ASIIN Institutional Accreditation Report for the

University of Energy and Natural Resources (UENR)

- Regional Centre for Energy and Environmental Sustainability (RCEES)

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A. About the Institutional Accreditation Process

Accreditation Subject	University of Energy and Natural Resources, Ghana	
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Representative/s of ASIIN Headquarter	Dr. Iring Wasser, Managing Director ASIIN	
Timeline	**Date**	**Milestone**
	16.01.2022	Conclusion of Accreditation Agreement with the UENR
	25.07.2023	Submission of Final Self-Evaluation Report
	27.-30.08.2023	On-site visit of the ASIIN international expert team
	21.03.2024	Decision by the ASIIN Accreditation Commission
Relevant criteria and sources	Criteria for the ASIIN System Seal / Institutional Accreditation / Institutional Assessment: Requirements for Good Teaching and Successful Learning (06/07/2022) Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)	

Description and depiction of ASIIN´s institutional accreditation approach

ASIIN considers institutional accreditation an instrument for organisational development triggered by a two-staged process of an internal evaluation followed by an audit of external experts. In the first stage, members of the evaluated organisation will conduct an internal self-reflection process regarding the functionality and effectiveness of its internal quality assurance system. In the course of this exercise, all relevant stakeholders participate. Subsequently, a self-evaluation report (SER) is edited on the part of the reviewed institution containing a shared internal understanding of the strengths and weaknesses of the evaluated subject. After receipt of the SER, ASIIN assembles an independent team of experts representing the required different stakeholder groups (representatives of academia, professional practice and students) and disposing of suitable expertise concerning the evaluated subject. This team reviews the SER and conducts a site visit at the institution, where the SER is validated in discussions with the relevant stakeholders. The findings are compiled in an institutional accreditation report analysing the strengths and weaknesses of the internal QA from an external point of view and summarising recommendations towards its enhancement.

The structure of the SER and the accreditation report are based on the *Criteria for the ASIIN System Seal / Institutional Accreditation / Institutional Assessment*[1]*.* This set of criteria is designed for quality development in teaching and learning. It refers to (I) the definition of quality and its management, (II) its application to the educational provisions the Higher Education Institution (HEI) is offering, (III) the management of its resources and (IV) quality-related transparency and documentation. Each aspect is considered in an *institutional*, *procedural* and *cultural* perspective or dimension. The approach is furthermore based on a system of so-called maturity levels. This makes for a comprehensive description of the development stage at which the quality management system of the institution presently is. A simplified version of the maturity levels is presented as follows:

0 = non-existent
1 = defined
2 = implemented
3 = established and controlled
4 = predictive and proactive

Further information regarding this classification can be found in the ASIIN mentioned above Criteria. The ensuing ASIIN institutional accreditation report is structured as follows:

Four chapters are presented for each of the four accreditation criteria. At the beginning of each chapter, the guiding questions are listed, followed by an analysis and findings of the

[1] Criteria for the ASIIN System Seal / Institutional Accreditation / Institutional Assessment: Requirements for Good Teaching and Successful Learning (20/06/2016). These criteria are in line with the European Standards and Guidelines 2015.

experts, as well as the respective maturity level of the organisation's structures, processes and their interaction with cultural characteristics observed by the expert team regarding single criteria. Every chapter concludes with requirements and recommendations for further quality enhancement and organisational maturity.

Special framework condition for the review of the University of Energy and Natural Resources (UENR)

It is interesting to note that this review has been commissioned by the University of Energy and Natural Resources (UENR) in the framework of a funding scheme by the World Bank, which since 2019 has invested in the build-up of the so-called African Regional Excellence for Energy and Environmental Sustainability (RCEES) at the UENR. The RCEES and all other "ACE Centres" have been established to innovate higher education on the postgraduate level and to concentrate research in vital areas for the further development of the Ghanaian/African nations.

Following this institutional review, the UENR/RCEES has also asked for international accreditation on the program level, namely for the Master Environmental Engineering and Management, the doctoral program in Environmental Engineering and Management, the Master in Sustainable Energy Engineering and Management as well as the PhD in Sustainable Energy Engineering and Management. This accreditation procedure was executed by an ASIIN expert team immediately after the execution of this institutional review procedure.

Responding to the queries of the ASIIN expert team, the leadership of the University puts on record that they consider this international institutional review by ASIIN not only a "have to do" under the regulations of the World Bank, but rather as a suitable way for self-improvement beyond the also obligatory national accreditation procedures. The national accreditations are carried through by the Ghana Tertiary Education Commission, a recent merger of the National Council for Tertiary Education (NCTE) and the National Accreditation Board (NAB) in 2020. The review furthermore contributes to increasing institutional recognition of its quality management system within the Ghanaian higher education sector. International Accreditation is also seen as one of several instruments to advance in international rankings such as the Times Higher Education World Rankings.

The ASIIN expert team takes note of the fact that the institutional accreditation review comes at a time of strategic repositioning and creating a new administrative structure, which is designed to improve the interaction between the university leadership/its central administrative units and the decentralized level of the various schools/departments of the institution. This applies to core areas of the Universities´ activities such as e.g. quality assurance and research. The experts are happy to note, that the World Bank Investments into the RCEES are providing a considerable number of improvements and innovations, from which the entire University greatly benefits. The following report summarises before this background the findings of the ASIIN expert team.

B. Characteristics of the University of Energy and Natural Resources

The University of Energy and Natural Resources (UENR) in has been established by an Act of the Ghanaian Parliament (Act 830) in 2011; today it is one of meanwhile 34 public universities in Ghana. It has been endowed with a specific mandate to disseminate knowledge and undertake research in all areas related to Energy and Natural Resources. Its mission is to provide leadership and management of energy and natural resources and to be a centre of excellence in these critical areas for the development of the nation.

Despite its focus on the two topics cited in its denomination, the UENR today is offering a broad range of study programs in economics, law, policy, management, science, technology, and engineering. It is organized in meanw hile nine schools located in three campuses. The University disposes of a multi-campus setup and currently runs three campuses located in the cities of Sunyani, Nsoatre, and Dormaa Ahenkro. The Sunyani campus with approximately 85 acres is home to the School of Sciences; School of Natural Resources; School of Graduate Studies and the Main Administration of the University as well as the University Library. The School of Engineering is located at the newly constructed Nsoatre campus with approximately 2,000 acres. The School of Agriculture and Technology and Geosciences are situated on approximately 2000 acres of land at the Dormaa campus. The University also has four field training stations in Mim, Bronsankoro and Kyeraa for Agriculture and Forest Resources Management students and one at Bui for Engineering students.

Starting with two initial study programs and a total enrolment number of 154 students, the University has ever since expanded considerably and is currently offering 49 undergraduate programmes and 22 graduate programmes. As of this year 2023, the student population is exceeding 12,000 students, almost doubling in the past couple of years. This increase in enrolments goes hand in hand with the expansion of the student population all across Ghana, as the government recently has made senior high school education free of cost, leading to a drastic increase in the number of high school graduates and consequently of university applicants. Most of the students are enrolled on the undergraduate level (around 11000) with another 1000 studying on the post-graduate level. One-third of the student population is female. Almost all students are Ghanaians; international student enrolment has practically not materialized in the past decade. Only a small minority of students are international students (less than 30 individuals). The number of academic staff amounts to about 330 across all study programs, which translates into a student-staff ratio of 1:37 on average. Currently, the biggest concern of the University is enrolment numbers/staff availability in the engineering disciplines, which are below expectations and deserve an additional focus.

The university operates ten research centres, which conduct research in relevant topics to energy and natural resources and provide community engagement and consultancy to the local and rural communities. Since 2019, the World Bank has furthermore selected the UENR

to host an Africa Centre of Excellence (ACE), labelled the “Regional Centre of Energy and Environmental Sustainability” (RCEES), offering a broad range of postgraduate programs. The UENR in recent past has made major efforts to increase its research output and today is ranking on position 12 among 78 educational providers in the country. In this context, it is interesting to note that the young institution only recently has elaborated the draft of a new research policy, designed to boost the research output of the UENR, which however still needs to be passed by the responsible decision-making bodies.

As regards the financing model of the institution, the UENR to almost two thirds relies on government funding, followed by income generated out of tuition fees. Third party research funding is limited, amounting to around 10% of the total income. Currently, there are initiatives underway, to diversify the sources of income and to become a more independent educational provider with its additional sources of income.

Concerning HR resources, the general picture is, that the University has been rapidly expanding and is suffering from a shortage of qualified staff, which leads to an unfavourable average staff-student ratio of 1:37. The hiring process is however beyond the control of the institution, as every additional staff recruitment needs prior government authorization; autonomy is only in place regarding the recruitment of guest lecturers.

Concerning QA arrangements, QA policies have been published back in 2016 containing a broad range of instruments. The challenge remains to consistently implement the various instruments on the central as well as on the decentral level in the schools and departments and also to close the associated QA loops, as will be further elaborated in subsequent chapters of this report.

C. Analysis and Findings of Experts

I. Definition of quality

Criterion I.1: Objectives

Questions

***Institutional dimension**:* Which quality objectives of the institution have an influence on the quality of teaching and learning? Which of these quality objectives have a high priority, and which have a lower priority? Which of the quality objectives reflect the existing strengths of the institution? Which of the quality objectives are oriented towards institutional development and are future-oriented? What are the biggest challenges to maintaining the achievement of the quality objectives?

***Procedural dimension**:* Which of the objectives related to the quality of teaching and learning have last been *amended*? What were the reasons for the amendment? What are the processes to define, implement, and review these objectives on a regular basis?

***Cultural dimension**:* Which values and behavioural patterns have the biggest influence on the quality objectives of the institution? Which objectives are of particular importance for the internal stakeholders? Which groups within the institution particularly relate to which of the objectives? Which objectives are rejected by some stakeholders within the institution? Which possibilities exist to discuss among the internal stakeholders' different opinions about the quality objectives of the institution?

Analysis and findings of experts

Concerning its overarching quality aspirations, the University of Energy and Natural Resources presents ambitious "Vision and Mission" statements. According to its **Vision statement,** the University aspires "to become a world-class institution for generating, advancing and applying knowledge in energy and natural resource sciences."

In its corresponding **Mission statement,** the UENR lists as its priority *"to promote the development of human resources and skills required to solve critical energy and natural resources challenges of society and undertake interdisciplinary academic, research, and outreach programs in engineering, science, economics and environmental policy".*

As regards its core values, they are clearly stated on the website and in a range of documents. The institution accordingly spires to

- Promote innovation, creativity, freedom of thought and creative expression.
- Operate with integrity, commitment and transparency.
- Promote conservation of energy and the environment.
- Establish partnerships with stakeholders in skills, knowledge generation and application.
- Be responsive to the needs of our students and partner communities.
- Promote and exemplify sustainability concepts across all University courses/programs,

The University also disposes an Honour Code, which contains the institutions´ statement on academic integrity, by which students and staff must abide.

Next to the Vision and Mission Statements, the definition of its Core Values and Honour Code, the quality aspirations and developmental goals are laid down and further elaborated in the UENR´s ten-year ***Strategic Plan*** running from 2016-2026, split into three phases (2016-2020, 2020-2023 and 2023-2026). Only recently, the University management in a broad stakeholder process assembled more than 100 leading representatives in a management retreat event on the occasion of the institution´s 10th anniversary, to further refine the quality aspirations of the UENR and jointly define an action plan for the way forward in a complementary "Regional Strategic Development Plan", spanning the period 2023-2028.

On the operational level, the University has attempted to establish a comprehensive Quality Assurance system, the impact of which is more thoroughly analysed in subsequent parts of this report. From an overall perspective, the experts identify room for improvement as regards the transfer of QA instruments designed at the central administrative level to the level of the Schools/Departments and their study offers as well as the full implementation of various quality assurance circles. Currently, the focus within the institution is on the "Planning" and "Doing", rather than on the "Checking" and "Acting" side, as will be further exemplified.

In the expert´s view, the quality objectives of the UENR have been well defined in a comprehensive stakeholder process. Its main objective to become a (world) leading institution dedicated to generating, advancing, and applying knowledge in the fields of energy and natural resource sciences is well placed, though very ambitious. At this moment, the first challenge is obviously to materialize this ambition in the country, then in the region/continent before advancing to even more ambitious goals. The experts concur that the institutions´ strategic position aligns well with the increasing global interest in energy production, policy, management, and sustainable natural resource management.

Whereas on the level of the vision and mission statement, the definition of quality is clearly stated, the Strategic Plan in the expert´s opinion deserves further improvement on several levels. While appreciating the existence of this important key document, there is a need for further substantiating this Strategic Plan by "refining", and continuously reviewing its progressive implementation. This goes hand and in hand with defining appropriate,

measurable key performance indicators, which are consistently and objectively operationalized and monitored in concrete, annual implementation plans, including a gap analysis, a risk register and especially dependable follow up action plans with reasonable, clear timelines. The current implementations plan in place on the central level are currently lacking these qualities.

A self-identified further area of improvement is related to the fact that the Strategic Plan currently exists only on the central administrative level and is at this moment not underpinned by comparable plans on the decentralized level of the Schools, Departments and Directorates. The University Leadership in discussions with various stakeholder groups has meanwhile reached the same conclusions and intends to close this important gap in the near future (see also the next criterion).

In the context of defining adequate QA goals, it is the issue of internationalization, which needs further elaboration. As will be elaborated in other sections of this report, currently there are practically no international student enrolment at the UENR, and incoming and outgoing mobility equally deserves a renewed focus and reform. The experts are informed that the UENR has recently passed an additional separate Regional Strategic Development Plan to more proactively address this important area of activity.

On the cultural level, the experts appreciate the fact that they experience open, self-reflective discussions with practically all stakeholder groups during the on-site audit and take it as evidence of a quality assurance culture geared towards the further development of this young educational provider. The experts strongly encourage the UENR´s leadership and its stakeholders to thoroughly and inclusively reflect in detail on the future development path of the institutions as is already good practice and well documented. Together, they are continuously challenged to further develop and fine-tune a clear understanding of what the institution´s distinguishing features and "unique selling points" are, progressively moving forward to become a university of international standing.

Concerning the use of (international) accreditation to promote quality and quality culture within the institutions, the experts commend the UENR on its accomplishment in this important field of activity. This applies to the area of institutional quality assurance, which is now culminating in this ASIIN accreditation procedure. On the level of program accreditation, the UENR also has started to undergo international accreditation procedures.

Final assessment of the experts/levels of maturity observed.

After discussing and studying the material provided, the ASIIN experts came to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 2

Cultural level of maturity observed: 3

Criterion I.2: (Quality-) Management System/Governance

Questions

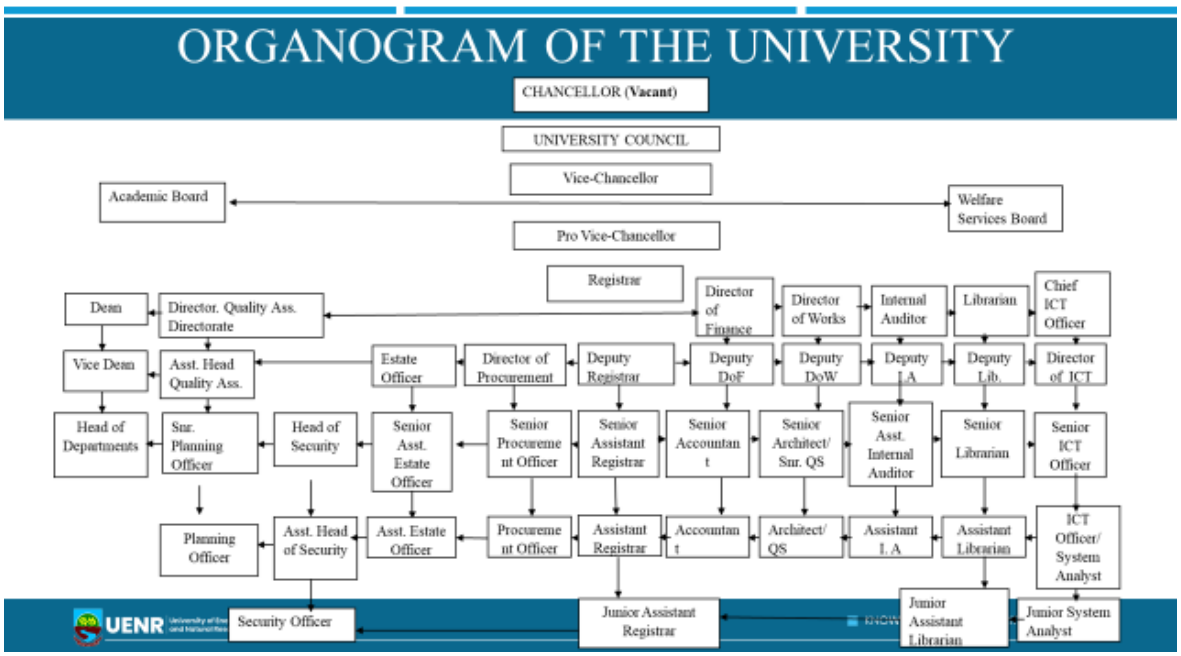
Institutional dimension: What works well regarding the organizational settings (responsibilities), structures, and physical and human resources of the quality management of the institution? Who is involved, who is responsible, and who is informed? Which changes are planned for the near future regarding the set-up, structure, and resources for quality management – and why? How is the collaboration between the different organizational units (teaching, research, administration) assessed by the different departments, faculties, etc., and by the central management? Which facets of the collaboration are considered useful, and which are considered obstructive?

