

# DORIL



جامعة الكويت  
KUWAIT UNIVERSITY



## DESIGN DEVELOPMENT & RESEARCH LAB

KUWAIT UNIVERSITY  
COLLEGE OF ARCHITECTURE



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## ABOUT US



The Design Development & Research Lab (DDRL) is a nonprofit facility based at Kuwait University's College of Architecture. The DDRL aims to contribute sustainable design solutions and evidence based policies.

The DDRL has three main tracks with three dedicated units. Each unit has a number of focus areas that explore the design, architectural and planning challenges unique to the local environment, predominantly the effects of climate change, increase in energy demand and inequitable land use patterns and urban development. The DDRL will

contribute to knowledge production and capacity building through lectures, roundtables and workshops. Above all the DDRL aims to be proactive in community engagement to help shift the current design discourse while establishing links between academia and praxis. Please join us in producing a more equitable environment for all.

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## LAB UNIT TRACKS

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### VISUALIZATION UNIT

Digital Visualization for Historic Preservation

BIM and Immersive Visual Environments

Visualization of Building Energy and Environmental systems

Data Visualization

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### DIGITAL FABRICATION UNIT

Rapid Prototyping and Product Development

Material Science

Computational Design and Construction

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### HOUSING + URBAN DEVELOPMENT UNIT

Strategic Urban Planning and Policy

Environment, Sustainability and Climate Change

Urban Housing, Equity & Social Justice

Urban Land Governance for Sustainable Development

Infrastructure & Green Cities



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## **ABOUT US**

### **V I S I O N**

We envision inclusive, safe, resilient and sustainable urban environments for all. We are committed to strengthen efforts that protect and safeguard cultural heritage, to increase awareness and capacity building in resource management, housing, design, urban development and climate action.

### **M I S S I O N**

We seek to collaborate with stakeholders on equitable design solutions, housing for all, resilient urban environments and preserving cultural heritage through open access data and evidenced-based policies that connect academia with practice.



DORL

**WE AIM TO  
ENCOURAGE  
RESEARCH  
PRODUCTIVITY  
AND TO CONTRIBUTE  
PROACTIVE AND  
SUSTAINABLE DESIGN  
SOLUTIONS AND  
POLICIES**



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# **WHAT WE DO**

**Evidence-based policy papers**

**Evidence-based design solutions**

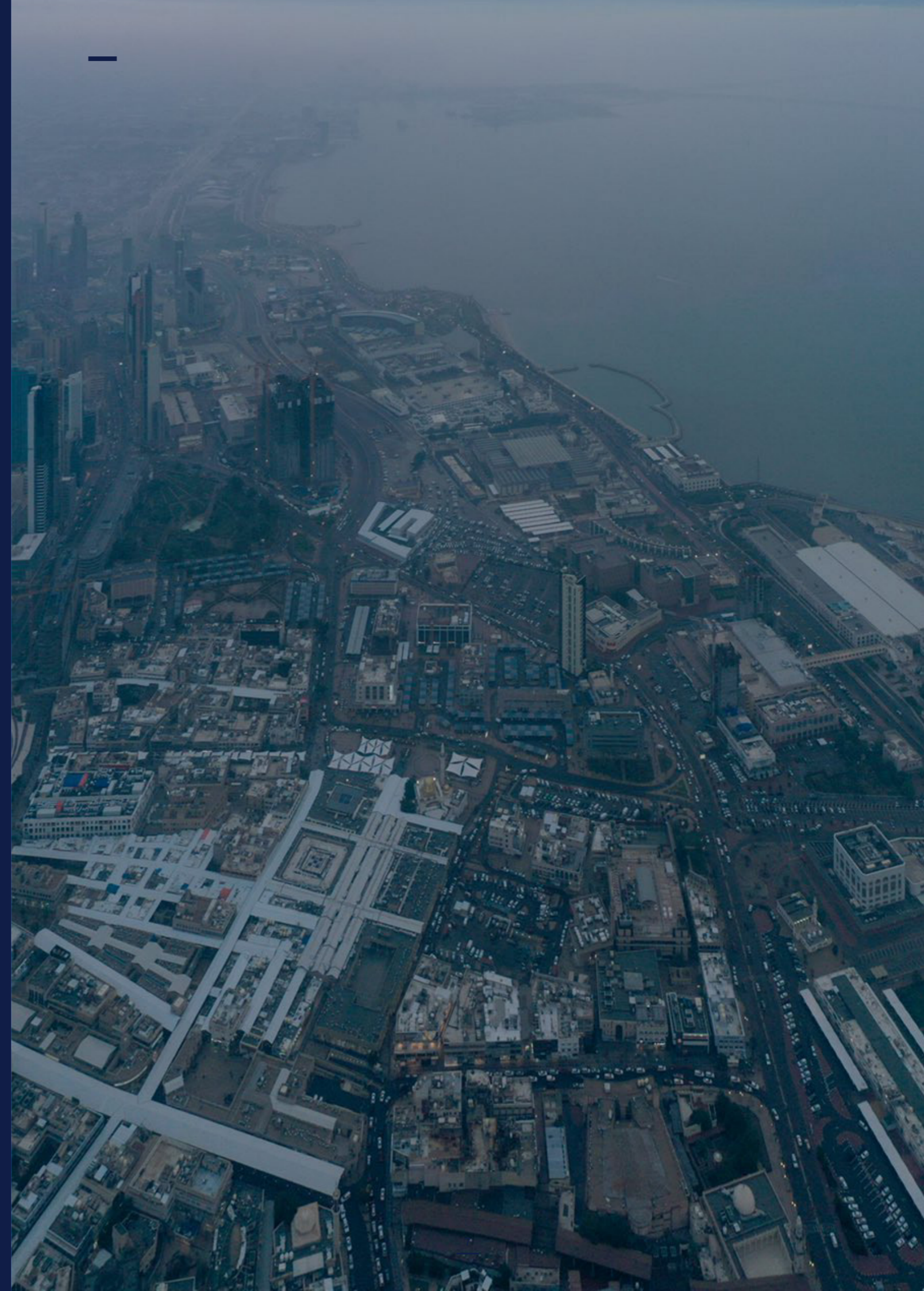
**Community engagement on design  
and planning challenges**

