

Dr. Adnan Nawaz

Associate Professor (Civil Engineering)
Chairperson of the Department of Civil Engineering
COMSATS University Islamabad, Wah Campus, Wah Cantt, Pakistan
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Academics

2010 - 2016	Asian Institute of Technology , Thailand Doctor of Engineering Structural Engineering School of Engineering and Technology
2008 - 2010	Asian Institute of Technology , Thailand Master of Engineering Structural Engineering School of Engineering and Technology
2007 - 2008	University of Engineering & Technology , Taxila, Pakistan Master of Engineering Structural Engineering Department of Civil Engineering
2003 - 2006	University of Engineering & Technology , Taxila, Pakistan Bachelor of Science Civil Engineering Department of Civil Engineering

Professional Experience

2023 – To Present	Associate Professor of Civil Engineering Chairperson (since Sep 2024) Department of Civil Engineering, COMSATS University Islamabad, Wah Campus, Wah Cantt, Pakistan
2016 – 2023	Assistant Professor of Civil Engineering Department of Civil Engineering, COMSATS University Islamabad, Wah Campus, Wah Cantt, Pakistan
2012 – 2016	Research Assistant Construction and Maintenance Technology Research Center (CONTEC) Sirindhorn International Institute of Technology, Thailand
2007 – 2008	Junior Engineer Structural Engineering Department National Engineering Services Pakistan (Pvt) Limited (NESPAK), Islamabad
2006 – 2007	Lab Engineer Department of Civil Engineering, University of Engineering & Technology, Taxila, Pakistan

Awards and Honors

2023	Co-researcher of research funding from the National Research Council, Thailand (~USD 10,000 at the time of award)
2019	Awardee of research funding from the Higher Education Commission of Pakistan (~PKR 9 million, ~USD 65,000 at the time of award)

2018	Travel and Conference Grant, the Higher Education Commission of Pakistan, the 7th Asia Conference on Earthquake Engineering, 22-25 Nov 2018, Bangkok, Thailand
2015	2 nd position in the Asian Institute of Technology Research Poster Competition, Thailand
2013	5 th position in the European Union Sustainable Consumption and Production (SCP) Policy Project Video Competition, Bangkok, Thailand
2013	Winner of the Asian Institute of Technology Video and Logo Competition, Bangkok, Thailand
2011	Served as the President of the Pakistan Student Association at the Asian Institute of Technology, Thailand
2008	Masters leading to Ph.D. Overseas Scholarship, Higher Education Commission (HEC), Pakistan
2006	Silver medalist in BSc Civil Engineering with Honors, UET Taxila, Pakistan

Publications

Journal Publications (peer-reviewed) (*h-index: 17, Cumulative impact factor > 145*)

Q1-(24), Q2-(11), Q3-(7), Q4-(1)

Research domain: Sustainable construction materials

1. Q1 **Nawaz, A.**, Hussain S., Tufail R.F., Iqbal, H.W., Mehmood, T., Saingam, P., Alattyih, W., Ahmad, J. (2024). Performance evaluation of high-performance concrete mixes incorporating recycled steel scale waste as fine aggregates. *Results in Engineering*. Elsevier. Vol 24, p103079. <https://doi.org/10.1016/j.rineng.2024.103079>
2. Q3 **Nawaz, A.**, Julnipitawong, P. and Tangtermsirikul, S. (2024). Management and utilization of fly ash containing high free-lime and sulfur trioxide contents. *Engineering Journal*. Vol 28(9). pp. 33-50. [10.4186/ej.2024.28.9.33](https://doi.org/10.4186/ej.2024.28.9.33)
3. Q1 Saingam, P., Chatveera, B., Promsawat, P., Hussain, Q., **Nawaz, A.**, Makul, N. and Sua-iam, G. (2024). Synergizing Portland Cement, high-volume fly ash and calcined calcium carbonate in producing self-compacting concrete: A comprehensive investigation of rheological, mechanical, and microstructural properties. *Case Studies in Construction Materials*. Elsevier. Vol 21, p.e03832. <https://doi.org/10.1016/j.cscm.2024.e03832>
4. Q1 Makul N., Hussain Q., **Nawaz A.**, Saingam P. and Sua-iam G. (2024). Effect of para-wood ash and calcium carbonate on the properties of eco-friendly self-compacting mortar reinforced with electronic waste fibers. *Journal of Building Engineering*. Elsevier. Vol 95, p110353. <https://doi.org/10.1016/j.jobbe.2024.110353>
5. Q1 Saingam, P., Hussain, Q., Ejaz, A., **Nawaz, A.**, Joklad, P. and Khan, K. (2024). Enhancing compressive behavior of concrete with novel low-cost hybrid passive confinement including large rupture strain cotton ropes: Experimental findings and a design-oriented model. *Case Studies in Construction Materials*. Vol 21, p.e03496. <https://doi.org/10.1016/j.cscm.2024.e03496>
6. Q1 Panumas, S., Qudeer, H., Gritsada, S., **Nawaz, A.** and Ejaz, A. (2024). Hemp fiber-reinforced polymers composite jacketing technique for sustainable and environment-friendly concrete. *Polymers*. Vol. 16(13), pp. 1774. <https://doi.org/10.3390/polym16131774>

