

**Indonesian Accreditation Agency
for Higher Education in Health
(IAAHEH)**



**HANDBOOK FOR
PHD PROGRAM
IN MEDICINE AND HEALTH SCIENCES**

FOREWORD

Thanks to The God Almighty who has given the strength, so that this handbook entitled: “Handbook for Study Program - PhD Program in Medicine and Health Sciences Accreditation” could be finalized. The main reason for writing this handbook is to provide thorough information of the accreditation process to the study program that are willing to be accredited by Indonesian Accreditation Agency for Higher Education in Health (IAAHEH).

The handbook was arranged to be simple and easy to read, so study program that prepare for accreditation could have a comprehensive guidance. It is expected that the handbook will provide the study program with stronger self-confidence in writing Self-Evaluation Report.

The WFME, ORPHEUS, and AMSE Standards for PhD Education in Medicine and Health Sciences in Europe are the main references for this book to maintain its international standard for PhD Programs.

This book is written by a team of medical education experts who come from several well-known universities. I thank them for their hard work in writing and finishing the book. I am pretty sure the writers expect that after understanding the handbook, the assessor team will be highly motivated to review the PhD Program's education process to facilitate continuous quality improvement.

Jakarta, August 5th, 2024

Prof. Usman Chatib Warsa, MD., PhD
The Chairman of IAAHEH

Table of Content

FOREWORD	i
Table of Content	ii
List of Figures	iii
List of Tables.....	iii
List of Appendices.....	iii
Chapter 1. Accreditation Criteria.....	1
Criteria 1. Mission and Values.....	1
Criteria 2. Curriculum.....	2
Criteria 3. Assessment	7
Criteria 4. PhD Candidates.....	12
Criteria 5. Academic Staff and Supervisor.....	16
Criteria 6. Educational Resources	19
Criteria 7. Quality Assurance.....	20
Criteria 8. Governance and Administration.....	21
Chapter 2. Guidance for Self-Evaluation Report	23
2.1 How to conduct Self-Evaluation Activities	23
2.2 Guidance of Writing a Self-Evaluation Report (Preliminary and Final).....	24
2.2.1 Introduction.....	24
2.2.2 Conducting Self-Evaluation	27
2.2.3 Structure and Format of Self-Evaluation Report	2
Chapter 3. Guidance for Survey Visit	5
3.1. Survey Visit Guidance	5
3.2. Administrative Preparation for Survey Visit	5
3.3. The Survey Visit Procedure	6
3.4. Guidance for Introductory Meeting.....	9
3.5. Guidance for Interview	10
3.6. Guidance for Observation	11
3.7. Guidance for Document Checking	11
3.8. Guidance for Closing Meeting	12

List of Figures

Figure 1. Plan-Do-Check-Act (PDCA) cycle of improvement.....	27
Figure 2. Example of a timetable to develop the SER.....	28

List of Tables

Table 1. Categories of Summary of the Overall Results	3
Table 2. Description of the Term Self-Evaluation Result	4
Table 3. The typical schedule for the survey visit	7

List of Appendices

Appendix 1. The structure of Self-Evaluation Report	14
---	----

Chapter 1. Accreditation Criteria

Criteria 1. Mission and Values

1.1 Stating the mission: The PhD program has a public statement that sets its values, priorities, and goals.

Consider the role, audiences, and uses of the mission statement. Briefly and concisely describe the PhD program's purpose, values, educational goals, research functions, and relationships with the healthcare service and communities.

Key Questions	Criteria for Compliance
1.1.1. How is the mission statement specially tailored to the PhD program?	<ul style="list-style-type: none">• PhD program mission statement accommodates the research roadmap of the graduate school.• The mission statement includes health problems at the national and international levels.
1.1.2. How does it fit with the regulatory standards of the IAAHEH and with relevant national governmental requirements, if any?	<ul style="list-style-type: none">• PhD program translates the relevant national/international regulations and standards into its own regulations and standards concordantly.• PhD program considers the local circumstances and uniqueness in implementing the national regulations and standards.
1.1.3. How is it publicised?	<ul style="list-style-type: none">• PhD program uses various media for publication of its mission and programs.

Supporting documents, may include, but not limited to the following:

- Research roadmap documents.
- Media use to publish vision, mission, aims, and strategies.
- Mission statements written in the curriculum book

Criteria 2. Curriculum

2.1 Intended Outcomes: The PhD program has defined the graduate learning outcomes that PhD candidates should have achieved by graduation and the intended learning outcomes for each part of the course as partial fulfillment.

Outcomes clearly describe what is intended regarding values, behaviors, skills, knowledge, and preparedness for being a PhD. Consider whether the defined outcomes align with the research's roadmap. Analyse whether the specified learning outcomes address the knowledge, skills, and behaviours each part of the course intends its PhD candidates to attain. Consider how the outcomes can be used as the basis for the design and delivery of content, the assessment of research and PhD candidate progress and evaluation of the course.

Key Questions	Criteria for Compliance
2.1.1 How were the intended outcomes for the PhD program and for each part of the course designed and developed?	<ul style="list-style-type: none">▪ PhD program uses its mission and research roadmap in the formulation of intended graduate outcomes
2.1.2 What are the graduate outcomes of the PhD program?	<ul style="list-style-type: none">• After completing PhD program, graduates are capable to:<ul style="list-style-type: none">• provide candidates with competencies that enable them to become an independent researcher, capable of conducting responsible, original, and independent research according to principles of good research practice.• develop new knowledge, technology, and/or art in their expertise or professional practice through research, thus producing creative, original, and tested works.• pursue careers inside and outside of academia. Transferable skills, including but not limited to critical thinking, problem-solving, leadership, teaching, communication, and project management skills, should be supported as part of a candidate's PhD training program.• solve scientific, technological, and/or artistic problems in their field through interdisciplinary, multi-disciplinary, and transdisciplinary approaches.• manage, lead, and develop research and development that is beneficial for the advancement of science and the welfare of humanity, as well as capable of gaining national and international recognition.

2.2 Curriculum Organisation and Structure: The PhD program consists of courses related to ethics, health, and safety, animal experimentation (if applicable), research methodology and statistics, and elective discipline-specific components to support PhD candidates in their scientific research, research activities, and PhD thesis.

Key Questions	Criteria for Compliance
2.2.1 What are the essential requirements of the PhD program?	<ul style="list-style-type: none"> • PhD training programs should be based on original research, courses, and other activities, including analytical and critical thinking. • PhD programs should be performed under supervision. • PhD programs should ensure that PhD candidates have substantial training in the rules concerning ethics and responsible conduct in research. • PhD programs should be structured with a clear time limit. Part-time PhD programs and extension of the time frame should be possible but limited and exceptional. The time frame should be extended in connection with parental leave and sick leave.
2.2.2 What is the structure of the PhD program?	<ul style="list-style-type: none"> • The program should include formalised courses in line with national regulations, parallel with the PhD project. A substantial part of the course program should be concerned with training in transferable skills. • There should be arrangements to allow PhD candidates, if relevant, to perform part of their PhD program at another institution, including those in other countries. • PhD programs performed in parallel with clinical or other professional training should have equal time for research and course work as any other PhD program. • The training program should include documented learning and professional development activities (e.g. courses, journal clubs, participation in conferences, seminars and workshops, teaching, demonstrating). A substantial part of these training activities should be transferable skills.
2.2.3 What are the requirements of PhD Thesis?	<ul style="list-style-type: none"> • The benchmark for the PhD thesis should be the outcome to be expected from research at the international level. This is equivalent to papers published in internationally recognized, peer-reviewed journals in medicine and health sciences or similar scientific output including patent, policy brief, etc.

Key Questions	Criteria for Compliance
	<ul style="list-style-type: none"> • In addition to the papers presented, the PhD thesis should include a full review of the literature relevant to the themes in the papers and a full account of the research aims, methodological considerations, results, discussion, conclusions, and further perspectives of the PhD project. • If the PhD thesis is presented in other formats, such as a single monograph; the assessment committee should ensure that the contribution is at least equivalent to the above benchmark. • A PhD thesis in clinical medicine should meet the same standards as other PhD theses. • To encourage international recognition, the thesis should be written and optimally defended in English unless national regulations stipulate otherwise or where this is not possible or desirable. An abstract of the PhD thesis should be published in English. • PhD theses should be published on the graduate school's home page, preferably in extenso. If patent or copyright legislation or other reasons prevent this, at least abstracts of the theses should be publicly accessible. • There should be a lay summary of the thesis in the local language. • The PhD candidate should be able to take full intellectual responsibility for all parts of the thesis. In considering these requirements, the assessment committee should take into account the provisos listed in the Annotations at the end of this section. • The PhD thesis should include a full review of the literature relevant to the themes in the papers or manuscript, a full account of the research aims, methodological considerations, results, discussion, conclusions, and further perspectives of the PhD project

Supporting documents, may include, but not limited to the following:

- Curriculum book
- Instructional design book
- PhD candidates' guideline book

2.3 Research Environment.

Key Questions	Criteria for Compliance
2.3.1 How is the research environment in your institution?	<ul style="list-style-type: none"> • Strong research environment can be reflected by identifying the following matters: <ul style="list-style-type: none"> ▪ Research strength of the available research group, department, and the PhD program, national and international networking with high-quality/recognized research institutions. ▪ It can be measured by: <ul style="list-style-type: none"> ○ Faculty Expertise, ○ Research Facilities, ○ Funding Opportunities, ○ Collaborative Opportunities, ○ Research Culture, ○ Professional Development, ○ Supportive Infrastructure, ○ Ethical Guidelines

Supporting documents, may include, but not limited to the following:

- Faculty profile
- MoU/contract/grants – research collaboration
- List of inventories
- Ethical guidelines
- Standard operating procedures
- Faculty development program
- Academic activities
- Publication of scientific articles in reputable journals by faculty
- Research roadmaps.

2.4 Research and Publication Ethics

Key Questions	Criteria for Compliance
2.4.1 Research Ethics. Is there any ethical committee/institutional review board (IRB)? Position of the ethical committee/IRB? What are their roles? What is the procedure to obtain research ethical clearance? Is it in line with the international ethical standard? Who are the ethical committee members?	<ul style="list-style-type: none"> • There is an ethical committee/IRB, which could be at the university or faculty levels. The workload of the ethical committee/IRB should be considered in deciding the committee's position. • The committee's role is to review and decide on research proposals. • Availability of mechanisms in applying for ethical clearance • Conformity with International Ethical Standards such as Helsinki Declaration II (clinical), EU Directive 2010/63/EU (animal), and Oviedo Convention (bioethics).