Procedural dimension: Which procedures (processes) for the implementation of the quality-related policy work well? Which processes for the implementation of quality policies need to be improved by the responsible actors? Are further changes in the processes planned? If yes, why?

Cultural dimension: Which typical values and behavioural patterns of the internal stakeholders have a positive effect on the quality management for teaching and learning? Which stakeholder groups particularly support quality management for teaching and learning? Which groups are less involved? What are the reasons for higher or lower levels of involvement? What are typical situations leading to changes in the structures and procedures of the quality management system? Who is involved in such changes?

Analysis and findings of experts

As regards **the institutional governance structure** of UENR, the following bodies and actors are involved.



The experts take note of the fact that the highest leadership position of the UENR (belonging to the category of "Principal Officers"), the position of the **Chancellor** has been vacant since the founding of the university more than a decade ago. They learn that the Chancellor in the organizational set-up is assuming primarily representative functions. Due to political struggles in the Ghanaian tribal society, all attempts to identify the leading representative of the institution have been futile. The experts see a clear need to fill this position by appointing a suitable individual well connected in the Higher Education establishment of the country and beyond.

Another Principal Officer is the Chairman of the so-called ***University Council***, which is responsible for determining the strategic decisions of the institution, implementing and monitoring key management decisions. These are on the operational level prepared by the Vice-Chancellor and one Pro-Vice Chancellor.

Next to the University Council, it is the UENR´s ***Academic Board***, which as the representative body of the Schools and Departments of the UENR assumes the final authority regarding all matters related to education and scientific research, ratifying degrees and approving study programs, approving changes to courses etc. The School of Research and Graduate Studies is a separate entity overseeing all aspects of research as well as the execution of Master's and PhD programs and graduate admission. The ***Admissions Board***, chaired by the Pro Vice-Chancellor or the Deans of the respective Schools, include all Heads of Departments as well as the Registrar oversees undergraduate admission. A subgroup of the Admissions Unit is the ***Academic Affairs Unit***, having oversight of admissions from affiliated institutions and the validation of student entry qualifications in collaboration with the West African Examinations Council.

Regarding the core area of university administration, it is the ***Registrar*** overseeing the administration and its various support units, organized in various "***Directorates***". Among the most important, are the Directorates on Human Resources, Finance, Procurement, Works, and Quality Assurance. There is an Internal Audit Unit as well as an ICT Support Unit in place.

The Works and Physical Development Directorate is responsible for the overall development and maintenance of the physical environment of the University and the provision of essential services effectively and efficiently.

The IT Directorate is responsible for all I.T.-related activities in the University, including the provision of security of all data that traverse the University's network and has been responsible for the development and deployment of most of the University's business applications.

The University also employs an Estate Officer and several professional librarians. In connection with the Pandemic, the World Bank Funding and other external stimulants, several important ***Centers*** have recently come into existence, among them the ***Center for Distance Learning and Digital Education, the Centre for Grants, Research and Innovations,***

the Centre for Business Innovation and Entrepreneurship as well as the Centre for Professional Development.

As regards the set-up of UENR´s Quality Assurance System, it is the ***Quality Assurance and Academic Planning Committee*** (QAADP), that oversees organizing all matters related to internal and external QA. It consists of 15 members and provides direction and support for academic units regarding academic planning and documentation of program effectiveness. It has also been established to advise the Academic Board on the future development of the University on appropriate procedures and strategies covering all aspects of the University's activities. This includes the establishment of new Schools/Institutes /Centers/Departments/Directorates and Centers, the opening and closing of study programs and the introduction of new assessment systems. It is also charged with maintaining guidelines and standards for quality assurance, planning, and assessment.

The core mandate of the Quality Assurance Directorate consists of facilitating and overseeing quality audits, self-studies, and other initiatives to enhance quality. In addition, it disseminates information related to quality enhancement and conducts surveys to gather feedback from students and employers. Currently, the institutional QA set-up is under review. The QAADP with its two main departments (the Academic Planning Department and the Quality Assurance Department) in the future will be supported by decentralized School Quality Assurance and Academic Planning Committees in each of the 9 schools of the university.

The experts note the existence of a Quality Assurance Policy, dating however back to 2016 (it is an updated version of the first draft from 2013) listing and describing a considerable number of QA tools. In terms of their implementation status, the experts find that some of the core QA instruments have not been consistently implemented in the past couple of years or just started to be put in place. This finding e.g. certainly applies to the important field of "tracer studies", documenting the success of the UENR´s graduates in the national and regional labour market. Although this instrument is adequately described, currently very few data are compiled or systematically assessed from this source, the first pilots have just started. There is equally no instrument in place looking into the satisfaction of staff with their working environments and conditions. The UENR piloted a Student Exit Survey (SES) in 2021, which resulted in several critical remarks from students regarding their learning experience, student life on campus, the state of infrastructure, laboratories etc. This in the expert´s eyes is a step in the right direction and should from now be executed regularly as an important way of measuring student satisfaction and getting reform measures in place where deemed necessary. The SES from 2023 whose results were released lately show a similar picture of critical points and student satisfaction.

The experts appreciate that the University of Energy and Natural Resources regularly organizes comprehensive stakeholder meetings to discuss the way forward. This was e.g. done on the institution´s tenth anniversary. The event was organized as an Extended Management Retreat on Managerial and Leadership Skills aimed at defining and promoting

the future path of the UENR in a comprehensive stakeholder review process. The retreat involved a retrospective analysis of the University's activities over the past ten years in line with the Vice-Chancellor's vision and Strategic Plan. Over 100 officeholders attended the event and as part of the outputs, fourteen key messages and actions were identified for management and staff consideration. These messages and actions are meant to drive the University's continued growth and development. Among the most important lines of action are the following:

According to the UENR´s analysis, the Schools, Departments and Directorates are urgently called upon to elaborate and present their strategic plans, complimentary to what has been formulated and passed on the institutional level. The experts concur, as only in harmony with the University´s broader goals, there is a realistic chance to work in sync towards common objectives and increase the capacity for interdisciplinary cooperation on all levels based on these decentralized development plans. Identifying measurable key performance indicators, documenting the progress of action plans as well as having in place clear roles and responsibilities are essential to ensure everyone knows what is expected of them. Developing annual activity plans, monitoring and evaluating progress, and regularly updating them will ensure they remain relevant and responsive to changing needs and priorities while keeping everyone on track.

Further management priority targets a closer interaction between the UENR and its industrial environment for manifold reasons. This includes in creating tailored academic programs and producing job-ready graduates, disposing of skills and knowledge that employers are looking for; cooperation with industry leaders is furthermore essential for offering adequate practical experience through internships and cooperative education as well as providing professional development opportunities for staff.

Another central challenge for the institutions management and governance system is related to operationalizing its HR development policies, dating back to 2015. The experts note that there are a number of QA instruments listed in this HR policies (system of evaluating the acceptance and effectiveness of its continuous development activities), which according to their knowledge are equally not consistently applied.

Another prerequisite for increasing the management capacity is the introduction of innovative financial investment and income diversification strategy as well as a plan for modernizing and expanding infrastructure on all levels. All these challenges are dealt with in more detail in Chapter 3 of this report.

As regards the area of research, this again is supposed to be decentralized, with Consultative Research Committees to be created in each of the 9 Schools of the university, jointly defining the future Research Agenda of the UENR (again more details are provided in subsequent parts of this report).

The experts in their summative evaluation of this criterion see a considerable number of opportunities as well as challenges related to the current governance structure.

Concerning the institutional governance structure, for the university to succeed, the decentralization process, which has been initiated by the leadership as a central reform goal, needs to be consistently followed through. This applies to areas e.g. Quality Assurance as well as the organization of Research within the UENR.

It also implies in the experts´ opinion that there is a need to further invest in the professionalization of management structures. Currently, the position of the Chancellor is vacant, and for the core areas of teaching and learning, research, community engagement, internationalization, there is only the Vice-Chancellor and one PVC available. Filling the vacant posts and putting this burden on more shoulders, while having a further differentiation of core leadership roles and responsibilities in place, is warranted. The experts in the UENR´s quest to improve HR resources furthermore recommend establishing a system of evaluating the acceptance and success of continuous development activities for its staff.

Apart from having sufficient HR resources on all levels of the organization, another core prerequisite of institutional capacities for self-governance requires that the capacity of the UENR, to diversify the sources of its income, must be strengthened to obtain more room for maneuver and to become a more independent, entrepreneurial university.

A governance issue is also to capitalize more on the capacity of the University for interdisciplinary studies and research. Currently, most of the decisions are taken on the level of individual Schools/Departments. The experts see room for improvement as regards the establishment of structures and procedures, which facilitate inter-departmental cooperation within and between Schools.

On the **procedural level**, the experts note, that it is the UENR´s Strategic Plan setting the boundary conditions. It is monitored by the University Council and an implementation committee, which in theory looks after the annual implementation plans in place that list necessary actions to achieve the goals. In the discussion, the experts are informed, that the annual implementation committee under the supervision of the pro vice chancellor only met once in the lifetime of its existence. At this stage, there has been therefore no consistent follow on measurable Key Performance Indicators and countermeasures taken. This means that the revision of the Strategic Plan needs to be done in a way that it becomes more operational with a consistent and stringent follow up on the already defined action lines. This finding equally implies that the challenge of developing complementary Strategic Development plans for all Schools/Departments in line with the overachieving developmental goals of the entire institution must be tackled without further delay.

The experts acknowledge that the UENR has elaborated and published Quality Assurance principles, policies and procedures that are essential to the university's strategic management. They have been formulated already back in 2016 to create a shared understanding among internal and external stakeholders about quality matters. The Quality Assurance policies contain detailed information regarding the structures, role allocations, and quality-related procedures. The UENR has in line with this finding a system in place for

opening new programs and conducting regular evaluations of current ones (refer to Criterion II.1). Academic staff performance is analysed and statistics on student cohorts' progression and dropout rates are collected on the central level, but not on the level of individual departments. The UENR has equally developed and implemented questionnaires evaluating students' satisfaction with the quality of the educational offerings and the student experience. The experts however note that "tracer studies" have just started being executed on regular intervals. A similar story relates to the evaluation of internships by students, which have only implemented occasionally. There is also no instrument in place to measure staff satisfaction with their working conditions and environment. According to the QA polices, the UENR aspires to measure the acceptance of its continuous professional development initiatives; there is however no evidence presented that such a system is currently operational. The experts also note that there is currently no system operating for the area of research, corresponding research policies for the institutions are just in the making (refer to Criterion III.2).

Given this background, the experts identify a need to review and modernize the QA policies, dating back to 2016, more consistently implementing the defined QA tools in all of the above-mentioned areas. As regards the mechanisms of collecting student feedback, student questionnaires are indeed regularly distributed to evaluate student satisfaction with the courses and the teaching performance of their lecturers within the UENR. This is now still done manually; a digital form of execution would certainly benefit all actors involved. For the students to get more substantive feedback/feel an impact related to their queries, scheduling regular collective sessions with program coordinators, and implementing a complaint management system (a "grievance platform") are suggestions that could reinforce the university's ongoing improvement initiatives. Such a grievance centre has already been successfully implemented for the study programs operating under the roof of the ACE-Centre, but thus far has not been transferred to the other Schools/Departments and their study programs. In addition, academic staff are assessed every semester and a composite report for a department is sent to the head of the department, where students' queries are added. The head of the department (HoD) then interacts with students to explain measures taken to address their queries. The HoD is also supposed to interact with lecturers who were poorly or averagely rated. A feedback report is filled by the HoD signed by the Dean of the school and some students and submitted to the Quality Assurance and Academic Planning Directorate.

From a cultural point of view, the experts find that one of the crucial assets of the university is its capacity for critical self-analysis and identifying areas of improvement. The recent management retreat and the associated broad stakeholder consultations have been the right step forward, the experts also support the documented key findings of this event. The experts commend the university on its participatory approach to improving the **cultural aspect**. This involves engaging major stakeholder groups, including employers, and further promoting students' participation in relevant discussions on both faculty and central levels. One is missing but underway, is the build-up of QA structures also on the level of

departments, to broaden ownership and take care of quality management on the level of programs.

Final assessment of the experts/levels of maturity observed.

After discussion, the ASIIN experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 2

Cultural level of maturity observed: 3

Criterion II.1: Creation and development of programmes / courses / trainings

Questions

***Institutional dimension**:* Which aspects in terms of organisational settings (responsibilities), structures, physical and human resources have an impact on the effectiveness of creation or further developing programmes? Who normally initiates the further development of programmes? What challenges exist regarding the further development of the full portfolio of programmes? Which educational offers are considered fit for the future and why?

***Procedural dimension**:* Are the processes to create and further develop educational offers considered effective and efficient? What works well and what should be improved? Where does the incorporation of external requirements (legal, social, professional) work well; where could it be improved? What are the reasons? Which processes exist to systematically collect stimuli for the further development of programmes?

***Cultural dimension**:* What is expected from the stakeholder groups involved in the design and further development of educational offers? Who is expected to participate? Does the involvement take place as expected? What happens if conflicts between involved stakeholders occur? To which extent are the relevant stakeholders willing to participate, and what is their level of information?

Analysis and Findings of experts

The UENR presents a comprehensive system of creating and implementing study programs, which are governed by legal requirements imposed by the national regulatory bodies.

The experts are interested to learn, that the UENR must follow a standardized procedure, imposed by the Ghana Tertiary Education Commission (GTEC), before opening a new program. The GTCE has come into existence after the merger of the former National Council for Tertiary Education (NCTE) and the National Accreditation Board (NAB) in Ghana. The NCTE had been responsible for ensuring, that a new program aligns with national development objectives and that it aligns with the mission of an institution. The NAB has ensured that a new program meets core standards, such as quality and availability of staff, facilities as well as supporting regulations. Now, it is the GTCE, which does a thorough pre-check of each new program proposal, though no ex-ante accreditation.

Every new program within the UENR must present the aims, objectives and Intended Learning Outcomes for each program, the alignment with its mandate and mission, a documented need/skill shortage in the national labour market and the target market for its graduates. Furthermore, an analysis must be handed in, which other HEIs in Ghana are offering similar programs, the planned enrolment figures for the first five years broken down into male and female projections as well as the Staffing requirements. Additionally, the cost implications of opening a new program must be stated as to how the UENR plans to finance the new educational offerings. Finally, the UENR must indicate how it intends to collaborate with industry to offer practical training, its duration and the competencies expected to be acquired during the training. For certain disciplines (e.g. engineering, medicine, accountancy, surveying, and law), which require collaboration with professional bodies in Ghana, the UENR must provide written evidence that the professional body in charge is willing to collaborate and license graduates on completion of the program in question.

Within the UENR, the task of preparing all these supporting documents falls under the primary responsibility of the Departments, which together form a School. It is thus the obligation of "Departmental Boards" at the UENR to set up committees with partners from industry and other partners and elaborate the study concepts and all related aspects, as stipulated by national regulations. Institutionally, the next level of engagement in then the school level. The Dean in charge on receipt of the proposal will transfer the documents to the "School Board" for further discussion of the program in question. In the decision-making pyramid, it then moves up to the central administrative level of the "Academic Board" to give final clearance before all documents are handed over to the GTCE for the pre-check and official authorization. The experts on request learn, that this external oversight might in some cases result in denial as has been the case of a French-speaking study program in Science and Technology. There have been other cases, where a program has received the go from the GTEC, but was nevertheless closed, as after advertisement student interest was too small to start to program.