**Curated panel discussions**

**Public participatory events**

**Open access datasets**

**Supervised access to research  
equipment**





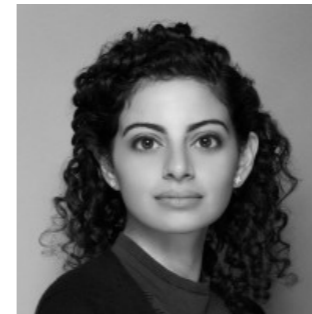
# TEAM MEMBERS



**Dr. Asseel Al-Ragam**  
Vice Dean for Academic Affairs,  
Research and Graduate Studies  
BArch, MArch, MS, PhD



**Dr. Talal Alkandari**  
Assistant Professor  
BArch, MS, PhD



**Dr. Sarah Almudhaf**  
Assistant Professor  
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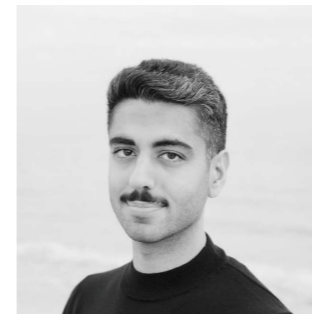
**Yousef Abdulaal**  
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BArch



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BFA, MFA, PhD



**Dr. Mohammed Alajmi**  
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**Muneerah Alrabe**  
Teaching Assistant  
BArch, SMArchS



