EVALUATION AND ACCREDITATION DOCUMENTS

Ph.D. Computer Science and Engineering

Obafemi Awolowo University (OAU), Ile-Ife,

Nigeria

September 2019

CONTENTS

EVALUATION REPORT

Ph.D. Computer Science and Engineering

Obafemi Awolowo University (OAU), Ile-Ife, Nigeria

MAY - 2019

The Obafemi Awolowo University at Ile-Ife has mandated Hcéres to perform its Information Communication Technology (ICT) doctoral program evaluation. The evaluation is based on the "External Evaluation Standards for doctorates out of France", adopted by the Hcéres Board on March 26, 2018. These standards are available on the Hcéres website (hceres.fr).

<table>
<tr><td>**For the Hcéres[1] :**</td><td>**On behalf of the experts committee[2] :**</td></tr>
<tr><td>Michel Cosnard, President</td><td>Carole Molina Jouve, President of the committee</td></tr>
</table>

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I. NATIONAL CONTEXT AND INSTITUTION IDENTITY SHEET

INSTITUTION

University/institution: Obafemi Awolowo University (OAU), Ile-Ife, Nigeria

Component, faculty or department concerned: Faculty of Technology; Department of Computer Science and Engineering

Programme's title: PhD. Computer Science & Engineering

Training/speciality:

PhD. Computer Engineering

PhD. Software Engineering

PhD. Computer Science

Year of creation and context: 2015

Site(s) where the programme is taught (Town and campus): Obafemi Awolowo University, Ile-Ife; Information Communication Technology (ICT) Driven Knowledge Park (OAK-PARK)

Programme speciality; Programme director; Grade ; Main subject taught

- PhD in Computer Engineering; Aderounmu G.A.; Professor; Data Communications
- PhD in Computer Science; Dr. Olajubu E.A.; Senior Lecturer; Distributed systems
- PhD in Software Engineering; Adagunodo E.R.: Professor; Operating Systems

METHODS AND RESULTS OF THE PREVIOUS ACCREDITATION(S)

Methodology and agency:

The study programmes asked for accreditation from NUC in 2017.

Results:

The study programmes received full accreditation from Nigerian University Commission (NUC) in 2017.

HUMAN AND MATERIAL RESOURCES DEDICATED TO THE PROGRAMME

1. Human resources
   The programme involves 28 academic staff; 3 Full Professors, 5 Associate Professors, 11 Senior Lecturers and 9 Lecturers (with Ph.D). Four Professors are also affiliated to these programmes.

2. Material resources
   A Cyberlab has been established funded by TETFund (Government Agency in Nigeria), World Bank and Industry. In addition, there exist 5 Postgraduate Research Laboratories: Data Communication and Computer Network, Computer Engineering, Software Engineering, Information System and Intelligent System Engineering all funded by the World Bank.

STUDENT POPULATION: EVOLUTION AND TYPOLOGY OVER THE LAST 4 YEARS

Table 1: PhD. Computer Engineering Students' In-take

SESSION	ENTRY QUALIFICATION	MALE	FEMALE	STUDENTS WITH GRANTS/BURSARIES	NO OF FOREIGN STUDENTS
2017/2018 Session	M.Sc./MPhil. (Computer Engr.)	1	1	Nil	Nil
2016/2017 Session	M.Sc./MPhil. (Computer Engr.)	1	1	Nil	Nil
2015/2016 Session	M.Sc./MPhil. (Computer Engr.)	1	1	Nil	Nil

Table 2: PhD. Software Engineering Students' In-take

Session	Entry Qualification	Male	Female	Students With Grants/Bursaries	No Of Foreign Students
2017/2018 Session	M.Sc./MPhil. (Computer Science)/ M.Sc./MPhil.(Software Engr.)	Nil	Nil	Nil	Nil
2016/2017 Session	M.Sc./MPhil. (Computer Science)/ M.Sc./MPhil.(Software Engr.)	Nil	Nil	Nil	Nil
2015/2016 Session	M.Sc. /MPhil. (Computer Science)/ M.Sc./MPhil.(Software Engr.)	1	Nil	Nil	Nil