The experts are impressed by this thorough approach for introducing a new study program, which extends to all qualification levels (including doctoral programs) and which resembles in many aspects a formal ex-ante accreditation procedure in other countries. They see, however, room for improvement as regards the establishment of further interdisciplinary programs between departments and especially schools, as in the current set-up most responsibilities are vested in individual Schools/Departments, the exceptions being the Master's programme Energy Economics and the Master's programme Agricultural and Resource Economics. The experts thus recommend to elaborate a procedure for the initiation of new interdisciplinary programs overcoming the traditional divide between the disciplines.

Final assessment of the experts/levels of maturity observed.

After discussion, the ASIIIN experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 3

Procedural level of maturity observed: 3

Cultural level of maturity observed: 3

Criterion II.2: Implementation of programmes / courses / trainings

Questions

Institutional dimension*:* What are the strengths regarding structures as well as to physical and human resources in the *implementation* of educational offers? What are the weaknesses regarding the structures (e.g., organisational set-up, decision-making paths) and to the resources in the day-to-day work?

Procedural dimension*:* Which procedures in the implementation of programmes (i.e., the delivery of programmes, i.e., the teaching processes) work well? Which can be considered good practice? Which processes need the particular attention of those responsible? What are the reasons? Where do stimuli for changes or for improvement come from? How can they be fed into the system, and what are the processes to deal with such stimuli?

Cultural dimension*:* How does the collaboration between the different units work in the day-to-day implementation of teaching? Do typical areas of conflict exist, and how are they dealt with? Do all stakeholder groups involved in the implementation of teaching provide the expected input? What are the reasons if expectations are not met?

Analysis and Findings of Experts

Since its establishment in 2012, the UENR has progressively expanded its array of study programs across its meanwhile 9 schools. The University started with two foundation schools (schools of Engineering and School of Natural Resources) and a starting enrolment of 154 students. It is currently running forty-nine (49) Undergraduate Programs (including certificate, diploma as well as Bachelor programs) and twenty-two (22) Graduate Programs (on the level of Master and PhD).

The duration of the Bachelor programs at the UENR amounts to 8 semesters (maximum duration for completion 12 semesters) and 4 semesters (maximum duration for completion 6 semesters) for the Master programs. The University is operating on a semester scheme, with two semesters of 17 weeks´ duration per year (13 weeks of Teaching, 1 week of Revision, and 3 weeks of Examinations). All students at the UENR go through an “industrial attachment”, meaning that they spent between 1-3 months doing an internship.

All programs before their initiation undergo the same processes in curricular review and accreditation by GTEC as all other programs at UENR. Once they are up and running, all programs are subjected to periodic reviews according to the “General Guidelines for the Approval of Programmes and the Review of existing programs”, which are part of the UENR´s

Quality Assurance Policy, dating 2016 and being prepared by the Quality Assurance and Planning Unit in the Office of the Pro-Vice Chancellor.

All academic units in line with these internal UENR regulations must submit all courses for review by the Academic, Curriculum, Quality and Staff Committee (ACQSDC), as well as to the respective School and Departmental Boards at least once every five years on a rotating basis. The review prerequisites the preparation of the same material as for the initiation of new programs described in the preceding Criterion. Feedback of all major stakeholder groups including from industry and alumni must be collected. Programs, which are not undergoing this internal review for whatever reasons, may no longer be offered. The review process again is layered across three levels, the academic review, followed by the review of the responsible School Board and finally the level of the central administration (the ACQADC). The Registrar oversees maintaining a list of all course proposals under review. The reviews are based on the principles of internal and external peer review. The objects of this periodic review are not only the learning outcomes and specifications of the programmes, but also the teaching performance. The experts learn in the discussions, that the feedback provided by internal and external stakeholders is actively used to improve existing study programs. One of the examples cited has been the area of academic writing. Student complaints resulted in a restructuring of related courses.

In the QA Policy, other instruments such as Tracer Studies are described. According to the QA Manual, these Tracer Studies have been institutionalized as a feedback mechanism to provide quantitative structural data on employment and career, the attitude of graduates at work and related competencies, and information on the professional orientation and experiences of its graduates. They are to be conducted at regular intervals, “preferably every three years”. They are to be executed for obtaining biographical data on income level, job titles, age and years of employment, but also for gathering feedback benefitting curriculum planning, development, and reform. This important instrument thus far regrettably has not been used to its full potential, as has been elaborated in prior parts of this report.

As regards major changes occurring in a running program (e.g. changes in required textbooks and/or changes in the quality and relative weights of graded assignments and examinations do not fall under this category), the program coordinators/staff members in charge must present their case, why they are considered necessary and how it will affect the program under consideration. An adapted Syllabus must be presented in line with the proposed changes.

The UENR furthermore has put in place processes and tools to collect, monitor, and act on information regarding the student life cycle, such as student admission, progression, drop-out rates, and the deviation from standard periods of study, information which also can be used for the optimization of study programs. A topic on the current agenda is the relatively low enrolment in the engineering disciplines.

Concerning the ***day-to-day implementation*** of the study programs, the University has published a Handbook for Undergraduate and Diploma Students on Rules and Regulations, dating as of September 2020, containing all relevant information such as the Admission Requirements, Examination Rules, Guidelines on Industrial Attachment, a range of Student Services etc. A similar document for postgraduate students also exists in the form of the School of Graduates Studies´ "Handbook for Graduate Studies".

In terms of ***Internationalization*** of its study programs, this has been and continues to be a challenge for the UENR. It has already been mentioned, that as of now only a very small number of international students are enrolled (around 30 incoming students among 12000 enrolments). In the discussions, the representatives of the UENR argue, that the location of the University is not attractive for international students and that only Ghanaian universities with a longer tradition attract students from outside the country. In the past, the university primarily admitted undergraduate students from the region, especially from Nigeria. With the World Bank investments in the UENR´s African Centres of Excellence, targeting also the best regional and continental talents, the landscape changed. After the first regional postgraduate student enrolment from Chad in 2017, the initiation of the ACE Impact project provided a small boost, leading to the admittance of students from 11 African countries, including Sierra Leone, Gambia, Senegal, Zimbabwe, Zambia, the Ivory Coast, Burkina Faso, Benin, Togo as well as Cameroon.

In a follow-up and recognizing the need for internationalization, UENR incorporated internationalization as one of its thematic focus areas in its revised University Strategic Plan from 2016 to 2026. The key activities in this area encompass pursuing collaborations with world-class institutions and universities, establishing networks with at least three such institutions, developing joint academic programs, and introducing credit exchange programs. In line with this strategic direction, UENR established the International Relations Office (IRO) back in 2021. The IRO has been entrusted with the responsibility of driving the university's internationalization efforts and achieving the objectives outlined in the strategic plan. The international office started to establish more international collaborations - 3 staff members are reportedly right now in China working on attracting more students.

Regarding the realm of ***didactics***, the UENR faces several challenges. Among them the need to adapt the teaching styles during and after the Covid-19 crises. During the interviews, the University leadership present their case that the University has developed the necessary capacities to deal with this challenge, not least due to the build-up of Centre for Distance Learning and Digital Education and the fact that the institution had already been engaged in targeted European Erasmus projects before the Pandemic. More details on this can be found under Criterion 3 of this report.

Another area of attention is the instilment of **"critical thinking" capabilities** among students. Some of the impeding factors in this area are the unfavourable student-staff ratios, and cultural impediments such as social engagement patters, which do not foresee that students challenge their teachers/elders. Still another factor in the equation is the conduct of

examinations, which at least on the undergraduate level to a considerable degree rely exclusively on written tests, which are not ideally suited to develop these student capabilities. Some examples of introducing the Humboldtian principle of research-oriented teaching are nevertheless presented especially by staff teaching on the post-graduate level and by leading the expert team through some of the laboratories.

During the on-site visit, the experts learned that UENR is using an **input-based credit point system.** All credit points are based on the contact hours between the lecturer and students. The time used by the students to prepare for the lectures and exams is not integrated into this system. The study regulations presented by UENR clearly state that one credit hour is equivalent to one hour of lecture (or tutorial) or two hours of practical or laboratory work. The characteristics of the program outline a master programme with 54 credits, representing 108 ECTS credit points whereas each PhD programme has 78 Ghanaian credits or 156 credit points. UENR presents a conversion between one Ghanaian credit to ECTS (European Credit Transfer and Accumulation System) credit points, where one UENR credit point represents two ECTS credit points. Not all compulsory parts of study programs are consistently credited (e.g. internship placements). This is also the finding of the subsequent program accreditation procedures at the UENR.

The experts in their summative evaluation of this criterion find that the internal and external quality assurance arrangements and procedures for the further development of study programs at the UENR are well documented and operationalized. The University has set up a system of carrying through the process for external program accreditation for already running programs under their own responsibility, involving internal and external stakeholders in the process, and collecting the feedback of important stakeholder groups. There is equally a system in place dealing with minor and major changes in programs in between the cyclical reviews. The Quality Assurance Polices, published in 2016, are setting the boundary conditions, for implementing the assorted instruments. The expert team is nevertheless concerned, that some of the instruments, which are useful for the further development of study programmes, and which are described in the corresponding Q policies, have not yet been (fully) implemented consistently and at best only now starts to be used as feedback mechanism. This certainly applies to the afore-mentioned instrument of Tracer Studies.

The UENR furthermore has put in place processes and tools collecting, monitoring, and acting on information regarding the student life cycle, such as student admission, progression, drop-out rates, and the deviation from standard periods of study, information which also can be used for the optimization of study programmes.

Regarding the issue of internationalization, the experts find that – after a long period of inactivity – the university has only started to tackle this important issue for the further development of the institutions and that more needs to be done to develop this aspect. They express their hope that backed by the new institutional (regional) development strategy and assisted by the newly created International Office, incoming and outgoing student mobility

will start to flourish and enrich student life on campus in the near future. In this context, they stress that the UENR must establish well-defined procedures for the recognition of credits for study transfer in view of potentially growing number of international students. A comprehensive study of the Lisbon Convention or comparable UNESCO regional recognition convention will be useful in this context.

As regards the overall quality of study programs, the quality of staff and their didactical skills, the expert team in the discussion round with students learn that they are generally satisfied with the quality of their studies. Despite the fact, that the learning experience varies considerably between and within study programs across various courses, the expert teams is reassured by the statement, that "we are happy to learn from teachers and not lecturers". The experts nevertheless recommend establishing on the university level a joint, formalized understanding of teaching and learning principles to guide the institutions´ quest to become a learning provider devoted to a modern, research-enriched, inquiry-based teaching style, fostering critical thinking skills in the process.

The experts furthermore demand that the UENR develops a mechanism to accurately trace the actual workload of the students during their studies, also allowing them to calculate an evidence-based conversion of their credit points to ECTS credit points following the ECTS user's guide. This workload is then to be verified in the following years to balance the workload of the students in the programs/courses on offer. Furthermore, it is required that all compulsory modules are credited as they are considered a mandatory part of the students' studies. This should also include modules such as "Field trip" or the "Industrial Attachment" as well as seminar lectures.

Final assessment of the experts/levels of maturity observed

After discussion, the experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 2

Cultural level of maturity observed: 2

Criterion II.3: Cooperation

Questions:

Institutional dimension*:* How is the cooperation with other institutions and between different internal units organized regarding the implementation of programs (structures and regulations)? What works well in the case of internal or external collaborations, what could be improved? How do such collaborations for programs usually come into being within the institution?

Procedural dimension*:* Which factors are critical for the smooth organization and implementation of collaborations? Where do stimuli for changes or for improvement come

from? How can they be fed into the system, and what are the processes to deal with such stimuli?

***Cultural dimension**:* What principles does the institution have in place for internal and external cooperation for educational offers? Are the existing rules and standards accepted by those affected by them? How are conflicts dealt with? What are the challenges regarding collaborations?

Analysis and Findings of experts

From the UENR's self-documentation and discussions with various stakeholders' groups, the experts learn that the University has a broad range of cooperation agreements with academic partners and industry in place. Strengthening this cooperation is said to be in line with the university's strategic position and in alignment with the increasing global interest in energy production, policy, management, and sustainable natural resource management. This position according to the UENR leadership opens doors for regional, national, and international collaborations, engagements, and funding opportunities.

At the ***national level,*** the UENR reportedly has established extensive partnerships with the Ministry of Energy, resulting in impactful initiatives such as the China-South-South cooperation projects that have brought solar power to previously underserved island communities. Furthermore, UENR has collaborated with prominent local organizations including the Bui Power Authority, the Volta River Authority, the Energy Commission, the Electricity Company of Ghana, and Ghana Grid Company, among others.

The university representatives present to the expert team an exemplary Memoranda of Understanding between the UENR´s African Centre of Excellence and the Ghana Atomic Energy Commission. The two parties therein agree to collaborate on research projects and activities relating to nuclear and allied sciences as well as other natural energy resources. They furthermore agree to exchange faculty/technical personnel on full-time/part time basis for a limited period not exceeding one year at a time and that the faculty/staff and research fellows registered for PhD degree may visit the other institution for a short period in connection with their research work under collaboration program. They also concur that the faculty /technical personnel will be encouraged to deliver lectures/invited talks in the other organization. Further clauses of the M.O.U, target the provision of internships and study visit opportunities for RCEES. Research fellows registered for PhD degrees with the University may visit GAEC for purpose of carrying out their research work. Further stipulations target the conduct of joint workshops, conferences, and the facilitation of student and/or staff training programs and seminars. They also agree to collaborate in joint research, technology development, demonstration, and other mutually beneficial projects.

At the ***regional level***, the UENR is part of the WACEENET (West African Centres of Excellence for Energy Network) a network of 5 centres from 5 West African Universities including the University of Energy and Natural Resources in the Energy thematic area under the ACE Impact project. The goal of the network is to promote research, innovation, and capacity build-

ing in energy and power in Africa. The network has hosted several successful seminars and symposiums, provided training and capacity building to many researchers, and disseminated research findings to a wide audience.

Another interesting engagement comes via the Earth Observation, Reservation, and Innovation Centre (EORIC), which is a research arm of the UBER. This centre is responsible for the acquisition of near real-time satellite-based data, air-borne and in-situ data, metadata, and products as well as automatic weather monitoring. Moreover, it deals with operations and management of unmanned aerial systems, virtual regional fire monitoring and modelling, and organization of training programs in the use of Earth Observation (EO) and Geographic Information Systems (GIS) techniques, collectively towards making informed decisions in the areas of water, disasters, health, energy, climate, agriculture, ecosystems, and biodiversity in the Africa Region. The impact of EORIC is according to the interviewees growing across Africa and the world. In partnership with the European Space Agency (ESA), EORIC is using earth observation data to monitor deforestation in the Congo Basin. This data is being used to help policymakers develop strategies to protect this important ecosystem.

The UENR also works on community engagement and consultancy – technology transfer to their surrounding farmers and rural areas; also, natural resources to educate people living next to forest reserves – one is the UENR STEM festival – which takes place right now on campus.

As regards the aspect of **academic cooperation**, two different perspectives come into play:

As regards the aspect of ***inner-university cooperation***, there are only a limited number of interdisciplinary programs, which are offered in cooperation between different Schools and Departments.

Concerning cooperation agreements with national and international universities, the website of the university lists a considerable number of academic cooperation partners with educational providers in many parts of the world, including the United States, China, South Africa, Germany and so forth. The UENR´s International Relations Office (IRO) as an outreach arm of the Vice Chancellor's Office has the mandate to facilitate, promote and coordinate all University's external relations regarding visiting scholars, international students, Research Collaboration and Funding and other external staff training programmes. Despite these manifold contacts, the establishment for formal exchange programs with International Universities thus far has not materialized; students with an interest for international exchange are directed to apply for the ERASMUS + program.

Concerning ***cooperation with the business community***, the UENR and especially its ACE-Centre entertain a considerable number of collaborations. If this collaboration involves research and technology transfer activities, it is the obligation of the Centre for Business Innovation and Entrepreneurship as well as the Centre for Grants, Research, and Innovation to support these activities. Currently, this collaboration does however not generate economic activities on a bigger scale. The third-party funding, generated by joint activities with indus-

try/private sector is low, as it contributes a comparatively small percentage to the UENR´s budget.

In their summative appreciation of this criterion, the expert team comes to the following conclusions/identify the following measures of improvement:

The experts concur that for a young organization with a history of a little more than a decade, the UENR and especially its African Centre of Excellence has come a long way of establishing fruitful and beneficial partnerships with academic and business partners. Some members of the expert team even have the chance to visit the facilities of a hydro-solar hybrid power plant of Bui Power Authority, illustrating the potential of collaboration especially concerning solar PV technology and in questions concerning the Ghanaian national energy grid. The experts acknowledge that the presented technology represents up-to-date standards. Stakeholders during the interviews confirm to the experts that they are familiar with their cooperation in UENR and that they regularly receive students for internships.

