numbers of internal and external stakeholder feedback.
2. UNDIKSHA should provide the information about the regulation that sets a time and/or page limit for the final thesis in order to monitor the workload related to it in English language.

With regard to the reasons for this decision the Standing Commission refers to the attached experts' report.

EXPERTS' REPORT**ON THE STUDY PROGRAMMES**

- “CHEMISTRY EDUCATION” (BACHELOR OF EDUCATION)
- “CHEMISTRY” (BACHELOR OF SCIENCE)

OFFERED BY UNIVERSITAS PENDIDIKAN GANESHA, SINGARAJA, INDONESIA

Visit to the university: 07 – 10 February 2023, written reconsideration evaluation in 2025/26

Panel of experts in 2023 and 2025/26:

Prof. Dr. Ingo Eilks

University of Bremen, Institute of Didactics of Science
Education - Chemistry Department

Prof. Dr. Joachim Wegener

University of Regensburg, Institute of Analytical Chemistry

Panel of experts in 2023:

Ms. Pesta Augustina Marbun

Teacher at Global Prestasi School, Jakarta (representative of the labour market)

Mr. Albrecht Martin Bloße

Student at Leipzig University (student representative)

Coordinator:

Maria Rentmeister

AQAS, Cologne, Germany

Doris Herrmann

I. Preamble

AQAS – Agency for Quality Assurance through Accreditation of Study Programmes – is an independent non-profit organisation supported by more than 90 universities, universities of applied sciences and academic associations. Since 2002, the agency has been recognised by the German Accreditation Council (GAC). It is, therefore, a notified body for the accreditation of higher education institutions and programmes in Germany.

AQAS is a full member of ENQA and also listed in the European Quality Assurance Register for Higher Education (EQAR) which confirms that our procedures comply with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), on which all Bologna countries agreed as a basis for internal and external quality assurance.

AQAS is an institution founded by and working for higher education institutions and academic associations. The agency is devoted to quality assurance and quality development of academic studies and higher education institutions' teaching. In line with AQAS' mission statement, the official bodies in Germany and Europe (GAC and EQAR) approved that the activities of AQAS in accreditation are neither limited to specific academic disciplines or degrees nor a particular type of higher education institution.

II. Accreditation procedure

This report results from the external review of the undergraduate programmes "Chemistry Education" (Bachelor of Education) and "Chemistry" (Bachelor of Science) offered by Universitas Pendidikan Ganesha in Singaraja, Indonesia.

1. Criteria

Each programme is assessed against a set of criteria for accreditation developed by AQAS: the AQAS Criteria for Programme Accreditation (Bachelor/Master). The criteria are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) 2015. To facilitate the review each criterion features a set of indicators that can be used to demonstrate the fulfilment of the criteria. However, if single indicators are not fulfilled this does not automatically mean that a criterion is not met. The indicators need to be discussed in the context of each programme since not all indicators necessarily can be applied to every programme.

2. Approach and methodology

Initialisation

The university mandated AQAS to perform the accreditation procedure in May 2021. The university produced a Self-Evaluation Report (SER). In January 2022, the institution handed in a draft of the SER together with the relevant documentation on the programmes and an appendix. The appendix included e.g.:

- an overview over statistical data of the student body (e.g., number of applications, beginners, students, graduates, student dropouts),
- the CVs of the teaching staff
- information on student services,
- core information on the main library,
- as well as academic regulations.

AQAS checked the SER regarding completeness, comprehensibility, and transparency. The accreditation procedure was officially initialised by a decision of the AQAS Standing Commission on 21 February 2022. The final version of the SER was handed in June 2022.

Nomination of the expert panel

The composition of the panel of experts follows the stakeholder principle. Consequently, representatives from the respective disciplines, the labour market, and students are involved. Furthermore, AQAS follows the principles for the selection of experts defined by the European Consortium for Accreditation (ECA). The Standing Commission nominated the aforementioned expert panel in August 2022. AQAS informed the university about the members of the expert panel and the university did not raise any concerns about the composition of the panel.

Preparation of the site visit

Prior to the site visit, the experts reviewed the SER and submitted a short preliminary statement including open questions and potential needs for additional information. AQAS forwarded these preliminary statements to the university and to all panel members in order to increase transparency in the process and the upcoming discussions during the site visit.

Site visit

After a review of the SER, a site visit to the university took place on 07-10 February 2023. On-site, the experts interviewed different stakeholders, e.g. the management of the higher education institution, the programme management, teaching and other staff, as well as students and graduates, in separate discussion rounds and consulted additional documentation as well as student work. The visit concluded by the presentation of the preliminary findings of the group of experts to the university's representatives.

Reporting

After the site visit had taken place, the expert group drafted the following report, assessing the fulfilment of the AQAS Criteria. The report included a recommendation to the AQAS Standing Commission. The report was sent to the university for comments.

Postponement of decision

The report, together with the comments of the department, forms the basis for the AQAS Standing Commission to take a decision regarding the accreditation of the programmes. Based on these two documents, the AQAS Standing Commission took its decision on the accreditation on 04 December 2023. AQAS forwarded the decision to the university. The university had the right to appeal against the decision or any of the imposed findings.

The AQAS Commission decided to give the programme additional 18 months for the further enhancement of the quality of the programmes. The deadline for the submission of the revised documents was 30 June 2025.

Reconsideration

The university submitted further evidence in June 2025, and thus, in the given timeframe, for the reconsideration process. The documents were forwarded to the relevant key stakeholder in the experts' panel. The expert drafted this follow-up report on the consideration, assessing the fulfilment of the AQAS Criteria. The report includes a short description of the situation when the programmes were assessed firstly, the evaluation by the expert panel which formed the basis for decision taking in 2023, the assessment of the situation on the basis of the additional documents provided in 2025 and a recommendation to the AQAS Standing Commission.

Decision

The report, together with the comments of the university, forms the basis for the AQAS Standing Commission to take a decision regarding the accreditation of the programmes. Based on these two documents, the AQAS Standing Commission took its decision on the accreditation on 23 February 2026. AQAS forwarded the decision to the university. The university had the right to appeal against the decision or any of the imposed conditions.

In March 2026, AQAS published the report and the result of the accreditation as well as the names of the panel of experts.

III. General information on the university

Universitas Pendidikan Ganesha (UNDIKSHA) is a state university located in Singaraja in the Bali province. The university is structured along 7 faculties and a Postgraduate Programme: Faculty of Education, Faculty of Law and Social Sciences, Faculty of Languages and Arts, Faculty of Mathematics and Natural Sciences, Engineering and Vocational Faculty, Faculty of Sport and Health, as well as Faculty of Economics. In total, the university offers 67 programmes to a student number of 12,750.

UNDIKSHA developed from a teacher training institute to its current state as an independent state university, which was granted in 2006. Its vision is defined in a Strategic Plan 2020-2024 and it follows a *Tri Hita Karana* philosophy, which subsumes learning and teaching, research and community service. UNDIKSHA strives to become a leading university in Asia by 2045.

The two Bachelor's study programmes to be accredited are part of the Faculty of Mathematics and Natural Sciences (FMIPA). The faculty has 1,540 students and offers in total 13 study programmes in 4 departments, e.g. an undergraduate programme in Biology Education and an undergraduate programme in Mathematics.

