Associate Professor
Architecture Engineering
Building science and technology

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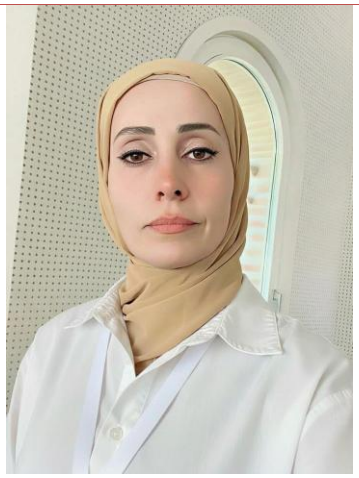
Salfit-Palestine



Assoc. Prof. Eman N. Shaqour

Curriculum Vitae

Department of Architecture Engineering, Faculty of Engineering Alzaytona University of Science & Technology, Salfit, Palestine

Dr. Eman N. Shaqour is an Associate Professor specializing in Architecture and Building Technology. She is a leading expert and researcher in computational design, digital heritage documentation, Dr. Eman Nabeeh Shaqour has built a distinguished academic and professional career across Egypt, Jordan, and Palestine, specializing in digital architecture in both design and execution. Her expertise focuses on advanced architectural technologies, with a leading role in integrating digital fabrication and artificial intelligence into architectural education and practice.. She earned her Ph.D. in Science and Building Technology from Cairo University in 2014. She played a pioneering role in developing the curricula for two Digital Architectural Engineering programs in Jordan and Palestine

Dr. Shaqour refined her technical expertise through intensive international training at the University of Palermo (Italy) and the University of Granada (Spain), specializing in advanced digital tools for heritage documentation. This includes Laser Scanning, Photogrammetry, and the production of digital models. She is also distinguished by her use of Virtual Reality (VR) as an innovative tool for the visualization and immersive experience of heritage documentation. Based on this international experience, she developed two specialized academic courses focused on utilizing modern digital methods for heritage documentation and preservation.

Her academic experience extends to teaching Computational and Parametric Design as well as Generative Design. Through her courses, she has supervised the production and

development of numerous projects utilizing Digital Fabrication, such as 3D Printing and CNC technologies, bridging the gap between design theory and advanced technical execution.

On the research front, Dr. Shaqour has published extensively on digital tools in architecture. She currently supervises several Ph.D. and Master's theses covering contemporary topics such as Artificial Intelligence (AI), Machine Learning, and Dynamic Architecture. Her research interests also focus on integrating Lean Construction philosophies, 3D Printing (3DP), and Building Information Modeling (BIM) into both educational frameworks and professional practice.

https://scholar.google.com/citations? user=1bJT4mwAAAAJ&hl=ar
Google scholar

https://www.scopus.com/authid/detail.ur i?authorId=57204203123
scopus

https://orcid.org/0000-0003-2669-1893
Orcid

https://www.researchgate.net/profile/Eman-Shaqour
researchgate

CERTIFICATES

- **Promoted to Associate Professor**

  Supreme Council of Universities, Egypt
  October 2021 – Present

- **Doctor of Philosophy in Architecture Engineering**

  Cairo University, Faculty of Engineering – Architectural Engineering Department, Cairo, Giza, Egypt
  May 2014 – Present
  Specialization: Building Science and Technology – Architecture Engineering

- **Master of Science in Architecture Engineering**

  Cairo University, Faculty of Engineering – Architectural Engineering Department, Cairo, Giza, Egypt
  November 2010 – Present
  Specialization: Building Science and Technology – Architecture Engineering

- **Bachelor's Degree in Architecture Engineering**

  Faculty of Engineering, An-Najah National University, Nablus, West Bank, Palestine
  May 2005

ACADEMIC WORK EXPERIENCE

Associate Professor. Part time
Faculty of Engineering, An-Najah National University, Nablus, West Bank, Palestine
February 2026 – -till now

Associate Professor.
Department of Architecture Engineering, Faculty of Engineering Alzaytona University of Science & Technology, Salfit, Palestine
Since October 2025-till now

