

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

REGIONAL CONFERENCE OF HIGHER EDUCATION
INSTITUTIONS OF WESTERN REGION

3rd CYCLE TRAINING OFFER
FOR THE PURPOSE OF OBTAINING A DOCTORATE
FOR THE 2024/2025 ACADEMIC YEAR

Quality of the higher education establishment:

Focal point" establishment ☐

Partner" establishment ☒

Doctoral Training Project by Sector

Establishment	Domain	Branch(es)
University of Chlef	AUMV	Architecture

Supporting structures for the doctoral training project

<input checked="" type="checkbox"/> Research Laboratory Code(s): -----C0823000 -----
<input type="checkbox"/> Other (Research center or unit):-----

Type of Doctoral School

Type	
<input checked="" type="checkbox"/>	Regional doctoral school
<input type="checkbox"/>	National doctoral school

Head of the CFD Doctoral Training Committee

Mr. KARI Nabil

1- Domiciliation of doctoral training :

Establishment	Faculty / Institute	Department
Hassiba Benbouali University of Chlef (HBUC)	Faculty of Civil Engineering and Architecture	Architecture

2- Head of the CFD doctoral training committee :

(Professor, MCA)

Full name: KARI Nabil

Grade: MCA

Tel: 07 76 47 23 08

Fax : / **E - mail :** n.kari@univ-chlef.dz

3- Current doctoral training courses in the sector

Are there any doctoral courses in progress? YES ☐ NO ☒

If yes, please complete the following table:

Year of approval	Total number of registrants	Number of doctoral students who have defended	Number of PhD students who did not defend their thesis
/	/	/	/

4- Doctoral training objectives :

✓ The objectives of this doctoral program:

1. Advance knowledge by bringing new perspectives, theories, and methodologies to the field of architecture through original research.
2. Enable candidates to specialize in specific areas of architecture, such as intelligent architecture and sustainable design.
3. Encourage critical thinking by developing the ability to critically analyze existing architectural theories, practices and methodologies.
4. Encourage interdisciplinary collaborations with other disciplines, such as engineering, environmental sciences, sociology and anthropology, to tackle complex architectural challenges.
5. Adopt a professional approach, preparing candidates for careers in teaching, research or professional practice as architects, university professors, consultants or decision-makers.
6. Encourage innovation by fostering creativity and innovation in architectural design, construction and urban planning.
7. Improve written and oral communication skills to present research results and teach, or even address the public.

✓ The link with strategic and priority areas:

This offer of doctoral training in architecture is linked to the strategic objectives and priorities set by high authorities, and in particular those linked to Industry 4.0 . These involve focusing research efforts on areas such as intelligent architecture, sustainable design, resilient buildings, affordable housing solutions, heritage preservation or innovative building materials and techniques. By aligning doctoral research with these strategic priorities, the field can help address pressing societal and environmental challenges while advancing architectural knowledge and practice.

5- Actual capabilities: human and material resources deployed

✓ **Human skills mobilized :**

The human resources mobilized to support the development and completion of the proposed doctoral school project are as follows: Professors and Associate Professors: experienced members of the teaching staff who provide future candidates with high-quality supervision and expertise in the field of architectural research; Lecturers: researchers or experts in the field invited to give lectures, workshops or seminars related to the topics proposed in this training offer, in order to provide additional insight and offer the possibility of networking; Interdisciplinary collaborators : researchers from other disciplines who bring complementary expertise and perspectives to enrich the doctoral school project; Members of the Architecture Department Committee and the Scientific Advisory Board of the Faculty of Civil Engineering and Architecture: all the members of these two scientific bodies helping to bring diverse perspectives to future candidates and providing them with support throughout their course; Librarians : Professionals from the Faculty of Civil Engineering and Architecture's library and the university's central library help future candidates access relevant literature, databases and resources needed for literature reviews and research; Laboratory technicians: personnel involved in experimental design, data collection and laboratory techniques; IT support : Technicians who provide assistance with software, programming, data management and technical problem solving; Economic sector experts: collaborators who can provide practical insight, access to resources or opportunities for collaboration; Administrative staff: contributing to logistics, programming and other administrative tasks related to the PhD program and research project.