The faculty is headed by a dean, the Postgraduate Programme by a director. The chemistry-related undergraduate programmes of this procedure belong to the Chemistry Department of the Faculty. The science education-related undergraduate programmes belong to the Physics & Sciences Education Department. There is a separate Institution of Research and Community Service on the university level whose goal is to coordinate research activities, including those of FMIPA.

IV. Assessment of the study programmes

1. Quality of the curriculum

Bachelor's degree

The intended learning outcomes of the programme are defined and available in published form. They reflect both academic and labour-market requirements and are up-to-date with relation to the relevant field. The design of the programme supports achievement of the intended learning outcomes.

The academic level of graduates corresponds to the requirements of the appropriate level of the European Qualifications Framework.

The curriculum's design is readily available and transparently formulated.

[ESG 1.2]

Description

General

The description of the programme learning outcomes at UNIDKSHA is structured into four categories: Attitudes, Knowledge, General Skills and Specific Skills. Programme learning outcomes are said to refer to national standards and the Indonesian Qualifications Framework on the corresponding level.

The programmes use the Indonesian credit system to assign workload. The Indonesian Universities use a specific way to compare their national system with the European Credit Point System: 150 SKS would be equivalent to 238 ECTS. The university states in the SER that 1 SKS is equivalent to students taking part in 50 minutes of scheduled face to-face activities, 60 minutes of structured academic activities, and 60 minutes of independent actions every week in the semester (170 minutes in total). During the semester, each course is carried out in 16 meetings (14 lessons and two meetings for exams).

General Remarks by the experts about both programmes:

The panel of experts comes to the overall conclusion that the teacher education programme in this cluster are suitable for preparing future teachers for Indonesia. All programmes in this cluster are feasible, well-organized and highly structured. The school representatives approved that the graduates are able to fulfil their profession and described the graduates as engaged and professional chemistry teachers. Nevertheless, there is a need to sharpen the profiles of the different programmes individually as the panel of experts comes to slightly different evaluations of the programmes offered.

During the site visit, the experts learned that several of the questions that they saw critical in the beginning were based on national regulations, thus the impression of the performance of Ganesha University got more positive day by day and also the student feedback showed, that the programmes are highly appreciated by the students, graduates and representatives of the local labour market. Moreover, the panel of experts saw a positive learning atmosphere between staff and students.

1.1 Chemistry Education (Bachelor)

The Bachelor's programme Chemistry Education established four profiles for its graduates as stated in the SER:

1. educators (teachers in school),
2. researchers in chemistry education,
3. managers of chemistry education laboratories and
4. entrepreneurs in the field of chemistry education.

Based on the four profiles, eight programme learning outcomes have been designed and are sorted into the four categories: Attitude, Knowledge, General Skills and Specific Skills. While the category of attitude mostly draws upon the role of the students and their responsibility in society, the category of mastery of knowledge refers to specific expertise the students must have gained related to their studies. This includes for example mastering theoretical concepts of education and scientific methods, as well as structure, dynamics, and energy of chemicals. The category of general skills contains learning outcomes that are generally gained in this line of study such as being able to integrate learning and innovation skills or being able to apply logical, critical, systematic, and innovative thinking. The category of specific skills consequently is more focused on learning outcomes that refer to this specific study programme, for example being able to plan, manage, and evaluate chemistry learning in schools as well as planning, managing, and evaluating activities in the laboratory by taking into account the principles of Occupational Safety and Security (OSS).

The SER demonstrates that the curriculum of the Chemistry Education programme consists of 150 SKS, of which 98 theoretical and 52 practical credit hours. The courses of the curriculum are structured into four categories. General Compulsory Courses in semesters 1 and 2 include 5 general courses, such as Pancasila, Religious values and English (10 SKS in total). Core Study Courses make up 95 SKS of the curriculum and include Chemistry related courses such as "Organic Chemistry" but also Education related courses such as "Microteaching". Study Programme Specific Courses make up 4 SKS of the curriculum, including e.g. a course on "Ethnochemistry". The last category of courses is the Elective Courses, which make up 41 SKS of the curriculum and which are mostly supporting science and technology courses. Included in the elective courses category are 9 SKS that can be chosen from outside the study programme's curriculum, labelled "Cross Study programme", as well as 14 SKS that can be taken outside the University e.g. through a student's exchange at a partner university or through an independent study project or other possibilities. The curriculum includes mandatory internships ("teaching practicum 1 & 2") as well as a mandatory thesis.

According to the university, the curriculum is reviewed and adjusted according to the needs of the working sector by conducting focus group discussions. The last review took place 2020 by implementing the national

MBKM Regulation (“Freedom of Learning”) which was implemented by including the “Cross Study programme” elective courses as well as the “Student’s Exchange” elective course mentioned above. The aim is, as stated in the SER, to produce civilized, knowledgeable, professional, and competitive graduates in the industrial era 4.0.

Experts’ evaluation

a) evaluation in 2023

In the experts’ opinion, the curriculum of this BA programme is broad and provides a systematic theoretical education for future chemistry teachers. All core fields of chemistry are presented, including innovative curriculum elements like green chemistry and indigenous science. The courses provide subject-specific and interdisciplinary elements; they cover subject-specific and cross-subject knowledge as well as subject-related, methodological, and general skills. The programme includes several elements of laboratory training. Overall, the experts conclude that the University should analyse the technical equipment in chemical laboratories in number and quality and whether technical infrastructure complies with a timely education of students with respect to their laboratory skills. In short, an analysis to review if a sufficient number and types of equipment with established safety standards are available in its labs must be conducted. Depending on the outcome, improvements must be made to allow the students the most suitable experience in practical work in the laboratories. Because some of the changes might not be possible at short notice, the experts request that a strategic plan (including action plan) is developed to improve the laboratory infrastructure (old Finding 1). Overall, a risk assessment plan and according to measures must be implemented to reduce risks and hazards for students and teachers during practical work in the laboratory and by the storage of risk chemicals (old Finding 2). An appropriate concept for handling and storage of risk chemicals needs to be developed and implemented. This includes support staff to ensure laboratory safety and management of chemicals (old Finding 2a). In this regard, it is needed to analyse and improve the laboratory training courses in terms of risks analyses and the provision of hazards (old Finding 2b). A stronger operation and control of personal risk protection equipment is needed (old Finding 2c). A thorough analysis of risks in practical work in the laboratory according to international standards must take place (old Finding 2d).

The courses in the domain of education and the school curriculum are extensive. The panel of experts took note that some innovative elements are already included, like teaching experiences in the micro-teaching lab. An additional focus on teaching international curricula would be an important point for improving the existing curriculum (old Finding 3). Offering subjects that prepare students to teach international curriculums, such as IB, Cambridge, and EdExcel, will give graduates an advantage in the job market, as these skills are in high demand. Furthermore, one missing element in the study programme is an explicit focus on inclusive education and teaching chemistry to students with special needs. The programme must be made to educate the prospective chemistry teachers for inclusive education and teaching chemistry to students with special needs. The programme must hand in a concept on how to include inclusive education and teaching for special needs students in schools into the chemistry teacher education programme (old Finding 4).

