DAR AL-HEKMA UNIVERSITY

# WE ARE ARCHITECTURE

# MASTERS PROGRAM

جامعة دار الحكمة
١٤٢٠
1999
DAR AL-HEKMA UNIVERSITY

MISSION

MISSION MISSION MISSION

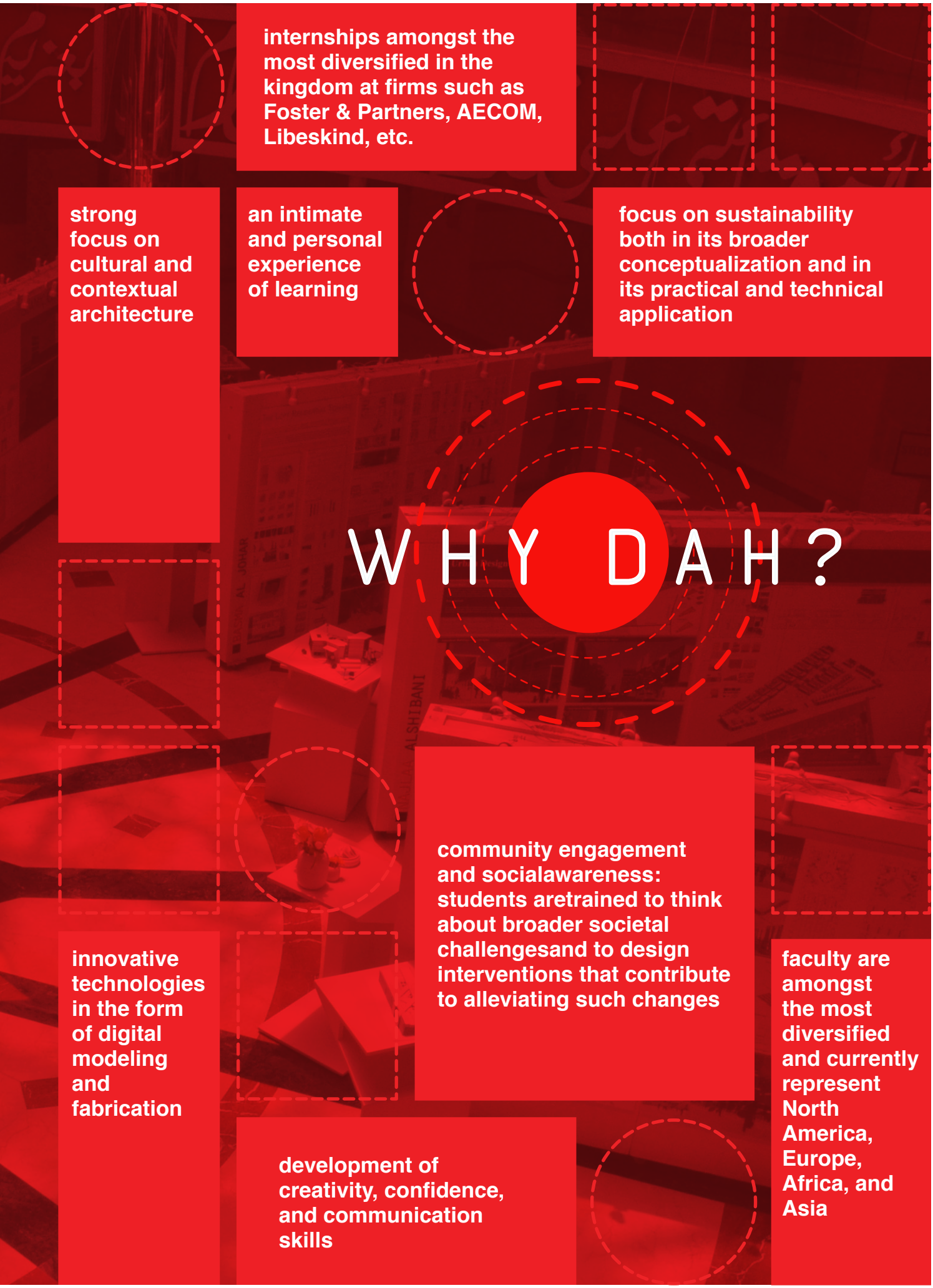
# OUR VISION

The Master of Architecture Program provides the **knowledge** and **skills** required to graduate **professionals** who **value** and **advocate** for the built environment and are able to **contribute** to the body of knowledge of architecture.

By incorporating **integral design principles** throughout the curriculum and by linking **theory** with **practice** and **advanced digital technologies**, our aim is to create **stimulating** and **holistic environments** that are environmentally, culturally and economically **vibrant.**

# OUR PROGRAM

The Master's of Architecture (MArch) program at Dar Al-Hekma is a **two-year professional program** that broadens the scope of architectural studies. The program is based on a **holistic approach** towards architectural design integrating multiple dimensions of the built environment. The graduates of the MArch Program are able to **connect** different domains of knowledge and **develop** independent **inquiry**, **creativity** and **responsibility**, as they respond to **technological**, **ecological**, **economic** and **socio-cultural** dimensions of the built environment. The electives in the program have been **clustered** to give concerted knowledge in the following domains: **Realestate Development**, **Building Technology** and **Heritage and Conservation.**



# WHY DAH?

internships amongst the most diversified in the kingdom at firms such as Foster & Partners, AECOM, Libeskind, etc.

