جَامِعَةُ دَارِ الحِكْمَة
DAR AL-HEKMA UNIVERSITY

ARCHITECTURE

Master's of Architecture Program

WHY THIS MASTER'S PROGRAM ?

Overview

Architecture is first and foremost about dwelling on the earth. In an era in which earth is facing major transformations due to climate change, pollution and resource exhaustion, the architecture profession should also evolve to respond to these changes.

In fact, architecture, and more generally, the construction industry bear a large share of the responsibility in the overall deterioration of the environment.

However, as is shown by countless successful examples of sustainability orientated architecture in the last decade, architecture could also hold a major role in mitigating environmental degradation and maintaining the livability of our built environments through adaptation strategies.

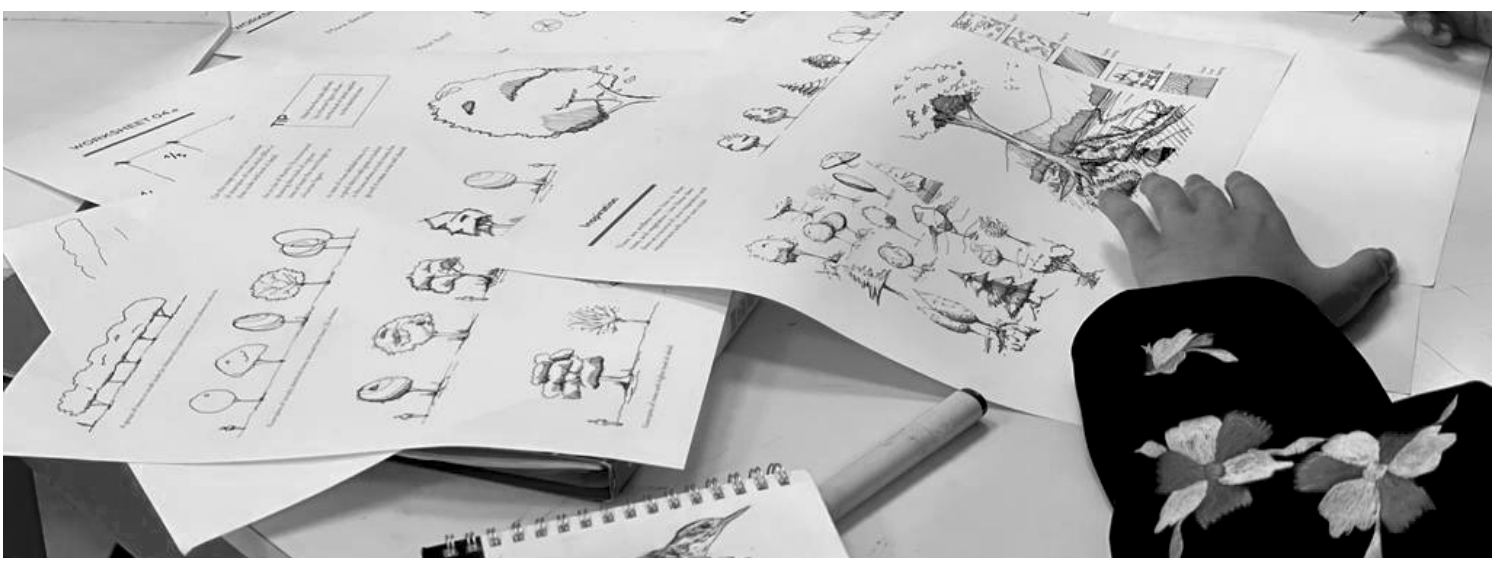
It is in this light that the Architecture Department at Dar Al-Hekma wishes to take its responsibilities in this regard and propose The Architecture Department's Master of Architecture program has been established to contribute to develop the knowledge and skills of architectural professionals to prepare them to design sustainable bioclimatic architecture and to optimize the ecological performance of buildings.

The Master's program equips students with the principles and methods of bioclimatic architectural design and the technical knowledge and skills—including the use of proper simulation software—to assess and optimize the performance of buildings in terms of energy and material consumption, greenhouse gas emissions and the quality of indoor environments.

THE ARCHITECTURE DEPARTMENT

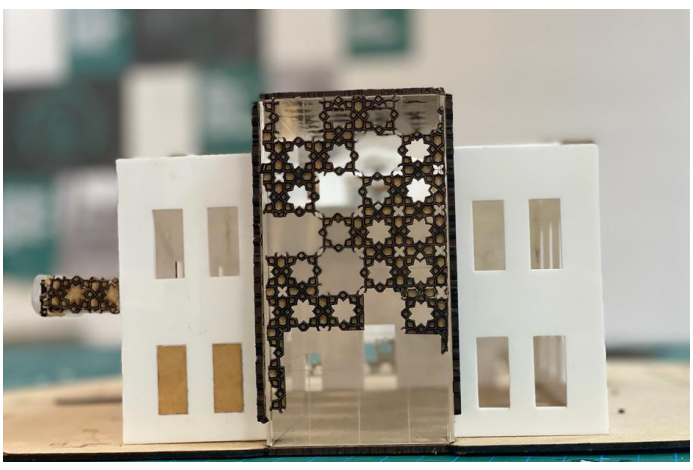
The Department Mission

The Architecture Department aims at graduating “creative professionals equipped with the necessary design, research and leadership skills in order to contribute to the catering and production of more sustainable built environments.”