The intended learning outcomes are broad and reflect both, academic/scientific and labour market requirements. Based on the feedback provided by students and labour market experts, the experts conclude that the achieved learning outcomes are appropriate to good. The outline of the intended learning outcomes (ILOs) is, however, in parts quite general. A more thorough and reflected outline of the intended learning outcomes would make a better base for more mutual and binding understanding between teachers and students. The intended learning outcomes need to be reflected and in parts reformulated to support the students in the learning process by providing transparency. The course descriptions must be revised in order to improve their competence orientation (old Finding 5). Within this process of revision, the intended learning outcomes (ILOs)

must be more focussed on the core competencies (old Finding 5a), the exams must refer to the ILOs (old Finding 5b), and the literature references must be updated (old Finding 5c).

The academic degree corresponds to the learning outcomes and the requirements of the appropriate level of the European Qualifications Framework. National regulations are taken into account. The curricular structure of the programme supports the achievement of the ILOs and the learner's progression by a detailed system of assessments in the courses. An idealised typical course plan is suggested to students and was provided to the panel of experts. The curricular elements including their functions, their compulsory or elective character and their usage are documented. The total programme workload is correctly and transparently allocated to the different courses/modules. Mechanisms of evaluation and student feedback are implemented.

Overall, the panel of experts wishes to point out that the internationalisation of the programme should be strengthened (old Finding 6), e.g., by fostering the exchange of staff and students (old Finding 6a) and by supporting the use of the English language. Based on students' feedback, the experts recommend expanding the number of curricular elements in the English language to provide graduates with a strong basis for an academic or international career (old Finding 6b). In addition, guest lecturers from the region and beyond should be invited (old Finding 6c). While the panel of experts learned that the curriculum is reviewed regularly, the experts strongly suggest that feedback from external and internal stakeholders should be collected in a more structured and regular way (old Finding 7). Additionally, the faculty should explore options for increased networking between the different programmes on the faculty level to explore synergies for the study programmes (old Finding 8).

b) Reconsideration evaluation in 2025/26

The University provided a detailed laboratory strategic plan that lists the available lab resources, lab space and equipment. Moreover, UNIDIKSHA has provided a plan on future investments within 2024-2028 particularly addressing lab safety measures. Within realistic limitations, the finding has been properly addressed.

On the document level, UNIDIKSHA has worked out rules and regulations to protect personnel and students while they are working in the lab. Moreover, a system has been established by which hazardous materials are disposed. On the document level the measures are compliant with findings in particular with respect to local limitations.

International curriculum developments have been addressed within the curriculum analysis course. An international curriculum has not been worked out yet. UNIDIKSHA stated that an international curriculum is addressed in a "curriculum analysis course". However, the reviewers could not find an explicit mentioning of "international curricula". But instead, the authors of the course mention a critical evaluation of the curricula of Indonesia which is most likely going in the intended way. Moreover, the experts have the strong impression that representatives of UNIDIKSHA have understood the necessity of international courses to reach their goal of global visibility. Based on this, this finding is considered as being very present in any future curriculum development.

The curriculum has been updated, and three new courses have been introduced to incorporate inclusive education and teaching strategies for students with special needs, benefitted from diverse stakeholder input, including a school for students with special needs.

Chemistry: The course descriptions have been revised thoroughly, and the ILOs have been detailed in a very formal way. Furthermore, literature references have been updated. Information on the exams, the specifications of the midterm and final assessments are, however, missing in the new documents (**new Finding 1d**).

Chemistry Education: The documents for the study programme are not available anymore. UNIDIKSHA has to provide the corresponding documents to show the fulfilment of the finding (**new Finding 1**).

UNDIKSHA lists several international initiatives for research and teaching with several different countries in the world. Moreover, international networking is going on in terms of guest lectures and cooperate research. The activities are indicators that UNDIKSHA tries hard to improve their international side and become more and more attractive for international partners.

UNDIKSHA reports on periodic internal quality audits and a transparent feedback system for external stakeholders. Unfortunately, the documents are not in English. Thus, the finding is partially fulfilled. UNDIKSHA should provide the evidence-based documents in English language. Furthermore, it is recommended to increase the numbers of internal and external stakeholder feedback (**new Finding 2**).

Curricular measures have been taken to make students attend classes from the other study programmes or interdisciplinary courses. Opportunity for student networking is addressed this way.

Conclusion

The criterion is partially fulfilled.

1.2 Chemistry (Bachelor)

The Bachelor's programme Chemistry established three profiles for its graduates as stated in the SER:

1. chemistry scientist,
2. chemistry practitioner and
3. entrepreneurs in the field of chemistry.

Based on the three profiles, eight programme learning outcomes have been designed and are sorted into the four categories: Attitude, Knowledge, General Skills and Specific Skills. While the category of attitude mostly draws upon the role of the students and their responsibility in society, the category of mastery of knowledge refers to specific expertise the students must have gained related to their studies. This includes for example mastering general concepts and principles in the core fields of chemistry and a more in-depth training in one of the fields of inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, and biochemistry. The category of general skills contains learning outcomes that are generally gained in this line of study such as being able to integrate learning and innovation skills or being able to apply logical, critical, systematic and innovative thinking. The category of specific skills consequently is more focused on learning outcomes that refer to this specific study programme, for example being responsible for planning and managing parts of the chemical process or preparing, handling, and managing chemicals in the environment and manufacturing processes in government and private institutions by utilizing chemical knowledge and technology.

The SER demonstrates that the curriculum of the Chemistry programme consists of 150 SKS, of which 111 theoretical and 39 practical credit hours. The courses of the curriculum are structured into four categories. General Compulsory Courses in semesters 1 and 2 include 5 general courses, such as Pancasila, Religious values and English (10 SKS in total). Core Study Courses make up 79 SKS of the curriculum and include Chemistry related courses such as "Organic Chemistry" or "Solid and Complex Chemistry". Study Programme Specific Courses make up 10 SKS of the curriculum, including e.g. a course on "Cosmetics and Food Drug Chemistry". The last category of courses is the Elective Courses, which make up 51 SKS of the curriculum. Included in the elective courses category are 9 SKS that can be chosen from outside the study programme's curriculum, labelled "Cross Study programme", as well as 14 SKS that can be taken outside the University e.g. through a student's exchange at a partner university or through an independent study project or other possibilities. The curriculum includes an internship as well as a thesis.

According to the university, the curriculum is reviewed and adjusted according to the needs of the working sector. The last review took place in 2020 by implementing the national MBKM Regulation ("Freedom of

Learning”) which was implemented by including the “Cross Study programme” elective courses as well as the “Student’s Exchange” elective course mentioned above. The aim is, as stated in the SER, to produce civilized, knowledgeable, professional, and competitive graduates in the industrial era 4.0.

The SER states that job opportunities for graduates both are available in government agencies such as the National Agency of Drug and Food Control (NADFC), laboratories involving chemical analysis and environmental services as well as in private/ state-owned enterprises agencies such as petrochemistry, mining, water treatment, and Local Government Owned Water Utilities (LGOWU).