strong focus on cultural and contextual architecture

an intimate and personal experience of learning

focus on sustainability both in its broader conceptualization and in its practical and technical application

community engagement and socialawareness: students aretrained to think about broader societal challengesand to design interventions that contribute to alleviating such changes

innovative technologies in the form of digital modeling and fabrication

development of creativity, confidence, and communication skills

faculty are amongst the most diversified and currently represent North America, Europe, Africa, and Asia

# OUR DEPARTMENT

## OUR FACULTY

### Dr. Hana Motasim Mahmoud Ali
**Assistant Professor**

• EngD (Doctor of Engineering), Katholieke Universiteit Leuven, Belgium, 2012
• MA, Human Settlements, Katholieke Universiteit Leuven, Belgium, 2006
• BSc. Architecture, University of Khartoum, Sudan, 2003

### Dr. Ayse Yucel
**Assitant Professor**

• PhD, Architectural Design, Istanbul Technical University, Turkey, 2011
• MSc, Architectural Design, stanbul Technical University, Turkey, 1991
• BArch, Architecture, stanbul Technical University, Turkey, 1987

### Dr. Abdulaziz Banawi
**Assistant Professor**

• PhD (Doctor of Philosophy in Civil Engineering), Construction Management and Sustainability, University of Pittsburgh, USA, 2013
• MSc, Construction Management, Florida Institute of Technology, USA, 2008
• MSc,Engineering Management, Florida Institute of Technology, USA, 2008
• BA. Architecture, King Abdulaziz University, KSA, 2003

### Dr. Ahmed Alaidarous
**Assistant Professor**

• PhD (Doctor of Philosophy in Civil Engineering), Technologies of Architectural Conservation of Earthen Heritage Buildings, Universitat Politecnica de Valencia, 2016
• MSc, Architectural Conservation, Scottish Centre for Conservation Studies, University of Edinburgh, Britain, 2011
• BA. Architecture, King Abdulaziz University, KSA, 2007

## Dr. Ammar A Naji
**Assistant Professor**

• PhD (Doctor of Philosophy), Urban & Regional
Planning, University of Florida, USA, 2016
• MBA, Leadership, University of Nebraska, USA, 2007
• BA, Urban & Regional Planning,
King Abdulaziz University, KSA

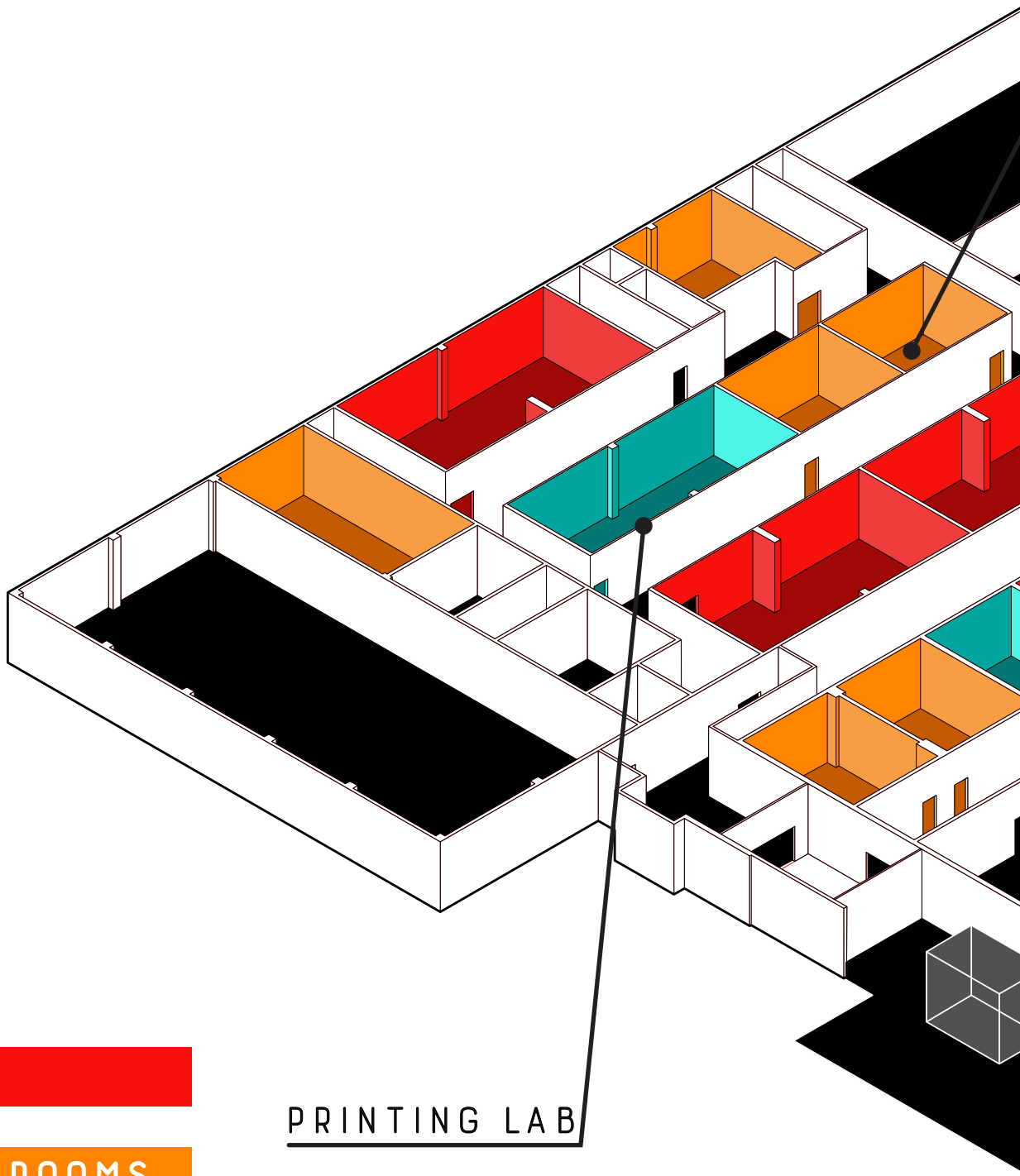
## Dr. Ahmed Baik
**Assitant Professor**