A Brief History

In 2011, Dar Al-Hekma University founded the Architecture Department, which, along with the Fashion Department, joined the Visual Communications and the Interior Design departments in the Hekma School of Design and Architecture. Its Bachelor of Architecture program was developed in collaboration with the University of Colorado, Denver.



Its impactful entrance in the architectural education scene in Jeddah has been widely recognized. In 2018, the department launched its Master of Architecture program.

In 2021-2022, the Architecture Department engaged in a five-year review of its programs. This led to a change in the direction of the Master of Architecture in the direction of specialization. Hence, its focus settled on bioclimatic architecture and the design of ecological buildings.

In the last decade the Architecture Department has graduated 323 students and presently has 104 students at master’s and bachelor’s levels.

Faculty

Since its inception, the Architecture Department aimed to have a wide diversity of faculty members. The international diversity of its faculty, as well as that of the universities where they studied, offer students exposure to a rich variety of architectural cultures. This provides the students with an opening to the world and to multiple ways of approaching architecture.

In its history, the Architecture Department has hosted faculty from different nationalities, with degrees from leading universities in USA, UK, Europe, Australia, East and South Asia and the Middle East.

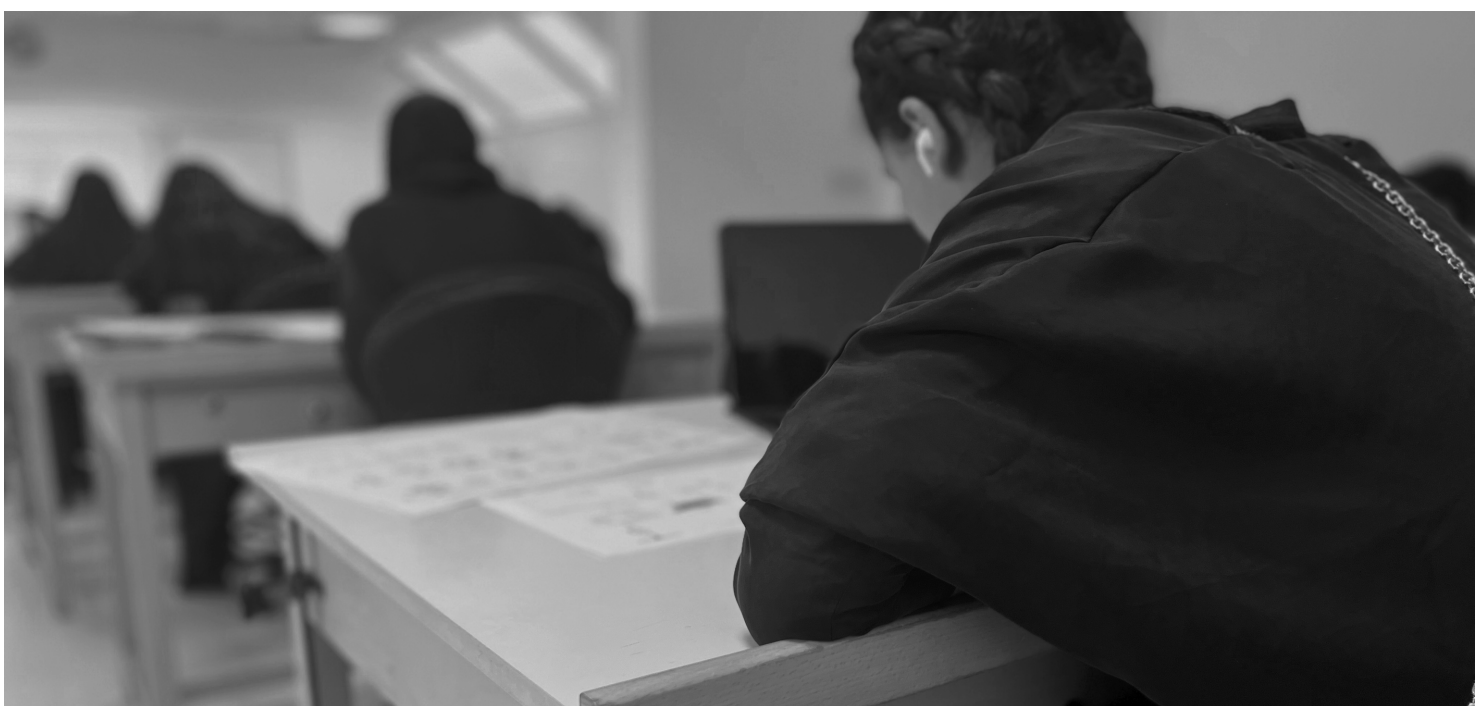
Our faculty's teaching and research interests vary from a focus on architecture and design theories to that on building technologies, digital technologies, construction management and professional practice, built heritage conservation, urban and sustainability issues.