Notwithstanding these individual examples of successful collaborations, an even more systematic approach in this field according to the experts´ opinion could leverage further untapped potential on all levels of potential joint activities. This untapped potential extends to the provision of more guest lecturers and internships by industry, includes the training of industry personnel in selected continuous professional development courses, and targets the areas of contract research, which the UENR might conduct on request of its industry partners etc.

During the interviews, most representatives of the employer side are satisfied with the university's work and its role in the country's development but also would appreciate and institutional framework, which enables more effective and systematic engagement between industry partners and the programmes. The experts before this background recommend the establishment of a permanent industrial advisory committee, which might bring university-industry relationship to a new level.

As regards the inner-university collaboration, the expert team emphasizes, that the current trend in modern curricular development is characterized by establishing inter-disciplinary curricula at the interphase of various disciplines, which requires reinforced collaboration between various Schools and Departments. They recommend that as part of the strategic development of the UENR, a renewed focus could be directed towards synthesizing the strengths of the Schools/Departments of the UENR.

Concerning the collaboration with international universities, the experts recommend increasing the number of formal exchange programs to foster incoming and outgoing student mobility.

Final assessment of the experts/ Levels of maturity observed.

After discussion, the exports come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 2

Cultural level of maturity observed: 2

Criterion II.4: Examination systems and organisation of exams

Questions:

***Institutional dimension**:* Which rules and structural provisions influence the design of exams in the programs? What works well, and what should be improved?

***Procedural dimension**:* Which procedures for the exam methodology and exam organization (including assessment criteria) work well? Which procedures do those responsible have to take particular care of? Where do stimuli for changes or improvement come from? How can they be fed into the system, and what are the processes to deal with such stimuli?

***Cultural dimension**:* Which principles do those responsible have to consider when designing and organizing exams? Are these principles accepted by all involved stakeholders? What role does the institutional tradition have in the design of exams? Are new assessment methodologies considered? Which values and behavioural patterns have the strongest influence on the exam system and organization? How do these influence the achievement of the objectives for exams? Do typical conflicts exist among those involved regarding exam methodology and exam organization? How are such conflicts dealt with?

Analysis and Findings of experts

The UENR has published relevant policies, rules and procedures of its examination system. The major rules form part of the two documents for undergraduate studies and graduate studies and been developed by the Quality Assurance and Planning Unit and dating 2017. The representatives of the UENR explain to the experts that the mode of assessment of each course comprises various assessment methods. These include presentations, practical exams, quizzes, assignments (group and individual assignments), seminars and journal/notebooks, but are currently not adequately documented in the individual course syllabi for each study programs. As a rule, staff has to release the results of an examination not later than 4 weeks after it has been taken.

Mid-semester and final examinations are integrated in every course. According to the program coordinators, a written final exam is still mandatory based on Ghanaian regulations whereas a replacement of the mid-term final exam with oral exams or projects is also applied in some study programs especially on the Master and Doctoral level. The exam regulations define that the final examinations give the students at least two- and-a-half hour time for completion of their exam. In the Bachelor written examinations largely dominate, whereas in the Master's and especially the PhD programs the UENR also includes to a certain degree presentations, practical exams, assignments (group and individual work), seminars and written and oral exams for mid-semester and final examinations.

The general examination regulations are included in the student handbooks, which all students receive at the beginning of their studies. They are published online and available for students and third parties. Students need to be present in at least 75% of all lectures to be allowed to take part in the final examinations. The minimum mark to pass one exam is 50% (grade D). Students are allowed to repeat courses they have failed at the next available opportunity. The students confirm that know about these regulations to the experts and add that there are no limitations on retaking the courses. However, each time they must pay a fee.

The following grades are commonly used:

Grade	**Marks %**	**Interpretation**
A	80-100	Excellent
B	70-79	Good
C	60-69	Satisfactory
D	50-59	Pass
F	-	Fail

The final grade of one course comprises the continuous assessment during the semester (quizzes, assignments, mid-term exam etc.) as well as the final examination. All assessments are graded with the grade and marks in percentages presented above. According to their examination regulation, the final grade considers the continuous assessment with 40% and the final examination with 60%. However, in the discussions, the experts learn that there is currently an ongoing discussion about the percentage weighing. During the COVID-19 pandemic, the grading of the examinations changed to 40% final exam and 60% continuous assessment, which some consider to be an advantage. The experts consider this discussion as very interesting; in their opinion, the ratio should reflect the workload of the module and consider the types of final examination (e.g. written exam vs. project).

As regards empirical evidence related to the diversification of examination methods, the experts would appreciate, if they received an exemplary course syllabus for a Bachelor program. Teaching staff during the ensuring program accreditation confirm that written exams are usually the type of examinations used and that orals are largely absent on the Bachelor level. They are also used very widespread in their study programs on the graduate level, mostly on the doctoral level. Rare exceptions also exist to replace the final written exam, such as in the module “Environmental Engineering Master Plan” in Ma EEMA and “Master Plan-Integrated Project” in Ma SEEM, where students work on small scientific projects in teams, followed by reports and presentations. The program coordinators state that they are currently reviewing their examination regulations in their quest of further diversifying the assessment methods throughout the semester. The experts are interested to know, how the teaching staff ensures that every student is contributing to the teamwork. On one hand, the teaching staff relies on the ethics of the students since they have already reached the master or doctoral programmes; on the other hand, they choose who is going to present which part

of their work in the last minute. They also ask questions to the students about any part of the teamwork project. They add that their aim is to educate students as mature individuals, who act responsible towards their colleagues and society. Furthermore, they also encourage students to delete the students' names who did not contribute to their work.

In the examination regulations, the UENR has defined that examination questions and marked scripts from all postgraduate courses are subjected to external moderation. This includes the rules and regulations regarding the final thesis. External examiners for the final thesis and dissertation are required to award the degree. In both, the master's and doctoral programmes, the thesis/dissertation needs to be submitted at least three months before the expected completion (defence) to the Head of the Department and the Dean of the School of Graduate Studies. The examination regulations consider at least one internal and one external examiner for every master thesis and one internal and two external examiners for each PhD thesis. The internal examiner is appointed from a related discipline inside the same department or outside. The final oral examination will be conducted in front of an examination panel, which is approved by the Board of the School of Graduate Studies based on the draft thesis. Whereas the final oral examination for master students is restricted, the examination for PhD thesis is open. The panel combines the Dean of the School of Graduate Studies (chairperson), the Head of the Department, the external examiner(s), the main supervisor and the additional internal examiner. The Dean of the School of Graduate Studies and the Head of the Department are responsible for determining the final grade of the student's oral final examination. All members of the examination panel are required to actively take part in the examination. Regulations are in place if the Dean of the Graduate Studies is either the main supervisor or the internal examiner of the thesis. The result can include the following outcomes:

1. That the degree be awarded without further amendments to the thesis.
2. That the degree be awarded after minor corrections or amendments have been made (and shall list those items to be corrected/amended);
3. That the thesis is re-examined after major corrections/revisions would have been carried out ((referred) and they specify the defects);
4. That the degree is not awarded (failed) for specific reasons.

Minor or major corrections need to be handed in within three months; these will undergo internal review by the internal examiners before it can be accepted.

The experts question the involvement of supervisors from industry in the grading process of master and doctoral theses. The programme coordinators confirm that supervisors from the industry are part of the grading team. One requirement is an adequate qualification, which is checked by an internal committee at the School of Graduate Studies. The UENR has published guidelines on how to assess students, which are shared with their partners from the industry before they take part in a project. The program coordinators value the personal interaction with people from the industry, who provide research topics for the majority of theses at RCEES. Upon the question of the experts, the program coordinators describe the pro-

cess of selecting topics for master theses and dissertations. First, the students have to submit a preliminary synopsis on the research project they would like to conduct. Parallel, the faculty members collect topics among themselves and from their industry partners. Afterwards, they try to match the topics of the students with available research projects from the faculty and the industry. The remaining available topics will further be presented to all students. Topics outside the core expertise of the teaching staff are encouraged only during PhD studies. Such projects require additional supervisors from outside the UENR. Once the students have decided on a topic, the university refers them to their supervisors unless the students prefer to choose their supervisor. Supervision is a shared responsibility at the UENR; usually next to the main, a secondary and tertiary supervisor are assigned. For example, if the project is connected to an externally funded project, the principal investigator needs to be one supervisor. Finally, the supervisor(s) and the students sign a supervision contract. International supervision is welcome but is limited to representatives of a university or university of applied sciences. The students confirm that they can suggest topics by themselves or work together on projects of lecturers or in collaboration with industry partners. The partners from the industry confirm that they collaborate with UENR in master and dissertation projects. Upon the questions of the experts, the students comment that they consider it as beneficial to have multiple supervisors and that they consider it easy to remain in good contact with all of them.

As part of the follow-up program accreditation visit, the experts, some of whom are part of both review teams, learn that UENR has examination regulations in place that relate to specific modules. The assessment methods allow the students to receive feedback on the competencies they have already acquired. The experts see evidence that transparent rules for make-up exams, non-attendance, and cases of illness are in place. The experts consider that the number and distribution of exams ensure an adequate workload as well as sufficient time for preparation. Furthermore, the exams are well organised. In the opinion of the experts, students have the opportunity to consult their lecturers about the results of their exams and are aware of the mechanism to appeal grades.

Although the students are informed about the type of assessment in each module in the classroom, the module/course handbooks presented in the framework of the subsequent program accreditation procedure at the UENR did not give conclusive information to the applied assessment methods and criteria (see criterion 4.1).

The experts in line with international good practice, the program/course syllabi must contain the examination modes and assessment rubrics for each course. They consider that the selection of the most suitable assessment methods needs to be in reference to the learning outcomes of the module. The current approach is schematic and does not reveal any criteria for identifying suitable assessment methods to ensure if the learning outcomes are achieved. Further, the experts recommend increasing the number of oral examinations.

The ASIIN experts otherwise find that the rules and regulations of examinations are clearly defined, and staff members are aware of and apply these rules. Staff and Students in the

interviews did only mention minor problems. Delays in receiving the examination results occur, but they are related not to a lecturer being late, but rather to students, who are not honouring the payment of examination fees.

An appeals system is in place and documented in the student handbook. Student can appeal within 2 weeks after obtaining their results. They have to write to the Registrar and subsequently a committee will be set up to review the results. The experts positively note that students with handicaps are being looked after with special arrangements for them.

The experts also take note of the fact, that the UENR is currently reviewing its examination policies and will publish them as of next year. One of the proclaimed goals of these new policies is to diversify the range of exams beyond the classical sit-down written examinations.

Final assessment of the experts/levels of maturity observed

The exports come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 3

Procedural level of maturity observed: 3

Cultural level of maturity observed: 2

Criterion II.5: Recognition of achievements

Questions:

Institutional dimension*:* Do the rules, structures, and responsibilities for the recognition of achievements obtained from other institutions or in a non-academic setting work as expected?

Procedural dimension*:* Do the procedures for the recognition of achievements obtained from other institutions or in a non-academic setting work as expected? Are there typical difficulties which regularly occur in the procedures? Which changes are planned for which reasons?

Cultural dimension*:* What are the guiding principles for the recognition of external achievements? Have the relevant members of the institution and interested students and teaching staff been informed of them, and do they accept them? How are conflicts dealt with?

Analysis and Findings of experts

The UENR thus far does not dispose of a specific credit transfer policy. According to the information presented in the Self-Assessment Report and during the interviews, there is at this stage only a draft credit transfer policy awaiting approval.

In the absence of this document, it is the Handbook for Undergraduate and Diploma Students on Rules and Regulations, which contains limited information. Transfer students accordingly must meet the admission requirement of UENR, must submit recommendation

letters and official statement of results from their current Alma Mater regarding the academic performance and conduct, must not be seeking to join the final year and addition must meet any other School Departmental requirements.

Section 1.4 dealing with admission regulations lists several cases, in which achievements from other institutions or achievements from previous study cycles are recognized. Students, who enter the university with a previous diploma (equivalent European Qualifications Framework 5), are accordingly entitled to skip up to one or two years of a corresponding bachelor's degree depending on their experience and prior achievements; each individual case will be considered by the School/Department in charge. Based on the applicant's transcript of records, the department decides which courses can be acknowledged.

In addition, there is a policy on "mature entrance." This scheme allows people older than 25 years with basic skills to enter the university. "Mature candidates" must only pass an entrance examination for admission into a program of their choice. This is because of the recognition of the experience they may have accrued in life in general. Requests are processed by the Academic and Students Affairs Division of the Registrar´s Office in consultation with the Central Undergraduate Admissions Committee. Finally, students, who have previously worked (e.g. also in the framework of an industrial placement), need to prove their qualification and can obtain credits for it.

During the institutional review, the experts encounter hardly any transfer students, who have profited from these recognition procedures in recent past. In view of the strategic goal of the UENR to enrol more international students from the region and beyond, the expert team sees either way a necessity to formally pass and implement the draft recognition policies mentioned above and publish them on the UENR website. The experts expect that a Diploma supplement should be issues together with the transcript of records to all graduates, facilitating their international academic and professional mobility in the future.

Final assessment of the experts/levels of maturity observed

After discussion, the experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 1

Cultural level of maturity observed: 2

Criterion II.6: Assistance and support

Questions:

Institutional dimension*:* Which elements of the assistance and support services offered for students are successful? Which changes are required? What are typical challenges to be overcome? Are the physical and human resources adequate and sufficient to implement the expected assistance and support services? How is this verified?

***Procedural dimension**:* How do the processes to provide assistance and support work? Which processes are considered to work well, which need to be improved? Do the members of the institution who are involved in the assistance and support have sufficient information and resources? Are the target groups for assistance and support reached as intended? How is this verified? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

***Cultural dimension**:* Are the offers of assistance and support available used by the intended target groups? If not, why not? How satisfied are the individual target groups with the assistance and support on offer?

Analysis and Findings of experts

Regarding the assistance and support services offered for students, the UENR has established a broad range of support unit and support services for its national and international students:

There is a university-wide system of academic advisors in place supporting the students during their studies at the UENR. The academic advisors are teaching staff in each Department appointed for a number of students (according to the information provided currently around 10 students per academic tutor) and responsible for providing counsel on course offerings and selection as well as monitoring their study progress.

The University offers compulsory **orientation sessions** for all new students every semester before the lectures begins. The Orientation program is designed to help students adjusting and adapting to university life, familiarizing them with the facilities, advertising the rules and regulations and getting students to know their rights, obligations, and responsibilities. Separate orientation sessions are organised for newly elected Students Representatives to improve the quality of student governance. For international students, it is the International Student Office, which can be addressed for all issues of orientation and guidance. There is an International Students Association, which offers support and represents student interests.

As regards all aspects for **sports and recreation**, it is the Sports and Recreation Directorate with the support of the Sports and Recreation Committee that serves as the main body with direct responsibility for overseeing the overall development and management of sports and recreational activities within the University. It organizes sporting events for students. On request, students can ask for financial “Student Athlete Assistantships” and obtain academic credit for sports activities. It also organizes sporting events and liaises with external sports organizations.

The University Health Services Directorate has the mandate to provide efficient and effective delivery of **health services** to students, staff and their relatives as well as provide regular health extension services to the adjoining communities. The University Health Services Directorate oversees that all new students and employees undergo a medical examination to be declared medically fit for academic work and employment. It also ensures the availability of drugs, hospital equipment and other goods and services needed for efficient operation of

the University Hospital / Clinic. Students have the possibility to visit the **University Guiding and Counselling Centre** when experiencing emotional, physical of other issues.

Regarding **financial assistance**, a small number of stipends are available for students who have to apply to the Association of African Universities or for a GNPS scholarship. The UENR furthermore supports various (altogether 16) Student Associations, which are organizing a range of social activities.

Concerning the aspect of **accommodation**, the policy of the UENR requires all freshmen to live in on-campus halls/hostels of residence. If the University is unable to provide housing, students however will have to find accommodation on their own outside campus.

As regards the group of international students, the UENR´s International Office supports incoming international students. Consultation for the international students through personal appointment or email is to be performed on the regular basis by staff in charge of incoming students during their stay at the UENR. Each international student in addition is assigned a personal mentor assisting him/her to achieve personal and/or professional goals.

In their appreciation of this criterion, the experts come to the following conclusions:

The experts see that the UENR offers a broad range of support services to its students. In the Student Exit Survey of 2021, the first one of its kind, the students had been very critical with certain aspects of student life on campus (missing social life, poor sport facilities etc., low percentage to further recommend the university). In their discussions with the current generation of students, the expert team, however notes that things have improved leading to a higher level of satisfaction with the assistance provided and the responsiveness in case of students´ queries and requests. They nevertheless recommend that these support activities are evaluated through the annual university surveys providing an overview of service quality indicators and stakeholder satisfaction.