Key Questions	Criteria for Compliance
	<ul style="list-style-type: none"> The ethical members consist of staff who are experts and competent in the medical/biomedical/health research field.
2.4.2 Publication ethics	<ul style="list-style-type: none"> The PhD program should provide an application system and mechanism for avoiding plagiarism. The PhD program should provide regulations concerning authorship.

Supporting documents, may include, but not limited to the following:

- Ethical guidelines
- Publication regulation

Criteria 3. Assessment

3.1. Assessment of Learning

Key Questions	Criteria for Compliance
3.1.1 How does the PhD program decide the candidate meets the expected learning outcome?	<ul style="list-style-type: none">• There should be a continuous, structured assessment of the progress of PhD candidates throughout their PhD program by the school and supervisor.• Merit should be given for relevant coursework taken elsewhere or other relevant experience obtained• Acceptance of a PhD thesis should include acceptance of both the written thesis and a subsequent oral defense in accordance with institutional regulation.• The institution should award PhD degrees based on a recommendation from an Assessment Committee that has evaluated the thesis and the oral defense concerning the standards.• The Assessment Committee should consist of established and active scientists without connection to the milieu where the PhD was performed and without conflict of interest. At least there should be examiners from other institutions following institutional regulations.• To avoid conflict of interest, the supervisor should not be an assessment committee member. However, some universities allow supervisors to act as assessment committee members, but they should not have a vote in the final decision.• In the case of a negative assessment of the written PhD thesis, the PhD candidate should normally be allowed to rewrite the thesis. Where there is a negative assessment of the oral defense, the candidate should normally be allowed an additional defense. In exceptional cases, The Assessment Committee can reject a thesis without an offer to reconsider.• The oral examination should include a presentation by the candidate of the research conducted for the PhD award. The examination itself should be detailed enough to ensure that the thesis is the candidate's own work, that the research carried out is original, that the candidate has expertise in the specific area of work and also a broad understanding of the discipline, and that elements of the work have

Key Questions	Criteria for Compliance
	<p>been published, or are publishable, in whole or in part.</p> <ul style="list-style-type: none"> • The oral defense or viva voce should normally be open to the public or the faculty. Where national norms preclude this, PhD candidates should present to faculty before the oral defense takes place • To promote internationalisation, it is advisable that The Assessment Committee includes at least one member from another country. • Apart from the thesis, the institution should ensure sufficient transferable skills are acquired during the PhD program. • Graduate schools should consider having a thesis committee for each PhD candidate that monitors the progress of the PhD candidate through meetings with the PhD candidate and the supervisors. • The competencies developed during the PhD program could be documented in a portfolio or equivalent. The principal supervisor (and advisory or thesis committee) should oversee the development and record of transferable skills throughout the doctoral program.

Supporting documents, may include, but not limited to the following:

- Assessment Committee role and function
- Thesis evaluation and defense procedure

3.2. Assessment in Support of Learning:

- a) The graduate school has in place a system of assessment that regularly offers PhD candidates actionable feedback that identifies their strengths and weaknesses and helps them consolidate their learning.
- b) These formative assessments are tied to educational interventions to ensure that all PhD candidates have the opportunities to achieve their potential.
- c) Feedback is one of the biggest drivers of educational achievement. PhD candidates need to be assessed early and regularly in courses for the purpose of providing feedback that guides their learning. This includes early identification of underperforming PhD candidates and the offer of remediation.

Key Questions	Criteria for Compliance
3.2.1 How are PhD candidates assessed to support their learning?	<ul style="list-style-type: none"> • PhD candidates are assessed based on their performance in conducting research by giving feedback regularly.

Key Questions	Criteria for Compliance
	<ul style="list-style-type: none"> There should be continuous assessments of the progress of PhD candidates throughout their PhD program.
3.2.2 How are PhD candidates assessed to determine those who need additional help?	<ul style="list-style-type: none"> PhD candidates' performance should be assessed regularly/continuously by the supervisors to identify the need for additional support.
3.2.3 What support systems are offered to those PhD candidates with identified needs?	<ul style="list-style-type: none"> Graduate school provides a PhD candidate support system that enables the candidates to access whenever needed. The system includes a mechanism where PhD candidates can consult their problems with supervisors to a higher level of education management, including psychologists/psychiatrists.

Supporting documents, may include, but not limited to the following:

- Logbook
- Portfolio
- Learning Management System (including candidate's progress/achievement)

3.3. Assessment in Support of Decision-Making: a) The graduate school has in place a system of assessment that informs decisions on progression and graduation. b) These summative assessments are appropriate for measuring course outcomes. c) Assessments are well-designed, producing reliable and valid judgment

Assessment for decision-making is essential to institutional accountability. These assessments must be fair to PhD candidates, and they must attest to all aspects of competencies as a group.

Key Questions	Criteria for Compliance
3.3.1 How are thresholds set on summative assessments?	<ul style="list-style-type: none"> The decisions on progression and graduation of PhD candidates across all expected graduate outcomes are made by conducting a regular meeting of the thesis team. The PhD program makes decisions on progression and graduation across all expected graduate outcomes.
3.3.2 What appeal mechanisms regarding assessment results are in place for PhD candidates?	<ul style="list-style-type: none"> There should be an appeal mechanism allowing PhD candidate to dispute decisions concerning their programs and assessment of their theses. The graduate school provides the policy on appeal mechanisms for the assessment results. The candidates are well-informed about the appeal mechanisms.

	<ul style="list-style-type: none"> • The graduate school, PhD program, and thesis team have been involved in implementing appeal mechanisms. • If there are disputes between the candidates and the school regarding the candidate's appeal, the graduate school should consult the authorities at the university level.
3.3.3 How are assessments used to guide and determine PhD candidates' progression?	<ul style="list-style-type: none"> • In deciding on PhD candidate's progression, the thesis team uses available candidate assessment data across all expected graduate learning outcomes. • The thesis team collects and compiles available data from the candidate's formative and summative assessments across all expected graduate outcomes.

Supporting documents, may include, but not limited to the following:

- Standard operational procedure for assessment
- Appeal mechanism
- Document of Quality Assurance system: planning and implementation

3.4. Quality control: a) The graduate school has mechanisms to ensure the quality of its assessments. b) Assessment data are used to improve the performance of academic staff, courses, and the institution

It is important for the graduate school and PhD program to review its individual assessments regularly, as well as the whole assessment system. It is also important to use data and feedback from the assessments, for continuous quality improvement of the assessments, the assessment system, the course, and the institution.

Key Questions	Criteria for Compliance
3.4.1 Who is responsible for planning a quality assurance system for assessment?	<ul style="list-style-type: none"> • Graduate school provides an academic quality assurance unit (name may vary), responsible for developing a quality assurance system for assessment.
3.4.2 Who is responsible for implementing a quality assurance system for assessment?	<ul style="list-style-type: none"> • Graduate school plans and implements the quality assurance system for assessments.
3.4.3 How is data from assessments used to evaluate supervision and the curriculum in practice?	<ul style="list-style-type: none"> • The PhD program collects comments and experiences about the assessment systems from candidates and supervisors through focus group discussions/by fill-in questionnaires. • To ensure that those comments and experiences are trustworthy, the PhD program observes the assessment process of the candidates and collects objective data regarding candidates' performance.

Key Questions	Criteria for Compliance
3.4.4 How is data from assessments used to evaluate supervision and the curriculum in practice?	<ul style="list-style-type: none"> • Data from assessment results are used to evaluate the supervision and the curriculum in practice by monitoring candidates' progress in achieving expected learning outcomes via information gathered from the supervisors/thesis team and by examining research reports and activities written in the logbook. • The assurance and quality team is involved in individual and program assessment quality assurance.
3.4.5 How are the assessment system and individual assessments regularly reviewed and revised?	<ul style="list-style-type: none"> • The assessment system and individual assessment are reviewed at least every semester and revised every five years.

Supporting document, may include, but not limited to the following:

- Standard operational procedure on assessment
- PhD candidate's logbook, assessment as candidates' (evaluation and monitoring candidates' progress) and staff feedback
- Procedures for remediation and counselling
- Support system algorithm.
- Procedure of appeal mechanism
- Document of Quality Assurance system: planning and implementation

Criteria 4. PhD Candidates

4.1. Selection and Admission Policy: The graduate school has a publicly available policy that sets out the aims, principles, criteria, and processes for the selection and admission of PhD candidates.

Where selection and admissions procedures are governed by national policy, it is helpful to indicate how these rules are applied locally. Where the graduate school sets aspects of its own selection and admission policy and process, clarify the relationship of these to the mission statement, relevant regulatory requirements, and the local context. The following admissions issues are important in developing the policy: the relationship between the size of PhD candidate intake (including any international PhD candidates' intake) and the resources, capacity, and infrastructure available to educate them adequately; equality and diversity issues; policies for re-application, deferred entry, and transfer from other schools or courses.

The rights, roles, responsibilities and duties of PhD candidates should be made apparent to all PhD candidates and supervisor.

Key questions:	Criteria for Compliance
4.1.1 How is the selection and admission policy for PhD program developed by the graduate school?	<ul style="list-style-type: none">• The graduate school develops the selection and admission policy by involving a team of academic and administrative staff appointed according to their qualifications.• The policy is derived from the university policy and graduate school. The selection and admission policy are aligned with the PhD program research roadmap.
4.1.2 What is the principle of the selection process?	<ul style="list-style-type: none">• The principles of the selection process are: Transparent and equity (accept candidates from other institutions).
4.1.3 What are the requirements to be fulfilled by the PhD candidates?	<ul style="list-style-type: none">• Requirements to be fulfilled by the PhD candidates could be as follows:<ul style="list-style-type: none">• Hold a master's or medical doctorate following institutional or national regulation.• The selection process was publicised before PhD students' enrolment
4.1.4 How is the selection and admission policy publicised?	<ul style="list-style-type: none">• The selection and admission policy are disseminated to internal and external stakeholders via social media, flyers, open houses, and the university/PhD program website.
4.1.5 How is the selection and admission system regularly reviewed and revised?	<ul style="list-style-type: none">• The selection and admission system are reviewed yearly and revised every 5 years.• These procedures involve an appointed team responsible for the selection admission system.