Faculty members have different ranks ranging from professors to lecturers and cater to the teaching needs of the Bachelor's and Master's programs. They organize and implement a wide diversity of out-of-class teaching activities and are heavily involved in the community life of the department.

Facilities

The wing of the Architecture Department contains architectural studios, classrooms, digital labs, a Model Shop, a Materials' Library room, faculty and staff offices and design jury spaces. Other facilities accommodated on the main campus of DAH include a library, classrooms, a printing lab, and a resource room.

Soon, a new Imnovation Lab will start operating on campus to support innovators and entrepreneurs seeking to develop and produce prototypes.



THE MASTER'S PROGRAM

Program Mission

To graduate sustainability-committed and innovative professionals able to produce adept climate-responsive design solutions to the challenges of the ecological transition in architecture.

What would you able to do ?

- Outline a variety of bioclimatic and green architectural design principles that will allow for a response to ecological challenges in the architectural field.
- Discuss a diversity of innovative technologies that will raise the ecological performance of buildings.
- Examine critically stakeholders' discourses on sustainable architecture and urbanism and identify appropriate bioclimatic and ecological approaches to specific contexts.
- Analyze contextual, social and environmental factors, identify challenges to socio-ecological transitions at multiple spatial scales, and use a diversity of methodological approaches.
- Use relevant analysis and simulation tools to assess a building's ecological performance at the level of its life cycle, energy performance and indoor environmental quality.
- Develop innovative bioclimatic architectural designs to answer contemporary social and environmental challenges.
- Communicate bioclimatic architecture design solutions efficiently and creatively.
- Demonstrate a professional attitude with a propensity for independence, curiosity and collective initiative.
- Demonstrate a strong commitment to sustainability at both social and ecological levels.

Plan of Study

	MASTER IN ARCHITECTURE Specialized in Bioclimatic Architecture and Ecological Buildings	42
CORE COURSES		
SEMESTER 1		
MARC 1311	Socioecological transition, climate responsiveness and circular metabolism	3
MARC 1321	Principles of bioclimatic architecture	3
MARC 1331	Buildings' life cycle analysis	3
MARC XXXX	Program Elective	3
SEMESTER 2		
MARC 1332	Passive and Net-Zero Energy buildings: principles and tools	3
MARC 1333	Sustainable construction technologies for green and bioclimatic architecture	3
MARC 1334	Indoor Environmental Quality	3
MARC XXXX	Program Elective	3
SEMESTER 3		
MARC 2341	Capstone Research	3
MARC 2442	Capstone Project Studio 1	4
MARC XXXX	Program Elective	3
SEMESTER 4		
MARC 2443	Capstone Project Studio 2	4
MARC 2451	Internship	4
ELECTIVE COURSES		
MARC 1335	Buildings' Informatics	3
MARC 1336	Daylight in Buildings	3
MARC 1312	Selected Topics in Bioclimatic Architecture and Environmental Design	3
MARC 1352	Construction Management	3
MARC 1322	Sustainable Buildings' Certification Systems	3
ADDITIONAL SPECIAL COURSES		
MARC 1661	Additional Support Module for Students with Interior Design or Civil Engineering Background	+6

Admission Criteria

Programs	**Master of Architecture**
Requirements	Pass Interview
Bachelor GPA	3.75 out 5
TOEFL Score	550
Required Bachelor Degree	A Bachelor Degree in Architecture, a Bachelor Degree in Interior Architecture or a Bachelor Degree in Interior Design
Other Admission Requirements	Digital Portfolio

CAREER PROSPECTS

The Master's of Architecture would mainly allow graduates:

- To take higher responsibilities as architectural designers and project managers in architectural firms and offices.

- To act as an independent consultant in architectural sustainability, providing tailored consultancy services to these firms and offices.

- To join as highly skilled professionals specialized local and national public institutions working on issues of sustainability in the frame of Vision 2030.

- To become entrepreneurs and developers in a growing market where ecologically sensitive buildings are in increasing demand.

- To join local and international research units working on building sustainability.

- To seek a PhD degree in the field of architecture.

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