• PhD (Doctor of Philosophy), Geomatics Engineering, UCL, UK, 2017
• MSc, Geospatial Information, RMIT University, Australia, 2011
• BArch, Architecture, King Abdulaziz University, KSA, 2006

## Dr. Mostafa Sabbagh
**Assistant Professor**

• PhD (Doctor of Philosophy), Environmental Design, Building Science and Performance, University of Calgary, 2013
• M-Arch II, Post. Pro., Minimum Cost Housing Program, McGill University, 2007
• BArch, Faculty of Environment Design, King Abdulaziz University, KSA, 2003

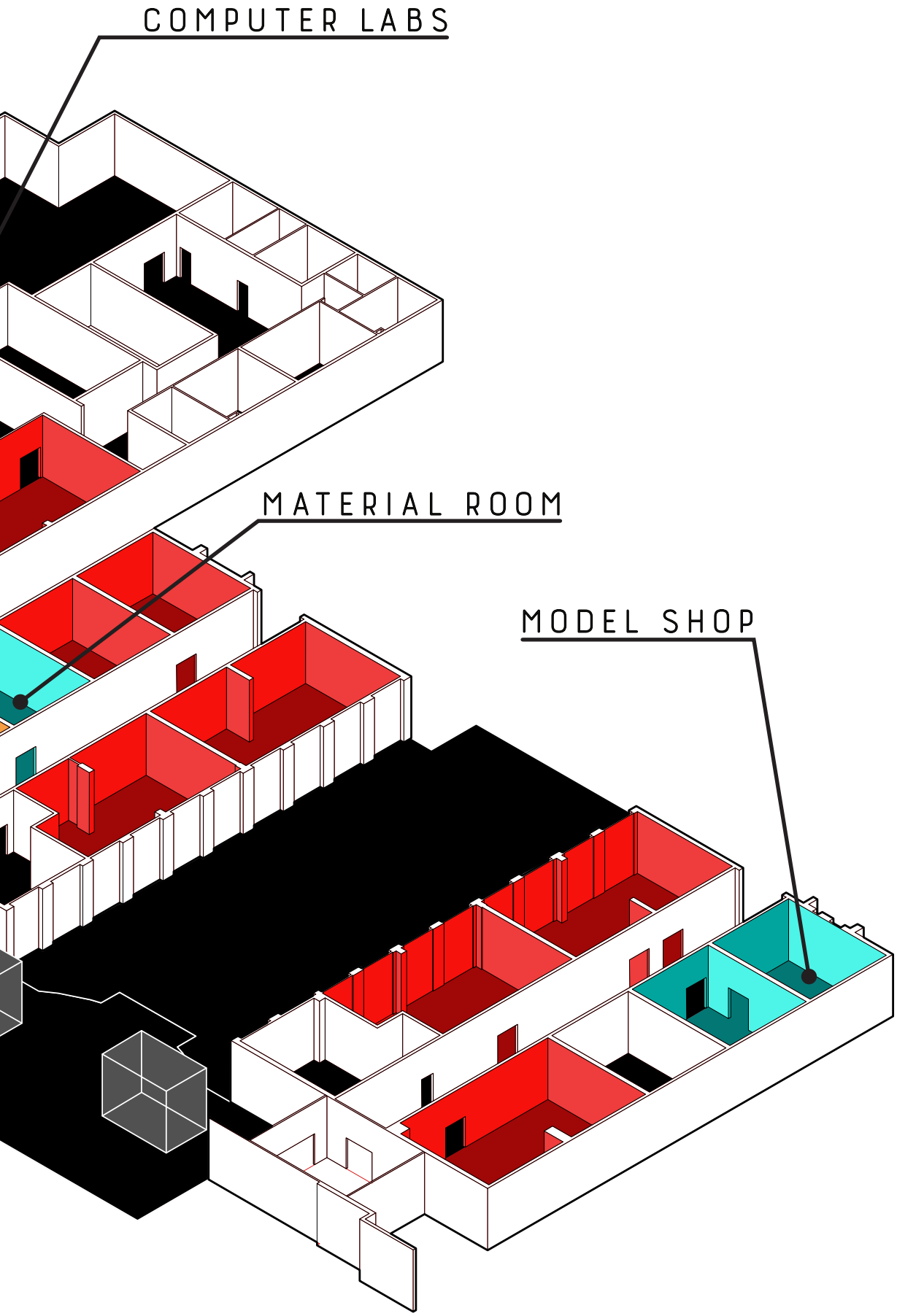
# OUR FACILITIES




STUDIOS

LECTURE ROOMS

FACILITIES.