Associate Professor
Department of Architecture Engineering, Munib and Angela Masri Faculty of Engineering

Aqaba University of Technology, Aqaba, Jordan
Since October 2024-October 2025

Head of the Architectural Engineering Department and the Multi-Media and Animation Department
Faculty of Architecture and Design, Philadelphia University, Amman, Jordan
September 2023 – September 2024

Head of the Department of Architectural Engineering
Faculty of Engineering, Nahda University, Beni Suef, Egypt
September 2016 – September 2023

Assistant Professor
Architectural Engineering Department, Faculty of Engineering, Nahda University, Egypt
March 2014 – September 2016

Lecturer, Architectural Engineering Department
Russia University, Cairo, Egypt
September 2018 – May 2019

Part-time Assistant Professor
Architectural Engineering Department, CIC – The Canadian International College, Cairo, Egypt
September 2019 – February 2020

Lecturer, Architectural Engineering Department
MSA University, Cairo, Egypt
February 2014 – June 2014

Teaching Assistant
Faculty of Engineering, An-Najah National University, Nablus, West Bank, Palestine
September 2005 – May 2008

SKILLS

- **Computer Applications in Architecture**: Proficient in 3ds Max, 3D Studio VIZ, Photoshop, AutoCAD, Rhino & Grasshopper, and Revit for architectural design and visualization.
- **Parametric Modeling & Digital Fabrication**: Skilled in parametric design and digital fabrication techniques, integrating technology in the creation of innovative

architectural solutions. Expertise in computational design, parametric design, and AI in architecture

- **Architectural History & Theory**: Extensive knowledge of architectural history, design theories, and their application in contemporary architecture.
- **Design Studio & Graduation Projects**: Over 10 years of experience guiding and mentoring students in design studios and graduation projects, focusing on conceptualization, development, and presentation.
- **Building Construction**: Expertise in both traditional and advanced building construction systems, including sustainable and efficient design solutions and working drawings. Skilled in construction management, building systems, and digital fabrication techniques

INTERNATIONAL CORPORATIONS AND PROJECTS

- **Erasmus+ Coordinator, Project of TOURITAGE (EU TOURITAGE)**

  Developing new education programmes in heritage management, connecting higher education, national authorities, and businesses. Focus on blended education covering Heritage, Planning, Tourism, and Economics. The project involves partners from Egypt, Tunisia, Italy, and Spain.

- **MLUMSE – Modernization of Land and Urban Management Education in Southern Mediterranean**

  Addressing urbanization, climate change, and population growth in Egypt, Jordan, and Morocco. This project utilizes geospatial technologies to modernize urban planning curricula, incorporating tools like IoT, smart cities, and digital twins, while promoting sustainable urban development through problem-based learning and collaboration.

- **EQUALCity Project**

  Aiming to tackle urban challenges in Egypt, Tunisia, and Jordan by enhancing urban development education in line with the European Green Deal. Key actions include modernizing curricula, establishing urban digital labs, and hosting capacity-building workshops. The project involves a consortium of European and Southern Mediterranean universities, focusing on creating resilient and sustainable cities.

PEER-REVIEWED JOURNAL ARTICLES

2025: *" A Study on the Utilization and Recognition of Digital Construction Technologies in the Egyptian Construction Sector"* **Practice Periodical on Structural Design and Construction".** Co-authors: Eslam Elshafie, Mai S. Azzam, Rashwan T. N. Almashhour.