Experts’ evaluation

a) evaluation in 2023

The curriculum of the Bachelor’s study programme “Chemistry” is described and documented in all details in the SER and its annexes. The curriculum contains predominantly theoretical education by means of lectures, seminars, and self-study units but also about 25% of SKS practical training in the laboratory which is essential for an experimental discipline like chemistry. Compared to international undergraduate programmes in chemistry, however, the panel of experts points out that this amount of practical training is more at the lower end of the scale but of course dependent on local conditions. Overall, the experts conclude that the University should analyse the technical equipment in chemical laboratories in number and quality and whether technical infrastructure complies with a timely education of students with respect to their laboratory skills. In short, an analysis to review if a sufficient number and types of equipment with established safety standards are available in its labs must be conducted (see Finding 1). Depending on the outcome, improvements should be made to allow the students the most suitable experience in practical work in the laboratories. The experts request developing a strategic plan to improve the laboratory infrastructure. This includes support staff to ensure laboratory safety and management of chemicals.

During the site visit, the panel of experts experienced that safety standards in chemical laboratories need to be reconsidered and improved as soon as possible to ensure the safety of students and instructors and to prevent them from potential health hazards. A concept regarding safety standards for risk prevention in the laboratories must be developed (see Finding 2). The concept must focus on the integration of laboratory safety for staff and students (see Finding 2c). Moreover, the teaching of laboratory safety to students must be an integral part of the concept (see Finding 2b). First and foremost, the handling and storage of chemicals must meet international safety standards for risk prevention and must be improved at short notice (see Finding 2a). If no national regulations apply, the university should define and enforce uncompelled local regulations that are leaned on international standards (see Finding 2d). The experts are aware that the establishment of improved safety standards requires financial resources to allow for infrastructural changes or the acquisition of technical equipment for risk prevention (e.g., a sufficient number of fume hoods). The university administration should therefore consider allocating resources for this critical improvement of teaching laboratories.

The curriculum covers all core fields of chemistry (inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, biochemistry) in addition to some very timely subjects like ‘green chemistry’ and ‘ethno-chemistry’. In this respect, the curriculum already includes established courses that could serve as a potential basis for a very attractive, future-oriented scientific profile. A dedicated scientific profile may provide regional and also national visibility and may add an important element to the university’s strategic plans and visions. The experts recommend discussing a potential research focus that is based on the timely elements of the study programme (old Finding 9). Timely elements have been found in many of the bachelor theses and may become a unique selling point in competition with other regional and national universities.

In addition to the core fields of chemistry, chemistry-related soft skills (e.g., research methodology) are part of the curriculum intended to enable students to independently solve chemical problems in a professional way.

In terms of learning/teaching formats, the curriculum contains classical elements like lectures and supervised lab work but also problem-based learning. The experts wish to point out this is particularly innovative as an element of practical training in the laboratory. All curricular elements required for an undergraduate programme in chemistry are nominally present. However, the sequence of their placement in the curriculum should be critically reconsidered (old Finding 10). For example, “quantum mechanics” in the first semester is taught in parallel to “basic mathematics”. Additionally, the course “biological chemistry” in semester III requires knowledge in “polyfunctional organic chemistry” which is, however, also taught in parallel in semester III.

The programme learning outcomes (ILOs) are described in a very general, repetitive way that requires more specification. The ILOs must be revised and tailored to the individual courses they are referring to (see Finding 5). The panel of experts found this to be particularly true for the ILOs on the level of individual courses. For these courses, the ILOs are very similar if not identical even for courses of very different content and they are sometimes not appropriate. Moreover, the course descriptions should describe the acquired competencies. Accordingly, the course descriptions must be rephrased in such a way that learning outcomes are expressed in a competence-oriented way. The course descriptions give all the required formal details like number of credits, status, prerequisites, and the assignment of the course to the four categories of the curriculum. The course descriptions do not specify the details of the midterm and final assessments. But during the site visit, the panel of experts got the impression that there is a generalized scheme for these assessments which are transparently shared with the students.

Even though the curriculum addresses all basic elements of a Bachelor's Chemistry programme according to the European Qualifications Framework, the experts have some doubt that the study programme is internationally competitive allowing graduates to enter international Master's programmes in chemistry. The curriculum seems to miss more in-depth elements in synthetic organic and inorganic chemistry, aspects of technical chemistry, theoretical chemistry, and practical training in spectroscopic analysis of chemical compounds, to mention a few. On the other hand, feedback from local representatives of the labour market confirmed that graduates from this programme bring all competencies and skills to be readily employed by chemical companies or regulatory authorities. Accordingly, the panel of experts concludes that the university should reconsider and decide on the future profile of students graduating from the BSc chemistry programme: (i) Graduates will be primarily educated and trained to enter Chemical Master's programmes to be able to pursue a career in science, or (ii) graduates will be primarily educated and trained for the local labour market. Depending on the outcome of the consideration the profile of the programme needs to be adapted (old Finding 11). If the profile of the study programme should be refocused to option (i), the panel of experts suggests it is mandatory to include the topics mentioned above at the cost of some soft skills or peripheral courses. In this case, the university may want to consider dedicating the students' exchange elective course to a topic that is part of the core fields of chemistry. The curriculum should be critically analysed whether or not all core fields of chemistry have been adequately addressed or may be expanded at the cost of fewer chemistry-related elements of the study programme. This critical analysis and corresponding action is required to develop an internationally competitive study programme.

Overall, the panel of experts wishes to point out that the internationalisation of the programme should be strengthened (see Finding 6), e.g., by fostering the exchange of staff and students (see Finding 6a) and by supporting the use of the English language. Based on students' feedback, the experts recommend expanding the number of curricular elements in the English language to provide graduates with a strong basis for an academic or international career (see Finding 6b). In addition, guest lecturers from the region and beyond should be invited (Finding 6c). While the panel of experts learned that the curriculum is reviewed regularly, the experts strongly suggest that feedback from external and internal stakeholders should be collected in a more structured and regular way (see Finding 7). Additionally, the faculty should explore options for increased

networking between the different programmes on the faculty level to explore synergies for the study programmes (see Finding 8).

b) Reconsideration evaluation in 2025/26

To the expert's understanding, there has been a slight misconception with respect to the finding regarding the development of a dedicated scientific profile and research focus. It was the experts' initial intention to trigger the establishment of a research focus across the faculty to provide the critical mass to participate in bigger (even international) research consortia on this very topic. The existing foci on sustainable chemistry should have been extended to other faculty members to create the critical mass. The examples of titles from different theses are actually pointing in the direction of "sustainable chemistry" as common grounds something that became apparent during the site visit already. From this perspective, UNDIKSHA is already headed to a common research focus and this initiative should be strengthened. So, the finding is considered as being fulfilled.

The sequence of courses has been revised largely along the experts' initial suggestions and now shows a meaningful order to teach chemistry.

The experts' understanding of UNDIKSHA's rebuttal is that the students are predominantly trained to enter the workforce after graduation. This is legitimate goal for the study programme. It does, however, not rule out advanced studies in one of the master programmes. In some ways this focus on educating for the labour market will also put natural limits to the initiatives for internationalization as discussed above.

Conclusion

The criterion is fulfilled.

2. Procedures for quality assurance

Bachelor's degree

The programme is subject to the higher education institution's policy and associated procedures for quality assurance, including procedures for the design, approval, monitoring, and revision of the programmes.

A quality-oriented culture, focusing on continuous quality enhancement, is in place. This includes regular feedback mechanisms involving both internal and external stakeholders.

The strategy, policies, and procedures have a formal status and are made available in published form to all those concerned. They also include roles for students and other stakeholders.