COMPUTER LABS
MATERIAL ROOM
MODEL SHOP

# OUR STUDIO CULTURE

Studios are considered the **intellecutal hubs** of **creativity**, **thought**, **discussion**, and **learning**. Students are grouped in sessions led by instructors to discuss the possibility of **creating solutions** to design problems found in our cities and communities. Through desk reviews, peer reviews, and critiques, students are able to **create**, **enhance**, and **improve** architectural designs of different scales. Learning the basics of **architectural thinking**, and with the **tools** and **facilities** provided by the department, students individually develop their own **design approaches** and **techniques**.
At Dar Al Hekma University, we follow a studio culture policy that follows that on the National Architectural Accreditation Board (NAAB).

## ESSENTIAL COMPONENTS

### STUDIO PEDAGOGY

We belive in the pedagogical benefits and purpose of a problem-based learning and learning by doing.

### STUDIO SPACE

Our studio spaces promote interaction between students and faculty. It allows students to share, discuss, and learn from one another.

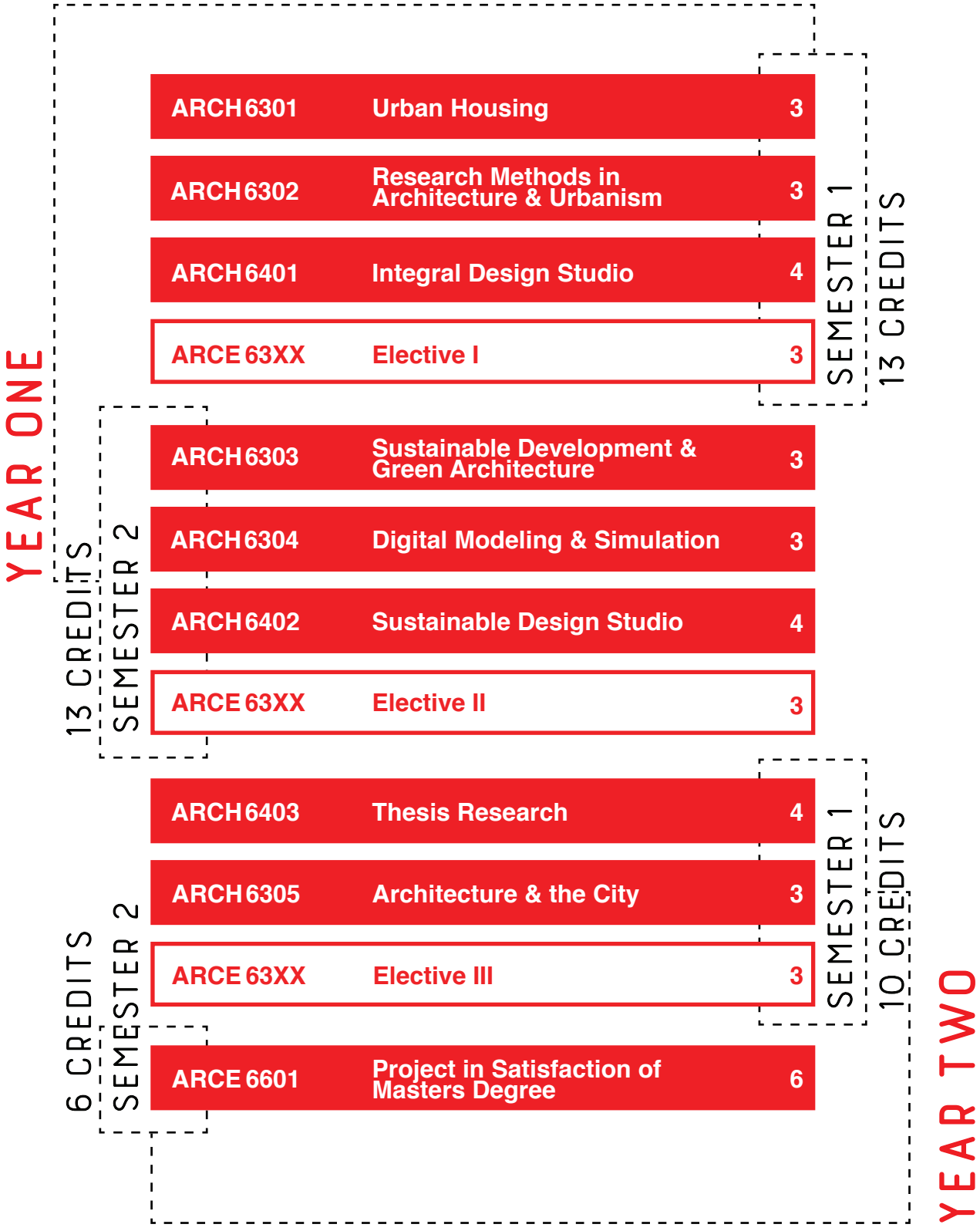
### STUDIO CULTURE

Our faculty and staff are key to creating the predominating positive atmosphere that encourages students to question and experiment.