Supporting documents, may include, but not limited to the following:

- Regulation on selection and admission policy graduate schools: research proposal aligned with the graduate school research roadmap.
- Research guidelines
- List of resources and other learning support available

4.2. Rights and Liability

Key Questions	Criteria for Compliance
4.2.1 What is the right and liability of PhD candidates related to their contribution to a research project?	<ul style="list-style-type: none">• PhD candidates have both rights and liability as researchers and PhD candidates. By upholding high ethical and academic standards and actively engaging in their research and scholarly activities, Ph.D. candidates can contribute to advancing knowledge in their field and prepare for successful careers in academia, industry, or other sectors.• PhD candidates should be familiar with all policies and processes pertaining to the successful execution of their doctorate (including conflict resolution, bullying and harassment, equality diversity and inclusion). Rights: Academic Freedom, Access to Resources, Supervision and Mentorship, Intellectual Property, Privacy and Confidentiality Liabilities: Academic Integrity, Compliance with Regulations, Timely Progress, Responsible Conduct, Financial Responsibilities.
4.2.2 What are the requirements to be fulfilled by the candidates before conducting their research project?	<ul style="list-style-type: none">• PhD candidates present their research projects and are assessed by external examiners.

Supporting documents, may include, but not limited to the following:

- PhD candidates' guidelines: right and liability
- Logbooks
- Portfolios

4.3. PhD Candidates Counselling and Support: The graduate school provides candidates with accessible and confidential academic, social, psychological, and financial support services, as well as career guidance.

Candidates might require support in developing academic skills, managing disabilities, physical and mental health, personal welfare, finances, and career planning. Consider what emergency support services are available during personal trauma or crisis. Specify a process to identify candidates needing academic or personal counseling and support. Consider how such services will be published, offered, and accessed confidentially. Consider how to develop support services in consultation with candidates' representatives.

Key Questions	Criteria for Compliance
4.3.1 In what ways are the academic and personal support and counselling services consistent with the needs of PhD candidates?	<ul style="list-style-type: none"> • The graduate school provides an appropriate package of support that meets the academic and pastoral needs of candidates, such as academic and career advisor, financial assistance/education financial management counselling, health and disability insurance, counselling/personal welfare program, candidates access to health care services, a candidates' interest, and talent development, etc. • The graduate school offers confidential PhD candidates counselling concerning the PhD program, supervision, etc., and personal matters.
4.3.2 How are these services recommended and communicated to candidates and supervisors?	<ul style="list-style-type: none"> • Graduate school disseminates guidelines consisting of information on candidates' support services easily accessed by supervisors and PhD candidates, e.g., via a website or Learning Management System. • The graduate school monitors and evaluates the utilization of support services to ensure that candidates and supervisors know the availability.
4.3.3 How is the services' feasibility judged regarding human, financial, and physical resources?	<ul style="list-style-type: none"> • Graduate school monitors and evaluates the effectiveness of the support service regularly by distributing satisfaction surveys to ensure that these services are feasible in terms of human, financial, and physical resources.
4.3.4 How are the services regularly reviewed with PhD candidates' representatives to ensure relevance, accessibility, and confidentiality?	<ul style="list-style-type: none"> • Graduate schools evaluate the effectiveness of these services through a range of methods, e.g., surveys, complaints, and representative groups. From monitoring and evaluating the effectiveness of the support service regularly, the graduate school has a chance to improve the performance of their service by changing something where appropriate.
4.3.5 What is the function of the representative of PhD candidates?	<ul style="list-style-type: none"> • Representatives of the PhD candidates have a chance to interact with the leadership of the graduate school regarding the design, management, and evaluation of PhD programs through a clear implementation procedure provided by the graduate school, PhD candidates' and student organisations are encouraged and facilitated to involve with the development, and

Key Questions	Criteria for Compliance
	enhancement of the quality of the PhD programs at the institution.

Supporting documents, may include, but not limited to the following:

- Policy, regulation, and procedures on PhD candidate's support.
- Policy, regulation, and procedures on PhD candidate's counseling.
- Supporting human resources, facilities, and finances for PhD candidates.
- Monitoring and evaluation of PhD candidates support system implementation.

Criteria 5. Academic Staff and Supervisor

5.1. Academic Staff and Supervisor Establishment Policy: The graduate school has the number and range of qualified academic staff required to put the school's curriculum into practice, given the number of PhD candidates and style of supervising and learning.

Determining academic staff establishment policy involves considering the number, level, and qualifications required to deliver the planned curriculum to the intended number of PhD candidates and the distribution of academic staff by grade and experience.

Key Questions	Criteria for Compliance
5.1.1 How is the supervision of PhD candidates?	<ul style="list-style-type: none">• Each PhD candidate should have a principal supervisor and, when relevant, at least one co-supervisor to cover all aspects of the program. The responsibility of each supervisor should be explicitly stated and documented.• The number of PhD candidates per supervisor should be compatible with the supervisor's workload.• Supervisors should be academically and scientifically qualified and active scholars in the field.• Supervisors should have regular consultations with their PhD candidates.• The supervisor-candidates' relationship is the key to a successful PhD program. There should be mutual respect, planned and agreed shared responsibility, and a contribution from both.• The responsibility of each supervisor is explicitly defined in the PhD program book.• Supervisors should have broad local and international scientific networks to introduce the PhD candidates into the scientific community.• Supervisors should be familiar with the structure of the PhD program and associated regulations, policies, and institutional procedures.• Supervisors should assist with the career development of PhD candidates starting from enrolment.• Institutions should consider having contracts describing the supervision and monitoring process to be signed by the supervisors, PhD candidates, and the head of graduate school.• The institution/graduate school should ensure that all supervisors, including potential supervisors, have formal training in international best practices in research supervision.

Key Questions	Criteria for Compliance
	<ul style="list-style-type: none"> Supervisors should, where possible, also act as external examiners for PhD candidates at other graduate schools within the country and internationally. Supervisors should be aware of all policies and processes relating to conflict resolution, bullying and harassment, equality, diversity and inclusion, and research ethics and integrity and share this information with their PhD candidates. Graduate schools should ensure that the candidate's academic progression in the PhD program is overseen by an independent individual or committee (not including the primary supervisor). The Graduate School calculates your academic staff's required number and characteristics.
5.1.2 How did the graduate school arrive at the required number and characteristics of their academic staff?	<ul style="list-style-type: none"> The Graduate School has considerations in deciding the number and characteristics of the academic staff. The Graduate School monitors and reviews the workload of the academic staff.

5.2. Continuing Professional Development for Academic Staff: The graduate school implements a stated policy on the continuing professional development of its academic staff.

Develop and publicise a clear description of how the graduate school supports and manages each staff member's academic and professional development.

Key Questions	Criteria for Compliance
5.2.1 How does the graduate school take administrative responsibility for implementing the staff's continuing professional development (CPD) policy?	<ul style="list-style-type: none"> The graduate school monitors, evaluates, and reviews the CPD program of the academic staff The graduate school appraises and rewards the academic staff related to CPD.
5.2.2 What protected funds and time does the graduate school provide to support its academic staff's continuing professional development (CPD)?	<ul style="list-style-type: none"> The graduate school supports its academic staff in CPD. The graduate school has policies for supporting the CPD of each academic staff. The graduate school disseminates the policy and procedure of CPD to the academic staff.

Supporting documents, may include, but not limited to the following:

- Policy and procedures for staff development
- Minutes of meetings and list of attendance during the development of the manpower plan

- Form for monitoring and evaluating academic staff performance, sampled a filled-in form from several academic staff, the result of performance appraisal each semester.
- Summary of the professional development of the academic staff

Criteria 6. Educational Resources

6.1. Physical Facilities for Research and Training: The graduate school has sufficient physical facilities to ensure the research is carried out as planned.

Physical facilities include the physical spaces and equipment available to implement the planned research activities for the given number of PhD candidates and academic staff.

The doctoral school should have sufficient resources for the proper conduct of PhD programs. This includes the resources appropriate to support the admission of PhD candidates, implementation of the PhD programs, stipends for the PhD candidates, assessment of PhD theses, and awarding of PhD degrees.

Key Questions	Criteria for Compliance
6.1.1 How do you describe your institution's facilities for PhD candidates?	<ul style="list-style-type: none">• The University provides access for PhD candidates to standardized laboratories needed to conduct the research.• The research laboratory should meet the standard requirements aligned with the research project.• The PhD program manages and regulates research laboratories' operational hours.• PhD program provides working rooms for candidates equipped with necessary amenities such as tables, chairs, bookshelves, pantries, prayer spaces, copy machines, printers, scanners, and computers. These working rooms have sufficient space and are accessible as needed.
6.1.2 What are the PhD candidates' support centres/systems?	<ul style="list-style-type: none">• PhD program provides health and sports facilities that can maintain PhD candidate's health and well-being.• The University ensures the PhD candidates' safety and security systems are in place at all locations.

Supporting documents, may include, but not limited to the following:

- Link to electronic library
- Policy on access for people with special needs
- Policy on equipment maintenance and calibration
- Policy on the use of experimental animal handling
- Policy on safety procedures
- Standard operating procedures in using laboratory equipment.

Criteria 7. Quality Assurance

7.1. The Quality Assurance System: The graduate school has implemented a quality assurance system that addresses the research and training components

- Consider the purposes, role, design, and management of the graduate school's quality assurance system, including what the graduate school considers appropriate quality in its planning and implementation practices. Design and apply a decision-making and change management structure and process as part of quality assurance. Prepare a written document that sets out the quality assurance system.