Data is collected from relevant sources and stakeholders, analysed, and used for the effective management and continuous enhancement of the programme.

[ESG 1.1, 1.7 & 1.9]

Description

Several departments, committees and working groups are outlined by UNDIKSHA to carry out quality assurance at the university, faculty and programme levels. To realize a functioning quality assurance system on the university level, UNDIKSHA states that a Quality Assurance Center (PJM) was formed, as well as Quality Control Units on the faculty and programme level. Every year, an "Internal Quality Audit" is conducted. Some of the mechanisms of the audit described in the SER include the formation of internal auditor panels and their training as well as the examination of study programmes by files and by field visits, concluding with a report. The documents, prepared by the Quality Control Unit to facilitate quality assurance, include National Education Standards, Research National Standards, Community Service Standards, and Non-Academic Standards.

The teaching and learning process is monitored and evaluated by the faculty by distributing questionnaires to the students in the beginning, middle and end of lectures each semester, as described by UNDIKSHA. Following the explanation, the questionnaire given at the beginning of the course aims to determine the readiness of the supporting documents given to students, the questionnaire mid-lecture aims to determine the learning process, and the questionnaire at the end of the lecture aims to determine the learning outcomes that have been designed. It is said that a Management Findings Meeting is set up to use the results for improvement of the coming academic year.

UNDIKSHA describes that stakeholder involvement plays an essential role in their quality assurance system and that internal stakeholders such as lecturers, students and education staff as well as external stakeholders such as industry, university, community partners are included by obtaining their feedback annually with surveys. Tracer studies, graduate user satisfaction surveys and suggestions from alumni are carried out / collected by the Technical Implementation Unit for Career Development and Student Entrepreneurship.

UNDIKSHA states that it uses the PPEPP or Perencanaan, Pelaksanaan, Evaluasi, Pengendalian, dan Peningkatan (Determination, Implementation, Evaluation, Control and Improvement) cycle for its quality assurance system. The results of monitoring and evaluation activities are said to be documented and open to the public on the faculty's website.

Experts' evaluation

a) Evaluation in 2023

The Science Education Cluster provides a well-implemented QM system based on the national regulations. The experts gained the impression that the collected results of the many surveys conducted can be used to hugely improve the quality of teaching at UNDIKSHA. During the site visit, the panel of experts was presented a dashboard on QM results of which the level of presentation looked professional. However, during the site visit, the panel of experts learned that the survey results were not shared with all stakeholders of UNDIKSHA, e.g., the students. Accordingly, the panel of experts recommends closing the feedback loop even further and to communicate the results and changes based on feedback to students (old Finding 12).

The expert group suggests measuring the workload of lecturers and students separately and regularly and to adapt the workload, if necessary (old Finding 13). By measuring the workload of lecturers and students separately, it can help identify areas where the workload can be improved and balanced for both parties. Regular measurement can also help to identify any changes or trends that may occur over time. The communication of survey results and resulting changes to students can also be beneficial for them, as it allows them to have a better understanding of the efforts being made to improve their educational experience. By closing the feedback loop and communicating results in an aggregated form, students can see the overall improvements being made, which can help improve their motivation and engagement in their studies.

The panel of experts took note of the structured meeting between faculty and staff to discuss the results of the evaluations. As an addition, the expert panel encourages collecting feedback from external and internal stakeholders in a more structured and regular way, introducing different forms of exchange with university and students can foster the development of independent students (see above).

The panel of experts learned that UNDIKSHA takes track of the students and admissions to the university courses. The experts suggest to further develop this into tracking the cohorts and to collect data on how long the average and actual time to successfully finishing the study programme is old (Finding 14).

b) Reconsideration evaluation in 2025/26

There are websites reporting on surveys and QM results. As such they are transparent. However, the content of the website was not in English - so not accessible to the experts. The presence of the website makes the experts feel that this finding has been addressed and fulfilled.

UNDIKSHA's rebuttal states that the revision of the curriculum has led to a more balanced workload. Links to the documentation are directing to documents not given in English. Detailed analysis is thus not possible. But the workload of both parties, students and lecturers have been documented.

UNDIKSHA indicates in their reply to the finding of collecting data on how long the average and actual time to successfully finishing the study programme is that a corresponding documentation system is in place. The system is only accessible with proper login credentials, so the information is protected.

Conclusion

The criterion is fulfilled.

3. Learning, teaching and assessment of students

Bachelor's degree

The delivery of material encourages students to take an active role in the learning process.

Students are assessed using accessible criteria, regulations, and procedures, which are made readily available to all participants and which are applied consistently.

Assessment procedures are designed to measure the achievement of the intended learning outcomes.

[ESG 1.3]

Description

All study programmes aim to achieve learning targets that meet both the learning objectives and graduate quality standards, which are essential to be accountable to stakeholders. The student-centred learning paradigm is said to be used by the faculty as well as the postgraduate school for their programmes and is aimed at students' development according to their potential while the lecturer shall only act as a facilitator in the class. Learning methods are stated in a semester lesson plan (RPS). Included are problem-based learning, project-based learning and case studies. The skills to be achieved through these methods are collaboration, critical thinking, creativity and communication skills.

The SER elaborates that lectures are conducted face-to-face and via online classes by using the e-learning platform of UNDIKSHA or another learning management system. Strategies used by lecturers are said to be expository, to include cooperative strategies, discussions, assignments, discovery inquiry, problem-solving, demonstrations, project-based learning, and laboratory experiments.

The Ministry of Education has provided regulations on how to count the final mark from all assessments. The evaluation model focuses on the tasks that students perform. If they fail an exam, the average is still considered good enough to pass the class.

Examinations are conducted twice a semester through a mid-semester test and a final test which are scheduled in advance and visible in the academic calendar. Attendance is a prerequisite to take part in the final test (75% of the total meetings and/or 100% of the practicum). The final mark is calculated based on participation

(20%), tasks (40%), middle test (15%), and final exam (25%). If a student fails, they can retake the exam the following year, but they must complete in a maximum of seven semesters.

Experts' evaluation

a) Evaluation in 2023

The panel of experts experienced during the site visit that UNDIKSHA has implemented a standardised learning process that includes planning, implementation and student workload to reach the goals described in the SER. The learning process involves interactions among lecturers, students, and resources within a learning environment, and is structured and systematic with measurable workload through various courses. To achieve specific abilities and fulfil learning outcomes for each course, the experts conclude that effective methods based on a student-centred learning approach are implemented.

On the one hand, research is a crucial learning process that involves students' activities under the guidance of a lecturer to develop knowledge, skills, and improve the national competitiveness. This learning process is actualized in the Final Project and Thesis. On the other hand, community service is a learning process under the guidance of lecturers that aims to utilize science and technology to promote public welfare and enrich the nation's life. This learning process is realized through the KKN or Kuliah Kerja Nyata (Community Engagement Programme) courses. Both research and community service are important aspects of learning that enable students to apply their knowledge and skills to real-life situations, enhancing their practical skills and contributing to society. Furthermore, the two types of problem-based learning and project-based learning are well-established at UNDIKSHA. The experts support the already established idea of linking university knowledge so closely to the problems of the surrounding society.