Final assessment of the experts/levels of maturity observed

After discussion, the experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 3

Procedural level of maturity observed: 3

Cultural level of maturity observed: 3

II. Management of resources

Criterion III.1: Material and human resources

Questions:

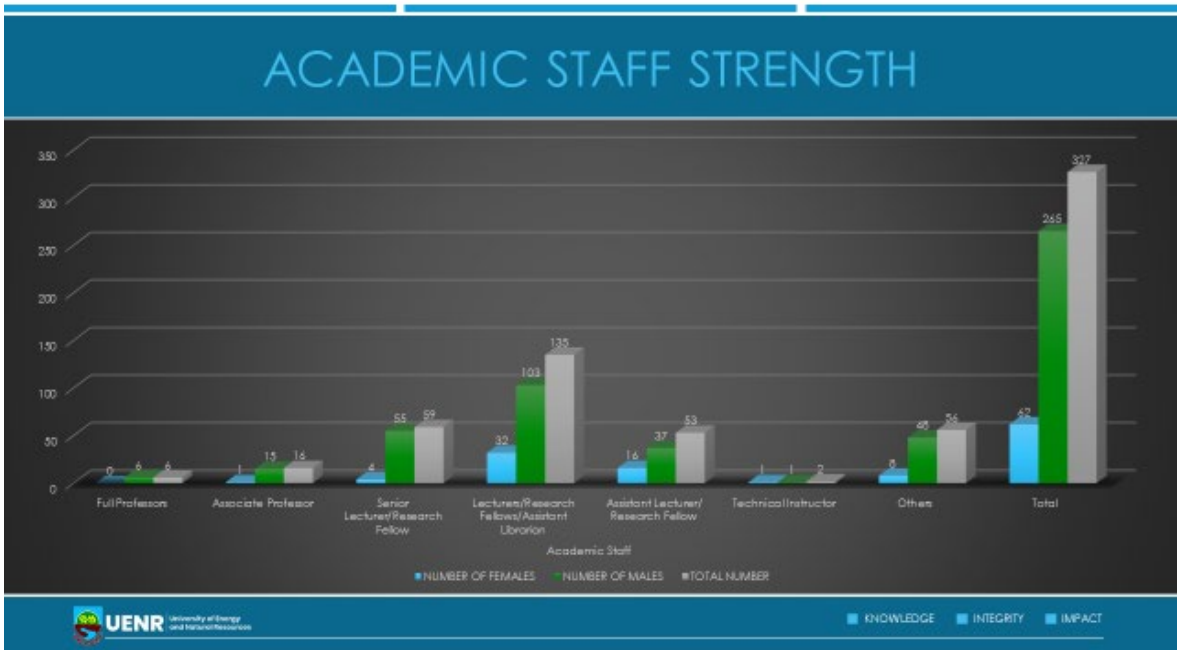
***Institutional dimension**:* Which elements particularly support the achievement of the quality objectives in this area as defined by the institution? What are typical difficulties, and how are they dealt with?

***Procedural dimension**:* Do the processes for the allocation and administration of physical and personnel resources, specifically for teaching and learning, within the institution work according to the expectations of the different groups and units? How does the institution integrate external (legal and economic) requirements? Where do stimuli for changes or for improvement come from? How can they be fed into the system, and what are the processes to deal with such stimuli? Which changes are planned or will become necessary based on such stimuli?

***Cultural dimension**:* How can the members of the institution, e.g. teaching staff and students, participate in managing physical and human resources for teaching and learning? Do all members of the institution feel adequately informed about the management of physical and financial resources? Which values and methods are supported or expected of the people involved in terms of the use of resources? What are the guiding principles at the institution to avoid misuse or waste of resources? Are the set rules and guidelines accepted by those affected by them? How are conflicts dealt with?

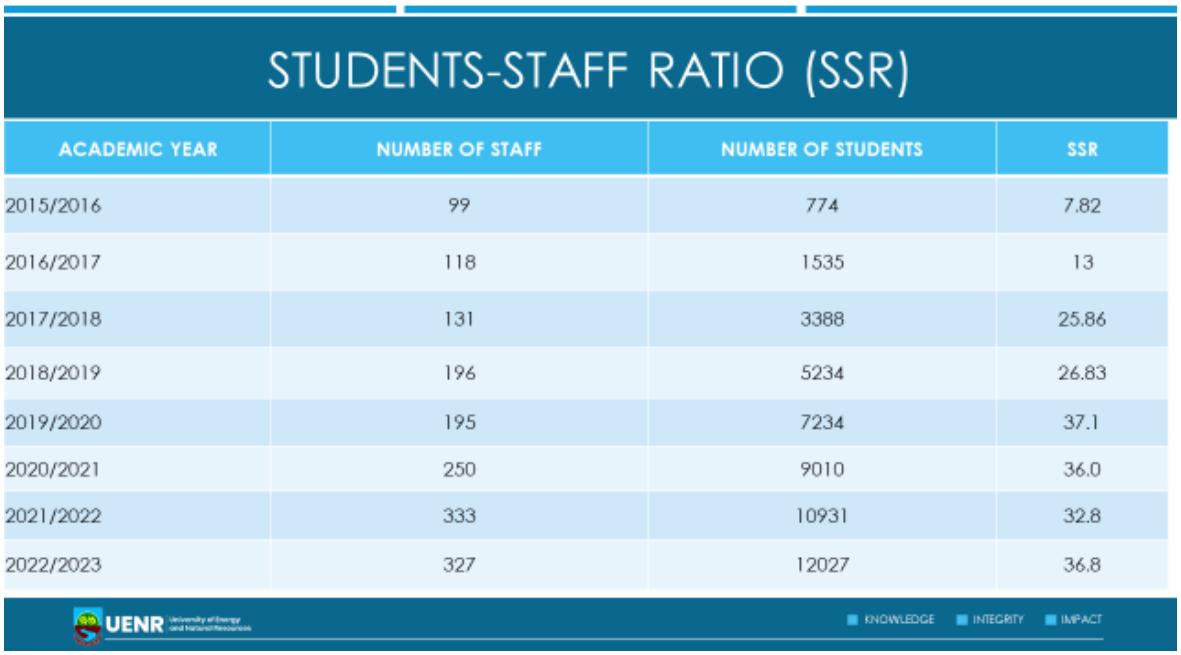
Analysis and Findings of experts

As regards the quality and viability of the UENR´s **human resource potential**, the expert team takes note of the composition of the institution's staff.



The University currently employs 6 full professors (0 female), 16 associate professors (1 F), 59 senor lecturers (4 F) and 135 lecturers (32 F), assistant lectures (16 F), 2 technical instructor (1 F), 56 others (8 F), in total 327 academic staff. All faculty members dispose of postgraduate degrees, 139 are qualified on the level of a PhD education, a considerable number of staff members have been trained abroad. Based on the information in the Self-Assessment report,

the student-to-faculty ratio for all study programs has deteriorated over the years due to the rapid expansion and the massive intake of new students in recent years. The total number of students has now surpassed 12000, of which close to 4000 are female. In the academic year 2022-2023, the last year for which statistical data has been provided, the staff-student ratio amounts to around 1:37 on average.



STUDENTS-STAFF RATIO (SSR)

ACADEMIC YEAR	NUMBER OF STAFF	NUMBER OF STUDENTS	SSR
2015/2016	99	774	7.82
2016/2017	118	1535	13
2017/2018	131	3388	25.86
2018/2019	196	5234	26.83
2019/2020	195	7234	37.1
2020/2021	250	9010	36.0
2021/2022	333	10931	32.8
2022/2023	327	12027	36.8

The university leadership puts on record that the number of faculty strength is currently not sufficient, that they are at about 60% of what it is striving for. This conforms to the finding of an external expert team in the framework of a national accreditation procedure, which listed the number of staff and its qualification levels as one of the central weaknesses. The reason behind the shortage of staff has been and continues to be, that the UENR is required to ask permission from the Ghanaian government prior to the employment of any additional staff. As the government pays the salary, it has to give financial clearance beforehand. The last time, a major boost in staff capacity happened, was in 2020, following the aforementioned national accreditation procedure, where altogether 200 new positions have been filled. This was also the prerequisite for enrolling an additional 4000 students in the past three years, as the university is growing rapidly, and numerous new programs have been added to the UENR´s portfolio of educational offerings.

The university acknowledges the continued importance of hiring new qualified staff members for their programs. Concerning the recruitment process, upon clearance from the government, the university publishes the job on its webpage and distributes it to relevant advertisement channels to ensure a wide range of applications. Successful applications are linked to the expertise and experience in the field of study as well as the relevant teaching and research record. The UENR also employs external faculty as well as representatives from industry to strengthen the connection to the employment sector and to fill the gaps, resulting from delays in government clearances.

In terms of upgrading the level of staff qualifications, the UENR has passed HR policies, which regulate its staff appointment and promotion procedures. These “Appointment and Promotion Criteria” have been published in the Chronicle as of February 2021 and specify the conditions (e.g. specifying the number of years/publications) to reach the next professional level. The time period foreseen for advancing from assistant lectures to lectures is two years, to the level of senior lectors 4 years, another 4-year pass before being eligible to become an assistant professor. Most staff at the UENR have been assistant lectures and lectures at the time of their first employment contract – to rise in the hierarchy, therefore consumes a considerable amount of time. The UENR with a history of around a decade thus disposes of a very young staff body. Employees after recruitment usually stay with the University, as the salary level is the same for all public educational providers in the country. As all universities run their own pension schemes, few staff members take the chance changing employment due to adverse effects on that scheme, in other words that there is little motivation to move.

Concerning the teaching load, depending on the position, the GTEC state regulations foresee a maximum of 12 credit hours per week for lecturers. Deans, however teach only 6 credits hours per week, heads of department also profit from a (smaller) reduction, having a teaching load of 9 credits. There is a separate staff category of research fellows, who will devote 70% of their time to research and only 30 percent for teaching. There is currently no policy in place, describing the mechanisms to transfer between the position of a lecturer and that one of a research fellow, although this is possible in theory.

No staff member at the UENR is obliged to work additional hours, but there are financial incentives in place to increase the individual teaching load. According to the university leadership, the current HR situation is comparatively stable; a staff shortage however has been identified in certain disciplines such as engineering. The related Schools/Departments must cope with a considerable overload, which is acknowledged by the UENR leadership. It is consequently one of the core priorities of the UENRS to increase the number of qualified lecturers. The University invests in the further training of its young lecturers, supports its staff in advancing on the career ladder and provides attractive housing opportunities. Not all of the lecturers, who have been trained abroad, do return to their Alma Mater.

The UENR is monitoring the performance of its staff members. At the end of each semester, the Quality Assurance and Academic Planning Directorate collects data and reviews the work done by each lecturer. The evaluation targets two main parts: teaching performance and research. The first considers the results of regular student evaluations of the courses taught by lecturers, the second takes into account parameters such as the amount of research conducted, the number of published papers etc. Currently, the primary focus is on the publication record. The UENR has also implemented a non-monetary reward system that encourages and motivates employees to achieve their goals. The “lecturer and researcher of the year” award falls under this category.

In the discussions with the students, the experts learn that they are satisfied with their teaching staff's quality. They also appreciate, that some of the lectures are given by externally contracted personnel from industrial partners or other institutions, which provides new, more applied perspectives and fosters the connection to the employment world. They however also report a shortage of staff in some study programs that at times affect the quality of the educational experience. In addition, the students see that some departments require additional investments in lecturers' pedagogical abilities, as mentioned under Criterion II.2. These findings are also confirmed in the discussions with staff, which report a high teaching workload, which is detrimental to other obligations, such as their research activities. There is a general sentiment, that the expansion of the university is going to rapidly.

Overall, the ASIIN experts express concerns regarding the current staff shortage at the UENR and question how this affects the University's ability to provide adequate services in teaching, research as well as administration. The university urgently needs to address the question how it will cope with the current phase of expansion with student enrolment doubling in the past couple of years and its present lack of teaching personnel. The current student-staff ratios of 37:1 puts a considerable amount of strain on the institutions and its personnel. In certain schools and departments, the student-staff ratios are even worse. This has also detrimental impacts on the research output, as most of the HR capacity goes into coping with the high teaching load.

It is also evident that the University needs to diversify and expand its budget resources to become more independent of government funds and HR authorizations, which are not always dependable. In terms of ***financial resources***, it is important to note, that the UENR is a publicly funded university and therefore receives funding from the government of Ghana. In addition, UENR generates funds though tuition fees, research grants and donations. In the interviews, it is recorded that the universities´ budget relies to 62% on governmental funds with 28% emanating from tuition free, and 10% from externally generated research grants. The amount of donations is currently very low. It is equally interesting to note, that currently and in recent years, an important source of funding has been the World Bank, which has supported the RCEES and the UENR with several million USD in the framework of its "African Centre of Excellence" programs.

In their appreciation of the UENR´s financial sustainability, the expert team identifies multiple challenges to cope with. On the one hand, the University and the RCEES will have to deal with the fact that the funding from the World Bank will end at the end of this year. On the other hand, it is not advisable to expect that government contributions will increase significantly in the coming years. Tuition fees as a third source of income have increased considerably in the past couple of years, as the almost exclusively national student intake has doubled since 2020. There are, however, limits to how fast an institution can grow, and any expansion goes hand in hand with necessary investments in staff resources beyond the control of the UENR and necessary investments in infrastructure at all levels. The university is thus in

danger of being caught in a “vicious cycle” of increasing student numbers and providing the necessary resources to deal with the expansion. As mentioned, at this stage there is already a considerable strain on limited staff capacities, which the UENR cannot increase without prior government clearance. Guest lecturers from outside can be paid out of the university’s budget, but the available funds for this exit route are currently limited.

The experts before this background suggest that the university intensifies its efforts on its path to becoming a more independent “entrepreneurial university”, diversifying its income sources, and making the best use of its unique role of being a hub in energy and natural resources related matters in this process. The experts identify as one possible option, to expand business by providing suitable, high-calibre continuous education to interested stakeholders from outside the university and especially to the workforce in the business world/for employees in industry, either on one of the campuses of the UENR or via distance education. The expert team can clearly see potential in this area, even more, since – as of 2021 – there is a Centre for Distance Education and E-learning, which could provide short cycle courses/ all sorts of professional development programs for interested customers outside the university on a national and international level. In the discussions, the University leadership cites as obstacle for going along this road the fact that thus far is has not been able to make this new Centre operational, because the Ghana Tertiary Accreditation Agency has not granted the extra government allowance to finance the position/install a director for running the operations of this Centre. The expert team however beliefs that there are means and ways to establish this administrative unit as a potential self-financed, income-generating business part of the university.

Another source of income, which has not yet been fully developed, it third party funding via research grants. Currently, the research focus is clearly on boosting the publication record of the UENR, less so, on attracting more external funding not so much from government tenders but rather from industrial partners or donors such as international development banks etc. The expert team acknowledges, that the UENR (not least to the existence of its African Centre of Excellence) has made headway in increasing third-party funding. Nevertheless, they see further potential for acquiring additional grants to support the institution’s budget beyond the current 10% contribution. A prerequisite is administrative expertise and support. As previously mentioned, several new administrative support units/directorates are established, which could give a boost in this area. The experts also point to the possibility to tap into external support resources for application to international tenders, as there are agencies, which are specializing in this business and are charging a partnering institution for their services only in case of success.

A third untapped source of income lies in international student recruitment, a sector currently virtually non-existent. Leveraging the array of attractive Master’s and PhD programmes, offered by the RCEEES as a foundation, along with the new Regional Development Strategy serving as an institutional framework, substantially higher tuition fees

could inject a much-needed boost into the university's finances. This would be a game changer in the delicate cost-benefit calculations, mentioned above.

In summary, the experts see a need to diversify the available sources of income, for the University to become an entrepreneurial institution with a higher degree of independence and self-governance, which prerequisites financial stability and room for investments in line with Strategic Plan, to be adapted as mentioned at the outset of this report. There is an undeniable potential to tap into some of the resources, which so far are not (fully) exploited for additional income generation. One possibility consists of marketing and selling continuous education in the form of (virtual) short cycle courses, modules, massive open online courses etc. to interested clients from industry/society. In the discussions with representatives of industry, this option was favourably considered. The technical infrastructure for implementing these offers has been established during the Pandemic via European and World Bank projects. The introduction and spreading of the international concept of micro-credentials also supports such a move. Another possibility would be systematically applying for tenders of international donors/funding agencies (such as the African development, the World Bank etc.). There surely needs to be qualified personnel to be successful in this endeavour and these qualified HR resources either need to be recruited or alternatively one cooperates with agencies, specializing in this area, in a model which only charges fees in case an application is successful. Closer cooperation with industrial partners could also be a way forward in the sense, that the UENR would have to interact with their partners more systematically (e.g. through industrial advisory boards) identifying areas, where the research capacity of the university would be contracted in areas of need.

