

Curriculum Vitae
Aliaa Elabd, Ph.D.
Assistant Professor
College of Engineering, Alfaisal University
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CURRENT POSITION

Chair of Architectural Engineering Department	Sep. 2022-Present
Assistant professor of Architecture	March 2013- Present
Vice Dean for Quality Assurance & Accreditation	Sep. 2021-Present

College of Engineering- Alfaisal University, Riyadh, Saudi Arabia

EDUCATION

- **Ph.D. in Design** 2009-2013
College of Design, North Carolina State University
Dissertation: *Physical and Social Factors in Neighborhood Place Attachment: Implications for Design*
- **Master of Science in Urban Design (MSUD)** 2007-2009
The School of Architecture, The University of Texas at Austin
Thesis Project: *Revitalizing Victoria Station, London*
- **Bachelor of Architectural Engineering** 1995-2000
University of Helwan, Cairo, Egypt

TEACHING EXPERIENCE

Assistant Professor: College of Engineering - Alfaisal University

- **ARE 455: Sustainable Buildings – 4th year**
presenting the practice of creating sustainable building structures and using processes that are environmentally responsible and resource-efficient. It addresses the full range of issues associated with sustainable buildings, including energy consumption, use of materials, building systems, users' behaviours and environment concerns.
- **ARE 477: Smart Buildings – 4th year**
This course explores how a building's operational efficiency as well as occupants' productivity and safety can be improved through the use of advanced and smart technologies. Students will be introduced to principles of smart systems and green building systems, in addition to how these principles integrate and interact.
- **ARE220: Architectural Design II – 2nd year**

Introducing the fundamental knowledge concerning the interface between buildings and sites, site analysis, movement and orientation, topography, urban contexts, graphical representation, physical and digital modeling, and using colors in design.

- **ARE 297: Architecture & Building** – *2nd year*
Stressing the fact that architecture is a form of both art and science, and introducing students to the main tools of architectural design, the profession of architecture, as well as passive heating and passive cooling techniques.
- **ARE 314: Architectural Design III** – *3rd year*
An interactive undergraduate studio that accentuates evidence-based design, through students conducting a POE research study to examine the effectiveness and the design of existing sites.

In 2021 & 2022, Students of this course Participated in a workshop and student challenge organized by **UN habitat**. The aim was to promot sustainability and affordability awareness in the housing sector. The workshop was conducted in partnership with the **Ministry of Municipal Rural Affairs and Housing (MoMRAH)** Deputyship of Developmental Housing and Community Engagement, and students from Alfaisal and Dar-Aluloum Universities. The primary objective was to develop a fully implementable Sustainable Housing Concept Plan (SHCP) for two selected locations (Jeddah and Alkhobar) that can serve as a pilot for future activities while realizing the Developmental Housing goals of Saudi Vision 2030.

- **ARE 312: Environment, Economics and Policy** – *3rd year*
Developing an understanding of rational analysis, as well as decision-making in issues concerning environmental economics and policy, taking into account the environmental impacts.
- **ARE 341: The Built Environment** – *3rd year*
Designed as an introduction to urban design, examining the design of the built environment from a physical and spatial perspective, as well as social and economic perspectives, and current trends in zero-carbon and closed-loop communities.
- **ARE 400: Special Topics in Architectural Engineering** – *3rd & 4th year*
- **ARE 435: Undergraduate Research in Architectural Engineering** – *4th year*
Students engage in supervised research with the course’s instructor. This supervised research can be: 1) independent research study undertaken and suggested by you, or 2) a study that is based on assisting on an instructor’s research project.

Instructor: College of Design, North Carolina State University, USA

2010-2013

- **ARC140: Experiencing Architecture** – *undergraduate course for non-majors*

A highly interactive and students-focused course, designed as an introduction to the field of architecture. Offered as both *distance learning* and *live* course.