Table 3: PhD. Computer Science Students' In-take

Session	Entry Qualification	Male	Female	Students With Grants/Bursaries	No Of Foreign Students
2017/2018 Session	M.Sc./MPhil. (Computer Science)	1	1	Nil	Nil
2016/2017 Session	M.Sc./MPhil. (Computer Science)	4	Nil	Nil	6
2015/2016 Session	M.Sc./MPhil. (Computer Science)	1	5	Nil	Nil

II. EVALUATION PROCEDURE

COMPOSITION OF THE EXPERTS PANEL

President:
- Pierre HALDENWANG, pierre.haldenwang@univ-amu.fr, Professor Emeritus at Aix-Marseille Université (Specialty: Physics, Mechanics). Expert for the department in charge of the evaluation of institutions (DEE), and for the department in charge of the evaluation of research (DER) of Hcéres.

Expert members:

- Catherine XUEREB, catherine.xuereb@inp-toulouse.fr, CNRS Research Director, (Specialty: Chemical Engineering), Vice President of Toulouse Polytechnic National Institut. Expert for the department of the evaluation of institutions (DEE) and for the department in charge of the evaluation of clusters of Higher Education and Research institutions (DECT) of Hcéres.

- Thibaud LECOMPTE, thibaut.lecompte@univ-ubs.fr, Assistant Professor at Université Bretagne Sud, habilité à diriger des recherches (Specialty: Mechanics des matériaux, eco materials, génie civil). Expert for the department in charge of the evaluation of programmes (DEF).

- Anass NAGIH, anass.nagih@univ-lorraine.fr, Professor at Université de Lorraine (Specialty: Computer Science). Expert for the department in charge of the evaluation of programmes (DEF) and for the Europe and international department (DEI) of Hcéres.

- Valentin LE BOEUF, valentin.le-boeuf@ens-paris-saclay.fr, Student Expert. Ecole Normale Supérieure Paris Saclay Graduate. (Specialty: Electrical Engineering). Expert for the department in charge of the evaluation of programmes (DEF) and for the Europe and international department (DEI) of Hcéres.

The Hcéres institution was represented by: Pr. Pierre COURTELLEMONT, Science Advisor

ON-SITE VISIT DESCRIPTION

— Date of the visit: May 22nd, 2019.

Organization of the visit: the visit took place on May 22nd on the NUC site, during one day. The different commitee meetings were achieved as follows:
Working session with team leaders: Faculty of Technology, Department of Computer Science and Engineering, PhD and MSc programmes

- Visit of facilities by video projection: building, laboratories, classrooms, computer facilities
- Interview with the teaching staffs (by videoconference)
- Interview with two industrial partners (by videoconference)
- Interview of the PhD and MSc students (by videoconference)
- 2dn Working session with team leaders (debriefing)
- Cooperation of study programme and institution to be accredited: perfect cooperation by all stakeholders, with the support of NUC team.

Before the comitee visit, several documents were provided to the experts:

- 2 self-evaluation forms

- Course description

- List of publications

- Alumni list

- Staff list

- Student handbook

During the visit, some more documents were supplied:
- Student enrolments list
- Photo shooting from facilities
- List of current PhD students, titles and supervisors

People met:

- Aderounmu G desola, Centre leader, Faculty Dean
- Oluwatope Ayodeji, Coordinator (Computer Engineering)
- Awoyelu Iyabo Odukemi, Coordinator (Computer Science)
- Adgunodo Rotimi Emmanuel, Coordinator (Software engineering)
- Olajubu Emmanuel Ajayi, Computer Science Head of Department
- Other Staff (All by Videoconferencing)
- Dr. A.I. Oluwaranti,
- Dr R.N. Ikono,
- Dr. D.F. Ninan,
- Dr. B.O. Akinyemi,
- Dr, M.L. Sanni,
- Dr. B.S. Afolabi, and
- Dr. K.C. Olufokunbi)