Regarding the topic of start-ups and the further commercialization of the UENR´s research activities, this continues to be work in progress.

As regards the ***physical infrastructure,*** the UENR currently disposes of two campuses, with a third one in the process of construction. At the time of its founding, the UENR inherited a considerable number of buildings, which however have come of age, resulting in a considerable investment jam. Necessary investments for renovating, refurbishing and upgrading these buildings and building new ones have been at times put on hold, as the expert team can observe during the guided tour across the universities´ facilities. The available classrooms provide space for different class sizes, but their number is limited, so that teaching must be extended also to the evening hours to accommodate all needs.

In Ghana, it is the government that provides funding for the improvement of infrastructure, but it has not been following up on all the promised/started investments; some buildings measures have come to a standstill as far back as 2016. The situation also deteriorated during the COVID 19 crisis. Other donors therefore had to substitute this lack of funding. The biggest investments are currently occurring in connection with the World Bank investments into the African Centre Excellence, the RCEES. The RCEES is undergoing a transition from previous facilities to a newly built RCEES building. During the on-site visit, the construction of the new building was almost complete, allowing the experts to visit new lecture halls,

seminar rooms as well as future laboratories, library, and further support structures. These new premises will benefit not only the RCEES but also the entire university. Previously, e.g., lectures were held at the Science Block in the School of Engineering or the School of Energy as well as the shared facilities of the School of Graduate Studies and the French Lab. Laboratories classes included the Renewable Energy Lab, as well as the chemistry and biology laboratories. The experts learn that modern equipment for these laboratories have been already delivered to the campus, awaiting their instalment. The experts during the on-site visit witnessed a large amount of new boxes of equipment as well as several containers stored on campus.

Next to the laboratories, the experts visit the main library on campus in the main university building. The experts verify that the university offers basic access to books and journals as well as student study places and access to computers, copy machines and more. Furthermore, the university library gives access to students and staff for an e-library supporting science via Scopus, ORCID and other platforms. Both students and staff confirm to the experts that their online access to journals and books is sufficient to support their learning and research. The experts also note that an additional subject-specific library will be placed in the new RCEES building with the support of the World Bank funding. Additional student learning spaces are available in various buildings and campus while designated student learning spaces are also considered in the new RCEES building.

The expert team also inspects student dormitories on campus, which are very crowded, as up to six undergraduate students are living together in a comparatively small room; graduate students usually share one room and a PhD students has the chance to obtain a single room.

In the discussions with different stakeholder groups and after having visited various premises of the UENR, the experts come to the following conclusions:

Students are not completely satisfied with the infrastructure available to them. According to available survey findings, students cite the small size and limited access to the laboratories due to multiple users and a busy laboratory schedule as their biggest concern. Larger class sizes must be split to accommodate all students. On the positive side, some students have been given access to either laboratories in companies in proximity to the campus and agencies or were provided with an exchange to a more distant partner company or research institution to conduct experiments in case of unavailability of adequate facilities on the UENR campuses. The UENR is currently working on finalizing collaborations with new institutions abroad to give them access to different laboratories enabling them to expand their range of research. Nevertheless, leadership and staff admit that the UENR is challenged to provide a modern infrastructure and that they look forward to commissioning the new RCEES building.

As to the university library services, students and staff confirm that their online access to journal and books is sufficient to support their learning and research. The same finding applies to the availability of student learning spaces. The dormitories are small and very crowded, especially for undergraduate studies, the situation considerably improves for

Master and PhD students, where two master students share one room while PhD students receive a single room.

In terms of barrier-free access, the visit of the new RCEES building testifies to the fact that there are provisions in place for the physically challenged as is the case according to the UENR representatives for the majority of buildings.

Regarding the IT infrastructure, the experts learn that there are a considerable number of ongoing initiatives addressing the upgrade of the UENR`s IT capacities.

The experts consider the technical and physical infrastructure *cum grano salis* adequate to support the teaching process. During the interviews with students, the experts learn of no major complaints regarding the physical infrastructure. As regards the laboratories, UENR has a good standing in research equipment and provides modern equipment. Unfortunately, due to a shortage in facilities and personal, most of the equipment has not been put into operation yet. The experts believe that much effort is needed to overcome this issue. They expressed optimism that the situation will improve with the construction of the ACE-centre's new building and the various ICT investment programmes.

Final assessment of the experts/levels of maturity observed

After discussion, the experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 2

Cultural level of maturity observed: 2

Criterion III.2: Human resources development

Questions:

Institutional dimension: Which challenges must be mastered with regard to staff development? Do the existing concepts take these challenges adequately into account?

Procedural dimension: How does the implementation of the staff development concept work? What are typical difficulties? How are they dealt with? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Which of the concepts and offers for staff development – specifically those with a focus on subject-relevant and didactic development – are particularly well received by teaching staff? Which are not? Why?

Analysis and Findings of experts

The UENR according to the information provided employs a range of support measures for HR development.

In terms of institutional arrangements, it is the Directorate for Human Resource Management, which is in charge of training and development programs. As a positive spin-off related to the establishment and financing of the Africa Centre of Excellence RCEES, it is important to mention that only recently a number of new support units such as the Centre for Grants, Research and Innovation (CeGRI), the Centre for Entrepreneurship and Business Innovation as well as the Centre for Professional Development have been established. They provide services not only to the RCEES, but to the entire institution. The Centre for Professional Development is charged with organizing professional developments courses that serves as a basis for further education and capacity building of the UENR´s staff. As to the CeGRI, its focus is on providing support for faculty members preparing applications for external research funding.

On a personal level and in pursuit of lifting the level of didactical skills, the expert team is happy to note, that new faculty members further are assigned a more experienced mentor to foster the teaching capabilities and provide support in all university matters.

The experts inquire about specific support measures connected to dealing with the COVID-19 crisis and its massive impact on teaching and learning modes in all institutions. They are informed that as of March 2020, borders in Ghana were closed and a complete shift to remote e-learning training occurred in the higher education sector. Thanks to the existence of a European Commission funded Erasmus project, starting already back in 2017, the UENR according to its own account was better prepared to accommodate for the necessary adaptations in teaching and learning and during the lifetime of the project advancing to become the leading university in Ghana in terms of online teaching. The project eventually resulted in the creation of a “Centre for Digital Education”, providing the necessary training to the UENR´s staff. Three renowned experts in the field served as the main tutors in digital training, training more than 30 UENR staff members on digital training with an additional two technicians also receiving specialized training in Morocco.

Concerning sabbaticals, the experts learn that after spending 6 years at the university, a staff member is entitled to take a sabbatical for one year, while continuing to receive full salary.

There are a number of incentives/non-monetary rewards such as the “Best lecturer of the year” recognizing outstanding achievements in the area of teaching. In the area of research, such a system is currently not in place, but in the stage of preparation (see also under criterion 3.3.). It the UENR´s new research policy, yet to be officially passed, the university administration in the future will track, collect, analyse, rate, and publish staff publication output. Staff will be encouraged to obtain Persistent Researcher Identifiers in reputable journals databases such as SCOPUS, ORCID and the Web of Science Researcher ID. In analogy to the Best Lecturer award, the idea is to also award prices in additional grant categories such as the Individual Researcher Award, Group Awards within and inter-departments, and Early Career Researcher awards and commendations on the level of undergraduate and postgraduate studies.

One of the underlying core principles of the universities´ mission is to enhance research capacities of staff and their professional development. The purpose of this policy is therefore to encourage and support staff to engage in professional and personal development activities such as attending conferences, seminars and workshops. The University in the future plans providing financial support for these activities. Conference Grants shall be drawn from the University Research Fund. Two local conferences can be funded, one international conference per year, covering airfare only. It is also planned to provide financial support for the organization of own scientific conferences.

The experts are getting mixed signals regarding the maturity level of the HR career planning instruments. In one department, the lecturers during the discussions report that only a year ago a routine of regular meetings between lecturers/teaching staff and school/department leadership has been established, in the process of which individual plans for career development, their "roadmap to success" and professional development measures are discussed. This however in not the case in other departments and schools. The experts believe that this best practice should be consistently exported to all schools as a regular routine.

The experts also suggest that there is value in regularly monitoring staff's opinions on training needs. The Human Resource Policies of 2015 contain this element, but no prove is provided that this is actually executed and how many staff members partake in the broad range of offers listed in this HR policy.

Currently, there is to the expert´s knowledge in terms of QA instruments also no Faculty Feedback Survey assessing different working tasks assigned within the academic year such as teaching, workloads, demands on further learning, and research in order to improve the quality of teaching and learning in the university.

It also becomes clear, that funding for (external) professional development is very limited and should be increased. Staff members appreciates that the university is trying to support their lecturer by inviting external experts for workshops at the UENR and that the directorate of HR development and the above-mentioned new support units are offering a range of useful courses. The appropriations especially for international professional development and research activities are so limited that they constitute an impediment for professional development. Lecturers at the UENR rarely can afford to participate in scientific Conferences abroad, as the amount offered by the UENR will cover only a very small fraction of the costs associated with registration, international travel, and accommodation. There is also not enough support e.g. to support PhD students, who would like to do their studies at a university abroad. The same applies to the attendance of international conferences, which exceed the financial capacities of individual and the UENR budget alike.

In as far, as the cultural dispositions in the area of HR is concerned, the interviewees express a general satisfaction that they can address their ideas and wishes to the management, that there is satisfactory level of ownership, interaction and communication.

Overall, during the interviews a clear message is sent that the majority of staff started their careers at the UENR, continued building their career and want to stay at their Alma Mater, climbing up the career ladder from assistant lecturer to eventually full professors. The only ones who left were retiring; very few ones switched to other universities. A strong attachment can be observed as well as the conviction, that the UENR is a good learning provider, which has come very far since it has been started more than a decade ago. There is a general belief that the university in the future will continue to grow and improve its reputation.

The experts attest that the University is putting a renewed focus on HR development. Staff is provided with trainings to use information and communication technologies effectively for teaching and participate more in evaluative and accountability frameworks. It is laudable that the UENR implements several incentive policies, including teaching and research awards, financial aid for publications and research applications, support for new members etc. The teaching performance is regularly monitored and feeds into an evaluation system; a comparable system for research will be implemented as part of the new research policies but still to be officially adapted.

Final assessment of the experts/ Levels of maturity observed

After discussion, the experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 1

Cultural level of maturity observed: 2

Criterion III.3: Interaction with research

Questions:

Institutional dimension*:* Are there any challenges at the points of interaction between teaching and research? Do the existing concepts take these challenges adequately into account? What are the strengths of the existing concepts and arrangements?

Procedural dimension*:* How are the processes to link teaching and research designed? Who is involved, who is responsible, and who is informed? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension*:* Which values and modes of behaviour are expected from the members of the institution when it comes to combining teaching and research? How is the expected mode of behaviour supported? To what extent do the different institution members share and accept the expected values and behaviour?

Analysis and Findings of experts

As regards the interaction between research and teaching, the mission of the UENR is "to promote the development of human resources and skills required to solve critical energy and natural resources challenges of society and to undertake interdisciplinary academic research and outreach programs in engineering, science, economics and environmental policies".

The University proudly presents its advancements in terms of Research and Publication Record during the past twelve years since its founding. As part of the Self-Assessment Report, they present the following tables and figures to the expert group:

RESEARCH AND RANKING

ITEM	Number
Research Centers	10
Number of Research Grants won	43
Ongoing Research Grants	23
Total Value of Research Grants won	USD 8,989,011.00
Publications Scopus indexed Journals	1061+
Publications in Google indexed Journals	4000+
Citations	27, 338+

ADI SCIENTIFIC RANKING

- Among Public Universities: **10/ 34**
- Among all Universities and Institutions: **12/78**

The University since its initiation has won in total 43 grants with a budget of around 9 million USD. Currently, the UENR operates with 10 research centers and is ranked on position 10 of the 34 public universities in Ghana and 12th among the 78 educational providers of the country. There is a clear policy goal on the part of the university leadership to invest into building up sustainable and effective research structure ultimately to also advance in the Times Higher Education World universities rankings.

The experts learn that – in spite of this initial success – the institutional arrangements and procedural instruments for university wide research policies and structures are just in the making and have not officially been passed by the UENR. The expert team is provided with the draft of the UENR Research Policy, which has been prepared by the Centre for Grants, Research and Innovation (CeGRI). According to this document, it is the newly founded CeGRI under the direct supervision of the Vice Chancellor and the Academic Board, which is in charge of organizing all research related matters. In the institutional set up, it is envisaged that the Centre will dispose of seven administrative sub-units. One unit will be responsible for the aspect of research development, one for project administration, one for the evaluation of research performance, one for innovation, technology transfer and Intellectual Property, one for research ethics and integrity and finally one for financial services.

Under the umbrella of the Centre and its seven sub-units, a so-called Central Consultative Research Committee (CCRC) will be established and in line with the aforementioned decentralization efforts also complimentary School Consultative Research Committee (SCRD). The Central Consultative Research Committee will be made up of all newly appointed School Research Officers for each individual schools as well as the Centre´s Director and will be chaired by the Pro Vice Chancellor. It will be the role of the School Research Officers assisting the Dean of the School in coordinating research activities.

Next to preparing and formulating the university-wide research agenda as the most important initial task, the CeGRI according to the proposal is also responsible for implementing these research policies, for coordinating research activities, for monitoring and reporting on the research output and for advising the Academic Board and the university community in research matters.

On the operational level, the Centre promises to provide skilled support for the development of grant applications, manage technology transfer as well as handle intellectual property questions and deal with all aspects of commercialization. According to the document, the Centre will also develop a system to measure and monitor, evaluate and report staff and institutional research performance in addition to developing ethical policies, guidelines and review ethical issues. Finally, it also assumes responsibility for ensuring efficient financial management of research projects.

In the application process, it is the CeGRI, which will initiate institutional registration on relevant funding platforms, circulate tenders and assist in the development of application. In case of success, administrative support is promised in the area of project administration and (financial) management as well as the organization of external audits.

In terms of internal funding, it is foreseen that the operating costs of the Centre will be funded by a mix of contributions from the central university budget, by a recovery of overheads from funded research projects and by embarking on a range of fundraising activities. There is even a proposal on the table, which would increase the student enrollment fees as an additional source of contribution to fostering research activities. Depending on the form of research (commissioned research, individual consultancy etc.), the overhead contributions to the central University budget and/or the School/Department budgets vary between 30-50% of the total funding amount. The money generated will go in the so-called University Research Fund (URF). The University Research Fund will be set-up to provide an internal funding mechanism to support the administration of the Grant Funding Program, featuring annual internal tenders in line with the overarching research agenda of the institution.

In their appreciation of this criterion, the experts acknowledge that for a very young university, the publication record and research output are off to a promising start. Whereas especially the publication record has been vastly improved in recent years, the income generated by third party research funding, however, needs improving. Given this

background, the experts are happy to hear that soon a remuneration system will be put into place, which will reward research activities.

The experts commend the UENR representatives for the efforts of advancing the institution´s research policies and procedures on the next level. They appreciate the plan to prepare the overarching research agenda in a broad stakeholder process. They are convinced that the newly designed research policies will provide a modern framework to govern the universities' research and corresponding teaching activities. The new approach in their opinion will be instrumental in the universities' quest to increase its collective research output, to modernize its teaching philosophy, to enhance its visibility and to benefit its internationalization efforts.

The expert also considers the creation of parallel structures on the School and Department level as part of the overarching decentralization strategy (see criterion 1) an intelligent move and necessary prerequisite facilitating the formulation of inter-departmental multidisciplinary research teams. Through the collaboration of researchers under the guidance of the new category of appointed School research officers, the chances to capitalize on new inter-School multidisciplinary research topics will increase.

On the cultural level, this (draft) document is instrumental in providing guidance to the UENR´s staff in conducting research, to ensure compliance with rules and regulations of the university and external donors in relations to funded research projects and to emphasize the commitment of the university towards providing research support to its researchers.

The experts expect that the UENR Research Policy will be formally passed and implemented in the very near future and ask for confirmation that the document has been passed by the responsible bodies within the institution.

