



# Noman Ashraf

Lecturer

## Personal Data

Nationality | India  
Department | Building Engineering  
Official IAU Email | nasheaf@iau.edu.sa  
Office Phone No. | 31828

## Language Proficiency

Language	Read	Write	Speak
Arabic	✓		
English	✓	✓	✓

## Academic Qualifications

Date	Academic Degree	Place of Issue	Address
2011	Master of Technology – Mechanical Engineering (Thermal Sciences)	India	Aligarh Muslim University, India
2008	Bachelor of Technology – Mechanical Engineering	India	CCS University, India

## PhD, Master, Bachelor Research Title:

Master's Dissertation	Heat Transfer and Fluid flow studies on Natural Convection over Heated plane.
Master's Project	Analysis of Natural Convection over a vertical flat plate.
Bachelor's Project	Optimization of thickness of packed bed Solar air heater using iron screen matrices.



### Professional Record:

Job Rank	Place and Address of Work	Date
Lecturer	Imam Abdulrahman Bin Faisal University, Dammam, Kingdom of Saudi Arabia	2013- To Date
Lecturer	Vivekananda College of Technology and Management, India	2011-2013
HVAC Design Engineer	Comfort Design HVAC Consultant, India	2008-2009

### Scientific Achievements:

#### Published Refereed Scientific Research

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Mujeebu, M. A., and <b>Noman Ashraf</b>	Energy-saving benefits of thermal insulation and glazing in code-compliant office building in cooling-dominated climates	Renewable and Sustainable Energy Reviews, 2024.
2	B. U. Mohammed, <b>Noman Ashraf</b> , et al.,	Pathways for efficient transition into net zero energy buildings (nZEB) in Sub-Sahara Africa. Case study: Cameroon, Senegal, and C <sup>o</sup> te d'Ivoire	Energy & Buildings, 2023.
3	<b>Noman Ashraf</b> and M. A. Wahid	Natural convection over a vertical flat plate: A numerical and experimental investigation	AIP Conference Proceedings, 2023
4	M. A. Aziz, M. Zubair, <b>Noman Ashraf</b> , et al.,	Mechanical, non-destructive, and thermal characterization of biochar-based mortar composite	Biomass Conversion and Biorefinery, 2023
5	S. H. Alyami, A. Alqahtany, <b>Noman Ashraf</b> , N. A. Aldossary, A. Almutlaqa, Faris Al-Maziad et. al	Impact of Location and Insulation Material on Energy Performance of Residential Buildings as per Saudi Building Code (SBC) 601/602 in Saudi Arabia	Materials, 2022
6	Muhammad Nasir, M. Zubair, <b>Noman Ashraf</b> , et. al	Engineered Cellulose Nanocrystals-Based Cement Mortar from Office Paper Waste: Flow, Strength, Microstructure, and Thermal Properties	Journal of Building Engineering, 2022
7	M. Nasir, M. Zubair, <b>Noman Ashraf</b> et. al	Recent review on synthesis, evaluation, and SWOT analysis of nanostructured cellulose in construction applications	Journal of Building Engineering, 2022



8	Saleh H. Alyami, <b>Noman Ashraf</b> , et. al	Likelihood of Reaching Zero Energy Building Design in Hot Dry Climate: Saudi Arabia”,	IEEE Access, 2021
9	<b>Noman Ashraf</b> , Muhammad Nasir, Walid Al-Kutti & Faris A. Al-Maziad,	Assessment of thermal and energy performance of masonry blocks prepared with date palm ash	Materials for Renewable and Sustainable Energy, 2020
10	Muhammad Abdul Mujeebu, <b>Noman Ashraf</b> ,	Impact of location and deadband on energy performance of nano aerogel glazing for office building in Saudi Arabia	Building Research & Information, 2020
11	Othman S Alshamrani, M Abdul Mujeebu, <b>Noman Ashraf</b> et. al	Selection of External Wall Material by LCC Technique for Office-cum-Commercial Building in the Eastern Province of Saudi Arabia	Journal of Architecture and Planning, 2017
12	M. Abdul Mujeebu, <b>Noman Ashraf</b>	Energy performance and economic viability of nano aerogel glazing and nano vacuum insulation panel in multi-story office building	Energy, 2016
13	M. Abdul Mujeebu, <b>Noman Ashraf</b>	Effect of nano vacuum insulation panel and nanogel glazing on the energy performance of office building	Applied Energy, 2016
14	Othman Subhi Alshamrani, <b>Noman Ashraf</b> et al.	Significance of Life-Cycle Costing for Selection of Building Construction Materials	International Journal of Civil and Structural Engineering, 2015

### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Othman Al-Shamrani, M. Essam Shaawat, <b>Noman Ashraf</b> and Abdussalam Alsudairi	Minimizing the Environmental Emissions Associated with Energy Consumption of Mosque Building in Saudi Arabia	The First International Conference on Mosque Architecture, 2016
2	Othman Subhi Alshamrani, <b>Noman Ashraf</b> , M. Esam Shaawat et al.	Significance of Life-Cycle Costing for Selection of Building Construction Materials	Second Intl. Conf. on Advances in Civil, Structural and Construction Engineering - CSCE 2015
3	<b>Noman Ashraf</b> and Faris Al-Maziad	Effects of façade on the energy performance of Education Building in Saudi Arabia	World SB14 Barcelona Conference, 2014



4	M. Essam Shaawat, <b>Noman Ashraf</b>	Comparative study of energy performance of an institutional building for different façade configurations in Saudi Arabia	SB 13 Conference, Graz University, Austria, 2013
5	<b>Noman Ahsraf</b> , Mustafa J. and Altamush M.	Experimental and Numerical analysis of Natural Convection over a Constant Heat flux vertical Plate	2nd National Conference on Advances in Heat Transfer and Fluid Dynamics, 2013

### Scientific & Academic Awards

#	Name of Winners	Award Title	Year	Details
1	Mukarram Zubair, <b>Noman Ashraf</b> , Mohammad Saood, Muhammad Arif, Walid Al-Kutti	Annual Student Research Publishing Initiative Award	2022	Awarded by Deanship of Scientific Research, Imam Abdulrahman Bin Faisal University <i>Category: Second Track of Students Research Publishing Initiative</i>

### Completed and Ongoing Funded Research Projects

#	Supported by	Research Title	Amount of Budget	Report Date
1	British Council, UK	Synergies in Energy-Efficient Design Strategies for Net-Zero Energy Residential Buildings: A Case Study of Saudi Arabia and the United Kingdom	£40,000	Ongoing
2	Imam Abdulrahman Bin Faisal University	Process optimization of cellulose nanocrystals from office paper waste and its utilization as renewable additive for strong green concrete	SR 139,700	2022
3	Imam Abdulrahman Bin Faisal University	Comparison of sky luminance distribution models with measurements done in Dammam Area	SR 56,700	2021
4	Imam Abdulrahman Bin Faisal University	The Physico-mechanical and Thermal Properties of Brick and Boards Containing Palm Tree Wood for Construction	SR 159,600	2016
5	Binladin Research Chair on Quality and Productivity Improvement in the Construction Industry, University of Hail	Selection of Construction Material based on Life Cycle Costing Technique.	SR 100,000	2016



## Current Researches

#	Research Title	Name of Investigator(s)
1	Performance evaluation of CdTe based PV modules for climatic conditions in Saudi Arabia	Noman Ashraf
2	Energy Performance of Thermal Insulation and Glazing for Office Building in Typical Climatic Locations of Saudi Arabia	Noman Ashraf and Abdul Mujeebu
3	Techno-Economic Assessment of Photovoltaic Glazing System for an Office Building in Saudi Arabia	Noman Ashraf and Faris Almaziad

## Membership of Scientific and Professional Societies and Organizations

- Member of American Society of Mechanical Engineers (ASME)
- Member of The Association for Materials Protection and Performance (AMPP)
- Member of Environment Technology and Management association (ETMA)
- Member of International Society of Automation (ISA)