✓ **Material resources deployed :**

In this doctoral school project, the resources deployed include Architecture, City and Environment research laboratory supplies, research tools, access to academic databases, computers, specialized software, and possibly funding for conferences or fieldwork. These resources and facilities are designed to support future candidates in advancing their research.

6- Doctoral Training Committee:

Last name and First name*	Grade	Branch	Speciality	Establishment	Quality (supervisor, thesis director, laboratory director, VDPG/DAPG)
KARI Nabil	MCA	Architecture	Architecture	UHBC	Manager
MAKHLOUF Ali	Pr	GTU	Urban planning and environment	UHBC	Thesis supervisor, Director of supporting laboratory.
EZZIANE Karim	Pr	Civil engineering	Civil engineering	UHBC	VDPG

The first name and surname of the person in charge of the training program are placed in the first position. He or she must be from the same field as the doctoral training program.

(*)CVs attached in appendix 1.

7- Doctoral thesis supervision team :

Last name and First name	Grade	Branch	Speciality	Establishment	Number of theses under supervision	Number of theses to be supervised
KARI Nabil	MCA	Architecture	Architecture	UHBC	00	02
MAKHLOUF Ali	Pr	GTU	Urban engineering	UHBC	00	02

(*) Supervision team = Thesis directors listed in table 6 (CFD).

8- Proposed thesis topics :

Proposed thesis topic	Thesis subject	Specialty of thesis subject	Thesis Director
Applicability and integration of Intelligent Architecture principles in existing buildings; assessment, constraints and potential.	Architecture	Architecture	KARI Nabil
Problem of integration into the natural landscape; development of a suitable architectural model for the rural housing program in Algeria.	Architecture	Architecture	KARI Nabil

Enhancing and protecting the colonial architectural heritage	Architecture	Architecture	MAKHLOUF ALI
Morphological and decorative characterization of the architectural heritage of the town of Ténès	Architecture	Architecture	MAKHLOUF ALI

For each thesis topic, please complete the corresponding research plan (see Appendix 2).

9- Training courses entitling participants to take part in the competitive entrance examination :

The 3rd cycle training offer corresponds to a branch of study involving all the specialties of the same branch of study, before or after harmonization, offered on a national scale.

10- Knowledge-building training program:

Activities	Semester 1	Semester 2
Specialty reinforcement courses related to doctoral training	Course title and timetable	Course title and timetable
Smart building	Architecture and new technologies.	Intelligent architecture: a question of applicability in Algeria.
Architectural quality	Construction quality; Players and issues.	Quality of construction: identity aspect.
Research methodology	Introduction to research paradigms.	Architectural research Methods
Sociology and anthropology of architectural space	Introduction to the question of space in sociology	Anthropology of architectural space
Scientific publication	Introduction to scientific publishing	Scientific publication process
Architectural heritage	General information on the protection of architectural heritage	Rehabilitation, restoration and enhancement of built heritage; case study

Important information:

- The courses offered are part of the teaching responsibilities of research professors.

- The number of hours per week for knowledge enhancement courses is set at two (02) hours. These courses can be organized by specialty or grouped by field.
- Additional training is provided in accordance with current regulations.
- The carnet de doctorant (doctoral student's notebook) is compulsory for validating prior learning and for tracking doctoral students, and will be introduced into the PROGRES digital platform.

11- Knowledge-building training participants :

Name and surname	Quality	Type of intervention (course, workshop, conference, etc...)
KARI Nabil	Associate	Courses, workshops and conferences
MAKHLOUF Ali	Associate	Courses, workshops and conferences
AZZOUZI Amar	Associate	Courses, workshops and conferences
SOUILAH Yacine	Associate	Courses
FARADJI Khalid	Associate	Courses, workshops and conferences
BOUSMAHA Said	Guest	Courses

(*) Visiting professor, associate professor, lecturer, ...

12- Partnership agreements: national and international agreements :

(All copies of agreements must be enclosed)

- ❖ Partnership agreement between the partner institutions involved in the doctoral school :
(Higher education establishments)

- ❖ **Partnership agreement linking the establishment to socio-economic partners, administrative bodies, local authorities, etc.** (in accordance with note n°242/SG/2024 of February 28, 2024).

