

**Decision No. EI-2024-38 on the accreditation of the M.Sc. Power Engineering, delivered by the University of Nigeria, Nsukka, 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. Power Engineering delivered by the University of Nigeria, Nsukka, 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: TRAINING POLICY AND CHARACTERISATION**

The M.Sc. programme in Power Engineering aligns well with regional strategies, integrating various scientific fields like Electrical Engineering, Thermodynamics, and Fluid Mechanics, but showing a need for enhanced interdisciplinarity. Sustainable development principles are effectively woven into specific courses. Internationalisation efforts, notably through partnerships with universities in Togo, Ghana, and South Africa, as well as through collaboration within the country, have led to increased enrolment of foreign students since 2021.

The inclusion of a research project, coupled with defined assessment procedures, underscores the programme's academic rigor and its standing within the research community, notably by encouraging students to publish research papers under the supervision of both a researcher and a member of the teaching staff.

The programme demonstrates a strong connection to the industrial sector through numerous industrial partnerships, enabling the programme to place its students easily in internships. The duration of the internship, which is only one month, seems too short to enable students to invest fully in their internship and thus in the industrial issues assigned to them. These partnerships also make it possible to adapt programmes to meet skills needs effectively.

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

The M.Sc. programme presented demonstrates a meticulous and comprehensive approach to learning methods. Clear objectives and prerequisites for each course ensure students are well-prepared for their educational journey. The selection process, which includes transcript evaluation and potential redirection for better alignment, underscores a commitment to student success.

The programme's multidisciplinary nature is supported by the guidance of two teachers from different departments for each student, fostering a well-rounded educational experience. Flexible teaching methods, including both face-to-face and online options, cater to diverse student needs and geographical locations. The integration of foreign lecturers and mobility grants for international exchanges enriches the learning environment, as evidenced by the significant number of foreign students.

The emphasis on English proficiency is notable, particularly in welcoming students from neighbouring countries in a region surrounded by French-speaking nations, with dedicated classes provided. The involvement of a coordinating teacher and a student representative ensures effective communication and support within the programme. Additionally, the inclusive approach to project topics, supervisor selection, and industry internships adds a practical dimension to the curriculum, aligning students with

real-world applications of their knowledge. Overall, the programme demonstrates a holistic and forward-thinking approach to education, preparing students for success in their chosen fields.

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

The programme employs a variety of strategies, both virtual and physical, to enhance its appeal to different audiences, leveraging participation in African networks such as AAU and WACEENET. A targeted approach to attract regional students, including offering full scholarship and language support programmes, has resulted in different student body from countries like Liberia, Cameroon, and Ivory Coast, alongside Nigerian students. While the absence of full scholarships for Nigerian students present a challenge, the programme's flexibility accommodates students balancing work and studies. Monitoring of the programme's attractiveness reveals a steady increase in applications over the past four years, from three to 36 applicants. Student success is regularly monitored through various methods, aiding self-assessment and tailoring support measures to students from diverse academic backgrounds, such as mechanical engineering and electrical engineering. The programme utilises the graduate tracer mechanism developed by the AAU to track the progress of the graduate students, with both student success and graduate information publicly available on the programme's website. However, the number of graduate students since 2019 remains low with only three graduates.

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

The ACE-SPED Power Engineering M.Sc. programme exemplifies a well-organised and effective approach to programme management, ensuring coherence and efficiency. Clear roles and responsibilities within the teaching team contribute to a positive and supportive environment, with regular communication among the centre manager, programme coordinator, and teachers.

Teachers benefit from support initiatives like discussion groups and opportunities for professional development through seminars and training courses. Mobility grants further enhance the programme's flexibility, allowing staff to participate in international activities. The extensive list of academic contributors, spanning various departments, reflects a diverse and substantial faculty, well-prepared for potential increases in student numbers or new educational offerings.

Internship experiences, whether within partner companies or elsewhere, highlight the programme's dedication to translating theoretical knowledge into practical application within the professional environment. The rigorous supervision process, anti-plagiarism measures, and adherence to university regulations ensure the quality and integrity of student work.

Quality assurance measures, in collaboration with the University of Nigeria, underscore the programme's commitment to maintaining high standards. Continuous improvement is evident through regular surveys, both internal and external evaluations, and alignment with university admission requirements. The programme's accreditation by the NUC for five years further solidifies its commitment to delivering a high-quality education.

## Article 2

The M.Sc. Power Engineering delivered by the University of Nigeria, Nsukka, 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:

- Introduce practical works, particularly during the project phase, to address the gap between students from different engineering backgrounds. Develop a curriculum that harmonises practical skills, ensuring all students, regardless of their engineering specialisation, acquire essential skills in both mechanical and electrical engineering.
- Consider extending the mandatory internship duration beyond one month, as requested by both industrial partners and students. A longer duration, perhaps up to six months, would provide a more comprehensive experience, align better with industry expectations, and improve learning outcomes. Alternatively, combine the Master's project with the industrial internship to extend the duration of industrial experience.



- Integrate real-world projects, case studies, and guest lectures from industry experts into the curriculum to provide students with practical insights and prepare them for the job market or entrepreneurship.
- Develop and implement a policy for work-linked training programmes and continuing education. Leverage existing partnerships with industry to create opportunities for students, especially those from modest social backgrounds or with limited financial means, to gain practical experience and enhance their employability.
- Facilitate students' involvement in decision-making processes by appointing students' representatives to relevant boards or committees. This inclusion would ensure that students have a role in programme development and provide valuable perspectives on improvements.

#### **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