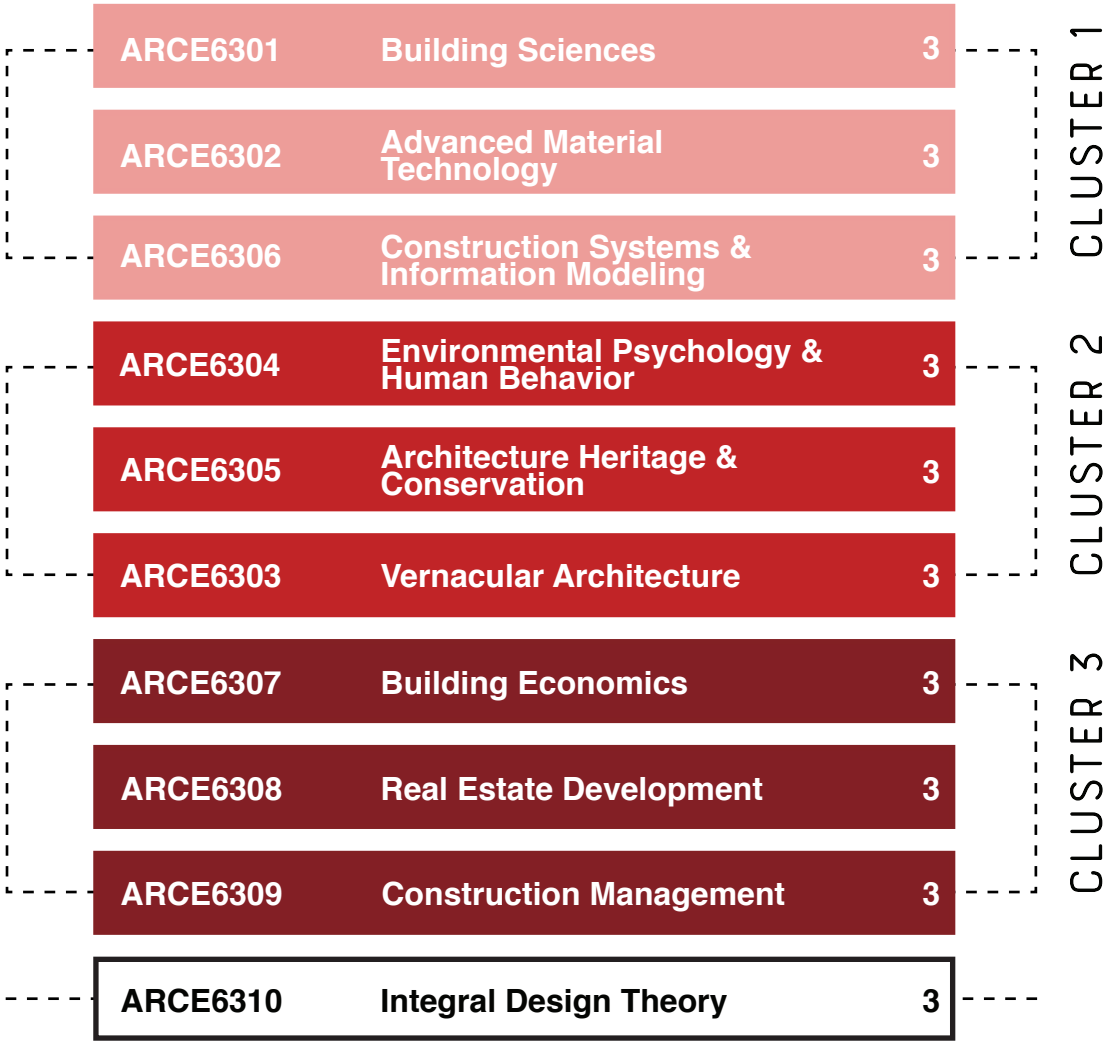
### STUDIO EXTENSIONS

We consider our entire department an extension to the studios; our printing lab, model shop, and material room, as well as our pin-up corridors and student support space.

AMBASSADOR'S
RESIDENCE




# PROGRAM OF STUDY




# ELECTIVE COURSES

# CLUSTERS

SUSTAINABILITY

HOUSING

CORE COURSES

*I have always wanted to understand how things are put together, what happens after pen and paper.*

ARCE 6301
Building Sciences

CLUSTER 1
# BUILDING TECHNOLOGY

CLUSTER 2
# HERITAGE & CONSERVATION

ARCE 6302
Advanced Material Technology

ARCE 6306
Construct. Systems & Info Modeling

*I am always fascinated by the buildings of Al Baladand the architecture of each region that has a character of its own.*

ARCE 6304
Envi. Psychology & Human Behavior

ARCE 6305
Arch. Heritage & Conserv.

ARCE 6303
Vernacular Arch.

ARCE 6308
Real Estate Develop.

ARCE 6309
Construct. Manage.

ARCE 6307
Building Economics

CLUSTER 3
# REAL ESTATE DEVELOPMENT

*Designing is important, but I am interested in understanding how to sell it. What defines economically successful architecture?*

# CORE COURSES DESCRIPTIONS

## YEAR ONE | SEMESTER ONE

**ARCH 6301**
### Urban Housing
**3 Credits**

This course introduces the evolution of urban housing theory and practice. It examines the various factors that impact residential developments around the globe. The course also focuses on the environmental, technological, political, cultural and socio-economic dimensions of housing design and production. It also investigates numerous housing projects of various scales and evaluates the impact of these projects on their respective communities.