Ayoub, S., El- Attar, S., **Shaqour, E.,** & Farag, M. (2025). Framework of Variables Impacting Form Generation in Parametric Architecture Using Computational Design Tools (Rhino-Grasshopper). *JES. Journal of Engineering Sciences*, *54*(2), 249-265. doi: 10.21608/jesaun.2025.387981.1525

2025: *"Factors Affecting the Cost of Dynamic Architecture in the Design Phase"* **Budownictwo i Architektura**. Co-authors: Lamiaa Mohamed Said Elsherif, Eman N. Shaqour, Abdullah Badawy Mohammed, Sherif Elattar. DOI: 10.35784/bud-arch.6493

2025: *"The Intelligent Cities Conversion Process Based on AI and Technologies Integration: A Systematic Literature Review"* **Budownictwo i Architektura**, Volume 24, Issue 1, Pages 113–132. Co-authors: Rashwan Almashhour, Eman N. Shaqour. DOI: 10.35784/bud-arch.6579

2022: *"The Role of Implementing BIM Applications in Enhancing Project Management Knowledge Areas in Egypt"* **Ain Shams Engineering Journal**, Volume 13, Issue 1, Page 101509. Co-author: Eman N. Shaqour. DOI: 10.1016/j.asej.2021.05.023

elbana, D., **Shaqour, E**., & El- Attar, S. (2026). Architectural Critique and Architectural Style Confusion Within Administrative Facades. *JES. Journal of Engineering Sciences*, *54*(3), 444-470. doi: 10.21608/jesaun.2025.393478.1547

2026: Usman Ali M, Tipu JAK, Arif M, **Shaqour EN** (2026;), "Lean management for the sustainability of projects in construction sector". *International Journal of Lean Six Sigma*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJLSS-12-2025-0360

2026: Shaqour, E. N., Alshafei, I. A., Abukarki, H., & Almashhour, R. T. N. (n.d.). The critical factors for successfully applying lean tools in the Egyptian construction sector. https://doi.org/10.35784/bud-arch.70012025

2026: Shaqour, E. N., Alshafei, I. A., Abu Taqa, A., Senouci, A., & Hassan, A. M. (2024). Energy Simulation-Based Assessment of Traditional and Modern Wall Materials for

Thermal Performance: A Case Study of a Traditional House in Jordan. *Energies*, *18*(20), 5336. https://doi.org/10.3390/en18205336

2025: *"Statistical Investigation of Hindrances of Applying Lean in Egyptian Constructions"* **Ain Shams Engineering Journal**, Volume 16, Issue 5, Page 103349. Co-authors: Eman N. Shaqour, Mai S. Azzam, Rashwan T. N. Almashhour. DOI: 10.1016/j.asej.2025.103349

2025: *"Life Cycle Impact Assessment of Solid Concrete Blocks Incorporating Recycled Fine and Coarse Crushed Ceramic Aggregates"***Journal of Architectural Engineering**, Volume 31, Issue 1, Page 05024010. Co-authors: Eman N. Shaqour, Ahmed M. Seddik Hassan, Aimen H. Abo Alela, Ayman S. Mohamed. https://doi.org/10.1061/JAEIED.AEENG-1812

2024: *"Effect of the Addition of Sawdust on Clay Brick Construction Properties and Thermal Insulation: Experimental and Simulation Approaches"* **Journal of Architectural Engineering**, Volume 30, Issue 1, Page 05023010. Co-authors: Aimen H. Abo Alela, Bahaa Elboshy, Ahmed M. Seddik Hassan, Ayman S. Mohamed, Eman N. Shaqour. https://doi.org/10.1061/JAEIED.AEENG-167

2023: *"The Reality of Using Modern Teaching Strategies in Architectural Design Course"* **International Journal on Studies in Education (IJonSE)**, Volume 5, Issue 3. Co-authors: Eman Nabih Shaqour, Fidaa Mohammed Barakat Dwiek. **DOI:** https://doi.org/10.46328/ijonse.134

2022: *"Measuring The Effectiveness of Using Modern Teaching Strategies in Developing Architectural Design Students' Skills (A Case Study of West Bank–Palestine)"* **Mansoura Engineering Journal (MEJ)**, Volume 47, Issue 3, Pages 17–28. Co-authors: Eman N. Shaqour, Rashwan T. Almashhour, Aimen H. Abo Alela. https://doi.org/10.21608/bfemu.2022.261461

2021: *"The Impact of Adopting Lean Construction in Egypt: Level of Knowledge, Application, and Benefits"* **Ain Shams Engineering Journal**. Co-author: Eman N. Shaqour. DOI: 10.1016/j.asej.2021.07.005