Partners and Alumni by videoconferencing (including Mike Olajide, Executive Director, Sidmach Technologies Nigeria Limited), Abraham Abati (Senior Engineer, Mainone)

Students by videoconferencing (around 15 students, no names)

III. PRESENTATION OF THE STUDY PROGRAMME

1 – PRESENTATION OF THE STUDY PROGRAMME

The department of Computer Science and Engineering of the University of Obafemi Awolowo, Ile-Ife, proposes a postgraduate programme in Computer Science that includes three masters of Science:
- M.Sc. Computer Engineering;
- M.Sc. Software Engineering;
- M.Sc. Computer Science.

The courses are structured into teaching units over 4 semesters.

The program offers both practical and scientific fundamental knowledge to allow graduates to be able to meet challenges posed by the new issues in computer systems.

The department of Computer Science and Engineering proposes also Master of Philosophy and PhD programmes in the same areas.

2 - PRESENTATION OF THE PROGRAMME'S SELF-EVALUATION APPROACH

A quite complete self evaluation procedure was carried out by the institution (and gathered in the document called "MSc_Accreditation_SEngr_CptSc_CptEngr.docx").

IV. EVALUATION REPORT

AREA 1 – THE POSITIONING OF THE DOCTORATE

The programme and the contents are rather generic and do not present any particular niche, as well as in terms of thematic orientations or in terms of excellence. Moreover, the search for a programme position particular in terms of thematic positions is seemingly missing. The practically 1-month internship is rather insufficient.

Area 1-1: The doctorate's distinct features and objectives are clearly defined

The objectives of the doctoral degree are very clear and can be described as follows:
- develop a framework for the training in the theoretical and practical aspects of computing;
- inculcate relevant ICT research and development skills;
- foster multi-disciplinary collaboration with academics in various areas of endeavours;
- foster collaboration with industry to design and develop affordable computing products, systems and services that respond to national objectives;
- train students to acquire appropriate skills in the development and deployment of computing products that address local problems, as well as meet international standards.

The visiting lectures by professionals allow them to stay in touch with the stakeholders and gradually evolve in accordance with the needs. In addition, the faculty board receives expectations from the industry and tries to adapt correspondingly.

Area 1-2: The positioning of the doctorate is consistent with its environment

The Ph.D. programme is well positioned and introduced in a relevant faculty that gathers a rich teaching body of academics with an appropriate core (given list of publications) of scientific production in known journals, The skill building is ensured through a comprehensive pedagogic programme. However, the duration of internship limited to 2 months is clearly insufficient. The explanation provided during the interviews is that the supervision time is currently limited to 5 (master and doctorate) simultaneously per lecturer.

There is evidence that the programme has launched several collaborations and exchanges with research organizations abroad (e.g. ICTP, Trieste, Italy). Funds are used to facilitate exchanges (e.g., double degree PhDs, academic exchange with Australia, France (Nancy), US, Canada, Côte D'Ivoire, and Senegal). Nonetheless, the policy about the international guidance is seemingly not clearly defined.

An efficient partnership with the bank that invested in the Cyber Security Lab is a real strategic success for ICT. Other domestic partnerships should be highlighted (and/or fostered) to indicate how a long-term financial stability of the programme can be ensured.

AREA 2 – ORGANIZATION AND MANAGEMENT OF THE DOCTORATE

> Excellent services and facilities are offered to the students and faculty, which include on-campus nursery and anti-harassment services; one can also add a sophisticated process of quality assurance. Further transparency is nonetheless requested in funding policies and the appropriateness of the conditions to carry out a PhD.