No pre-requisites

**ARCH 6302**
### Research Methods in Architecture & Urbanism
**3 Credits**

This course focuses on the research skills required for writing a Master level thesis. The course covers various research methods in architecture and urbanism and examines the ways used to write a comprehensive research proposal based on a thorough literature review. The course discusses the different methods of data collection and verification that support the development of a thesis.

No pre-requisites

**ARCH 6401**
### Integral Design Studio
**4 Credits**

This course addresses the concept of integral design as a comprehensive design strategy. It examines architectural precedents that assist in the production of innovative architectural design solutions and exhibits evaluations of the relevance of integrated systems within the built form using various assessment tools. This studio promotes the development of programmatic requirements in relation to the four integral domains of design; human, technology, ecology and culture, in their multiple levels of complexity.

No pre-requisites

# YEAR ONE | SEMESTER TWO

**ARCH 6303**

## Sustainable Development & Green Architecture

**3 Credits**

This course introduces the concept of sustainable development and the related role of green architecture. It discusses the natural resources constraints and the pressing needs for environmental protection. The course also highlights the link between economic development, environmental stability and social impartiality. It focusses on the significant role of green architecture principles and responsible design decisions in the production of environmentally sound buildings and humane urban environments.

No pre-requisites

**ARCH 6304**

## Digital Modeling & Simulation

**3 Credits**

This course introduces a range of digital modelling and simulation tools for designing and assessing the built environment. It investigates different aspects of digital technology and its role in promoting creative architectural solutions. The course considers the incorporation of building information modeling in building performance simulation and optimization throughout the building lifecycle.

No pre-requisites

**ARCH 6402**

## Sustainable Design Studio

**4 Credits**

This course introduces advanced applied levels of the theory of sustainable design to studio projects. It incorporates emergent sustainable technologies into the design process and production. The course investigates the role of advanced building materials and construction methods in providing sustainable solutions. It assesses the local built fabric and proposes solutions that address the human, technological, economic, social, ecological and cultural domains of sustainable design.

No pre-requisites

# YEAR TWO | SEMESTER ONE

**ARCH 6403**
## Thesis Research
**4 Credits**

This course focuses on the production of a comprehensive research thesis that addresses an architectural or urban challenges. It emphasizes the need to adopt a critical and analytical approach to the evaluation of a problem prior to proposing potential solutions.

ARCH 6302 Research Methods in Architecture and Urbanism

**ARCH 6304**
## Architecture & the Coity
**3 Credits**

This course introduces the theoretical discourse on architecture and the city. It analyses the historical growth of urban form and discusses the role of the urban artefact in structuring the city. It also introduces the concepts of type and typology and explains their impact on architectural production in urban settings. The course explains the city as a physical manifestation of social, cultural, economic, and political conditions. It also draws particular attention to the different scales of interventions within cities focusing on the role of urban design, urban renewal and urban planning in re-shaping our cities today.

No pre-requisites

# YEAR TWO | SEMESTER TWO

**ARCH 6601**

## Project in Satisfaction of Masters Degree

**6 Credits**

This course focuses on the production of a comprehensive research thesis that addresses an architectural or urban challenges. It emphasizes the need to adopt a critical and analytical approach to the evaluation of a problem prior to proposing potential solutions.

ARCH 6403 – Thesis Research

# ELECTIVE COURSES DESCRIPTIONS

**ARCE 6301**
## Building Sciences
**3 Credits**

This course focuses on the integration of building sciences within architectural design practice with the aim of improving the energy efficiency of buildings. It discusses the application of new technologies in generating holistic architectural designs that satisfy multiple buildings' performance goals. The course stresses the ecological importance of energy-conscious designs. It discusses the role of energy analysis and comfort assessment tools in designing efficient and highly-functioning interior environments.

**ARCE 6302**
## Advanced Material Technology
**3 Credits**

This course focuses on major advancements in material technology and their application in contemporary architecture. The course covers the science of building materials and explores new developments in the production of sustainable and environmentally sensitive materials. It explores advanced technologies in the manufacturing, testing and application of materials. The course highlights the role of smart materials in energy-based applications.

**ARCE 6303**
## Vernacular Architecture
**3 Credits**

This course focuses on vernacular architecture and discusses the manner in which it provides a material record of human values and communal practices. The course records the type of traditional dwellings and other structures built by different cultural ethnic groups in diverse geographic regions of the world. It also analyses the built environment as a reflection of the context within which it emerges. The course highlights the social, cultural, environmental and aesthetic qualities of vernacular architecture that may inform architectural design practice in the 21st century.

**ARCE 6304**

## Environmental Psychology & Human Behavior

**3 Credits**

This course introduces the theory, research and methods in the field of environmental psychology and humans' interaction with the built and natural environments. It focuses on environmental perception and knowledge and preferred environments concept. It discusses the problems of mental attention fatigues and restorative environments principles. The courses highlights the application of the human natures model on the issues of common property resource management and the psychology of sustainability.

**ARCE 6305**

## Architecture Heritage & Conservation

**3 Credits**

This course provides comprehensive explanation of the global and local architectural heritage. It emphasizes the different values that people give to historic buildings and places. The course also highlights the role of heritage conservation in the modern ecological agenda. It examines case studies that explicate the properties of historical buildings and discusses numerous conservation techniques employed in their repair.