- **ARC201: Architectural Design II** – *undergraduate level course*
Assisting students to develop their drawings and design skills, and considering the historical and geographical context in their design, as well as creating digital and physical models.
- **ARC577: Sustainable Communities** – *graduate level course*
Examining the search to establish new communities; through reviewing a variety of case studies and precedents with regard to sustainable design practice.
- **ARC574: Place and Place Making** – *graduate course*
Exploring with students ways to make better urban places both as a means to serve a city's inhabitants, and also as a catalyst to urban regeneration.
- **ARC570: Anatomy of the City** – *graduate level course*
Introducing students to the body of knowledge that supports the practice of city design, drawing from the theory, history and methodologies of architecture, landscape architecture, urban planning, cultural planning and cultural geography.

Teaching Assistant, College of Design, North Carolina State University

2009-2010

- **D104/First Year Experience Studio** – *Undergraduate level course*
Providing College of Design freshmen with a comprehensive introduction to fundamental design concepts and methods representative of creative thought and activity across design and artistic discipline.

RESEARCH EXPERIENCE

2012 – 2013

- **Urban Design Conference–Leading by Design**
Interviewing stakeholders in various cities. Developing/creating GIS maps and statistical analysis of the collected data. Gathering information about the selected case studies that were part of the Urban Design Conference 2013, in terms of their potentials and challenges.
- **D592: Connecting the Dots (Graduate level Course)**
Assisted in developing the course materials and the GIS maps; in addition to helping students developing their survey tools, and producing new GIS maps analyzing their selected sites.
- **Uncovering Southwest Raleigh Project**
A city of Raleigh funded research program to help revitalize the southwestern quadrant of the city. Developing GIS maps of the different systems of southwest Raleigh

PUBLICATIONS

A. M. Taha and A. Elabd, "An IoT Architecture for LEED Certification of Existing Buildings," *2020 IEEE International Conference on Communications Workshops (ICC Workshops)*, Dublin, Ireland, 2020, pp. 1-5, doi: 10.1109/ICCWorkshops49005.2020.9145407.

A. -E. M. Taha and A. Elabd, "IoT for Certified Sustainability in Smart Buildings," in *IEEE Network*, doi: 10.1109/MNET.011.2000521.

Elabd, A., & Hallowell, G. (2015). Using Simulation Tools in Architectural Education: An Approach to Teaching Islamic Vernacular Urbanism. *The International Journal of Sustainability Education*, 10 (3-4), 1-10.

Elabd, A. (2015). Using Simulation Tools for Vernacular Urbanism in Architectural Education in Saudi Arabia . In S. C. Antiquities, Urban Heritage and Architectural Education . Riyadh: Saudi Commission for Tourism and Antiquities. (*In print*)

Elabd, A., Hallowell G. 2014. A Research Approach for Urban Places: Exploring the Behavioral Aspects of a City Plaza. *Spaces and Flows: An International Journal of Urban and ExtraUrban Studies*. 4(3): 1-12.

Elabd, A., & Hallowell, G. (2013). Measuring Place Attachment: Stabilizing Factors in Inner Ring Suburbs. *Spaces and Flows* , 3 (1), 119-133.

Abrams, R., **Elabd, A.**, & Hallowell, G. (2013). Experimenting with Distance Eduaction in

CONFERENCE PRESENTATIONS

Elabd, A., Hallowell G. (2019). A New Vision for Riyadh, Saudi Arabia: Balancing New TOD Design with Cultural and Environmental Realities. 50th Annual Conference of the Environmental Design Research Association, EDRA. Brooklyn, NY: May 22nd – 26th, 2018.

Elabd, A., Hallowell G. (2018). Aligning Urban Design with Social and Economic Realities: A Changing Vision for Riyadh Saudi Arabia. 25th IAPS Conference: Transitions to sustainability, lifestyles changes and human wellbeing: cultural, environmental and political challenges. Rome: July 9th-13th, 2018.

Elabd, A. (2015). The Impact of Walkable Environment on Improved Health Outcomes Among Saudi Adults: A Conjoint Research Study of Physicians and Architects in Alfaisal University, Saudi Arabia. 46th Annual Conference of the Environmental Design Research Association (p. 167). Los Angeles: May 27th- 30th, EDRA.