Final assessment of the experts/ Levels of maturity observed

After discussion, the experts come to the following conclusions and levels of maturity:

Institutional level of maturity observed: 2

Procedural level of maturity observed: 1

Cultural level of maturity observed: 2

Criterion III.4: Interaction with administration

Questions:

Institutional dimension*:* What are the guiding principles and rules for the role and function of the administration linked to teaching and learning? Which elements of support for teaching and learning by the administrative units of the institution work well? What areas can be improved? What are typical challenges for the administration in order to effectively support the quality objectives for teaching and learning? How are these challenges dealt with?

***Procedural dimension**:* How are the administrative units involved into the design, (further) development and implementation of educational offers and their quality assurance work? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

***Cultural dimension**:* Which values and methodologies are characteristic for the role of the administration in the processes of introducing, (further) developing and implementing educational offers as well as in their quality assurance? Which attitudes and behaviour are expected? How are they promoted? Are the set rules and guidelines accepted by those affected by them? How are conflicts dealt with?

Analysis and Findings of experts

The UENR has established a comprehensive administrative system to support and manage the teaching process. There are similar regulations in place, which define the functions and tasks of different administrative directorates/centres/ units in the teaching and learning process, which have been presented in prior parts of this report.

As regards the interphase of quality assurance and quality of teaching and learning, it is the QAAD, which assists the departments and schools in all matters related to external and internal quality assurance. This including manifold processes, described extensively in other parts of this report, such as the processes related to the creation and modernization of study programs, the administration of internships, the organization and execution of exams etc. Data regarding the various stages of the student life cycle and study success are consistently compiled and monitored.

In terms of self-identified challenges, the UENR has been successful in managing the digital transformation as one of its core priorities to improve the quality of teaching and learning. Sparked by the Pandemic, and assisted by European projects, it has shifted its teaching activities to an online education mode. The biggest challenge right now is to organize the process of decentralizing responsibilities within the institutions and to find the best interphases between the existing administrative units by corresponding structures on the level of the Schools and Departments, as has just been exemplified under the previous criterion.

The experts acknowledge that the UENR´s administrative units numerous forms of support for teaching and learning. The administrative units participate in meetings, workshops, and events to contribute to program opening, implementation, and development. They are involved in various processes such as program opening as well as minor and major program reviews to ensure quality assurance of the programs. The process of providing each member of the UENR´s administration with clear job descriptions and areas of responsibility is work in progress and has been identified in the Strategic Plan as one of the focus areas. An assessment of the activities of all administrative units and their employees is carried out regularly.

The experts furthermore confirm that the University monitors student success, progression, dropout rates, and deviations from standard study periods. In their interviews with the experts, students express overall satisfaction with their educational experiences and the administrative support services provided. The same can be said about the academic staff, which are appreciative of the services rendered by the various administrative units. The biggest challenge remains the build-up of decentralized support structures (e.g. for QA and research) on the Departmental/School level.

Final assessment of the experts/ Levels of maturity observed

Institutional level of maturity observed: 2

Procedural level of maturity observed: 2

Cultural level of maturity observed: 2

III. Transparency and documentation

Criterion IV.1: Rules and regulations for programs / courses / trainings

Questions:

Institutional dimension*:* Which rules and regulations for educational offers have been defined? Whom do they address? Which units of the organisational setting are responsible? What works well?

Procedural dimension*:* How are the documents that define the rules for studying at the institution developed? How are they published and updated? How does the institution integrate external (e.g. legal) requirements into the processes? What are typical challenges with regard to the draft, update and dissemination of rules? How are they dealt with? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Do the members of the institution – specifically students and teaching staff – feel adequately informed about the rules and regulations for programmes that affect them? Are the rules accepted by the respective members of the institution affected by them? Are the rules transparent and understandable for all stakeholders?

Analysis and Findings of peers

Relevant ***regulations concerning undergraduate education*** at the UENR are laid down in the "Handbook for Undergraduate and Diploma Students on Rules and Regulations", dating as of September 2020, containing all relevant information such as the Admission Requirements, Examination Rules, Guidelines on Industrial Attachment, a range of Student Services etc. The experts also confirm that a similar "Handbook for graduate studies" is available online on the webpage of the School of Graduate Studies. This document clearly states the students and university responsibilities and provides the relevant information for the students. The main

topics covered in the student handbook include among others information on the study programs, registration, examinations, and graduation. Additional information is available regarding supervision, monitoring of the student process as well as policies for sexual harassment etc.

The ASIIN expert team confirms that the UENR disposes of a transparent set of rules and regulations for the establishment, implementation and modernisation of programs, analysed in prior parts of this report. They include information on admission rules to the UENR programs, the type of programs on offer, the program learning objectives, and other important pieces of information. ´

The experts confirm that administrative staff, teaching staff, and students participate in developing relevant rules and regulations and are aware of their content. They appreciate that new incoming staff as well as new students during their orientation week are adequately informed about the rules and regulations that apply to them respectively.

Final assessment of the experts/ Levels of maturity observed

Institutional level of maturity observed: 3

Procedural level of maturity observed: 3

Cultural level of maturity observed: 3

Criterion IV.2: Documentation

Questions:

Institutional dimension*:* How does the system for the documentation, document management and filing of information work? What are typical difficulties and how are they dealt with?

Procedural dimension*:* Do the processes with regard to the documentation and filing of information about teaching and learning / about programmes work as expected? What are typical challenges and how are they dealt with? How are the external requirements for transparency and documentation which are relevant to the institution (e.g. disclosure obligations and voluntary publication) embedded into internal processes? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension*:* Do the members of the institution – specifically students and teaching staff – feel adequately informed about the educational offers and their general conditions? Which attitudes and behaviour are expected from the members of the institution with regard to internal and external information policies, also in terms of achieved quality objectives and need for improvement? Are these expectations accepted by the different stakeholder groups within the institution?

Analysis and Findings of experts

The University has an extensive documentation system in place, which contains the most important documents and policies of the institution. They are compiled in the “Statutes of the UENR” and are published under the authority of the University Council in the so-called “Chronicler” (the version provided to the expert team dates of 3 June 2020, Vol. Number 1). It is a comprehensive 100-page publication, which contains the functions and responsibilities of the various university bodies and key personnel and includes the rules for the appointment of staff, promotions policies, regulations regarding matriculations, examinations etc. Within the UENR it is the Legal Office, which is in charge of the documentation, preparation and drafting of legal documents. The University Council has the authority formally passing all these documents, which are circulated to all staff, if new policies are developed or major changes occur.

New Staff upon employment are provided with a compilation of the most important documents; deans will get hard copies of the most relevant policies and procedures. Students, as has been mentioned, are also briefed regarding those documents most relevant to them during orientation week. The University disposes of a newsletter and weekly publications on Friday, in which key activities and achievements are published and shared through e-mails to all staff also using social media and the WhatsApp platform in the process.

The website gives detailed overview regarding the teaching, learning and assessment procedures, the learning opportunities available to their students, and graduate employment information.

The experts commend the UENR on its documentation policies and find that the interviewees during the discussion are well-informed about policies and documents and confirm that they are asked and can participate if new documents are elaborated, or existing ones amended. The experts nevertheless see a need for action in the following areas.

The experts see room for improvement regarding the publication of accurate, tailor-made syllabi/course handbooks, which are given to the students of a specific study program at the outset of their studies/at the beginning of each semester. This finding has been confirmed in the subsequent program accreditation procedure at UENR, in the framework of which the UENR submitted module handbooks on the basis of the template provided by ASIIN. It turned out that there were several misunderstandings in the terminology and extent of the information input into this template. In the four study programmes under review, the teaching staff used syllabi, which gave students an overview about the course outline as well as the content of each lecture. The initially presented module handbooks included information on the module name and code, the module designation, and the semester in which the module is taught according to the study plan. In addition, it listed the course language, the person(s) responsible for the module, the teaching methods as well as the number of credits and the workload divided into the contact hours and self-study time. In

case no pre-requisites were required, the field was left blank. In addition, the learning outcomes/objectives were listed, a short description of the content next to the reading list for this module. In terms of shortcomings, it was noted, that although the type of examination was listed, no adequate information was given to the students on the actual assessment methods used in this course and the applied grading scale was also not provided. Furthermore, the listed number of credits did not match the numbers given in the curricular overview. The experts further positively remark that the presented workload does show contact hours and self-study; however, credits according to the ECTS system were missing. The Module handbook in summary were in part incomplete and missed among other, the module description for the thesis/dissertation, seminars, industry attachments (internship), field trips and thesis research. Finally, a curricular overview and the module handbook are not published online. The experts suggest providing both in a complete version on the webpage of each study programme to transparently present the content of the programme to everyone interested.

As regards the Diploma Supplement, the UENR states that they issue a diploma (degree certificate) together with a transcript of records shortly after graduation. The documents provide information on the student's qualifications profile and individual performance as well as the classification of the degree programme with regard to the respective education system. The marks of individual modules are presented and the way in which the final mark is calculated is explained. However, the transcript of records currently does not provide a conversion of the Ghanaian credit points to ECTS credit points or statistical data as set forth in the ECTS Users' Guide allowing readers to assess the individual mark. The experts therefore request that the UENR issues a diploma supplement upon graduation to all students in line with the ASIIN criteria. The diploma supplement is vital in providing information that makes it easier for employers and education institutions to understand various qualification profiles. This applies especially if students want to apply for a job or studies abroad. The diploma supplement shall explain to third parties, what the students have learned in in their studies. It contains information confirming the type and level of awarded qualification, the institution that issued the qualification, the content of the study program, the specialisation the student had chosen, and possibly details of the national education system.

The experts also see room for improvement regarding information provided for incoming international students, whose numbers are currently are very small. This target group is currently not appropriately addressed and does not find enough transparent and easily accessible information on study opportunities available to them. The experts see a need for upgrading the website with information related to the needs of incoming international students.

Another recommendation targets the publication of the UENR´s Quality Policies. This important document should be made available on the website, ensuring that interested stakeholders can access it.

Final assessment of the experts/ Levels of maturity observed

Institutional level of maturity observed: 3
Procedural level of maturity observed: 2
Cultural level of maturity observed: 3

D. Comment of the Higher Education Institution (08.03.2024)

ASIIN INSTITUTIONAL ACCREDITATION REPORT FOR THE UENR

S/N	ASIIN EXPERTS COMMENT	PAGE NO. OF COMMENT IN THE	UENR MANAGEMENT RESPONSE	SUPPORTING DOCUMENT	REMARKS
1	The Strategic Plan in the expert´s opinion deserves further improvement on several levels. While appreciating the existence of this important key document, there is a need for further substantiating this Strategic Plan by "refining", and continuously reviewing its progressive implementation. This goes hand and in hand with defining appropriate, measurable key performance indicators, which are consistently and objectively operationalized and monitored in concrete, annual implementation plans, including a gap analysis, a risk register and especially dependable follow-up action plans with reasonable, clear timelines. The current implementation plan in place on the central level is currently lacking these qualities.	Pg 9. Last Paragraph	We appreciate the experts for their feedback. The University Management will form a committee to oversee this initiative of which the aforementioned qualities will be taken into consideration.		
2	The experts take note of the fact that the highest leadership position of the UENR (belonging to the category of "Principal Officers"), the position of the Chancellor has been vacant since the founding of the university more than a decade ago. They learn that the Chancellor in the organizational set-up is assuming primarily representative functions. Due to political struggles in the Ghanaian tribal society, all attempts to identify the leading representative of the institution have been futile. The experts see a clear need to fill this position by appointing a suitable individual well connected in the Higher Education establishment of the country and beyond.	Pg 12. First paragraph	We acknowledge this observation. It is true that UENR Statutes state that there must be a Chancellor appointed bythe University Council (Statutes 6, p10). UENR will work towards appointing someone to occupy this important position in consultation with GTEC and the Government ofGhana.	Please refer UENR Statutes 6. page 10	Please, refer to **SD 1** for confirmation
3	a) These are on the operational level prepared by the Vice-Chancellor (at the time of the audit, the position of Vice-Chancellor was also in the process of being nominated, with the acting VC in attendance) b) Dear UENR, can you briefly clarify, which of the following areas of responsibility - teaching, research, internationalization – are vested with the VC and/or the PVC?	Pg 12. Second paragraph	Thanks a) Unfortunately, there might have been misunderstanding regarding the position of the Vice-Chancellor. During the ASIIN mission at UENR, the one who was leading the UENR team was the Acting Pro-Vice Chancellor (Professor John Kofi Mensah Kuwornu) . The University since November 2020, has had a substantive Vice-Chancellor (Professor Elvis Asare Bediako) who as the time of the team visit was on national assignment. b) The roles of the Vice Chancellor and the Pro-Vice Chancellor are clearly stated in the University Statutes.	See: https://uenr.edu.gh/?s=UENR+has+new+vice-chancellor+2020+ 2. The Section of the University Statute	a) Please, refer to the **link inducting the Vice-Chancellor into office [Link 1]** **b)** Refer to **SD 2 page 17 (Statute 15 and Statute 16)**
4	a) The experts note the existence of a Quality Assurance Policy, dating however back to 2016 (in the text itself, reference is even made to the year 2013), listing and describing a considerable number of QA tools. b)Interms of their implementation status, the experts find that some of the core QA instruments have not been consistently implemented in the past couple of years or just started to be put in place. This finding e.g. certainly applies to the important field of "tracer studies",	Pg 13. Third paragraph	We thank the experts for the observation regarding the QA policy. a) The QA policy was first drafted in 2013 and updated in 2016. We should have indicated that it was an updated version. Since it is being under review we will correct this anomaly. b) 1. Among the key instruments,Tracer Study is ongoing since August 2021. 2. Since its inception, the University has conducted two (2) Student Exit Surveys; the 2021 Student Exit Survey (SES) and the 2023 Student Exit Survey. The findings of the 2021 SES were implemented which impacted favorably on the 2023 SES edition	https://forms.gle/6JavCNJJVdNWeHmJ6	**a)** Please, refer to the Updated QA Policy **SD 3** b) Please, refer to **Link 2** for the ongoing Trace Study for the University.
5	There is equally no instrument in place looking into the satisfaction of staff with their working environments and conditions.	Pg 13. Third paragraph	Thanks, and well noted. The Quality Assurance and Academic Planning Directorate will design an instrument to take care of this laudable suggestion.		

