

**Decision No. EI-2024-33 on the accreditation of the M.Sc. Water Resources and Environmental Engineering, delivered by Ahmadu Bello University, Zaria, Nigeria**

**The President of the High Council for the Evaluation of Research and Higher Education,**

Considering the Research Code, in particular Articles L. 114-3-1 to L. 114-3-6;

Considering the Board's deliberation of 29<sup>th</sup> September 2022 on the accreditation criteria for courses abroad (excluding doctoral/PhD programmes);

Considering the Decision No. 2023-9 of 16<sup>th</sup> March 2023 on the international accreditation procedure of the High Council for the Evaluation of Research and Higher Education;

Considering the agreement DEI\_2023\_CONV17 of 14<sup>th</sup> June 2023 for the evaluation/accreditation of fourteen training courses, delivered by six Centres of Excellence in Nigeria;

Considering the opinion issued by the Accreditation Commission on 18<sup>th</sup> June 2024;

**Decides:**

**Article 1**

Noting that the M.Sc. Water Resources and Environmental Engineering delivered by Ahmadu Bello University in Nigeria meets the four accreditation criteria, voted by the Board of the High Council on 29<sup>th</sup> September 2022, as follows:

**ACCREDITATION CRITERION 1: TEACHING POLICY AND CHARACTERISATION**

The M.Sc. in Water Resources and Environmental Engineering is perfectly aligned with the university's priorities and socio-economic needs. Indeed, this M.Sc. is perfectly integrated and complementary to other programmes of the Faculty of Engineering of the University and has been awarded the "Africa Centre of Excellence" label. The programme offers a comprehensive and engaging exploration at water management and preservation challenges.

To reach its objectives, the programme proposes strong links with national research and socio-economic partners. As far as research is concerned, the programme has, within the Department, the facilities (equipment, library, and software) necessary for the students to develop their two-year research project. Other national laboratories complement their research requirements, as for analytical purpose, for instance. Students can attend a Ph.D. programme in the same department. It would be interesting to add core courses on ethics and research integrity. Regarding the relations with the socio-economic partners, they are significant through several effective partnerships with public institutions and private companies, which present a real added value to the programme. It would be valuable to further engage these partners in curriculum development and offer more professional seminars.

There is outgoing and incoming mobility with foreign universities, as well as numerous international partnerships. This aspect of international exchanges could be improved, especially for an academic Master's degree. To maximise the programme's strong national positioning, it is advised to foster more international partnerships, which would benefit both students and Faculty.

**ACCREDITATION CRITERION 2: THE PEDAGOGICAL ORGANISATION OF THE STUDY PROGRAMME**

The curriculum of the programmes is designed in a comprehensive manner and the two years are well-organised. Students receive courses on all important aspects related to water management issues, from water pollution and water treatment up to economic and law concerns. It is also interesting to note that interdisciplinarity is provided through courses run by other Departments of the University. The knowledge and skills are well-identified and address the main concerns of water socio-economic world. The pedagogical practices are well-diversified. To go further, it is recommended that more practical work on industrial cases be developed, as well as the acquisition of additional skills related to communication tools.

Professional immersion, which is one of the strengths of the programme, is ensured through the research project, which is carried out over the two years. Moreover, an internship is mandatory for students enrolled in the ACENPEE programme. This requirement, coupled with incentives for students' engagement with the socio-economic and international spheres, could be extended to all students for a more extended duration.

Although various elements of soft skills are offered to students, these are often scattered and informal. They should be developed and systematised to better prepare students for incoming and outgoing mobility. It would help them acquire additional skills relevant to their job-market integration and have a greater mastery of information and communication tools.

### ACCREDITATION CRITERION 3: ATTRACTIVENESS, PERFORMANCE AND RELEVANCE OF THE STUDY PROGRAMME

The attractiveness is well-followed by the programme, with a consequent number of applicants (217 applications over four years), a significant part (55%) of them coming from other universities. Therefore, the programme is well-known in the field of Water Management. This attractiveness has increased with the launch of the ACENPEE programme. The students' follow-up during their programme could be enhanced. The integration of graduates into the labour market is also well-monitored, owing to the identification of the companies and institutions that employ them.

### ACCREDITATION CRITERION 4: MANAGEMENT AND CONTINUOUS IMPROVEMENT OF THE ACADEMIC PROGRAMME

The programme organisation is clearly defined and efficient. The contributors to the programme have an excellent level of expertise covering the different objectives of the programme in the field of water management and resources. The number of teaching staff and technical staff is satisfactory. The pedagogical resources of the department are at a good level, from equipped classrooms, libraries to technological halls for the several aspects of water issues. It is important to emphasise that a significant financial contribution would enable the renewal of some of the equipment that could benefit the students, as well as providing access to costly simulation software licences. The integration of newly recruited staff is efficient. It would be interesting to develop outgoing mobility possibilities.

The different procedures for recruitment and examinations are well-detailed and explained. Continuous assessment of the courses is done. This process is effective but could be more systematic. The students, except through class representatives and students' unions, are not part of the different bodies (such as the Department Council). Their contribution to these bodies would be a good way of strengthening their involvement and taking their suggestions into account in the programme.

## Article 2

The M.Sc. Water Resources and Environmental Engineering delivered by Ahmadu Bello University in Nigeria, is accredited for a period of five years from the date of this decision.

## Article 3

The decision is accompanied by the following recommendations and comments:

- For greater substantial funding, enhance and diversify responses to calls for projects, seek out partnerships with public institutions, and strengthen connections with the socio-economic sphere, including alumni.
- Increase the number of collaborations with programmes and research units abroad, and propose formal training and seminars to provide information on international opportunities. This would also further increase the number of incoming and outgoing mobility.
- Ask for additional financial support to institutions, universities, and companies to enable students to complete their studies within two years of enrolment.
- Develop a more systematic and formalised follow-up of students and alumni, and strengthen the programme with courses and seminars that focus on soft skills to facilitate integration into the job market.
- Set up courses, seminars, and workshops on scientific integrity and ethics, and communication.



#### **Article 4**

This decision will be published on the Hcéres website.

Paris, 27<sup>th</sup> June 2024.

The acting President  
signed  
Stéphane Le Bouler