Pasalar, C, Hallowell G, **Elabd A.** (2015). Urban Resilience: Measuring Place Identity in Sustainable Communities. Architecture Research Centers Consortium ARCC 2015 Conference, Chicago, Illinois — April 6 – 9, 2015

Elabd, A., Almubarak, F., & Hallowell, G. (2015). Using Simulation Tools in Architectural Education: An approach to Teaching Islamic Vernacular Urbanism . The 11th International Conference on Social, Economic, environmental Sustainability Conference, Copenhagen, Jan 21st- 23rd 2015 . Copenhagen: Common Ground Publishing.

Pasalar, C, Hallowell G, **Elabd A.** (2014). Measuring Urban Resilience: People-Place Relationships in sustainable Communities, June 21st, 14. Open Cities: The New Post-Industrial World Order, ACSA. Seoul.

Elabd, A. 2014. Restoring Connection to Place: Physical and Social Factors in Neighborhood Place Attachment, May 29th, 14. Environmental Design Research Association (EDRA 45). New Orleans.

Elabd, A. Hallowell, G. (2013). A Research Approach for Urban Places: Exploring the Behavioral Aspects of a City Plaza. The Spaces and Flows Conference. Amsterdam.

Elabd, A. Hallowell, G. (2013). The Meaning of the Built Environment: A Comparative Analysis Of Perception and Preference Among Architecture Students. The Spaces and Flows Conference. Amsterdam.

Elabd, A., & Hallowell, G. (2012). Measuring Place Attachment: Stabilizing Factors in Inner-Ring Suburb. The Spaces and Flows Conference, Wayne State University. Detroit .

Elabd, A. (2012). Meaning of the Built Environment: Difference between Designers and Users. Environmental Design Research Association (EDRA 43). Seattle .

Elabd, A., & Hallowell , G. (2012). Urban Form and Spatial Identity: Examining Persistence and Resilience in Urban Neighborhoods. Environmental Design Research Association (EDRA43). Seattle .

Elabd, A. (2012). Examining the Relationship between Place Attachment and Neighborhood's Green Spaces. CELA Conference 2012. University of Illinois.

Abrams, R., **Elabd, A.,** & Hallowell, G. (2011). A comparative Study of Morphogenesis: In pursuit of the Foundations of Stability . ISUF, The 18th International Seminar on Urban Form. Montreal .

Elabd, A. (2011). Investigations in Shrinking Cities: Green Approaches for Revitalization. The 48th IFLA World Congress. Zurich.

Elabd, A. (2011). Green Infrastructure as a Tool for Restructuring Rust-Belt Cities. The Lean Years . The University of Michigan.

Elabd, A. (2011). The Dichotomy of Urban Form in Arab Cities: A review of Case Studies between old and New. Environmental Design and Research Association. Chicago.

Elabd, A., & Hallowell, G. (2011). The Vitality of Urban Spaces: Exploring the Behavioral Aspects of a City Plaza. Environmental Design and Research Association (EDRA 42). Chicago.

PROFESSIONAL EXPERIENCE

Architect

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|---|-----------|
| Gamal Fathi Office for Architecture and Interior Design- Egypt | 2003-2006 |
| <ul style="list-style-type: none"> - Running the architecture department and developing procedures for organizing work and supporting staff - Designing and preparing the working drawings of various residential, commercial, and office buildings - Participated in the design of the social building of the Engineers' Syndicate. | |
| The Scientific Office of Architecture and Interior Design- Cairo, Egypt | 2001-2003 |
| <ul style="list-style-type: none"> - Participated in the design of various single-family and multi-family residential buildings - Participated in the design of several mixed-use buildings - Participated in the design of "Notre Dame Du Divin Amour" School | |

AWARDS & FELLOWSHIPS

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| <ul style="list-style-type: none"> - College of Engineering Alfaisal University <ul style="list-style-type: none"> o Faculty of the Year o Teaching Award o Service Award | 2018
2019
2021 |
| <ul style="list-style-type: none"> - Ford Fellowship to Study Master's degree abroad
Ford Foundation | 2006-2009 |
| <ul style="list-style-type: none"> - Student Scholarship
Environmental Design and Research Association # 42 | 2011 |
| <ul style="list-style-type: none"> - Dean's Fellowship
Dean's Prestigious Fellowship Award, UT, Austin | 2008 |
| <ul style="list-style-type: none"> - Travel Scholarship
London Studio- University of Texas at Austin | 2008 |