2021: *"Life Cycle Cost Reduction of a Social Housing Building by Using Polyurethane Lightweight Bricks"* **GEOMATE Journal**, Volume 21, Issue 84, Pages 220–227. Co-authors: Eman N. Shaqour, Aimen H. Abo Alela. DOI: 10.21660/2021.84.j2195

2021: *"Improved Fired Clay Brick Compressive Strength by Recycling Wastes of Blacksmiths' Workshops"* **Journal of Engineering and Applied Science**, Volume 68,

Pages 1–14. Co-authors: Eman N. Shaqour, Aimen H. Abo Alela, Aiman A. Rsheed. https://doi.org/10.1186/s44147-021-00002-2

2021: *"Benefits, Disadvantages, and Constraints of Applying Blended and Virtual Design (Case Study: Studios at Nahda University)"* **Mansoura Engineering Journal (MEJ)**, Volume 46, Issue 1, Pages 54–62. Co-author: Eman N. Shaqour. DOI: 10.21608/bfemu.2021.158861

2021: *"Measuring the Degree of Students' Satisfaction with the Virtual Design Studios in Light of the Spread of the COVID-19"* **Journal of Al-Azhar University Engineering Sector**, Volume 16, Issue 59, Pages 325–337. Co-authors: Eman Nabih Shaqour, Fidaa Mohammed Barakat Dwiek. DOI: 10.21608/AUEJ.2021.166661

2021: *"A Vision to Amend the Egyptian Antiquities Law in Light of International Charters and Treaties"* **Journal of Al-Azhar University Engineering Sector**, Volume 16, Issue 60, Pages 802–813. Co-authors: Mutlaq Shaqour, Eman Nabih. DOI: 10.21608/auej.2021.187981

2021: *"Improving the Architecture Design Studio Internal Environment at NUB"* **Journal of Advanced Engineering Trends**, Volume 41, Issue 2, Pages 31–39. Co-author: Eman N. Shaqour. DOI: 10.21608/JAET.2020.51955.1073

2020: *"Developing Mixtures and Foreign Technologies for the Success of Building by Clay in the West Bank"* **Journal of Egyptian Society of Engineers**, Volume 59, Issue 2, Pages 22–28. Co-author: Eman N. Shaqour.

2020: *"Causes of Building Material Waste in Construction Sites in Egypt"* **Journal of the Egyptian Society of Engineers**, Volume 59, Issue 1, Pages 3–9. Co-author: Eman N. Shaqour. Link: Article on EKB

2014: *"A Prediction Model for Project Final Duration and Delay in Offices Building Projects"* **Engineering Research Journal**, Volume 142. Co-authors: Ehab F. Rashed, Eman N. M. Shaqour.

2014: *"A Prediction Model for Project Final Cost and Cost Overrun Amount in Egypt"* **Engineering Research Journal**, Volume 143. Co-authors: Ehab F. Rashed, Eman N. M. Shaqour.

2014: *"Factors Causing Cost Overrun in Administrative Construction Projects of Egypt"* **Journal of Engineering and Applied Science**, Volume 61, Issue 3, Pages 199–215. Co-authors: E. F. Rashed, E. N. Shaqour.

ACADEMIC AND PROFESSIONAL SERVICE

Ph.D. Supervision

- "Optimizing Space Use Through Generative Parametric and AI-Based Design in Architecture", Department of Architectural Engineering, Cairo University.
- "A Methodology for Achieving the Economic Feasibility of Dynamic Architecture", Department of Architectural Engineering, Fayoum University.

Master's Supervision

- *"Automated Classification of Architectural Styles"*, Department of Architectural Engineering, Fayoum University.
- *"Parametric Design as an Architectural Form Generation Approach"*, Department of Architectural Engineering, Fayoum University.