Key Questions	Criteria for Compliance
7.1.1 How are the graduate school's purposes, quality assurance methods, and subsequent actions defined and described?	<ul style="list-style-type: none">There should be procedures for regularly reviewing the structure, function, and quality of PhD programs. This will normally include both supervisor and candidate feedback.The graduate school determines and applies the criteria and methods (including monitoring, measurement, and related performance indicators) necessary to ensure these processes' effective operation and control.The graduate school determines the resources required for this process and ensures their availability.The graduate school assigns responsibilities and authorities for these processes.The graduate school addresses risks and opportunities.The graduate school evaluates these processes and implements any necessary changes to ensure that these processes achieve the desired result.
7.1.2 How are resources allocated to quality assurance at graduate school?	<ul style="list-style-type: none">The graduate school identifies resources needed to implement, maintain, and continuously improve the quality assurance system.The graduate school justifies that the allocated resources are sufficient.

Supporting documents, may include, but not limited to the following:

- Organisation chart of the internal quality assurance system
- Policy, standards, and procedures of quality assurance of the graduate school and quality standard
- Reports on the internal quality audit, evaluation results, and tracer studies
- Resources allocated to implement the IQA system.
- Follow-up documents on the results of quality improvement.

Criteria 8. Governance and Administration

8.1. Governance: The graduate school has a defined governance structure in relation to research, training, and resource allocation.

Relevant internal stakeholders in doctoral education include the PhD candidates, supervisors, head of school, professional staff, and other relevant bodies within the university. Relevant external stakeholders include funders, employers, research agencies, policymakers, alumni associations, and others. The PhD programs are organised, managed and delivered depending on the structure of each institution, national guidelines and standards. This section highlights important aspects of PhD management in a graduate school structure while recognising that other models of the organisation also exist.

Key Questions	Criteria for Compliance
8.1.1 How and by which bodies are decisions made about the institution's functioning?	<ul style="list-style-type: none">• The University has policies related to the functioning of the graduate school.
8.1.2 By what processes and committee structures are training and research governed in the institution?	<ul style="list-style-type: none">• The graduate school organizes training and research activities.
8.1.3 What governance arrangements are there to review the performance of the graduate school?	<ul style="list-style-type: none">• The University assigns the IQA structure for reviewing the graduate school performance.
8.1.4 How are risks identified and mitigated?	<ul style="list-style-type: none">• The graduate school identifies and mitigates all risks that may occur during training, research, and budget allocation.

8.2. Administration: The graduate school has appropriate and sufficient administrative support to achieve its goals in training and research

Develop a policy and review process to ensure adequate and efficient administrative, staff, and budgetary support for all graduate school activities and operations.

Key Questions	Criteria for Compliance
8.2.1 How does the administrative structure support the functioning of the institution?	<ul style="list-style-type: none">• The graduate school designs the administrative structure.• The administrative structure's roles in supporting the graduate school's functioning are well-defined.
8.2.2 How does the decision-making process support the functioning of the institution?	<ul style="list-style-type: none">• The roles of the decision-making process regarding the functioning of the graduate school are well-defined.
8.2.3 What is the administration's reporting structure concerning training and research?	<ul style="list-style-type: none">• The graduate school designs the administrative reporting structure on training and research programs/activities.
8.2.4 How does the graduate school disseminate its profile and program?	<ul style="list-style-type: none">• The graduate school utilizes information technology to disseminate its profile and program.

- **Supporting documents, may include, but not limited to the following:**
 - Organisation chart of the management and administration of the graduate school
 - Standard operating procedure for budget allocation
 - Report on the school performance review.
 - Document on risk identification and mitigation.
 - Reports on PhD candidates and academic staff in decision-making and functioning.
Minutes of the meeting of the discussion
 - Standard operating procedure for the decision-making process in relation to PhD candidates.
 - Standard operating procedure for reporting training and research
 - Link to the homepage and other information technology systems.

Chapter 2. Guidance for Self-Evaluation Report

This chapter describes how to conduct self-evaluation, writing a self-evaluation report, and identifying supporting documents. The PhD Program needs to read them thoroughly to produce a readable Self-Evaluation report and a well-prepared survey visit.

2.1 How to conduct Self-Evaluation Activities

The purpose of an external quality evaluation is to determine to what extent the PhD Program complies with the IAAHEH quality criteria for PhD education program. The process of external evaluation includes studying the written self-evaluation report of the PhD program.

To conduct an objective and accurate self-evaluation, a series of activities need to be carried out by the PhD Program and coordinated by the accreditation team. The PhD Program will obtain data and information that will be used as tools to evaluate the program. All findings will be analysed and written as a self-evaluation report.

A self-evaluation report needs to represent the real condition of the PhD Program, specifically in the education process and to what extent the PhD Program may maintain compliance with the IAHEH quality criteria. Therefore, a series of steps need to be conducted.

The following steps are carried out:

- Identifying the people whom, they need to communicate with in exploring and gathering the information.
- Collecting all relevant documents such as vision and mission, strategic plan, management system, curriculum implementation, data on PhD candidates, faculty members and their academic performances, and the future expectation related to the vision achievement.
- Studying the vision and mission and the efforts of achieving the vision and mission, the strengths, and weaknesses of the graduate school in managing the education process which could be compared with the strategic plans of the graduate school. A series of interventions to manage the issues is identified as well.
- Scheduling several meetings with internal and external stakeholders to gain accurate information by exploring their perception of how far they perceive on the quality of education offered by the graduate school.
- Identifying and analysing the strengths, weaknesses, opportunities, and threats and how the team uses these data in developing a plan toward a better quality of education. A process of planning/determining, implementation, evaluation, controlling, and improvement of the

education program needs to be reflected in the process of self-evaluation activities and be presented as a Self-Evaluation Report.

2.2 Guidance of Writing a Self-Evaluation Report (Preliminary and Final)

Following the activities of self-evaluation, a written report needs to be designed by the accreditation team. There are two steps of writing a Self-Evaluation Report (SER), namely: writing a preliminary self-evaluation report and a final Self-Evaluation Report. The preliminary SER is THE FIRST DRAFT of SER. The Preliminary SER is subject to change based on the feedback of the trainers. The following is the structure of SER.

2.2.1 Introduction

Self-evaluation is the process of an organisation in collecting comprehensive data about its own activities and achievements without any external assistance or pressure. Self-evaluation is undertaken within the given time limits and for a specific purpose. Self-evaluation is a thoughtful analysis of all components of the PhD program, compared against agreed and accepted criteria. The analysis should draw on the expertise of the PhD program and its local environment. It represents the opportunity to appreciate the PhD program's strengths and identify areas for improvement. This needs to be a formal part of the internal quality assurance that provides the opportunity to record and document changes and improvements in a PhD program.

The purpose of self-evaluation is to elicit the PhD program's description and analysis of itself, and its program in relation to the predetermined criteria. Besides being the basis for the accreditation process, the self-evaluation should be recognised as an important planning instrument to enable the PhD program to achieve insight into its strengths and weaknesses and to identify areas for quality improvement of its program.

An effective self-evaluation is time-consuming as it requires effort and time. However, the gains from a good self-evaluation are invaluable. It gives information and facts about the quality assurance system and provides a platform for stakeholders to discuss issues on the quality of education.

There are many reasons for undertaking a self-evaluation as follows (Banda, et al., 2016):

- a. For improvement:
 - Identifies and specifies problems.
 - Identifies and specifies possible causes and means to change.
 - Identifies avenues for change and improvement.

- Providing information that may not normally be evident (such as localised innovative practices in teaching and learning)
- b. For accountability:
- If there are external criteria set by accreditation bodies, it is important to know how well the criteria are achieved.
 - Or a self-evaluation might be part of the entire review process and required by the external body. In this case, the objectives are to understand, to evaluate, and to improve.
 - To find solutions to a known problem:
 - Where problems have been highlighted or indicated, a self-evaluation can address these and help to understand the context – for example, PhD candidates cannot achieve the education outcomes as expected, or supervisors have raised concerns about PhD programs.
 - Verifying those processes are in place, and whether these are operating effectively.
 - Providing evidence of quality processes in place
 - Enabling self-identification of improvement gaps and development of associated strategies to address these prior to external audit.
- c. As part of the PhD program's managerial process:
- Self-evaluation allows the PhD program to look at their educational program and services.
 - The PhD program should pay attention to the candidates' experience, particularly to their learning, research experience, and performance. The PhD program will be able to assess how well they meet the educational goals and any external criteria which apply to the PhD program.
 - Self-evaluation allows evidence-based educational planning and management.
 - The PhD program will experience the greatest benefit if the self-evaluation process becomes part of their regular planning cycle.
 - Determining whether existing policies and procedures are effective in meeting goals and identifying any gaps.
 - Enhancing the understanding (across staff, PhD candidates and/or other stakeholders) of organisational processes and outcomes
 - Disclosing weaknesses and gaps
 - Promoting honest communication
 - Encouraging benchmarking, internally and/or externally

- Identifying activities that are misaligned with organisational goals/objectives.
- Promoting an evidence-based culture

Two principles that relate to the self-evaluation process are:

- Independence as the basis for the impartiality and objectivity of the conclusions.
- Evidence as the rational basis for reaching reliable and reproducible conclusions in a systematic process. Evidence is based on records and statements of fact or information that are verifiable and relevant to the criteria.

Adherence to these principles is a prerequisite for a reliable and relevant process and outcome. The following considerations should be made before carrying out a self-evaluation:

- Management must fully support the self-evaluation and provide access to relevant information needed for an effective quality assurance system. The self-evaluation acquires structural insight into the operation and performance of the PhD program.
- Gaining management support to carry out a self-evaluation is not enough. The whole organisation must prepare itself for the self-evaluation. Assessing quality is more than evaluating the performance of a program; it is also about developing and shaping the PhD program. Staff members should be responsible for the quality, and all staff should be involved in the self-evaluation.
- Writing a critical self-evaluation of the quality assurance system demands good organisation and coordination. Primarily, someone must lead and coordinate the self-evaluation process. The chosen leader should have good contacts within the PhD program, including key management staff, faculty, and support staff; access to the required information at all levels; and the authority to make appointments with stakeholders.
- It is desirable to install a working group in charge of the self-evaluation. It is important that the group is structured in such a way that the involvement of all sections is assured. The working group should oversee the self-evaluation, gathering and analysing data and drawing conclusions.
- As it is assumed that the PhD program supports self-evaluation, it is important that all staff members should be acquainted with the contents of the SER. The working group might organise a workshop or seminar to discuss or communicate the SER.