RECEIVED GRANTS

- | | |
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| <ul style="list-style-type: none"> - Internal Research Grant: (CoI) Alfaisal University (Amount of 50,000SR) | 2019 |
| <ul style="list-style-type: none"> - Internal Research Grant; (PI) Alfaisal University (Amount of 50,000SR) | 2014 |
| <ul style="list-style-type: none"> - DELTA IDEA Grant, NCSU (Amount of \$8,000) | 2010 |
| <ul style="list-style-type: none"> - Innovative Summer Course Grants for summer of 2010, NCSU (Amount of \$10,000) | 2009 |

SUBMITTED (NOT FUNDED) GRANTS

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|---|------|
| <ul style="list-style-type: none"> - The PAS_Annual Program Statement Fund_ American Embassy in Riyadh
Amount of \$150,000 | 2023 |
| <ul style="list-style-type: none"> - Internal Research Grant – Alfaisal University | 2018 |
| <ul style="list-style-type: none"> - The Graham Foundation-Production and Presentation Grants | 2011 |
| <ul style="list-style-type: none"> - The Latrobe Prize | 2010 |
| <ul style="list-style-type: none"> - The Graham Foundation-Research and Development Grant | 2010 |

PROFESSIONAL DEVELOPMENT

Advancement Technologies for High-Performance Buildings : Creating sustainable equitable & efficient environments.

Harvard University. Graduate School of Design Feb. 2022

Net-Zero Cities by 2030: Smart City Lab

Harvard University. Graduate School of Design Feb. 2022

CERTIFICATES

- **CoAT**

Certificate of Accomplishment in Teaching, NCSU

December 2013

- **Project Management Certificate**

Professional Development Center, University of Texas, Austin

May 2009

HONORARY MEMBERSHIP

- **Phi Kappa Phi**

Member of the Honor Society of Phi Kappa Phi, NCSU

Since 2011

- **Friends of the Library**

Complementary Membership, North Carolina State University

2010-2011

SERVICE & COMMUNITY OUTREACH

Committee Member

- Students Affairs Committee, Alfaisal University Since 2014
- College Council Committee, Alfaisal University Since 2014
- Accreditation Committee, Alfaisal University 2015
- Hiring Search Committee, Alfaisal University Since 2013
- External Affairs Committee, Alfaisal University 2014 & 15
- Teaching and Learning Committee, Alfaisal University 2013 & 14
- The Annual Urban Design Conference-Raleigh, NC 2011-2012
- Ford Fellows Conference, University of Texas 2009

Reviewer, Guest Speaker & Adviser

- Reviewer for various Studios at the College of Engineering, Alfaisal University
Capstone Projects, Design I & Interior Design
- Reviewer – Senior Final Projects, Dar AlUloom University 2017 & 2018
- Reviewer – Senior Final Projects, Prince Sultan University 2016
- Durrat Arriyadh Development, Riyadh, Saudi Arabia
Lecture: The Hidden concepts of the Islamic architecture and urbanism 2014
- LAR200-Landscape Architecture Introductory Studio 2010-2012

Mid-term and final reviews

- LAR500-Advanced Design Studio 2012
Reviewing students' proposals on using innovative infrastructure strategies, and developing different means to bring purpose to the area south of the River Thames in London that includes the New Covent Garden Market.
- LAR582-Research Strategic Thinking 2012
Lecture: "How to create a survey questionnaire?"
- Urban Land Institute-Students Competition- NCSU 2010-2012
Advisor to CoD ULI student teams
- ARC503/LAR500-City Design 2010-2011
Mid-Term and Final Reviews
- St. Augustine College- Department of Education 2011
Lecture: "*Introduction to Architecture*"
- ARC570- Anatomy of the City 2010
Lecture: "Islamic architecture"