Area 2-1: Effective organization and management is in place for the doctorate

The Ph.D. programme is developed accordingly with three specific thematics: Computer Science, Computer Engineering and Software Engineering. A clear description is given in what concerns the contents of the programme modules, which includes the compulsory lectures and the area-specific curricula. The admission criteria for the targeted audience and the graduation criteria are well-exposed and appear transparently.

Even though the teaching group for every programme is provided with sufficient details, less has been supplied concerning the administrative team and the role and responsibilities of each team member. Student representation needs to be formalized. Detailed guidelines about generic routines such as particular exams, internships, exchanges, preparation for defense, criteria for submitting the work, evaluation procedures etc. needs to be deepened.

Some facilities are provided to the students and faculty which include on-campus nursery and anti-harassment services. There is a free access to the cyber security lab and the ICT library which is expected to be enlarged.
Students have a free access to the research activities such as training, conferences, e-libraries, academic exchanges etc.

A sophisticated quality assurance system is apparently in place according to the provided document. A separate department involved in quality assurance is in charge of keeping track of the various teaching data, and carries out a quality survey at the end of each semester.

Area 2-2: There is an explicit policy for recruiting and funding doctoral students, which is adapted to the PhD program

The main source of funding for PhD students are self-funded, especially for the international students. Less information has been provided elaborating on transparency in thesis funding policy closely aligned with the institution's scientific policy. Further information on the existing procedures and appropriateness of condition and financial resources for carrying out the PhD could be enlightened.

AREA 3 – SUPERVISION AND TRAINING FOR DOCTORAL STUDENTS

> Admission and graduation requirements for entering the ICT PhD programme are clearly set out. University has provided the students and the faculty staff with a service specifically involved in anti-bullying and anti-harassment.
> Explicit rules of supervising and follow-up procedures, reciprocal commitments of PhD students and the supervisor(s), measuring progress and preparation for employment are missing. The criterion for defense remains unclear; combat against frauds, plagiarism and corruption seems missing.

Area 3-1: The doctorate applies a strict doctoral student supervision and follow-up policy

University has provided staff and students with a service involved in anti-bullying and anti-harassment. While admission and graduation requirements are clearly set out, clearer contents can be supplied about the supervising rules and the follow-up procedures, about the reciprocal commitments between the PhD student

and his advisor(s), about the manner that permits to measure the thesis's progress and about the preparation for employment.

While university does encourage making use of Turnitin platform, it would be interesting to know how the institution combats fraud and corruption in relation to the doctorate.

Area 3-2: The doctorate offers diverse teaching and organizes supplementary events

It is clear that the PhD programme provides the students with the basic disciplinary teaching, as well as the "hard and soft" skills in Computer Science. Further details are nevertheless needed on how the doctorate programme develops some awareness of research ethics and scientific integrity. The institution invites visiting lecturers from the industry (sometime from its alumni) during the weekend. This way enables socio-economic partners to intervene in teaching and delivery.

Duration of thesis is clearly set out in the provided materials. However, re-enrolment at every year is less clear. Clearer and more explicit rules -and their fairness- for authorizing the defense of a doctoral students needs to be supplied.

AREA 4 – INTEGRATION OF DOCTORS INTO THE JOB MARKET

The integration seems quite smooth; mostly are staffs in other university and the others are either recruited or set up their own start-ups. However, no details have been provided. Data gathering and analysis remains inefficient and does not follow a systematic way. The alumni network needs to be improved.

Area 4-1: The doctorate includes mechanisms to promote the integration of doctors into the job market

Students have the possibility of communicating with the former graduates on two occasions: 1) annual alumni meetings and 2) those who deliver teaching at the university (e.g. during weekends). Together with the 1-month stage, both opportunities establish the main connection with the socio-economic environment. The final integration of the students into the job market is essentially academic (actually, most of the PhD students are already lecturers in other universities). But, some of the doctors would like to start their own companies.