**Haya Alnajjar**  
Graphic Designer  
& brand identity





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# DIGITAL FABRICATION UNIT

## COMPUTATIONAL DESIGN AND CONSTRUCTION

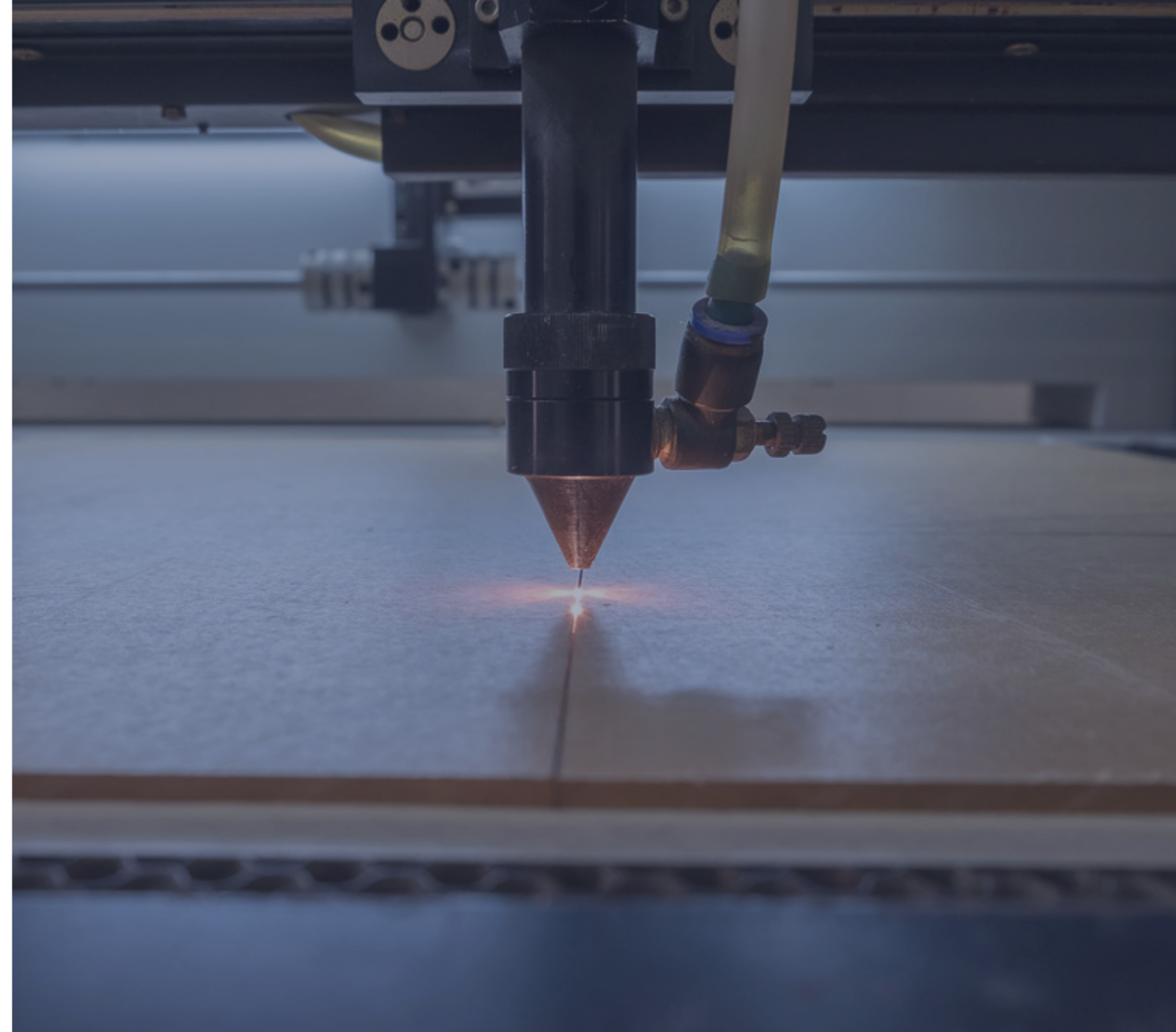
Focuses on robotic fabrication and linking new technologies with the construction sector. This focus embodies the connection between design and the way we build.

## MATERIAL SCIENCE

Creates a knowledge base in which novel methods of material manipulation are applied in multiple fields. The focus addresses the material sciences, processes and functionality in any built environment.

## RAPID PROTOTYPING AND PRODUCT DEVELOPMENT

Addresses form finding through successive iterations of 3D printable materials to better understand the applied methods of design and manufacturing.





# HOUSING + URBAN DEVELOPMENT UNIT

## STRATEGIC URBAN PLANNING AND POLICY

Focus on setting planning objectives and concepts that fit current social and climate demands and ways to manage and prioritize these objectives to meet social, economic and environmental challenges.

## URBAN HOUSING, EQUITY & SOCIAL JUSTICE

Supports housing policies and institutional frameworks that ensure everyone has access to adequate housing by creating humane settlements that foster social, economic and spatial integration and inclusion.

## URBAN ENVIRONMENT, SUSTAINABILITY AND CLIMATE CHANGE

Addresses theoretical and practical approaches to urban environmental, sustainability and climate change management issues, looking at how cities can adapt to climate change impacts and how to minimize environmental effects on people and infrastructure.