## Teaching Activities

### Undergraduate

#	Course/Rotation Title	Course Code	Extent of Contribution
1	Building Services (3): Mechanical Systems	BSTC 432	Lectures
2	Thermodynamics & Fluid Mechanics	BSTC 331	Lectures and Labs
3	Green/Sustainable Buildings	BSTC 400	Lectures and Labs
4	Environmental Control Systems	ARCH 322	Lectures and Labs
5	Environmental Eng. (1): Energy Systems	BSTC 332	Lectures and Tutorials
6	Building Systems (1): Plumbing and Air Conditioning	INAR-321	Lectures and Labs
7	Engineering Mathematics	BSTC 341	Lectures
8	Building Maintenance & supervision	BSTC 512	Lectures and Labs
9	Advanced Topics in Building Energy	BSTC 583	Lectures and Labs
10	Energy-Efficient Building Automation Systems	ENRG 453	Lectures and Labs
11	Design Studio – 6,7,8, 9, 10	BSTC 302, 401, 402, 501, 502	Design Studio
12	Arch Design Studio 10	ARCH 502	Design Studio



## Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution
1	Building Energy Systems and Energy management	BUSC 651	Lectures
2	Thermal properties and performance of building	BUSC 650	Lectures and Labs
3	Solar Energy Technology	BUSC 652	Lectures and Labs
4	Directed Studies in Building Science	BUSC 680	Lectures and Labs
5	Experimentation Techniques	BUSC 613	Lectures and Labs

## Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Undergraduate	32	2015	2023

## Supervision of Bachelors, Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	Bachelors		Imam Abdulrahman Bin Faisal	Each Year

## Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
1	Bachelors	Assessment of the efficiency of glazing integrated PV module for an office building in Saudi Arabia	Imam Abdulrahman Bin Faisal	2023-24



## Administrative Responsibilities, Committee and Community Service

### Committee Membership

#	From	To	Position	Organization
1	2017	Date	Head	Curriculum Area Committee – Basic Sciences
2	2017	Date	Member	Curriculum Area Committee – Building Services
3				
4	2017	Date	Member	KPI Data Collection Committee
5	2018	Date	Member	Program Assessment and APR Committee
6	2014	Date	Member	Laboratories Committee
7	2020	Date	Member	Safety and Fire Diplomas Committee
8	2022	Date	Member	Scientific Committee for Exit Exam
9	2022	Date	Member	MCEM Master Program Accreditation Committees - Steering Committee no. 4 (Faculty Members)

### Competencies and Skills: (Computer, Information technology, technical, etc.)

1	<b>Building Energy Simulation Software</b> – DesignBuilder, Ecotect, IES-VE, eQuest, TRACE 700
2	<b>Design of HVAC systems for Buildings</b> – Hourly Analysis Program (HAP), E20, DuctSizer, DuctMate, Pipesizer, Ductulator, ASHRAE duct fitting, CARRIER Psychart, Climate Consultant
3	<b>Photovoltaics (PV) and BiPV systems Analysis</b> – RETScreen, HOMER, PVSOL, PVGIS, PVSites
4	<b>Environmental Assessment</b> – OpenLCA, One Click LCA
5	<b>Statistical Analysis</b> – SPSS, Crystal Ball, SuperDecision
6	<b>Building Information Modelling (BIM)</b> – Revit MEP
7	<b>Programing Language</b> – MATLAB, FOTRAN, C

### Research Profile and IDs:

<b>Google Scholar Profile</b>	<a href="http://scholar.google.com/citations?user=JEuNe58AAAAJ&amp;hl=en">http://scholar.google.com/citations?user=JEuNe58AAAAJ&amp;hl=en</a>
<b>Research Gate Profile</b>	<a href="https://www.researchgate.net/profile/Noman_Ashraf2">https://www.researchgate.net/profile/Noman_Ashraf2</a>
<b>ORCID ID</b>	<a href="https://orcid.org/0000-0002-9687-1171">https://orcid.org/0000-0002-9687-1171</a>
<b>SCOPUS ID</b>	5581637100