Further details are required to demonstrate how doctorate promotes itself domestically, the mechanisms employed at the doctorate to evaluate the graduates and the match with the job market need.

Area 4-2: The doctorate has effective monitoring of the integration of doctors into the job market

Except for 16 cases reported, no detail has been provided on the presence of any graduate integration monitoring into the job market and any availability of alumni network.

Area 4-3: The data collected is analyzed, communicated and used

No information has been provided on how the doctorate programme collects data -and analyses them- about the employment of graduates and how this could incite the programme to promote itself domestically and at the international level.

V. CONCLUSION

STRENGTHS:

- Regional and domestic visibility
- Marked efforts to get closer to industry
- Some unique services such as nursery and anti-bullying services
- Existence of Security lab which is a distinguishing potential to be exploited

WEAKNESSES:

- Apparent lack of long/midterm industry collaborations ensuring durability of the programme strategies
- No scenario elaborated for measuring the student progress and for preparing to employment.
- The CyberSecu lab is an element that has not been exploited enough.
- The PhD defense criteria need to be published in a clearer manner.
- Student enrollment is decreasing in the recent years.

RECOMMENDATIONS:

1. As most of the doctoral students are already faculty members in other establishments, durable and long-term collaborations are hence established with the other regional academic institutions. A similar model needs to be developed with the industries and professional bodies with the possibility to adjust the spectrum with respect to the long-term needs of those markets.
2. In addition to the individual-based exchanges, the doctorate could establish partnerships with other international organizations (academic and professional) to secure (maybe through some bilateral funding) a regular and systematic exchanges for PhD student (eventually leading to double degree programs).
3. A documented set of guidelines for almost every single procedure and issue that a PhD student can be concerned with (from library membership to raising complaints etc) need to be established and communicated.
4. To overcome the downward trend in student in-take, the PhD programme could focus on several specific areas, in which a reputation of excellence (and maybe a recurrent funding) is easier to develop rather than on a large and diffuse spectrum of thematics.

CONCLUSION OF THE APPRAISAL COMMITTEE

The Experts Committee regrets that the visit to the ICT site at AOU University was impossible. The physical presence on site would have been a precious tool for clarifying the numerous issues that are still pending, even though the meetings in Abuja with our colleagues, leaders of the PhD programmes, were frank and fruitful. The Committee's members thank their Nigerian colleagues for the overall quality of these meetings and for their readiness to provide them with additional information, even though the present report indicates that certain issues need to be deepened.

In a general manner, the Committee found that the three ICT PhD programmes are well-supported by a faculty staff of high scientific level, which undoubtedly gives the PhD programme a real regional and domestic visibility. Even though some incentive actions towards industry are rolled out, the PhD programme essentially prepares the students to the academic job market. The ICT PhD programme possesses a wonderful tool for increasing its development: the Security Lab. Furthermore, the ICT PhD programme is inserted in the AOU University, which has developed precious services (nursery, anti-bullying prevention).

A point that has mainly concerned the experts is the overall downward trend in PhD. Student in-take. Moreover, none of the analysis about this feature has been presented to the Committee. The latter point could, by the way, call for a substantial improvement in the continuous process of PhD Programme self-assessment. Such a quality policy should include -at certain level- the students and the representatives of the potential job market.

To help their ICT colleagues, the Committee's members propose several points of recommendation. Even if the CyberSecu lab is a precious tool for developing long-term links with the socio-economic environment, the ICT PhD programme should first and foremost multiply the collaborations with industry. More precisely, the entrance within the ICT doctorates of the industrial job marked concerns should be carried out at various

levels: overall strategy, curriculum definition, research subjects, preparation to employment, etc.. Another point of improvement is the determination of clear PhD defense criteria, to be delivered to the students.

As a final consideration, the Committee's members would say their optimism about the fact that their Nigerian colleagues will quickly find how to solve the serious issue of the enrolment downward trend.