2.2.2 Conducting Self-Evaluation

The period of conducting self-evaluation is ten weeks. The SER team has six weeks to write the final SER. The SER team needs to accommodate input and feedback from trainers in the final SER.

Figure 1 illustrates the approach for preparing a self-evaluation that encompasses the Plan-Do-Check-Act (PDCA) cycle of improvement.

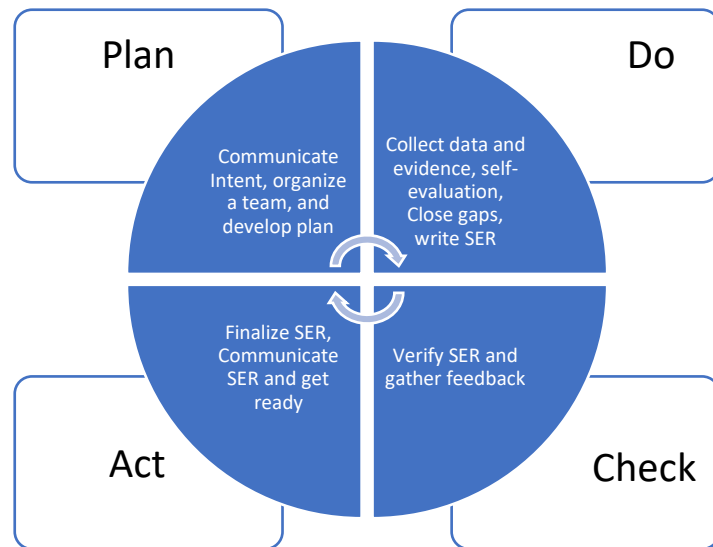


Figure 1. Plan-Do-Check-Act (PDCA) cycle of improvement.

Details of each step are explained in the following paragraphs:

a. Plan

The “Plan” phase starts with the communication of intent for self-evaluation. The PhD program appoints a group responsible for writing the SER. The group should consist of key people. This group should have financial, staff, and other support from the Management. The group could then be divided into subgroups, each assigned to address one or several criteria. As part of the change management process, early engagement with stakeholders is crucial to get their buy-in and commitment before the start of the project. A clear timetable should be set up to develop the SER. Each member in the group should be made responsible for collecting and analysing data and information, and writing the SER. Each member must have a good understanding of the accreditation criteria before proceeding to the next phase. Figure 4 is an example of a timetable that could be developed.

Activity/Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Deadline	Assigned to	Status
P L A N	Communicate Intent																			
	Organizing Team																			
	Development Plan																			
	Understanding IAAHEH Criteria and Process																			
D O	Self-assessment																			
	Collect Data & Evidence																			
	Close Gaps																			
	Write SER																			
	Review SER																			
C H E C K	Verify SER																			
	Gather Feedback																			
A C T	Improve QA																			
	Finalise SER																			
	Communicate SER																			
	Get Ready																			
Change Management																				

Figure 2. Example of a timetable to develop the SER

Note: The plan in this table is conducted during the nurturing and writing of preliminary SER.

In summary, the following are steps that need to be taken during the planning stage, namely (1) to appoint a group/committee with representation of relevant stakeholders, (2) to ensure sufficient financial support, (3) to ensure staffing support, (4) to clarify the task, including the standards to be addressed, (5) to plan timetable (Banda, 2016).

IAAHEH provides training and assistance in conducting self-evaluation reports during the application phase.

b. Do

The “Do” phase involves identifying the gaps in meeting the accreditation criteria. Data collection is a critical step in this phase as it helps to quantify the existing quality assurance practices as well as to identify what the institution needs to do to meet the accreditation criteria. Solutions to close the gaps should be implemented before proceeding to write and review the SER. In the process of conducting its self-evaluation, a PhD program brings together representatives of the administration, faculty, PhD candidates, and other constituencies to:

1. Collecting and reviewing data about the PhD program and its educational program,
2. Identifying evidence that supports the achievement of accreditation criteria.
3. Identifying gaps between the existing conditions and the accreditation criteria.
4. Defining strategies to ensure that the gaps are closed and any problems are addressed effectively.
5. Write the draft according to the determined structure.
6. Completing the draft with an executive summary and glossary (if required)
7. Sending the draft to the reviewers.

As data collection is an important step, it is crucial that data collection is done according to sound methodology. Wherever possible, it is suggested to use the existing data. The same set of data could be used for more than one criterion. If new data is required, data collection methods should be designed to demonstrate achievement of the accreditation criteria.

There might be some barriers during the data collection, such as lack of access to the required documentation, low response rates, scattered information, missing information, or limited access to data. These barriers need to be overcome. All data that

has been collected needs to be analysed and presented in simple and understandable formats to answer each key question. Table, charts, graphs, narratives might be used.

Once the data collection is completed, the writing of the SER could be started. Each key question in the Accreditation Criteria needs to be answered according to the existing conditions and supported with evidence.

c. Check

To prepare a creditable and objective report, the SER team must verify the evidence gathered. The “Check” phase involves verifying the SER as well as the quality assurance practices and giving feedback to improve them. An independent team should be appointed to review the SER and the existing quality assurance practices against the accreditation criteria. Recommendations to improve the SER and close the gaps in the existing quality assurance practices should be made.

d. Act

The “Act” phase involves implementing the recommendations raised in the “Check” phase. The SER is finalised before communicating it to relevant stakeholders and preparing for the subsequent accreditation procedures.

2.2.3 Structure and Format of Self-Evaluation Report

An executive summary is required to provide an overall picture of the program, follows with a glossary to clarify the specific terminologies. A brief description of the PhD program is written at the beginning of a Self-Evaluation Report. Further, the self-evaluation report is developed through a specific design consisting of the structure of the SER, the format used, the dissemination of SER to stakeholders, and the content, as described below.

a. Structure

In writing the Self-Evaluation Report (SER), each key question in the Accreditation Criteria needs to be addressed. The evidence supporting each sub-criteria's achievement needs to be referred to, attached, and linked in the designated Google Drive.

The structure of Self-Evaluation Report can be seen in **Appendix 1**.

In Chapter IV (**Appendix 1**), the study program summarises the overall results for each sub-criteria and determines whether it is compliance, partial compliance or non-compliance, as shown in the table below:

Table 1. Categories of Summary of the Overall Results

Accreditation Standards	Compliance	Partial Compliance	Non-Compliance
1.1. Stating the mission			
2.1. Intended outcomes			
2.2. Curriculum organisation and structure			
2.3. Curriculum content			
...etc.			

b. Format

The SER should be written in size 12 Times New Roman font in A4 paper with single space. The maximum page is 80 pages excluding Executive Summary, Glossary and Appendices.

c. Dissemination

The PhD program needs to identify who will receive the full reports and the executive summary, for both internal and external stakeholders. Many have been involved in completing the Self-Evaluation and would need to be informed of the results. A communication strategy needs to be planned. The main point of this entire process should be to facilitate change where change is required. Therefore, the last element that must be addressed is the issue of securing the commitment to act on the findings of the SER.

Table 2. Description of the Term Self-Evaluation Result

Compliance	Almost all components in each sub criterion can be fulfilled
Partial Compliance	Some components in each sub criterion can be fulfilled. But there are components in some sub criteria which cannot be fulfilled. These unfilled components of sub criteria are not systemic and will not affect the education process, will not disrupt the achievement of vision, mission, objectives, and targets of the institutions, and will not hinder the achievement of learning outcomes and competencies.
Non-Compliance	All components in each sub criterion cannot be fulfilled

d. Content

IAAHEH has developed 8 (eight) criteria consisting of mission and values, curriculum, assessment, PhD candidates, academic staff, resources, quality assurance, governance and administration as described in Chapter 1.

Chapter 3. Guidance for Survey Visit

3.1. Survey Visit Guidance

One important step of the accreditation process is the survey visit. The survey visit aims to obtain evidence through interview and observation of all criteria in WFME standards based on the result of Self-Evaluation Report (SER) Review. The targeted sites of the survey visit include building, infrastructure, and facilities to deliver the PhD program. This guidance aims to provide key points for the study program in preparing the survey visit. It consists of an explanation of the assessors, survey visit, and final survey visit report.

Principles of the survey visit

The survey visit should focus on:

- The continuous quality improvement, such as PDCA (*plan, do, check, and action*).
- Achievements in education, research, and public services, competition, and internationalisation.
- Compliance with WFME Standards.
- Academic and non-academic achievement, including assessment of input, process, and output.
- Availability of evidence and traceability.
- Management of the PhD program.
- Effectiveness of internal quality assurance system

3.2. Administrative Preparation for Survey Visit

The team and the study program achieve an agreement on the schedule during the survey visit, especially schedule for interview with faculty, PhD candidates, and alumni; progress report session, the closing session, and other activities such as post accreditation meeting with dean or administrator, including confirmation of the schedule on observing PhD candidates learning activities, and assessing facilities.

- The date of survey visit is organised by the secretariat of IAAHEH.
- Invitation letter for the Assessor
- Booking accommodation for the Assessor
- Dietary requirements such as vegetarian, halal food, etc.
- Health protocol
- The interviewee cannot be replaced.
- The PhD program provides local transport, airport transfer.

- The PhD program invites graduate school board, senate, academic staff, PhD candidates, alumni, user, supporting staff, and translator.
- The PhD program prepares facilities infrastructure (management office, classroom, laboratory, clinical practice setting, community practice setting, PhD candidates' facilities, PhD candidates counsellor or supervisor office, academic staff room, etc)
- The PhD program prepares documents related to curriculum (curriculum map, module, syllabus, samples of PhD candidates research work, sample of examinations, practical guidance.
- The PhD program prepares documents related to internal quality assurance system (graduate school academic policy, academic regulations, other manual and procedures as required).
- The PhD program prepares information resources system (library, internet connection, IT, application, Learning Management System-LMS, etc).
- The PhD program provides translator if English is not native language and documents are primarily not in English.
- The PhD program provides working room for the assessor (LCD and screen, flipchart, internet connection, printer, paper, whiteboard marker, etc).