**ARCE 6306**

## Construction Systems & Information Modeling

**3 Credits**

This course explores contemporary developments in construction systems and building technology. It introduces systems appropriate for the production of medium to large scale buildings. The course examines the optimization of different production and assembly processes and their impact on the overall efficiency of construction projects. The course examines the practical application of Information Modelling in the development and delivery of projects.

**ARCE 6307**

## Building Economics

**3 Credits**

This course introduces the economics of a building's lifecycle. It explains the financing of projects and discusses the diverse factors influencing design and building costs. It covers the various approaches to managing costs from initial project definition through to construction, delivery and use. The course also covers the various techniques utilized for project budgeting, cost estimating, and lifecycle cost analysis.

**ARCE 6308**

## Real Estate Development

**3 Credits**

This course introduces the concept of real estate development within the global and local contexts. It discusses the impact of urban design and planning on improving real estate values. The course sheds light on the ways the different players in the construction industry can impact the production of the built environment. It explains the administrative processes, laws and regulations that govern real estate practice the course emphasizes the effects of micro and macro-economics on the property market.

**ARCE 6309**

## Construction Management

**3 Credits**

The course focuses on the role of construction management in achieving overall project success. It explores procedures and organizational techniques involved in the preparation of competitive bids and schedules. The course discusses the various forms of contracts used in the construction industry and best practices for their administration and management. It explores stakeholder rights, duties, responsibilities, claims management and assignment of risk.

**ARCE 6310**

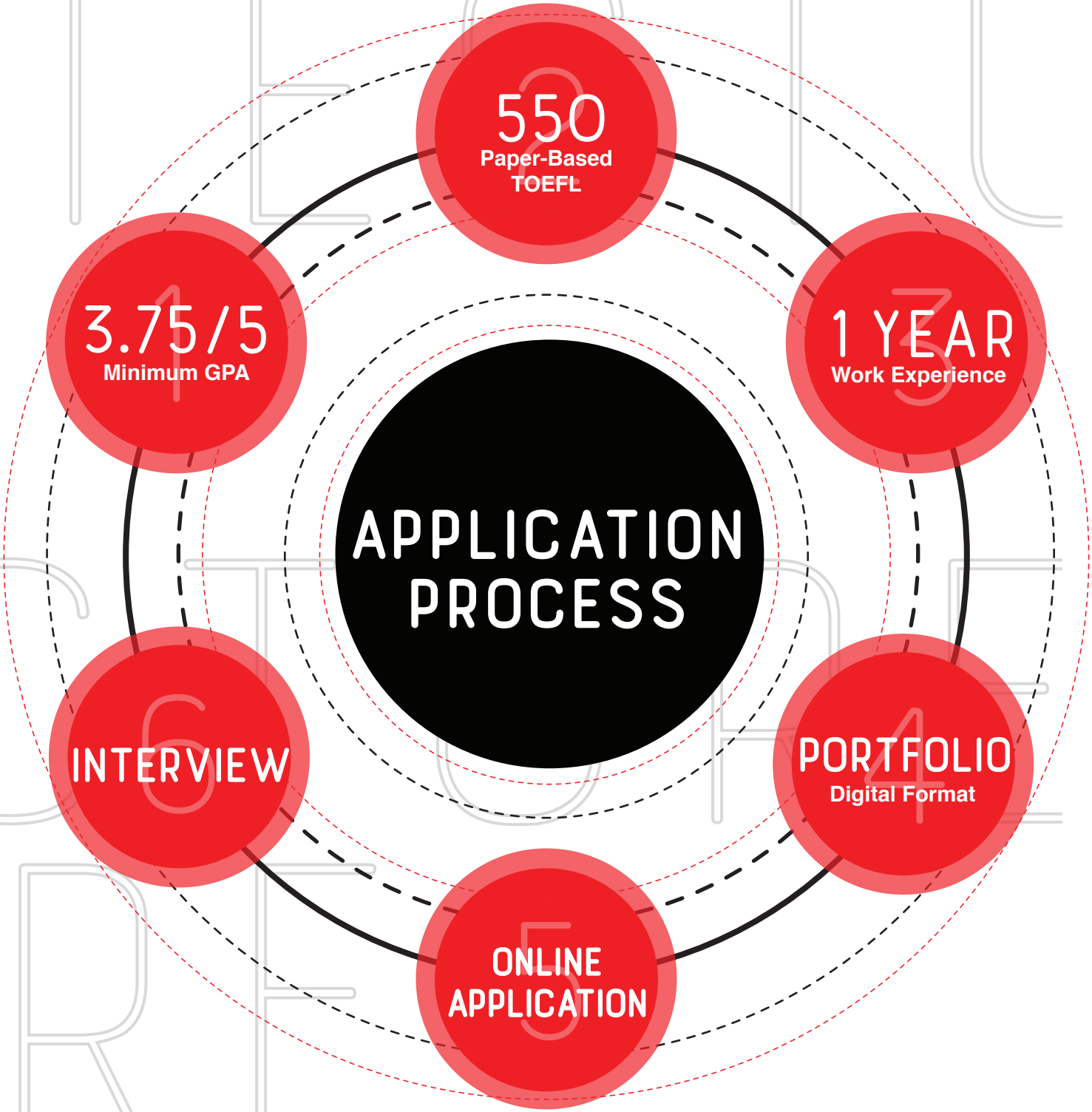
## Integral Design Theory

**3 Credits**

This course introduces the Integral Design theory, establishing a holistic framework for design thinking and application in architecture and urbanism. It focuses on the multiple levels of complexity and the importance of the four dimensions of the design process; human, technology, ecology and culture. The course emphasizes the egologic, technologic, ecologic and ideological overarching theoretical frameworks and their role in defining architecture.