UNDIKSHA recognizes and values the diversity of its students and provides various programmes and strategies in both academic and non-academic areas. The university offers both face-to-face and online courses to ensure accessibility and flexibility for all students. The *Tri Hita Karana Philosophy*, which emphasizes the importance of harmony and balance between humans, nature, and God, is incorporated into all study programme visions, reflecting the university's mission to continuously improve the quality of education, particularly in teacher education. Courses are designed to provide students with both theoretical and practical knowledge, with a well-arranged proportion of theory and practical work.

The programme which is targeting on teachers' training includes a practical component known as PPL, which stands for "Praktek Pengalaman Lapangan" or field experience practicum. The programme integrates prior learning experiences and involves teaching performance, including various teaching positions and duties, which are systematically scheduled and collaboratively facilitated by a Supervisor and a Teacher Supervisor. PPL is divided into several stages, starting from field orientation to independent training, and is designed to enhance the teaching skills of students.

According to the information given, assessments, both formative and summative, are explained by the lecturer at the beginning of the course. The lecturer is willing to make changes to exams, and students can suggest changes. Assessment scores are checked at the end of the course to determine if the learning outcomes described in the course handbook have been achieved. The tests are designed to test the competencies of the students, and they assess both thinking and practice.

The panel of experts got the impression that UNDIKSHA's education programmes have been successful in producing high-quality graduates who are well-prepared to excel in their chosen fields. However, there are some areas where improvements can be made to further enhance the quality of education provided.

It is important to evaluate the number of micro-teaching labs to ensure they are sufficient for the number of students using them, particularly if the number of students in each batch is increasing (see Finding 1). This will

ensure that every student receives the necessary practical experience to complement their theoretical knowledge.

Creating an English-speaking environment on campus will enable UNDIKSHA to better compete in the global arena. As mentioned above, measures should be taken to improve the English language skills of teaching staff, increasing the number of classes taught in English or providing more sources in English. The panel of experts recommends that the English competencies of staff and students should be aligned with the requirements of international labels and certificates and described accordingly (old Finding 6d).

During the site visit, a selection of final projects as well as BA and MA theses were made available to the experts for review. Overall, the panel of experts found the Bachelor theses to be impressive but quite elaborate. The experts thus recommend discussing and introducing a regulation that sets a time and/or page limit in order to keep the volume of these theses within reasonable limits for all Bachelor's study programmes (old Finding 15).

The panel of experts would like to encourage UNDIKSHA to include more open discussions with the students as a teaching method in the seminars to improve the quality of education and teaching even further. Open discussions with students can be a valuable tool for improving the quality of education and teaching, as long as they are conducted in a constructive and respectful manner.

As already stated above in more detail, the experts expect that the graduate's qualifications could be further improved by strengthening the teaching of topics that are in high demand by the labour market. First, the teaching for the educational programmes at UNDIKSHA should include an additional focus on teaching international curricula. Second, providing training and education on inclusive teaching students with special needs is essential in ensuring that UNDIKSHA graduates are well-equipped to handle a diverse range of learners (see Findings 3 and 4).

UNDISKHA has achieved a zero-failure rate among its students in all exams and courses. The panel of experts discussed this phenomenon with the teaching staff and learned that this was explained with the good preparation of the students and an unlimited number of repeats until eventually successful. The panel of experts could follow the explanation given but recommends that UNDIKSHA monitors the outcomes of the exams in its programmes regularly and closely (old Finding 16).

UNDIKSHA can stay up-to-date with the changing demands of the job market by evaluating and ensuring that students acquire the skills and knowledge needed for success in their onward professional career.

b) Reconsideration evaluation in 2025/26

According to UNDIKSHA's rebuttal, meaningful and balanced limitations for the thesis have been installed. However, the detailed regulations are not accessible as they are not given in English. Whether this finding has been addressed or not, is not assessable. The statement by UNDIKSHA indicates that the finding may have been misunderstood as it has been answered with respect to the total study time but not with respect to the time and workload associated with the final thesis (**new Finding 3**).

According to UNDIKSHA's rebuttal, the finding of monitoring the outcomes of the exams has been properly addressed. Checking the system is only possible with corresponding login credentials. Thus, the information seems to be private and secure. There is no information whether or not the data will be looked at by the faculty. Finding 16 was asking for a monitoring system not confined to just collect the data. This part remains open (**new Finding 4**).

Conclusion

The criterion is partially fulfilled.

4. Student admission, progression, recognition and certification

Bachelor's degree

Consistently applied, pre-defined, and published regulations are in place which cover student admission, progression, recognition, and certification.

[ESG 1.4]

Description

Admission to the Bachelor's programmes is granted through three pathways, namely the recruitment of prospective new students through State University National Entrance Exam, via Joint Entrance Selection of State Universities and an Independent Entrance Selection of New Students. Except for the last pathway, the entrance selection is organized on a national level.

To enter the programmes of Chemistry Education and Chemistry it is said that new students must have a formal education (Senior High School/Madrasah Aliyah/Vocational High School) or the equivalent and come from sciences majors with new graduate status (max. one year before). New students cannot be color blind and must do a medical check-up test.

According to the SER, mechanisms of recognition are in place at the university and even recognition of prior learning is taken into account in the admission process. Also, the national regulation of "Freedom of Learning" (MBKM) was implemented by UNDIKSHA programmes, which allows students to spend time outside of university, such as in taking courses at other universities or doing an internship, while recognizing the student's achievement. The SER gives an example that within this programme a cooperation between MCUT Taiwan and UNDIKSHA Chemistry Study programme was developed.

Students have academic evaluation results signed by their academic advisors each semester to monitor their progression.

The SER states that graduates receive Diplomas, Academics Transcripts and Diploma Supplements at the end of their studies.

Experts' evaluation

a) Evaluation in 2023

Based on the documents provided and the discussions during the site visits, the panel of experts learned that out of three admission pathways to the undergraduate programmes only the third one is not controlled by national regulation but accounted for by UNDIKSHA. The panel of experts recognized some elements of the admission process that should be revisited and re-evaluated. In general, the rules of the admission process, as far as not defined by national regulations, should be made transparent for students, publicly accessible and they should be based on competencies of the future students (old Finding 17). Attention should be paid to two points in particular: First, the admission process should include potential students suffering from colour-blindness (old Finding 17a). The experts certainly appreciate that colour vision is an important sense that might be needed or is at least helpful during laboratory work. However, the same is true for other senses. As such, a focus that colour-blindness is a reason for exclusion is not justified and the experts recommend revisiting and re-evaluating this criterion of admission. Second, the admission process accounted for by UNDIKSHA also includes a medical check. However, this medical check and its criteria have not been documented. Therefore, the panel of experts also recommends strongly to revisit this criterion and to eliminate it. At least, the university should be transparent on which physical criteria may lead to an exclusion from the study programmes (old Finding 17b). Next to clearly defined and publicly accessible regulations, the regulations should implement competence-based criteria for admission.

Learning progression is closely reported and documented at UNDIKSHA. The university has installed an academic advisor for any student. The academic advisors discuss learning progression with the individual student in regular intervals, grades as well as the courses to be taken in the next semester. Every lecturer takes care of a maximum of 20 individual students. The experts wish to highlight that the feedback from students on the implementation of such a personal advisor was positive throughout. Accordingly, the panel of experts supports this time-consuming system of personal mentoring by academic lecturers as it helps the progression of students throughout the study programme. It seems to provide a very direct, personal, and tailored means of consultation.