6	The UENR piloted a Student Exit Survey (SES) in 2021, which resulted in several critical remarks from students regarding their learning experience, student life on campus, the state of infrastructure, laboratories etc. This in the expert´s eyes is a step in the right direction and should from now be executed regularly as an important way of measuring student satisfaction and getting reform measures in place where deemed necessary.	Pg 13. Third paragraph	Thanks, and we acknowledge this observation as UENR isworking hard in this direction. The 2023 SES has been conducted and the report is now available.	The 2023 Student Exit Survey	Please, refer to the **SD 4**
7	Another central challenge for the institutions management and governance system is related to operationalizing its HR development policies, dating back to 2015. The experts note that there are a number of QA instruments listed in this HR policies (system of evaluating the acceptance and effectiveness of its continuous development activities), which according to their knowledge are equally not consistently applied.	Pg 14. Fouth paragraph	Please well noted. The QAAD in collaboration with HR will activate most of these QA instruments to enhance the University Governance		
8	Concerning the institutional governance structure, for the university to succeed, the decentralization process, which has been initiated by the leadership as a central reform goal, needs to be consistently followed through. This applies to areas e.g. Quality Assurance as well as the organization of Research within the UENR.	Pg 14. Last paragraph	Thanks, and well noted. a) School and Departmental-levelQuality Assurance Committees have been set up to decentralize the operation of Quality Assurance. Steps have also been taken to establish QA in the Non-teaching directorates of the University.	Please refer to Statute **51 bullet 7 pp.41**	Please, refer to **SD 1**
9	Currently, the position of the Chancellor is vacant, and for the core areas of teaching and learning, research, community engagement, internationalization, there is only the (acting) Vice-Chancellor and one PVC available	Pg 15. First paragraph	We acknowledge this observation. It is true that UENR Statutes state that there must be a chancellor appointed by the University Council (Statutes 6, p10). UENR will work towards appointing someone to occupy this important position in consultation with GTEC and the Government of Ghana. b) Unfortunately, there might have been misunderstanding regarding the position of the Vice-Chancellor. During the ASIIN mission at UENR, the one who was leading the UENR team was the Acting Pro-Vice Chancellor (Professor John Kofi Mensah Kuwornu) . The University since November 2020, has had a substantive Vice-Chancellor (Professor Elvis Asare Bediako) who as the time of the team visit was on national assignment	Please refer, UENR Statutes 6. page 10	a) Please refer Vice-Chancellor's appointment **(Link 3]** **b)** Please refer to **SD 1 (UENR Statutes)**
10	Another core prerequisite of institutional capacities for self-governance requires that the capacity of the UENR, to diversify the sources of its income, must be strengthened to obtain more room for maneuver and to become a more independent, entrepreneurial university.	Pg 15. Second paragraph	This is a laudable suggestion that the University has already begun working on assiduously. The University generates internally generated fund through its clinic (https://uenr.edu.gh/directorates/health-services-directorate/) open to the general public. Moreover, the Centre for Research and Applied Biology (https://cerab.uenr.edu.gh/) serves as another link to internally generated funds for the University. The University has an enterprise called UENR Enterprise, farms (crop and animal), and short certificate courses that bring in fund.	https://uenr.edu.gh/directorates/health-services-directorate/ https://cerab.uenr.edu.gh/	Please refer to **Link 4** how the university generates income internally.
11	a) Academic staff performance is analysed and statistics on student cohorts' progression and dropout rates are collected on the central level, but not on the level of individual departments.(Dear UNER, we need evidence and figures to substantiate this claim. Please provide statistical figures regarding average standard period of studies and drop out/graduation rates at the UNER. What are lessons drawn from these figures, if any?)	Pg 15. Last paragraph	Thanks: a. Every academic department is assessed at the end of every semester and reports are sent to HoDs. The University examiner and team are being tasked to work on this for now. QAAD will be developing a system to enable departments detect students' progression and dropouts and the reasons thereof	1. Summary Report of Lecturer's assessment	Plase, refer to **SD 5** A &B

12	For the students to get more substantive feedback/feel an impact related to their queries, scheduling regular collective sessions with program coordinators, and implementing a complaint management system (a "grievance platform") are suggestions that could reinforce the university's ongoing improvement initiatives. Such a grievance centre has already been successfully implemented for the study programs operating under the roof of the ACE-Centre, but thus far has not been transferred to the other Schools/Departments and their study programs.	Pg 16. Second paragraph	Academic Staff are assessed every semester and a composite report for a department is sent to the Head of the department where students' queries are added. The Head of the department then interacts with students to explain measures taken to address their queries. The HoD is also supposed to interact with lecturers who were poorly or averagely rated. A feedback report is filled by the HoD signed by the Dean of the school and some students and submitted to the Quality Assurance and Academic Planning Directorate.	1. HoDs composite Report 2. Feedback Report	a) Please, refer to **SD 6** for a sample of the HOD composite report **b)** Feedback on Student Assessment of Lecturers template **SD 7**
13	The experts are impressed by this thorough approach for introducing a new study program, which extends to all qualification levels (including doctoral programs) and which resembles in many aspects a formal ex-ante accreditation procedure in other countries. They see, however, room for improvement as regards the establishment of interdisciplinary programs between departments and especially schools, as in the current set-up all responsibilities are vested in individual Schools/Departments. It is therefore recommended to elaborate a procedure for the initiation of new interdisciplinary programs overcoming the traditional divide between the disciplines.	Pg 18. Last paragraph	Thanks and much appreciated. There are a handful of interdisciplinary programmes between departments such as MSc/MPhil Energy Economics and MPhil Agricultural and Resources Economics. As suggested, however, UENR will consider more such programmes in the future coupled with documented inter-departmental MoUs.		
14	The duration of the Bachelor programs at the UENR amounts to 8 semesters (maximum duration for completion 12 semesters) and 4 semesters (maximum duration for completion 6 semesters) for the Master programs. The University is operating on a semester scheme, with two semesters of 17 weeks´ duration per year (13 weeks of Teaching, 1 week of Revision, and 3 weeks of Examinations). Dear representatives of the UNER, we could not find statistical data on the standard period of study and the average drop-out rates for the Bachelor, Master and PhD level? Could you kindly provide these figures?	Pg 19.Fifth paragraph	Well noted. The Quality Assurance and Academic Planning Directorate will take time to work on it.		
15	Another area of attention is the instilment of "critical thinking" capabilities among students. Some of the impeding factors in this area are the unfavourable student-staff ratios, and cultural impediments such as social engagement patters, which do not foresee that students challenge their teachers/elders. Still another factor in the equation is the conduct of examinations, which at least on the undergraduate level to a considerable degree rely exclusively on written tests, which are not ideally suited to develop these student capabilities. Some examples of introducing the Humboldtian principle of research-oriented teaching are nevertheless presented especially by staff teaching on the post-graduate level and by leading the expert team through some of the laboratories.	Pg 21.Forth paragraph	Thanks. UENR recognises that examination of its students must speak to modern trends beyond sit-down written examinations. In that regard, the overall performance of students comprises a continues assessment of 40 % and a final examination of 60 %. The continues assessment assesses students via quizzes, presentations and practical other than sit-down written examinations. Management has formed a committee to review the University's examination policy to incorporate more flexibility in the overall conduction of examinations to embrace other ways of assessment. regards.	Memo for the Examination Policy Review Committee	Please refer to **SD 8** which constitutes the examination review committee.
16	During the on-site visit, the experts learned that UENR is using an input-based credit point system. All credit points are based on the contact hours between the lecturer and students. The time used by the students to prepare for the lectures and exams is not integrated into this system.	Pg 21.Last paragraph	Thanks. UENR acknowledges that even though credit points are awarded to practical and other outreach efforts put in by students, this is done at the discretion of departments. The examination policy review committee (see SD 8) will incorporate this suggestion in the review of the existing examination policy to formally regulate credit hours beyond contact hours between lecturers and students.	- Do-	-Do-

17	The experts furthermore demand that the UENR develops a mechanism to accurately trace the actual workload of the students during their studies, also allowing them to calculate an evidence-based conversion of their credit points to ECTS credit points following the ECTS user's guide. This workload is then to be verified in the following years to balance the workload of the students in the programs/courses on offer. Furthermore, it is required that all compulsory modules are credited as they are considered a mandatory part of the students' studies. This should also include modules such as "Field trip" or the "Industrial Attachment" as well as seminar lectures.	Pg 22.First paragraph	Thanks. We acknowledge this very crucial point as it would bring to reality hours students and lecturers actually put into teaching and learning. The examination policy review committee will incorporate this suggestion.		
18	As regards the aspect of inner-university cooperation, there are only a limited number of interdisciplinary programs, which are offered in cooperation between different Schools and Departments . (Dear representatives of UNER, please provide a list of cooperation agreements/joint study initiatives to substantiate this claim)	Pg 23.Third paragraph	Thanks so much. Please as indicated in Q 13 there are few interdisciplinary programmes. However, there are no formal Mou signed between the departments. In enhancing proper documentation, clear roles and benefits, UENR will facilitate the development of inter-departmental programmes MOU.		
19	The representatives of the UENR explain to the experts that the mode of assessment of each course comprises various assessment methods. These include presentations, practical exams, quizzes, assignments (group and individual assignments), seminars and journal/notebooks, but are currently not adequately documented in the individual course syllabi for each study programs.	Pg 27.Forth paragraph	Thanks. This must have been miscommunication. Kindly See attached some course outlines that show the various methods employed in accessing students beyond written examination.		Please refer to **SD 9 for sample course outline**
20	The program coordinators state that they are currently reviewing their examination regulations in their quest of further diversifying the assessment methods throughout the semester. The experts are interested to know, how the teaching staff ensures that every student is contributing to the teamwork. On one hand, the teaching staff relies on the ethics of the students since they have already reached the master or doctoral programmes; on the other hand, they choose who is going to present which part of their work in the last minute. They also ask questions to the students about any part of the teamwork project. They add that their aim is to educate students as mature individuals, who act responsible towards their colleagues and society.	Pg 28.Last paragraph	Thanks. The upcoming revised examination policy will in cooperate some of these suggestions		
21	The UENR thus far does not dispose of a specific credit transfer policy. According to the information presented in the Self-Assessment Report and during the interviews, there is at this stage only a draft credit transfer policy awaiting approval . Dear representatives of the UNER, please forward these draft policies to the team.	Pg 31.Last but 1 paragraph	Thanks, and much appreciated. Discussion on the subject matter has been held at the Graduate Studies but policy has not been formulated. At the National Level, Thanks. GTEC has imitated stakeholder engagement for Transnational Education Policy in Ghana for Higher education. The stakeholder meeting was held at KNUST on 23-24 January of which UENR VC, Registrar and Director of QAAD attended. The rationale is to have a policy that will facilitate the aforementioned structures.		
22	During the institutional review, the experts encounter hardly any transfer students, who have profited from these recognition procedures in recent past. In view of the strategic goal of the UENR to enrol more international students from the region and beyond, the expert team sees either way a necessity to formally pass and implement the draft recognition policies mentioned above and publish them on the UENR website.	Pg 32.Third paragraph	Thanks. GTEC has imitated stakeholder engagement forTransnational Education Policy in Ghana for Higher education. The stakeholder meeting was held at KNUST on 23-24 January of which UENR VC, Registrar and Director of QAAD attended. The rationale is to have a policy that will facilitate the aforementioned structures.		**Please refer to SD 10**
23	There is currently no policy in place, describing the mechanisms to transfer between the position of a lecturer and that one of a research fellow, although this is possible in theory.	Pg 37.Second paragraph	Thanks. The positions are similar in renumeration but for job description. The University will form a committee for this important policy to be passed		

24	The experts before this background suggest that the university intensifies its efforts on its path to becoming a more independent "entrepreneurial university", diversifying its income sources, and making the best use of its unique role of being a hub in energy and natural resources related matters in this process. The experts identify as one possible option, to expand business by providing suitable, high-calibre continuous education to interested stakeholders from outside the university and especially to the workforce in the business world/for employees in industry, either on one of the campuses of the UENR or via distance education	Pg 39.First paragraph	Thanks and this is a laudable suggestion the University has already begun working on assiduously. The University generates internally generated fund through its clinic (https://uenr.edu.gh/directorates/health-services-directorate/) open to the general public. Moreover, the Centre for Research and Applied Biology (https://cerab.uenr.edu.gh/) serves as another link to internally generated funds for the University. Also, the Sustainable Energy Services Centre (https://uenr.sescgh.com/) under RCEES. The University has an enterprise called UENR Enterprise, farms (crop and animal), and short certificate courses that bring in funds.	https://uenr.edu.gh/directorates/health-services-directorate/ https://cerab.uenr.edu.gh/	Please refer to **Link 4** how the university generates income internally.
25	The experts expect that the UENR Research Policy will be formally passed and implemented in the very near future and ask for confirmation that the document has been passed by the responsible bodies within the institution.	Pg 48.forth paragraph	Thanks and well noted. The Research Policy has been approved by the University Academic Board. It has been submitted to the University Council for Ratification. Management will follow up for it to receive the necessary attention during the next council meeting		
26	The experts see a need for upgrading the website with information related to the needs of incoming international students. Another recommendation targets the publication of the UENR´s Quality Policies. This important document should be made available on the website, ensuring that interested stakeholders can access it.	Pg 54.first paragraph	The website has information on International Students here https://iro.uenr.edu.gh/about-iro/. However, this link will be moved to students' information in general for easy tracking. The University Quality documents will also be uploaded to the website.	Thanks. The website has information on International Students here https://iro.uenr.edu.gh/about-iro/	Please refer to **link 5** on International students information

E. Summary: Expert Recommendations

Areas to review		Maturity Level
I.1 Objectives	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**3**
I.2 (Quality-) management systems/ governance	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**3**
II.1 Creation and development of programmes / courses / training	a) institutional	**3**
	b) procedural	**3**
	c) cultural	**3**
II.2 Implementation of programmes / courses / training	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**2**
II.3 Cooperation	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**2**
II.4 Examination systems and organisation of exams	a) institutional	**3**
	b) procedural	**3**
	c) cultural	**2**
II.5 Recognition of achievements	a) institutional	**2**
	b) procedural	**1**
	c) cultural	**2**
II.6 Assistance and support	a) institutional	**3**
	b) procedural	**3**

	c) cultural	**3**

III.1 Material and human resources	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**2**
III.2 Human resources development	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**3**
III.3 Interaction with research	a) institutional	**2**
	b) procedural	**1**
	c) cultural	**2**
III.4 Interaction with administration	a) institutional	**2**
	b) procedural	**2**
	c) cultural	**2**

IV.1 Rules and regulations for programmes / courses / training	a) institutional	**3**
	b) procedural	**3**
	c) cultural	**3**
IV.2 Documentation	a) institutional	**3**
	b) procedural	**2**
	c) cultural	**3**

Overall comments

The UENR scores high in areas such as the creation and implementation of programs, the assistance and support systems for students, the administration of rules and regulations.

Areas, which deserve further attention are the processes related to the ongoing decentralization process in the UENR´s governance system, the full implementation of its QA policies, the improvement of its HR, financial and institutional bases as well as the implementation of new research policies.

Based on the institutional accreditation report, the experts recommend awarding the ASIIN Institutional Quality Seal to the UENR with the following requirement and recommendations until September 2025.

Requirements:

It is required, that the UENR

A 1. Presents a further substantiation of its Strategic Plan by defining appropriate, measurable key performance indicators to be operationalized and monitored in concrete, annual dependable follow up action plans with reasonable, clear timelines (I.1).

A 2. Presents evidence related to the underpinning of the central Strategic Plan by comparable plans on the level of the Schools, Departments and Directorates as part of its overarching decentralization strategy (I.1).

A 3. Invests into the professionalization of management structures. This includes filling the position of the Chancellor and a further differentiation of core leadership roles and responsibilities (I.2).

A 4. Presents a concrete timeline/implementation plan for its decentralization strategy as elaborated in this report (e.g. concerning the new management structures in the field of QA and Research) (I.2).

A 5. Updates its QA policies and consistently implements the instruments listed therein (e.g. tracer studies) (II.1).

A 6. Develops a system of tracing empirically the actual workload of the students during their studies, also allowing the calculation an evidence-based conversion of their credit points to ECTS credit points following the ECTS user's guide (II.2)

A 7. Consistently credits all compulsory modules in its study programs (II.2).

A 8. Inserts information regarding examination modes and assessment rubrics for each course program syllabi/handbooks (II.4)

A 9. Formally passes and presents its draft for credit transfer in view of potentially growing number of international students. A study of the Lisbon Convention or comparable UNESCO regional recognition convention will be useful in this context (II.5)

A 10. Formally passes and implements its new research policies (III.3).

A 11. Publishes complete module handbooks which are given to the students of a specific study program at the outset of their studies/at the beginning of each semester (IV.2)

A 12. Issues a "Diploma Supplement" for each graduate (IV.2).

Recommendations:

The experts recommend that the UENR

E 1. Stimulates more inner-university cooperation in teaching and research as more interdisciplinary synergies could be created by closer, forward-looking cooperation between the Schools/Departments (I.2)

E 2. Invests in the digitalization of its QA system (e.g. the administration of student questionnaires (I.2).

E 3. Schedules regular collective feed-back sessions of students with program coordinators and implements a complaint management system for the entire university (a “grievance platform”) (I.2).

E 4. Fosters the initiation of new interdisciplinary programs overcoming the traditional divide between the disciplines (II.1).

E 5. Establishes on the university level a joint, formalized understanding of teaching and learning principles to guide the institutions´ quest to become a learning provider devoted to a modern, research-enriched, inquiry-based teaching style, fostering critical thinking skills in the process (II.2).

E 6. establishes a permanent industrial advisory committee bringing university-industry relationship to a new level (II.3)

E 7. Increases the number of formal exchange programs to foster incoming and outgoing student mobility (II.3)

E 8. Diversifies the exam types (e.g. using oral examinations) while developing suitable assessment rubrics for all courses (II.4).

E 9. Regularly evaluates the quality of its student support services (II.6)

E 10. Diversifies its sources of income as elaborated in the report as a prerequisite for becoming an independent, entrepreneurial university (III.1).

E 11. Continues investing in modern equipment to be able to conduct state of the art research (III.1).

E 12. The University must address the question how it will cope with the current phase of expansion with student enrolment doubling and its present lack of teaching personnel (III.1)

E 13. Implements a system of evaluating the acceptance and success of continuous development activities for its staff as described in its QA policies (III.2),

E 14. Increases funding for professional development (III.2).

E 15. Publishes its UENR´s Quality Handbook ensuring that interested stakeholders can access it (IV.2).

E 16. Provides more targeted information for its future international student intake (IV.2)

F. Decision of the Accreditation Committee (22.03.2024)

The Accreditation discusses the procedure and decides to award University of Cape Coast an institutional accreditation for one year under 12 requirements and 16 recommendations. Once the requirements are fulfilled, the accreditation will be extended to its full period of six years until 30.09.2030.

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