1. Partnership agreement between the Hassiba Benbouali University of Chlef and the Department of Culture and Arts of the Wilaya of Chlef dated 05 October 2022, valid until 05 October 2027 (05 Years). (See appendix 03)
2. Partnership agreement between the Hassiba Benbouali University of Chlef and the Tourism and Crafts Department of the Wilaya of Chlef, dated November 10, 2021, valid until November 10, 2024 (03 years). (See appendix 03)

3. Partnership agreement between the Hassiba Benbouali University of Chlef and the Public Works Department of the Wilaya of Chlef, dated May 08, 2024, valid until May 08, 2029 (05 years). (See appendix 03)

❖ **Partnership agreement between the company and a research center** (in accordance with note N°242/SG/2024 of February 28, 2024)

.....

13- Training and support structures :

❖ Research laboratory :

Laboratory name	Laboratory Manager
Architecture, City and Environment (AVE)	Prof. MAKHLOUF Ali

❖ Other structures :

Structure name	Manager
/	/

14- Is doctoral training part of your institution's training menu?

No ☒ Yes ☐

If yes, attach copy of bylaws.

Research plans

Subject 01:

Applicability and integration of intelligent architecture principles in existing buildings; assessment, constraints and potential.

Dr. KARI Nabil

✓ Research context :

The principles of intelligent architecture offer promising avenues for improving the functionality, efficiency and sustainability of buildings in Algeria. However, their application to existing buildings presents unique challenges and opportunities. This research aims to provide a comprehensive review of the evaluation of smart architecture principles in the context of existing buildings. It will provide a better understanding of how smart architecture principles can be effectively applied to existing buildings to improve their performance, sustainability and user experience. By synthesizing existing knowledge and identifying gaps in the literature, this study will inform future research directions, practical applications and policy interventions in the field of architectural adaptation and building renovation. Assessing the principles of intelligent architecture in existing buildings is essential to realizing their full potential in improving building performance and meeting sustainability challenges. Through an in-depth review of the literature, this research aims to provide valuable information and recommendations for researchers, practitioners and policy-makers involved in retrofitting existing buildings.

✓ Summary and keywords:

Abstract: This research explores the feasibility and benefits of integrating smart architecture principles into existing buildings in the case of Algeria. It investigates the challenges, constraints and potentialities associated with retrofitting buildings with smart technologies to improve sustainability, efficiency and occupant comfort. Through an in-depth review of the relevant literature, case studies and interviews with experts, this study aims to provide an insight into the practical implementation of smart architecture in the context of already-built environments.

The proposed topic aims to contribute to the body of knowledge on intelligent architecture by providing an in-depth assessment of its applicability and integration in existing buildings. It offers valuable insights to architects, engineers, policy makers and other stakeholders involved in transforming built environments towards greater sustainability and efficiency.

Key words: Intelligent architecture; applicability of intelligent architecture principles, constraints and potentialities of intelligent architecture integration; existing buildings.

Subject 02:

Problem of integration into the natural landscape; development of a suitable architectural model for the rural housing program in Algeria.

Dr. KARI Nabil

✓ Research context :

Integrating rural housing into the natural landscape is an essential aspect of sustainable architecture, particularly in regions like Algeria where rural communities are often faced with challenges related to housing adequacy, environmental conservation and cultural preservation. This research aims to explore the complexities of the problem of integrating the natural landscape and to propose an architectural model adapted to the unique socio-cultural and environmental context of rural Algeria. The development of a suitable architectural model for Algeria's rural housing program has significant implications for addressing housing shortages, improving living conditions and promoting sustainable development in rural areas. By integrating insights from architectural theory, environmental science and cultural anthropology, this research aims to contribute to the creation of context-appropriate housing solutions that enhance the resilience, livability and cultural identity of rural Algerian communities. The problem of integrating the natural landscape presents both challenges and opportunities for the development of rural housing in Algeria. Through interdisciplinary research and community engagement, this study seeks to develop an architectural model that not only meets the practical needs of rural residents, but also fosters a deeper connection between architecture, nature and culture in the built environment.