For international students, there is currently no process established that provides a formally based recognition of courses or competences acquired in other universities or extracurricular, following the Lisbon convention. Currently, rules for recognition of external coursework are not documented. The experts strongly advise to develop structural concepts and processes for incoming and outgoing students. Such processes are vital and a prerequisite to increasing internationalisation. For all study programmes in this cluster, Universitas Pendiikan Ganesha must describe its regulations for recognition of achievements of students at foreign universities transparently. A system to converse and recognize credits in a structured manner should be implemented (old Finding 18). Next to recognition of courses and competencies from other universities, the university should consider the use of learning agreements to support exchange of UNIDKISHA students to other universities worldwide (see Finding 6).

The panel of experts has identified that the current Diploma Supplement does not fully comply with international standards yet which should be corrected. Besides other elements, an English translation of the thesis title seems important for students applying for positions abroad. Moreover, a Transcript of Records should be handed out to the graduates (old Finding 19).

b) Reconsideration evaluation in 2025/26

The student admission guidelines are publicly accessible, but the process does not include potential students suffering from colour blindness. The health test carried out at the time of re-registration is said to be only an initial needs analysis to determine the health level of new students in terms of providing health services later during their time as students. The medical test is said to be not related to the requirements for determining graduation. The corresponding documentation is not accessible, as it is not given in English. The experts judge the finding therefore as partially fulfilled without any background check (**new Finding 5**).

According to UNDIKSHA's rebuttal the system to converse and recognize credits in a structured manner is in place. The documentation is not in English, but it seems that there is a transparent system for recognition of achievements of students at foreign universities that is accessible to the students.

The diploma, grade transcript and diploma supplement has been adjusted adequately to suit Indonesian and international needs.

Conclusion

The criterion is partially fulfilled.

5. Teaching staff

Bachelor's degree

The composition (quantity, qualifications, professional and international experience, etc.) of the staff is appropriate for the achievement of the intended learning outcomes.

Staff involved with teaching is qualified and competent to do so.

Transparent procedures are in place for the recruitment and development of staff.

[ESG 1.5]

Description

Staff at UNDIKSHA is employed as civil servants or as contract lecturers. The implementation of recruitment and selection is carried out at university level concerning the two positions, via the recruitment of civil servant lecturers (following national regulations) and the institute's local recruitment system for contract lecturers. According to information in the SER, the lecturer recruitment planning is initiated by an analysis of the needs of each study programme. It is described that the Study Programme Coordinator together with the Head of the Department conducts an analysis of the adequacy of lecturer resources by calculating the ratio of the number of lecturers relative to the number of students and an analysis of the average teaching load per semester (full-time teaching equivalent). Lecturers have a minimum teaching hour obligation of 12-Credit Hours, according to the SER.

It is stated that new lecturers will be given 90 hours of training, providing training to young lecturers in the field of pedagogic improvement and how to utilize existing technology in the learning process (PEKERTI). There is also a continuation of this training programme targeting senior lecturers (AA).

For the Chemistry Education programme, 16 lecturers are listed in the SER, two of them full professors.

The Chemistry programme has 7 lecturers, one of them full professors, according to the SER.

There is also academic staff like laboratory assistants available for the programmes.

Experts' evaluation

a) Evaluation in 2023

Overall, the panel of experts concludes that the amount of teaching staff fits the size of the student body. The university provided a full list of all teaching staff involved in the programme, including their academic qualification, their research and other relevant qualifications. In the experts' opinion, the university teaching staff is sufficiently or even highly qualified with regards to the intended learning outcomes of the programme.

The overall workload for staff (teaching, research, administration) seems to be quite high, but nonetheless appropriate for the delivery of the programme.

The university defined a concept for staff development. The internationalisation of the programmes should be strengthened as mentioned above by fostering the exchange of staff and by supporting the use of the English language. More guest lecturers from the region and beyond should be invited.

b) Reconsideration evaluation in 2025/26

No further evidence required. The experts already saw no need for short-term changes or additions in this area in the first evaluation of the programme. Therefore, there is nothing to add to the previous evaluation.

Conclusion

The criterion is fulfilled.

6. Learning resources and student support

Bachelor's degree

Appropriate facilities and resources are available for learning and teaching activities.

Guidance and support is available for students which includes advice on achieving a successful completion of their studies.

[ESG 1.6]

Description

Following the SER's description, in the beginning of the semester a Semester Study Plan (RPS) is handed out, that shall guide students concerning what to prepare and what to expect in the relevant courses and which learning outcomes are to be achieved. An orientation period is held at the beginning of studies. Every student is assigned an academic supervisor who shall provide guidance in academic and non-academic matters. In preparation for the thesis, the students are supposed to meet with an assigned thesis advisor several times.

Student services in all study programme include according to the SER academic assistance, guidance and counselling services, interest and talent services, soft skills coaching services, career and entrepreneurship guidance services, scholarship services, and health services.

Besides, the UNDIKSHA provides facilities such as libraries, sports fields, a health clinic, and a counselling service for the entire academic community. In order to support students' learning process and achievements, the university also provides several facilities, such as offices, standardized classrooms, and laboratories under the management of the faculties.

Teaching material is supposed to be published online using the university's integrated system (SIK - Sistem Informasi Akademik). A Student Careers and Entrepreneurship Center organizes job application letter writing training, interview answer training, entrepreneurship training, and a job fair.

Experts' evaluation

a) Evaluation in 2023

During the site visit, the experts learned that students at UNDIKSHA welcome and appreciate the familiar atmosphere at the faculty. Each Bachelor's student at UNDIKSHA has an academic advisor who has a role in directing students' academic and non-academic progress, advising on how many credits can be taken in the next semester, providing guidance on the topic of the final thesis, and facilitating requests to change study programmes. The close relationship between academic advisors and students at UNDIKSHA was evident for the panel of experts and reflects the parental dynamic that is common in Indonesia. This bond can help keep students motivated and on track with their academic progress, enabling them to achieve their goals and complete their studies on time. Furthermore, students can confide in their academic advisors about any personal issues that may affect their academic performance. However, the panel of experts wishes to point out that the parental dynamic between academic advisors and students should not hinder students to develop independent personalities. The experts see the *Tri Hita Karana Philosophy* as positive as it supports the development of students' personalities.

In the experts' opinion, based on publicly available information, UNDIKSHA has implemented an integrated academic information system called SIK (Sistem Informasi Akademik), which serves as a central platform for managing academic-related tasks such as registration, grading, and course scheduling. SIK also provides access to academic-related information such as student transcripts, course schedules, and academic calendars.

UNDIKSHA has a library information system called E-Library, which allows students and staff to access digital resources such as e-books, online journals, and research databases. The E-Library system is accessible both on-campus and off-campus and provides a wide range of resources to support teaching, learning, and research activities. Additionally, there is an E-Journal that provides access to online journals that can be used by students to find references. The resources provided by the lecturers and by the library seem to be feasible to finish the study programme. The use of online literature and databases is of high importance. Therefore, the experts advice to improve the availability of databases and online resources even further (old Finding 20).