3.3. The Survey Visit Procedure

The activities of the survey visit would include:

- An introductory meeting with the management of the PhD program and the faculty
- Interview sessions with:
 - Management of the graduate school and the study program
 - Internal quality assurance team
 - Faculty members from various departments (10-12 faculty members)
 - PhD candidates represented from each academic year (10-12 PhD candidates)
 - Supporting staff (8-10 staff, including laboratory technicians/analysts, IT, administration, librarians, etc.)
 - Alumni who graduated in the last 3 years. (8-10 alumni)
 - Employers of the graduates (6-8 employers preferably non-alumni)
 - Management of the teaching hospitals and teaching clinics
- Observation and assessment of the teaching and learning processes (in the classroom, practical/ skill laboratory, and the teaching hospitals)
- Visitation and assessment of physical facilities: library, laboratories, simulation centre, teaching hospitals, teaching clinics, PhD candidates services, and other facilities for PhD candidates

- Clarification and validation of documents
- Closing meeting with the graduate school management

If needed, an interpreter from a non-related party should be provided to bridge communication between the assessor team and the local staff.

Table 3. The typical schedule for the survey visit

Day -1		
08.30-09.00	:	Introductory meeting of the management of the study program and assessors
09.00-10.00	:	Presentation of the profile of the study program by the management of the study program (and Q&A session)
10.00-11.30	:	Interview and discussion with PhD supervisors and co-supervisors
11.30-12.30	:	Interview with the internal and external Examiners (hybrid)
12.30-13.30	:	Lunch break
13.30-15.30	:	<ul style="list-style-type: none"> ○ Visitation and assessment of the library, laboratories, working room, counselling services, family support, and other facilities in the study program. ○ Interview with the supporting staff
15.30-17.00	:	Interview with PhD candidates from different batches
19.00	:	Internal discussion of the assessors
Day-2		
08.30-10.00	:	Observation of the academic activities
10.00-11.00	:	Discussion with the alumni of the study program
11.00-12.30		Interview and discussion with the Internal Quality Assurance team of the study program
12.30-13.00	:	Lunch break
13.00-14.00	:	Discussion with the employers of the graduates and other stakeholders
14.00-15.00	:	Ethical committee and academic committee
15.00-17.00	:	Discussion about research infrastructures and research roadmap with the management of university and faculty

17.00-18.00	:	Document verification: research proposal, official report of research proposal seminar, notes on research progress, draft manuscript for publication.
19.00	:	Internal discussion of the assessors
Day-3		
08.30-10.00	:	Clarification and verification of the findings with the management of the graduates' school and study program
10.00-12.00	:	Internal discussion of the assessors to draft the initial report to be presented in exit meeting
12.00-13.00	:	Lunch break
13.00-15.00	:	Closing meeting and discussion
15.00	:	Closing ceremony

The typical schedule above could be rearranged to suit the situation. However, all the agenda should be conducted.

3.4. Guidance for Introductory Meeting

a. Preparation for the Venue

The PhD program must provide the venue with equipment (LCD, Screen, microphone) that can accommodate all the invitees.

b. Preparation for the Invitee

The following are the person or the parties to be invited:

- The Dean
- Vice Dean
- Head of Study Program
- Accreditation Team
- Head of Quality Assurance Unit
- Directors of Teaching Hospitals
- Education Unit
- Research Unit
- Community Service Unit
- Heads of Departments
- Heads of Administrations
- etc.

c. Graduate school Preparation for the Presentation

The profile of the graduate school will be presented during the first session of the visit.

- The Dean/ Vice Dean will prepare a presentation on the highlight of the graduate school's profile and the graduate school's strategic planning and management, resources available to run the PhD program, human resources and other physical and non-physical resources required for the PhD program, counselling, and PhD candidates support.
- The head of the PhD program will prepare a presentation on the graduate profiles, graduate competencies, curriculum, and assessment system.
- Head of the quality assurance unit to prepare a presentation on internal quality assurance system.

It is advised that the presentations will stress the important points and updated information.

It is strongly suggested that the presentations will not repeat all the information that is already in the SER. In total the presentation lasts 30 minutes and Q&A session should last about 30 minutes.

3.5. Guidance for Interview

This guidance is intended for assessors and the PhD program during the visit. The interview session will be held without the presence of school management and accreditation team. The interview will be:

- Interview with the management of the Graduate School about governance, quality assurance, human resource management, curriculum management, finance and asset management, program development, collaboration program, academic environment, description of how research is disseminated and utilised, research rewards and incentives, ethics review board composition and functions.
- The PhD program appoints academic staff that will be interviewed. The interview with academic staff will cover leadership, faculty development program, working atmosphere, relationship with management and colleague, workloads (teaching, research, and community services), learning, teaching and research facilities, job security and satisfaction, relevant academic issues, academic and non-academic support system, ranking and promotion system, faculty orientation program, salary scale, faculty performance evaluation, academic advising and referral system, description of how research is disseminated and utilised, research rewards and incentives
- The Graduate School/PhD program invites support staff representing different function, such as technician (Mechanical and Electrical (ME) and laboratories), librarian, administrative, IT support, finance.
 - The interview will cover leadership, supporting staff, development program, working atmosphere, relationship with management and colleague, workloads, staff qualification relevant to the assignment, job security and satisfaction, relevant issues, information technology support system, library acquisition and collection development plan and profile of library staff.
- The Graduate School/PhD program invites PhD candidates that will be interviewed, which represent different academic years and achievement, PhD candidates organisation.
 - The interview will cover academic atmosphere, learning, teaching and research facilities, PhD candidates learning and teaching satisfaction, PhD candidates support system, academic advising and referral system, non-academic development program, job and career information.

- The Graduate School/PhD program invites alumni that graduated in the last five years. The interview will cover learning experiences, job preparedness, relevance of the acquired competencies with the current job, alumni feedback and contribution, time to get the first job, involvement in the academic, research, community services of the school, and internship program.
- The Graduate School/PhD program invites employer of the alumni, representing various kind of workplaces (or such as hospitals, health offices, universities, clinics, other health services, companies). Preferably the employer is not alumni. Otherwise, a maximum of 30% of the interviewees are alumni. The interview will cover hard skills and soft skills of the alumni employed, employer feedback to the school.

3.6. Guidance for Observation

Observation is a way of gathering data by watching behaviour, events, process, activities, and physical setting.

- The Graduate School/PhD program prepares research and physical facilities of the university, hospitals, and health center to be visited by assessors.
- The research facilities of the university observed include equipment and instrument. The observation may include office, bio-medical laboratories.
- The physical facilities include library (library acquisition and collection development plan and profile of library staff), IT, small room for discussion, PhD candidates lounge, PhD candidates' lockers.
- Physical facilities for PhD candidates support, such as clinics, sport facilities, family support, dormitory, classroom size.
- Observation of some activities, such as teaching and learning, small group discussion, laboratory activities. The observations are focused to check consistencies between descriptions in the SER with the curriculum implementation.

3.7. Guidance for Document Checking

If there are any new information/data/documents which had not been included in SER, the graduate school may display during the visit of assessors, otherwise the assessors will not require any additional document. The purposes of the document checking are:

- To verify that the evidence is genuine, valid, and current.
- Sample syllabi, sample examination question, sample of theses/dissertations, capstone projects, sample of academic advising and referral system, schedule of current term, list of thesis/dissertations advisers and number of advisees per adviser. List of co-curricular activities, and sample of minutes of supervisory review and evaluation.

- Research agenda, research manual, faculty research journal/s, graduate research journal, list of faculties and PhD candidates research and publications, research budget and performance report, research contracts with government and private agency and institutions, ethics review board composition and functions.
- Tuition fee schedule, admission and retention policies, enrolment figures per program and year level, statistical data on dropouts, graduation/completion rates, scholarships and grants, support and auxiliary services PhD candidates satisfaction survey visit results, health clearance certificate of canteen personnel, safety and sanitation inspection reports/documents of the canteen/cafeteria, sample minutes of meetings of PhD candidates services offices, tracer and employer satisfaction surveys and exit interviews, list of PhD candidates activities and collaborations.
- Faculty profile, samples of accomplished evaluation forms, list of visiting and/or exchange professors, list of in-services an off campus, monitoring of online campus, sample of minutes of faculty meetings.
- Library staff development program, library fees, library budget and performance reports, instructional/Orientation program for users, list of print, non-print, electronic resources, utilisation report.
- Organisational chart, profile of Board of Trustees and key institutional and program administrators, latest institutional and program strategic plans and program operational plan, contingency plan or emergency and business continuity plan, audited financial statements for the last three years, graduate school budget, data privacy policy, MOA/MOUs with local and/or international academic, professional, research, private and/or government institutions/organisations, list of chairs, grants, and donations from foundations, minutes of consultation meetings with stakeholders.
- Description of outreach activities/service-learning program, special rooms dedicated for graduate school activities, facilities and laboratory maintenance, sanitation and/or inspection schedule and report, documentation of the following (videos and/or photos): faculty room, consultation rooms including those used for counselling, PhD candidates lounges and PhD candidates organisation rooms, classrooms and laboratories used by the graduate school, co-curricular, extra-curricular, and community service activities.

3.8. Guidance for Closing Meeting

A closing meeting needs to be prepared by the PhD Program to allow the assessor team to present their finding in front of the Graduate School/PhD Program. The Graduate School/PhD Program needs to invite relevant invitees, including their accreditation team. It is usually attended by the

management of the Graduate School/ PhD Program. The PhD program also prepares all the needs for the presentation.

The following is the procedure for the Closing Meeting:

- The draft of summary findings will be given to a study program to be read thoroughly.
- The accreditation team of the PhD program discusses each sub-criterion.
- The accreditation team will write comments or criticise the findings if there is any irrelevant description with the real condition.
- In the following morning, the Graduate School/ PhD Program prepares a representative room for discussion with the assessors, required equipment such as audio-visual, LCD, white screen, a printer with sufficient ink, etc.
- The Graduate School/PhD Program invites all relevant invitees from the PhD program including the accreditation team.
- The representative of the PhD program will open the meeting and ask the team of assessor to lead the meeting.
- The head of the assessor team assigns one of the team members to present the summary of findings.
- Each sub criteria will be read and discussed.
- All invitees will listen carefully and respond to a relevant sub-criterion.
- The PhD program will show related evidence/s to support their assumption on related sub-criteria.
- Each sub-criteria will have a new description based on an agreed statement from the PhD program.
- The PhD program representatives will listen to the recommendation for each sub-criteria after been adjusted with the recent changes.
- After discussing all sub criteria, and both sides agree with the findings, the accreditation team of PhD program will listen to the summary findings, re-describe the commendation and the recommendation.
- The head of the team concludes the summary findings, re-describe the commendation and the recommendation, then allow the assessor team to print.
- While the assessor team prints the documentation, the study program will wait for the next session.
- The head of assessor returns the session to the PhD Program.
- The responsible person of the PhD Program will receive the session and then deliver his/her closing remarks.
- The meeting is dismissed.