✓ Summary and keywords:

Abstract: This research examines the challenges and opportunities associated with integrating architectural structures into the natural landscape of rural Algeria. Focusing on Algeria's unique environmental, cultural and socio-economic context, the study aims to develop a bespoke architectural model that respects and enhances the natural environment while meeting the needs of rural communities. Through a multi-disciplinary approach combining architectural design principles, landscape ecology, cultural studies and community engagement, this research aims to propose a sustainable, context-sensitive framework for rural development in Algeria.

This research aims to bridge the gap between architectural theory and practice by proposing a contextual framework for the integration of natural landscapes in rural Algeria. By engaging with local communities, policy-makers and practitioners, it seeks to foster sustainable development that respects the cultural and environmental heritage of the Algerian countryside.

Key words: Natural landscape; architectural model; rural housing; rural architecture; rural housing program; landscape integration.

Subject 03

Title : Enhancing and protecting the colonial architectural heritage in Chlef city center

Prof. MAKHLOUF Ali

✓ **Research context :**

The town of Chlef, formerly El Asnam before 1980, is one of the capital cities of the Ouarsenis region. The town is located in a highly seismic region, and has experienced several earthquakes (1922, 1934, 1954 and 1980). The town was rebuilt after 1954 by French architects, and most of the existing colonial buildings were constructed after the earthquake. This heritage, in addition to its unique architecture, has demonstrated its ability to withstand earthquakes, the fact that it suffered no degradation after the 1980 earthquake. The aim of this project is to study and analyze a number of colonial buildings, their architecture, style and construction materials. The aim is also to see how old buildings, and in particular the buildings studied in the town of Chlef, were able to withstand the earthquake, so that we can make better use of our knowledge and expertise. The study also looks at the regulations in force to protect and promote heritage.

✓ **Summary and keywords:**

Summary: Algeria has a rich urban and architectural heritage. These include Roman architectural heritage, Arab-Muslim architectural heritage, Ottoman architectural heritage and, above all, colonial architectural heritage. However, urban policies have largely focused on urban sprawl and neglected this heritage, particularly that of the central urban fabric. Chlef (or El Asnam before 1980 and Orléansville in colonial times) is the name of an Algerian town located 200 km east of Algiers. The town was hit by an earthquake on September 9, 1954 and was partially destroyed. Boasting a rich colonial architectural heritage, the town of Chlef boasts a number of famous buildings constructed after the 1954 earthquake and which survived the 1980 earthquake. These include the École des Ponts et Chaussées and the Ensemble Architectural du Centre Albert Camus, now renamed Larbi Tebessi. Preserving the architectural heritage of the past has been a priority for the Algerian state since 1962. Like all Algerian cities, Chlef has undergone urban renewal and transformation, and its architectural heritage has been severely affected. Integrating colonial architecture into the urban fabric is an integral part of heritage conservation. Legislation for the protection and conservation of architectural heritage has been drawn up, along with planning instruments and action programs within the framework of city policy. Today, the center of Chlef has aged too much, and the heritage of the city's dilapidated built heritage is suffering from deterioration and demolition. The aim of this project is to enhance and protect the heritage of Chlef's town center. An exhaustive analysis of the architecture of a building that withstood the 1980 earthquake will be detailed and published. The study will also examine the situation of colonial heritage and the application of current heritage protection regulations.

Key words: heritage, enhancement, protection, regulations, city of Chlef.

Appendix 5: Summary sheet

ملحق بالقرار رقم المؤرخ في
والمتضمن تأهيل جامعة لضمان التكوين لنيل شهادة الدكتوراه
ويحدد عدد المقاعد البيداغوجية المفتوحة بعنوان السنة الجامعية 2024-2025

Domain	Channel	Head of department (Doctoral training)	Specialties	Number of teaching places by specialty	Total (Sector)

Appendix no. 6: Opinions and visas of administrative and Scientific Bodies

Signature of doctoral program coordinator :

CSF (faculty) or CSI (institute) or CSD (school)

Notice and visa:

Date :

Laboratory council or other structures

Notice and visa:

Date :

Head of School

Opinion and visa of the Head of School:

Date :