The panel of experts wishes to support UNDIKSHA's efforts to enhance the internationalisation of the study programmes. Part of an internationalisation strategy should increase the number of students who study abroad or in other national facilities for a part of their programme. Therefore, the experts would encourage that the academic advisor and faculty provide information on how to study abroad and about the recognition process (see above).

During the site visit of UNDIKSHA, the panel of experts was informed there are no students with special needs inscribed in the programmes. Nevertheless, this situation can change easily and in this case the panel has to conclude that the support for students with special needs is not yet well established at the university. For instance, the experts took note that some of the facilities do not provide mobility constructions for non-walkers or provide special instructions for blind students. While the panel of experts understands that it may be hard to change existing infrastructure, the experts strongly advice to develop a concept regarding students with special needs (see Finding 4).

The experts learned that the kind of exam that is needed to finish the courses successfully will be announced to students in the first week of the semester. As stated above, the academic advisors support students with their ongoing studies and learning outcome, including advice on the workload they should take and courses they can take. However, the panel of experts took note that the module descriptions do not seem to be precise enough. For the students' benefit, the module descriptions must clearly state, which competences will be achieved as an outcome of the course (see Finding 6). As explicitly mentioned above, the laboratory situation does not fulfil the standards which should be expected in natural sciences (see Chapter 1). This has an impact on the fulfilment of the criterion.

b) Reconsideration evaluation in 2025/26

The availability of two databases and online resources for the research of students and teaching staff has been extended. One is not given in English. The other one is a local repository. But as international data bases are publicly available (e.g. GOOGLE Scholar) the experts consider the finding to be fulfilled.

Conclusion

The criterion is fulfilled.

7. Information

Bachelor's degree

Impartial and objective, up-to-date information regarding the programme and its qualifications is published regularly. This published information is appropriate for and available to relevant stakeholders.

[ESG 1.8]

Description

The responsible unit for public information at the university is UPT TIK. According to the SER, the unit has developed various information systems and applications, including the academic information system, UNDIKSHA E-library, E-Learning, E-Journal, information management system of community service programme, and information management system of a pre-service teacher. Those can be accessed through the SSO portal called E-Ganesha. In addition, to optimize IS/IT services, UPT TIK also develops UNDIKSHA Mobile Applications based on Android and iOS. The IS continues to be developed and refined to support UNDIKSHA's business processes. Following the existing master plan, UPT TIK continues to expand its services.

The students can access information on the university's website. The faculty also has its own website that provides information to students. At the study programme level, it is said that social media networks are used to strengthen communication.

The university also provides information on international cooperation on their publicly accessible website. Likewise, results of tracer studies can also be accessed online.

There is an E-learning portal that can be used by the lecturers and students in conducting the learning process. Integrated E-learning can be used as a place for academic matter from distributing materials, assignments, or even online tests to provide complete experiences for online learning for the students.

Experts' evaluation

a) Evaluation in 2023

There are many online information systems on the campus website that can help campus members and the public to find anything they want to know about UNDIKSHA. The website is also complete with information about all the achievements of the campus, the lecturers, and students on national and international scales, which can help the public to know more about UNDIKSHA. Overall, UNDIKSHA appears to have implemented several information systems to support various academic and administrative functions, which are essential for ensuring efficient and effective operations of the university.

There are some generally accepted standards for evaluating information systems, such as efficiency, effectiveness, usability, reliability, security, and scalability. Efficiency refers to how well the system can perform its functions in a timely and cost-effective manner. Effectiveness refers to how well the system meets the needs of its users and helps them achieve their goals. Usability refers to how easy it is for users to use the system and perform tasks. Reliability refers to the system's ability to function consistently and accurately over time. Security refers to the measures in place to protect the system and its data from unauthorized access, theft, or damage. Scalability refers to the system's ability to adapt and grow as the needs of its users change over time. Overall, the experts confirm that UNDIKSHA's information Systems have reached good standards compared to international requirements.

During the site visit, the experts learned that the coordination for updating information on the website is facilitated through a WhatsApp group. The group comprises individuals responsible for creating and managing the website, as well as management personnel from various departments within the university. The group serves

as a controlling system, with update requests and submissions made through it. The person in charge (PIC) is responsible for informing the group once the updates have been completed.

Nonetheless, the experts suggest the following points to be reflected:

The website of each study programme should provide a comprehensive list of all courses offered (old Finding 21). The experts are convinced that this will assist senior high school students as well as interested international students in making informed decisions when selecting their preferred study programme. By having access to a list of courses offered in each programme, students can make informed decisions about which programme is best suited for their needs.

UNDIKSHA should review its website to ensure that all information is relevant for admission is publicly accessible (see above).

Overall, the experts found that the programmes' websites in English language provide only general information on the study programmes. However, it should be ensured that all programmes provide the same and complete information, e.g. by developing a concept with a cohesive structure and guidelines providing core information for each programme (old Finding 22).

Additionally, the panel of experts thinks it would be beneficial if all of UNDIKSHA's local, national, and international achievements are automatically displayed on the website's homepage whenever someone accesses it. This would allow the university's selling points to be directly showcased on the website, giving visitors a better understanding of UNDIKSHA's achievements and strengths.

b) Reconsideration evaluation in 2025/26

It seems that the website provides a comprehensive list of all courses and core information for each study programme in the Indonesian version, but the English version seems to be incomplete. So, it is difficult to check on the availability of a list of courses. It is not easy to navigate along this website but that may be only true for the incomplete English version (**new Finding 6**).

Conclusion

The criterion is partially fulfilled.

V. Recommendation of the panel of experts

The panel of experts recommends accrediting the study programme “**Chemistry Education**” (Bachelor of Education) offered by Universitas Pendidikan Ganesha with conditions.

The panel of experts recommends accrediting the study “**Chemistry**” (Bachelor of Science) offered by Universitas Pendidikan Ganesha with conditions.

The panel of experts commends the University Pendidikan Ganesha for having very engaged management, staff and students. This will be a profound basis for the ambitious future development of the programmes. UNDIKSHA is very well interconnected in the region and provides graduates that are needed and welcome, both in the educational and business sector. The experts saw potential for unique selling points to improve the visibility and attractiveness of the university – all to attract students, funding and cooperation partners. The panel commends the programmes for their orientation on locally relevant science, e.g. ethnoscience.

Findings:

For the study programme Chemistry Education (1a-d) and Chemistry (1d):

1. The intended learning outcomes must be reflected and in parts reformulated. As a consequence, the course descriptions must be revised in order to improve their competence orientation. Within this process of revision:
 - a. the intended learning outcomes (ILOs) must be more focussed on the core competencies,
 - b. the exams must be oriented on the competencies formulated in the ILOs,
 - c. the literature references must be updated and
 - d. specification of the details for midterm and final assessments have to be described for both study programmes.

For all study programmes

2. UNDIKSHA should provide the evidence-based documents in English language. Furthermore, it is recommended to increase the numbers of internal and external stakeholder feedback.
3. UNDIKSHA should provide the information about the regulation that sets a time and/or page limit for the final thesis in order to monitor the workload related to it in English language.
4. Information about whether or not the data of the outcomes of the exams is checked and analysed frequently must be provided.
5. UNDIKSHA has to provide the admission regulations in English language.
6. The English version of the website has to be completed so that it contains all relevant information about the study programmes and increases the comparability and transparency for the stakeholders.