Executive Summary

Glossary

Chapter I Graduate School Context

Chapter II Self-Evaluation

1.1. The Need for Self-Evaluation

1.2. The Team

1.3. The Process of Self-Evaluation (who is involved and how)

1.4. Methods (sample, data collection and analysis)

Chapter III Accreditation Criteria

1. MISSION AND VALUES

1.1 Stating the mission.

1.1.1. How is the mission statement specially tailored to the PhD program?

- To what extent does the PhD program mission statement accommodate the research roadmap of the graduate school?
- How are national and international health issues included in the mission statement?

1.1.2. How does it fit with the regulatory standards of the IAAHEH and with relevant national governmental requirements, if any?

- How does the PhD program concordantly translate the relevant national/international regulations and standards into its own regulations and standards?
- How does the PhD program consider the local circumstances and uniqueness in implementing the national regulations and standards?

1.1.3. How is it publicised?

- How does the PhD program use various media for publication of its mission and programs?

1.2 Recommendation

2. CURRICULUM

2.1 Intended outcomes.

2.1.1 How were the intended outcomes for the PhD program and for each part of the course designed and developed?

- How does the PhD program use its mission and research roadmap to formulate intended graduate outcomes?

2.1.2 What are the graduate outcomes of the PhD program?

- What capabilities do graduates acquire upon completing the PhD program?

- become an independent researcher who is capable of conducting independent, responsible, and original research according to principles of good research practice
- develop new knowledge, technology, and/or art in their expertise or professional practice through research, thus producing creative, original, and tested works.
- pursue careers inside and outside of academia. Transferable skills, including but not limited to critical thinking, problem-solving, leadership, teaching, communication, and project management skills, should be supported as part of a candidate's PhD training program.
- solve scientific, technological, and/or artistic problems in their field through interdisciplinary, multi-disciplinary, and transdisciplinary approaches.
- manage, lead, and develop research and development that is beneficial for the advancement of science and the welfare of humanity, as well as capable of gaining national and international recognition.

2.2 Curriculum organisation and structure

2.2.1 What are the essential requirements of the PhD program?

- What are the measurements taken to ensure a PhD training program is based on original research, courses, and other activities that promote analytical and critical thinking?
- How is a PhD program supervision performed?
- What measures must PhD programs take to ensure that PhD candidates receive substantial training in the rules concerning ethics and responsible conduct in research?
- How are PhD programs supposed to be structured concerning the planned time limits, with provisions for part-time study and extensions mainly limited to exceptional circumstances such as parental leave and sick leave?

2.2.2 What is the structure of the PhD program?

- How do PhD programs include formal courses that are in line with national regulations alongside the PhD project? In particular, how should they prioritize transferable skills training in the course curriculum?
- What arrangements must be in place to allow PhD candidates, where relevant, to undertake part of their program at another institution, which may include in another country?
- What is the arrangement for a PhD program performed in parallel with clinical training or other professional training to ensure equal time allocation for research and coursework compared to other PhD programs?
- How should PhD training programs ensure the inclusion of documented learning and professional development activities such as

courses, journal clubs, participation in conferences, seminars, workshops, teaching, and demonstrations? In particular, how should they prioritize transferable skills in these training activities?

2.2.3 What are the requirements of the PhD Thesis?

- What are the standards for a PhD thesis, especially in medicine and health sciences, to reflect the expected outcomes of research at the international level? In particular, how does this benchmark relate to publishing papers in internationally recognized and peer-reviewed journals?
- How does a PhD thesis have to be structured to include a presented paper and a comprehensive review of the relevant literature, research objectives, methodological considerations, results, discussions, conclusions, and further perspectives of the PhD project?
- How should the assessment committee ensure that if a PhD thesis presented in other format, e.g., multiple papers (such as a single monograph), it still meets benchmarks equivalent to the expected contribution of the standard format?
- How does the study program ensure that a PhD thesis in clinical medicine has the same standard as other PhD theses regarding quality and academic rigor?
- How are PhD programs supposed to encourage international recognition by ensuring that these are written, preferably defended, in English, unless national regulations dictate otherwise, or circumstances make it impractical or undesirable? In addition, how should they ensure that PhD thesis abstracts are published in English?
- How can a PhD program ensure the visibility of PhD theses on the graduate school homepage, preferably in full, except where patent or copyright regulations or other factors prohibit this? Alternatively, how could they ensure that at least the abstract of the thesis is publicly accessible?
- How does a PhD program ensure the availability of a thesis summary in the local language?
- How does the assessment committee ensure that the PhD candidate can take full intellectual responsibility for all parts of the thesis, considering the requirements listed in the Annotations at the end of this section?
- How could the PhD program ensure that the PhD thesis structure include a comprehensive review of the relevant literature, research objectives, methodological considerations, results, discussion, conclusions, and further perspectives of the PhD project?

2.3. Research environment

2.3.1. How is the research environment in your institution?

- How can the research environment be identified based on the available research group of the department and the PhD program, national and

international networking with high-quality/recognized research institutions? How can it be measured?

2.4 Research and publication ethics

2.4.1 Is there any ethical committee? What is the position of the ethical committee? What are their roles? What is the procedure to obtain research ethical clearance? Is it in line with the international ethical standard? Who are the ethical committee members?

- Is there any research ethics committee at the university of faculty level? How is their workload? Is the workload evaluated regularly? What are their roles in the research environment?
- What are the committee's responsibilities in reviewing and making decisions on research proposals?
- What are the mechanisms for requesting ethical clearance? How does the mechanisms be made available and accessible within the research framework?
- How should adherence to international ethical standards such as the Helsinki Declaration II (clinical), EU Directive 2010/63/EU (animal research), and Oviedo Convention (bioethics) be ensured?
- How should the composition of the ethical committee ensure its members are experts and competent in medicine and health sciences research?

2.4.2 Publication ethics. How does the PhD program ensure the avoidance of plagiarism? What is the regulation concerning authorship? How does the PhD program regulate joint publications?

- What kind of programs and mechanisms are implemented by the PhD program to prevent plagiarism?
- What are the regulations established by the PhD programs regarding authorship?
- How could PhD programs ensure that joint publications adhere to standards where co-author statements document substantial and independent contributions by the PhD candidate? Additionally, how should ownership of results from PhD studies be clearly defined to prevent the same publication from being used in more than one thesis?

2.5. Recommendation

3. ASSESSMENT

3.1 Assessment of Learning

3.1.1 How does the PhD program decide whether the candidate meets the expected learning outcome?

- How could PhD programs ensure continuous, structured assessment of the progress of PhD candidates throughout their program by both the school and supervisors?
- How could PhD programs recognize and give credit for relevant coursework taken elsewhere or other pertinent experiences gained?

- What are the mechanisms of the acceptance of a PhD thesis? Do they include the evaluation of the written thesis and a subsequent oral defense following institutional regulations?
- What is the regulation of awarding PhD degrees? What are the roles of the assessment committee in the process of awarding PhD degree? Does a recommendation from an Assessment Committee that evaluates the thesis and the oral defense according to established standards is needed?
- How should the Assessment Committee be composed to ensure it consists of established and active scientists without connections to the milieu where the PhD was conducted and without any conflicts of interest? How should the inclusion of examiners from other institutions be aligned with institutional regulations?
- How should universities address the issue of potential conflicts of interest when determining whether a PhD supervisor can serve as a member of the assessment committee, considering that in some cases, they may participate without voting on the final decision?
- How should universities handle cases where a PhD thesis receives a negative assessment, including opportunities for the candidate to rewrite the thesis after a negative assessment of the written component or to have an additional defense following a negative assessment of the oral defense? Additionally, under what exceptional circumstances can an Assessment Committee reject a thesis without offering the candidate the opportunity to reconsider?
- How should the oral examination be structured to ensure the presentation of the candidate's research conducted for the PhD award? Additionally, how should the examination sufficiently assess that the thesis represents the candidate's original work, demonstrates expertise in the specific area of research, shows a broad understanding of the discipline, and includes published or publishable elements?
- How should universities ensure that the oral defense or viva voce examination for PhD candidates follows norms regarding public accessibility, or at least accessible to the faculty? How should they handle situations where national norms prohibit public access by requiring candidates to present to the faculty before the oral defence occurs?
- How should institutions promote internationalization by ensuring that, where possible, the Assessment Committee includes at least one member from another country?
- How should institutions ensure that, besides the thesis, PhD candidates have acquired sufficient transferable skills during their program?
- How should graduate schools consider implementing a thesis committee for each PhD candidate to monitor their progress through regular meetings with the candidate and their supervisors?
- How should the competencies developed during the PhD program be documented in a portfolio or equivalent format? How should the

principal supervisor (and advisory or thesis committee) oversee the development and recording of transferable skills throughout the doctoral program?

3.2 Assessment in support of learning

3.2.1 How are PhD candidates assessed to support their learning?

- How should PhD candidates be assessed based on their performance in conducting research, including the regular provision of feedback?
- How should continuous assessment of the progress of PhD candidates throughout their program be conducted?

3.2.2 How are PhD candidates assessed to determine those who need additional help?

- How do you decide which PhD candidates need additional help based on their assessment across the curriculum?

3.2.3 What support systems are offered to those PhD candidates with identified needs?

- How do you support the PhD candidates with the identified needs?

3.3 Assessment in support of decision-making

3.3.1 How are thresholds set on summative assessments?

- How do you decide on progression and graduation across all expected learning outcomes?
- Who makes decisions on progression and graduation across all expected graduate outcomes?

3.3.2 What appeal mechanisms regarding assessment results are in place for PhD candidates?

- What are the mechanisms for appeal that allows PhD candidates to dispute decisions regarding their programs and the assessment of their theses?
- How is the policy/system regarding the appeal mechanism for the assessment results?
- How do you ensure the candidate is well-informed about the appeal mechanisms?
- Who is involved in implementing these appeal mechanisms?
- What happens if there are disputes between the candidates and the school?