TEACHING COURSES : ADVANCED ARCHITECTURAL TECHNOLOGIES

- **Parametric Design (Egypt):** Teaching the principles of algorithmic and computational design, focusing on complex geometries and generative workflows.
- **Advanced Digital Applications in Design (Jordan):** Utilizing advanced software to develop architectural projects and diverse products, including bespoke furniture design.
- **Digital Fabrication and Manufacturing:** Supervising the production of building components and furniture using advanced methods such as **3D Printing** and **CNC** machining to bridge the gap between digital models and physical execution.
- **Digital Heritage Documentation:** Teaching the use of advanced technologies, including **Laser Scanning** and **Photogrammetry**, to document and preserve historical buildings.
- **Advanced Building Technology:** A core course focusing on modern construction systems, innovative materials, and the technical integration of complex structures.

- **Building Information Modeling (BIM):** Integrating BIM and HBIM workflows into architectural education for enhanced documentation and project management.
- **Virtual Reality (VR) in Architecture:** Utilizing VR technologies for the immersive visualization of architectural designs and heritage documentation.
- **Lean Construction & DOWNTIME:** Teaching waste reduction strategies and value stream mapping to optimize construction site workflows.
- **Digital Architecture Curricula Development:** Pioneering the design of specialized programs in Digital Architectural Engineering across Jordan and Palestine.

THESES

- **Master's Thesis:** *An Analytical Study of the Factors Affecting Overcoming Disasters Effects*
  Focused on reconstruction technologies after disasters, emphasizing local technologies and materials.
  Department of Architectural Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.
- **Ph.D. Thesis:** *An Approach to Control Cost Overruns in Construction Projects in Egypt (Special Reference to Administrative Buildings)*
  Investigated the issue of cost overruns in construction projects, particularly in administrative buildings in Egypt. The study identified critical factors contributing to cost overruns and proposed a framework for controlling these issues, providing suggestions to minimize their impacts on the construction industry.
  Department of Architectural Engineering, Faculty of Engineering, Cairo University, Giza, Egypt.

FIELD WORK EXPERIENCE

Senior Architect

Dimension Studio for Architecture Design – Cairo, Egypt
September 2008 – September 2009

- Engaged in architectural design, project planning, and interior design for various residential and commercial developments.

Senior Architect

Almaghraby Company for Real Estate Development – Cairo, Egypt
September 2009 – September 2013

- Contributed to large-scale architectural projects and urban planning initiatives.
- Specialized in educational buildings, landscape design, interior projects, and consultation for the Beni Suef Governorate.
- Participated in competitions and led consulting efforts for strategic urban and infrastructural projects.

Selected Projects for the Governorate of Beni Suef:

- **2022:** Planning of Industrial City of Medicinal Herbs in Samasta – *147 acres*
- **2021:** Planning of Maidum City – *2,124 acres*
- **2021:** Planning and Landscape Design of Beni Suef Dry Port – *68 acres*
- **2021:** Planning and Landscape Design of Beni Suef Public Garden – *10 acres*
- **2021:** Development of Beni Suef Governorate Island – *147 acres*
- **2020:** Landscape Design of Eastern Corniche – *3.2 km*
- **2020:** Design of the Potatoes Factory in Beni Suef City
- **2019:** Planning and Design of Beni Suef Moderia Garden – *7 acres*
- **2005 – Present:** Delivered over 100 interior design projects across residential, commercial, and institutional sectors.
- **2018 – Present**: Designer and Owner Consultant, Morouj Compound (89 Acres), 6th October City, Egypt.
- **2018**: Designer, Bani Suef Murals (Murals of East Bridge, Harith Bridge, Sadat Bridge), Egypt.
- **2014 – Present**: Designer and Consultant, Tens of Development Projects for Nahda University (Buildings and Roads), Beni Suef, Egypt.

Papers reviewer

- **Reviewer**, *Journal of Advanced Research in Applied Sciences and Engineering Technology*
- **Reviewer**, *Future Engineering Journal*
- **Reviewer**, *Science, Engineering and Technology Journal*
- **Reviewer**, *Innovative Infrastructure Solutions Journal*
- **Reviewer**, *Budownictwo i Architektura*