## URBAN LAND GOVERNANCE FOR SUSTAINABLE DEVELOPMENT

Addresses legal structures and decision-making processes concerning access to land and its use, the implementation of such decisions, as well as institution and stakeholder management and the way all of them can shape the development of a city

## INFRASTRUCTURE & GREEN CITIES

Focus on energy, transport, building, water and sanitation sectors to develop sustainable public services and to create green policies that respond to climate change challenges.





# HOW TO GET INVOLVED

Share datasets

Upload highlights of ongoing research

Share completed research

Share publications

Share collected data from undergraduate and graduate courses

Propose research topics

Contribute a blog post

Curate panel discussions

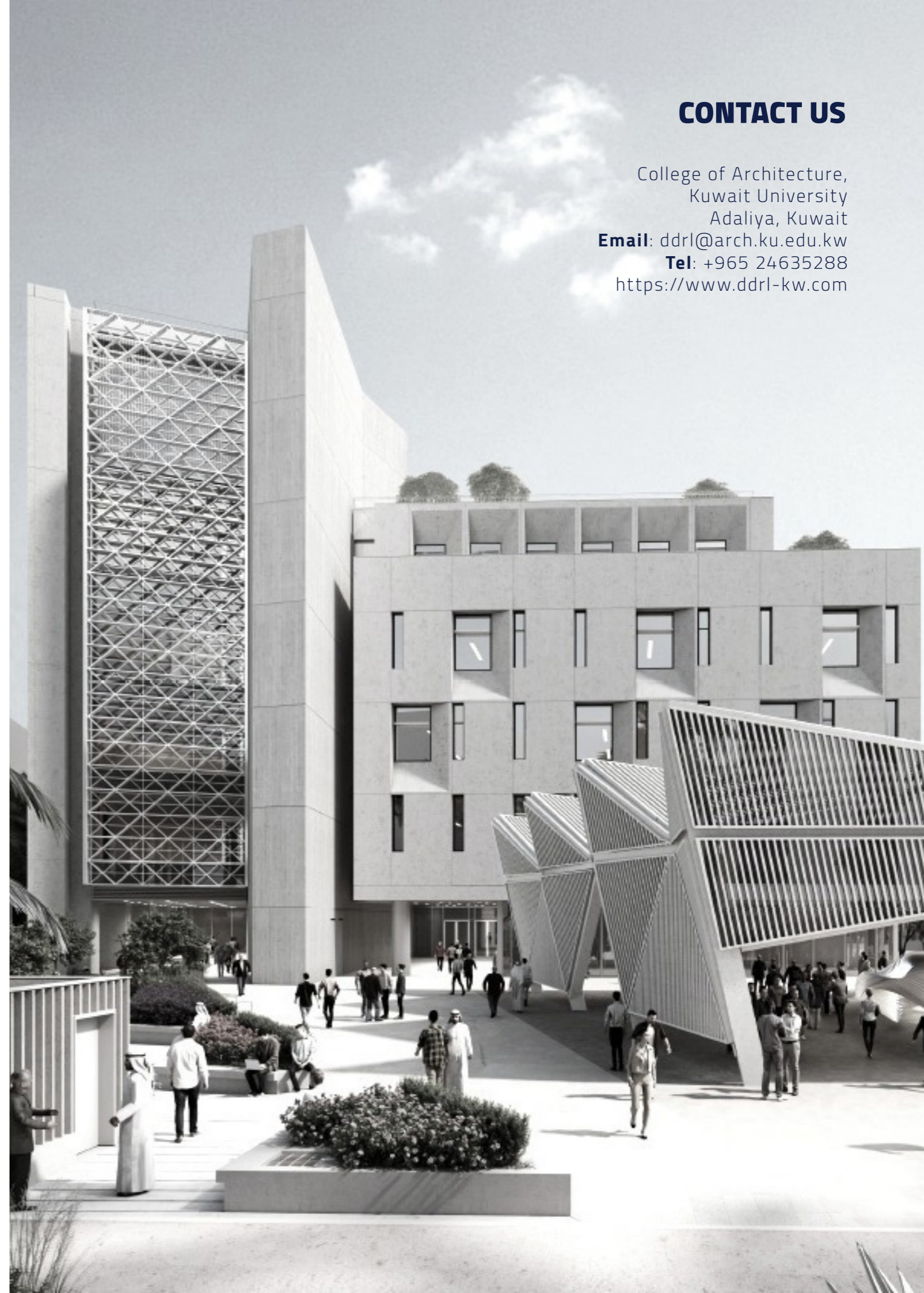
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# DDRI

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