VI. COMMENTS OF THE INSTITUTION

AFRICA CENTRE OF EXCELLENCE
OAU-ICT-DRIVEN KNOWLEDGE PARK (OAK-PARK)
OBAFEMI AWOLOWO UNIVERSITY
ILE-IFE, NIGERIA

26th August 2019

Prof. François PERNOT
Directeur/Director
Département Europe et International
Europe and International Department
francois.pernot@hceres.fr

Dear Sir,

COMMENTS ON THE REPORT AND ON THE RECOMMENDATIONS MADE BY THE EXPERTS
(Ph,D. PROGRAMMES)

Thank you for the detailed report forwarded to my team on August 11th, 2019 on the above subject matter

Please find below our comments with respect to the above report.

The duration of the programme is limited to 2 months. It is to be noted that the Centre of Excellence is always supporting all students on internship for a period of two months. However, there is provision for students to continue with the internship for another four months but without financial support from the Centre of Excellence. An efficient partnership with the local partners such as Polaris Bank(formerly Skye Bank), Sidmach Technologies, TETFund (Sectoral partner) and World Bank that invested in the Cyber Security Lab is a real strategic success for ICT. With the above mentioned partners especially the domestic partners, a long-term financial stability of the programmes can be ensured.

There exists one administrative team in the Department saddled with the following responsibilities: processing different postgraduate forms, processing of postgraduate student results, oral examination results processing and processing of theses. Furthermore, after the course work, a Ph.D. student is expected to present a seminar (Concept) in the Department, followed by a qualifying examination, approval of panel of examiners through approval of Form A, progress seminar, and finally oral examination

The main source of funding for PhD students (National) are self-funded, however, all postgraduate students receive support for yearly conference attendance, internships and various ICT workshops.

For the international students, there exist scholarship of $3600 per session ($2000 for tuition, and $1600 for stipends), in addition free hostel accommodation provided for all international students, bench fee is also free, research tools are also available for all students.

University has provided staff and students with a service involved in anti-bullying and anti-harassment. While admission and graduation requirements are clearly set out, clearer contents can be supplied about the supervising rules and the follow-up procedures, about the reciprocal commitments between the PhD student and his advisor(s), about the manner that permits to measure the thesis's progress and about the preparation for employment.

While the University does encourage making use of Turnitin platform, there exists a disciplinary committee at the management level to handle fraud and corruption in relation to the doctorate degree programme.

On the issue that some Courses are generic, it is to avoid quick obsolescence of those courses if they are attached to some specific software products when those products are no longer in the market. But the course lecturers or instructors teach the principles using current products and packages as case studies.

ACCREDITATION DECISION

Ph.D. Computer Science and Engineering

Obafemi Awolowo University (OAU), Ile-Ife, Nigeria

September 2019

SCOPE OF THE ACCREDITATION GRANTED BY HCÉRES

Hcéres has built its evaluation process based on a set of objectives that Higher Education Institution must pursue ton ensure recognised quality within France and Europe. These objectives are divided up into six fields among which are the accreditation criteria.

As for the « External Evaluation Standards », the accreditation criteria have been specifically designed for foreign HEI. The accreditation criteria were adopted by the Board on June 2016 and are available on the Hcéres website (hceres.fr).

The accreditation committe, meeting his accreditation decision, has wholly taken into account the final evaluation report of the HEI. This accreditation decision is the result of a collegial and reasoned process.

The accreditation decision issued by Hcéres shall not grant any rights watsoever, wether in France or abroad. The decision to accredit an institution confers an accreditation label and does not infer recognition in France of the qualifications issued by the accredited institution. The Hcéres accreditation process therefore has no impact on the qualifications recognition process in France.

FULFILLMENT OF THE ACCREDITATION CRITERIA

AREA 1: THE POSITIONING OF THE DOCTORATE

Accreditation criterion

The positioning, the content and the objectives of the doctorate are clearly defined. Its interactions with the stakeholders (lead institution(s), foreign partners, socio-economic environment) are formally set out and effective. Its links with the research units and the institution's scientific policy are effective.