3.3.3 How are assessments used to guide and determine PhD candidates' progression?

- How do you decide PhD candidates' progression?
- How do you use assessment results to guide and determine PhD candidates' progression across the program?

3.4 Quality control

3.4.1 Who is responsible for planning a quality assurance system for assessment?

- What are the tasks of a graduate school's academic quality assurance unit responsible for developing a quality assurance system for assessment, be structured and managed?
- 3.4.2 Who is responsible for implementing a quality assurance system for assessment?
- How does the PhD program implement a quality assurance system for its assessment processes?
- 3.4.3 How are comments and experiences about the assessments gathered from candidates, and supervisors?
- How do you collect comments and experiences about the assessment system from candidates and supervisors?
 - How do you ensure that those comments and experiences are trustworthy?
- 3.4.4 How is data from assessments used to evaluate supervision and the curriculum in practice?
- How do you use assessment results to evaluate the supervision and the curriculum in practice?
 - Who is involved in this process?
- 3.4.5 How are the assessment system and individual assessments regularly reviewed and revised?
- Can you explain the procedure for regularly reviewing and revising your assessment system in individual assessment?
- 3.5. Recommendation
4. PhD CANDIDATES
- 4.1 Selection and admission policy
- 4.1.1 How is the selection and admission policy for PhD program developed by the graduate school?
- Who is involved in developing the selection and admission policy?
 - How do you ensure the selection and admission policy align with the graduate program research roadmap?
- 4.1.2 What is the principle of the selection process?
- What principles should govern the selection process to ensure transparency and equity, particularly in accepting candidates from other institutions?
- 4.1.3 What are the requirements to be fulfilled by the PhD candidates?
- What are the requirements that PhD candidates must fulfill?
- 4.1.4 How is the selection and admission policy publicised?
- How do you disseminate selection and admission policy to internal and external stakeholders?
- 4.1.5 How is the selection and admission system regularly reviewed and revised?
- How should the selection and admission system be regularly reviewed and revised?
 - Who is involved in these procedures?

4.2 Rights and Liability

4.2.1 What are the rights and liabilities of PhD candidates related to their contribution to a research project?

- How can Ph.D. candidates balance their rights and responsibilities as researchers and doctoral candidates to uphold high ethical and academic standards, actively engage in research and scholarly activities, and contribute to advancing knowledge in their field while preparing for successful careers in academia, industry, or other sectors?
- How should PhD candidates be informed about policies and procedures related to the successful completion of their doctorate, including conflict resolution, bullying and harassment, equality, diversity, and inclusion?

4.2.2 What are the requirements to be fulfilled by the candidates before conducting their research project?

- How should PhD candidates present their research projects and be assessed by external examiners?

4.3 PhD Candidates Counselling and Support

4.3.1 In what ways are the academic and personal support and counselling services consistent with the needs of PhD candidates?

- Does the graduate school provide an appropriate package of support that meets the academic and pastoral needs of candidates, such as academic and career advisor, financial assistance/education financial management counselling, health and disability insurance, counselling/personal welfare program, candidates access to health care services, a candidates' interest, and talent development, etc?
- How should graduate schools offer confidential counselling to PhD candidates regarding their PhD program, supervision, and personal matters?

4.3.2 How are these services recommended and communicated to candidates and supervisors?

- How is information on services made available to supervisors and PhD candidates?
- How do you ensure that candidates and supervisors are aware of the availability of these PhD candidates' support services?

4.3.3 How is the services' feasibility judged regarding human, financial, and physical resources?

- How do you ensure these services are feasible regarding human, financial, and physical resources?

4.3.4 How are the services regularly reviewed with PhD candidate representatives to ensure relevance, accessibility, and confidentiality?

- What are the procedures to evaluate the effectiveness of these services through a range of methods, e.g., surveys, complaints, and representative groups?
- How are changes accommodated where appropriate?

4.3.5 What is the function of the representative of PhD candidates?

- How should PhD candidates' representatives interact with the graduate school's leadership regarding the design, management, and evaluation of PhD programs? Additionally, how can institutions encourage and facilitate the involvement of student organizations dedicated to enhancing PhD programs at the institution?

4.4 Recommendation

5. ACADEMIC STAFF AND SUPERVISOR

5.1 Academic Staff and Supervisor Establishment Policy

5.1.1 How is the supervision of PhD candidates?

- How should institutions ensure that each PhD candidate has a principal supervisor and, when relevant, at least one co-supervisor to cover all aspects of the program? Additionally, how can they ensure that the responsibilities of each supervisor are clearly defined and documented?
- How should institutions determine the number of PhD candidates per supervisor to ensure compatibility with the supervisor's workload?
- How should institutions ensure that supervisors are academically and scientifically qualified and actively engaged scholars in the relevant field?
- How should institutions ensure supervisors regularly consult their PhD candidates?
- How should institutions foster a successful PhD program through the supervisor-candidate relationship, emphasizing mutual respect, shared responsibility, and contributions from both parties?
- How should institutions ensure that the responsibilities of each supervisor are explicitly defined?
- How should institutions ensure supervisors possess broad local and international scientific networks to effectively integrate PhD candidates into the scientific community?
- How should institutions ensure that supervisors are familiar with the structure of the PhD program, as well as associated regulations, policies, and institutional procedures?
- How should supervisors assist in the career development of PhD candidates starting from enrolment?
- How should institutions implement contracts describing the supervision and monitoring process to be signed by supervisors, PhD candidates, and the head of the graduate school?
- How should institutions or doctoral schools ensure that all supervisors, including potential supervisors, receive formal training in international best practices in research supervision?
- How should supervisors, where feasible, also serve as co-supervisors for PhD candidates at other graduate schools within the country and internationally?

- How should supervisors ensure they know all policies and processes related to conflict resolution, bullying and harassment, equality, diversity, inclusion, research ethics, and integrity, and how should they effectively share this information with their PhD candidates?
- How should doctoral schools ensure that the academic progression of candidates in the doctoral program is overseen by an independent individual or committee, excluding the primary supervisor?
- How do you calculate the required number of your academic staff's and their characteristics?
- How did the graduate school arrive at the required number and characteristics of their academic staff?
- What are your considerations in deciding the number and characteristics of your academic staff?
- How do you monitor and review the workload of your academic staff?

5.2 Continuing Professional Development for Academic Staff

5.2.1 How does the graduate school take administrative responsibility for implementing the staff's continuing professional development (CPD) policy?

- How does the graduate school monitor, evaluate, and review the continuing professional development program of the academic staff?
- How could the graduate school appraise and reward the academic staff related to their continuing professional development?

5.2.2 What protected funds and time does the graduate school provide to support its academic staff's continuing professional development (CPD)?

- How could the graduate school support its academic staff in continuing professional development?
- What are the policies for this?
- How could the academic staff understand the policy and procedure clearly?

5.3. Recommendation

6. EDUCATIONAL RESOURCES

6.1 Physical facilities for research and training

6.1.1 How do you describe your institution's facilities for PhD candidates?

- What considerations should be made to implement standardized laboratory practices?
- How do you ensure that the research laboratories meet the standard requirements for each research project, including considerations such as room size, capacity, bench tables, chairs, lighting, airflow, etc.?
- How should operational hours and access to research laboratories be managed and regulated?
- How should PhD programs ensure that working rooms provided for PhD candidates are equipped with necessary amenities such as tables, chairs, bookshelves, pantries, prayer spaces, copy machines, printers,

scanners, and computers? How can they ensure these working rooms have sufficient space and are accessible as needed?

6.1.2 What are the PhD candidates' support centre/systems?

- How should PhD programs provide health and sports facilities that contribute to maintaining the health and well-being of PhD candidates?
- How do you ensure the PhD candidates' safety and security systems are in place at all locations?

6.2. Recommendation

7. QUALITY ASSURANCE

7.1 The quality assurance system

7.1.1 How are the graduate school's purposes and methods of quality assurance and subsequent action defined and described?

- How should institutions establish procedures for regularly reviewing the structure, function, and quality of PhD programs, incorporating feedback from supervisors and candidates?
- How does the graduate school determine and apply the criteria and methods (including monitoring, measurement, and related performance indicators) necessary to ensure these processes' effective operation and control?
- How does the graduate school determine the resources required for this process and ensure their availability?
- How does the graduate school assign responsibilities and authorities for these processes?
- How does the graduate school address risk and opportunities?
- How does the graduate school evaluate these processes and implement any necessary changes to ensure that these processes achieve the desired result?

7.1.2 How are resources allocated to quality assurance at graduate school?

- How does the graduate school identify resources needed to implement, maintain, and continuously improve the quality assurance system?
- How does the graduate school justify that the allocated resources are sufficient?

7.2. Recommendation

8. GOVERNANCE AND ADMINISTRATION

8.1 Governance

8.1.1 How and by which bodies are decisions made about the institution's functioning?

- Which bodies are responsible for decisions related to the graduate school's functioning?
- How do the graduate school bodies make decisions on the functioning of the graduate school?

8.1.2 By what processes and committee structures are training and research

governed in the institution?

- How does the graduate school govern the training and research activities?
- Which structures are responsible for managing training and research activities?

8.1.3 What governance arrangements are there to review the performance of the graduate school?

- Which body is responsible for reviewing the performance of the graduate school?

8.1.4 How are risks identified and mitigated?

- By what mechanisms does the graduate school identify and mitigate all risks that may occur during training, research, and budget allocation?

8.2. Administration

8.2.1 How does the administrative structure support the functioning of the institution?

- How does the graduate school design the administrative structure?
- What are the roles of the administrative structure in supporting the functioning of the graduate school?

8.2.2 How does the decision-making process support the functioning of the institution?

- What are the roles of the decision-making process regarding the functioning of the graduate school?

8.2.3 What is the reporting structure for administration about training and research?

- How does the graduate school design the administrative reporting structure on training and research programs/activities?

8.2.4 How does the graduate school disseminate its profile and program?

- How should the graduate school develop and maintain a homepage effectively?

8.3. Recommendation

Chapter IV Summary of the Overall Results

Chapter V Appendices