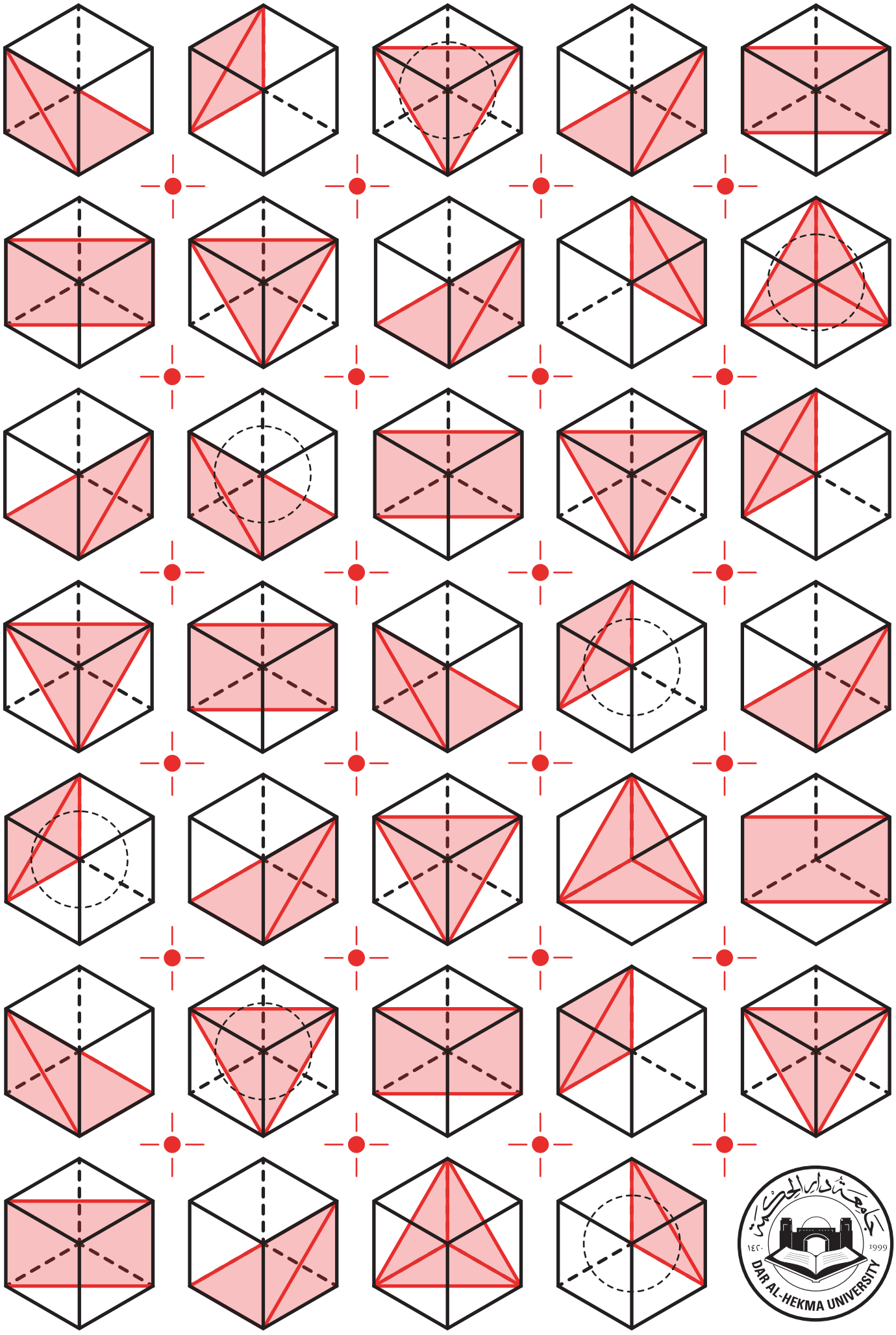
# ADMISSION REQUIREMENTS

- ☐ A complete application form
- ☐ A degree from an accredited / recognized post-secondary instituse / university
- ☐ Official copies of transcript(s) and certificate(s) of undergraduate and/or graduate studies completed earlier (originals will be required for verification)
- ☐ 2 recommendation letters from previous professors.
- ☐ Letter of good standing
- ☐ Letter of intent / personal statement
- ☐ Four recent passport-size color photographs (hair must be covered)
- ☐ Photocopy of ID card (original required for verification)
- ☐ Photocopy of passport (original required for verification)
- ☐ Proof of work experience
- ☐ Curriculum vita (CV)
- ☐ No-objection letter from applicant employer
- ☐ Complete health record


APPLICATION PROCESS
1
3.75/5
Minimum GPA
2
550
Paper-Based
TOEFL
3
1 YEAR
Work Experience
4
PORTFOLIO
Digital Format
5
ONLINE APPLICATION
6
INTERVIEW

YOU ARE ARCHITECTURE
APPLY NOW

BRANCHED
DESIGN APPROACH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