Criterion assessment

The programme and the contents are rather generic and do not present any particular niche, as well as in terms of thematic orientations or in terms of excellence. Moreover, the search for a programme position particular in terms of thematic positions is seemingly missing. The practically 1-month internship is rather insufficient.

AREA 2: ORGANIZATION AND MANAGEMENT OF THE DOCTORATE

Accreditation criterion

The doctorate's organisation and management are clearly defined and rely on material and human resources adapted to the requirements of programmes at ISCED level 8. Internal quality assurance mechanisms are in place and effectively used in order to improve continuously the doctorate. The doctoral students recruiting is formally set out, their funding is fair and sustainable.

Criterion assessment

Excellent services and facilities are offered to the students and faculty, which include on-campus nursery and anti-harassment services; one can also add a sophisticated process of quality assurance. Further transparency is nonetheless requested in funding policies and the appropriateness of the conditions to carry out a PhD.

AREA 3: SUPERVISION AND TRAINING FOR DOCTORAL STUDENTS

Accreditation criterion

A strict policy of supervising and follow-up of doctoral students is set. Doctoral students have access to various teaching and professional trainings and take part in scientific/professional actions. Explicit rules are defined concerning the thesis duration and defence. Measures to combat fraud, plagiarism and corruption are applied within the doctorate.

Criterion assessment

Admission and graduation requirements for entering the ICT PhD programme are clearly set out. University has provided the students and the faculty staff with a service specifically involved in anti-bullying and anti-harassment.
Explicit rules of supervising and follow-up procedures, reciprocal commitments of PhD students and the supervisor(s), measuring progress and preparation for employment are missing. The criterion for defense remains unclear; combat against frauds, plagiarism and corruption seems missing.

AREA 4: INTEGRATION OF DOCTORS INTO THE JOB MARKET

Accreditation criterion

The doctorate implements systems to promote the doctorate and the integration of doctors into the job market. The integration monitoring and analysis are effective and used to perform the continuous improvement of the doctorate.

Criterion assessment

The integration seems quite smooth; mostly are staffs in other university and the others are either recruited or set up their own start-ups. However, no details have been provided. Data gathering and analysis remains inefficient and does not follow a systematic way. The alumni network needs to be improved.

ACCREDITATION DECISION

Considering the accreditation criteria analysis detailed above, the accreditation commission takes the following decision:
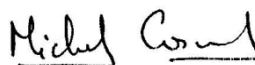
"Five-year unreserved accreditation decision"

and draws attention to the various recommendations made by the committee of experts in its evaluation report:

1. As most of the doctoral students are already faculty members in other establishments, a durable and long-term collaborations are hence established with the other regional academic institutions.
2. A similar model needs to be developed with the industries and professional bodies with the possibility to adjust the spectrum with respect to the long-term needs of those markets.
3. In addition to the individual-based exchanges, the doctorate could establish partnerships with other international organizations (academic and professional) to secure (maybe through some bilateral funding) a regular and systematic exchanges for PhD student (eventually leading to double degree programs).
4. A documented set of guidelines for almost every single procedure and issue that a PhD student can be concerned with (from library membership to raising complaints etc.) need to be established and communicated.
5. To overcome the downward trend in student in-take, the PhD programme could focus on several specific areas, in which a reputation of excellence (and maybe a recurrent funding) is easier to develop rather than on a large and diffuse spectrum of thematics.

SIGNATURE

For HCERES and on behalf of

Michel COSNARD,

President

Date: Paris, September 4th, 2019

The evaluation reports of Hceres
are available online : www.hceres.com

Evaluation of clusters of higher education and research institutions
Evaluation of higher education and research institutions
Evaluation of research
Evaluation of doctoral schools
Evaluation of programmes
International evaluation and accreditation