7. Q3 **Nawaz, A.**, Julnipitawong, P. and Tangtermsirikul, S., (2023). Effect of curing temperature and free lime content in fly ash on basic properties and autoclave expansion of fly ash mixtures. *Engineering Journal*. Vol. 27(10), pp.67-79. [10.4186/ej.2023.27.10.67](https://doi.org/10.4186/ej.2023.27.10.67)
8. Q2 Ali, K., Saingam, P., Qureshi, M.I., Saleem, S., **Nawaz, A.**, Mehmood, T., Maqsoom, A., Malik, M.W., Suparp, S. (2023). Influence of recycled plastic incorporation as coarse aggregates on concrete properties. *Sustainability*. Vol. 15(7). MDPI. <https://doi.org/10.3390/su15075937>
9. Q1 Arham, M., Rana, I.A., **Nawaz, A.**, Arshad, H.S.H. (2023). The impact of brick kilns on environment and society: A bibliometric and thematic review. *Environmental Science and Pollution Research*. Springer-Nature. <https://doi.org/10.1007/s11356-023-26011-7>
10. Q1 Saingam, P., Ejaz, A., Ali, N., **Nawaz, A.**, Hussain, Q. and Joyklad, P. (2023). Prediction of stress-strain curves for HFRP composite confined brick aggregate concrete under axial load. *Polymers*. Vol. 15(4). MDPI. <https://doi.org/10.3390/polym15040844>
11. Q1 Haq, I.U., Elahi, A., **Nawaz, A.**, Shah, S.A.Q., Ali, K. (2022). Mechanical and durability performance of concrete mixtures incorporating bentonite, silica fume, and polypropylene fibers. *Construction and Building Materials*. Vol. 345. Elsevier. <https://doi.org/10.1016/j.conbuildmat.2022.128223>
12. Q2 Mushtaq, F., S., Ali, A., Khushnood, R.A., Tufail, R.F., Majdi, A., **Nawaz, A.**, Durdyev, S., Nergis, D.D.B., Ahmad, J. (2022). Effect of bentonite as partial replacement of cement on residual properties of concrete exposed to elevated temperatures. *Sustainability*. Vol. 14(18). MPDI. <https://doi.org/10.3390/su141811580>
13. Q1 Rodsin, K., Joyklad, P., Hussain, Q., Mohamad, H., Buatik, A., Zhou, M., Chaiyasarn, K., **Nawaz, A.**, Mehmood, T., Elnemr, A. (2022). Behavior of steel clamp confined brick aggregate concrete circular columns subjected to axial compression. *Case Studies in Construction Materials*. Vol. 16. Elsevier. <https://doi.org/10.1016/j.cscm.2021.e00815>
14. Q2 Maqsoom, A., Aslam, B., Gul, M.E., Ullah, F., Kouzani, A.Z., Mahmud, M.P., **Nawaz, A.** (2021). Using multivariate regression and ANN models to predict properties of concrete cured under hot weather. *Sustainability*. Vol. 13(18). MDPI. <https://doi.org/10.3390/su131810164>
15. Q1 Rodsin, K., Hussain, Q., Suparp, S., **Nawaz, A.** (2020). Compressive behavior of extremely low strength concrete confined with low-cost glass FRP composites. *Case Studies in Construction Materials*. Vol. 13. Elsevier. <https://doi.org/10.1016/j.cscm.2020.e00452>
16. Q2 Tufail, R.F., Feng, X., Zahid, M., Utashev, N., Mehmood, T., **Nawaz, A.**, Maqsoom, A., Salahuddin, H. (2020). Statistical modeling of rubberized concrete beams confined by FRP using RSM technique. *Sādhanā*. Springer. Vol. 45. <https://doi.org/10.1007/s12046-020-01349-7>
17. Q1 Iqbal, H.W., Khushnood, R.A., Baloch, W.L., **Nawaz, A.**, Tufail, R.F. (2020). Influence of graphite nano/micro platelets on the residual performance of high strength concrete exposed to elevated temperature. *Construction and Building Materials*. Vol. 253. Elsevier. <https://doi.org/10.1016/j.conbuildmat.2020.119029>
18. Q2 Salahuddin, H., Qureshi, L.A., **Nawaz, A.**, Abid, M., Alyousef, R., Alabduljabbar, H., Aslam, F., Khan, S.F., Tufail, R.F. (2020). Elevated temperature performance of reactive powder concrete containing recycled fine aggregates. *Materials*. Vol. 13(17). MDPI. <https://doi.org/10.3390/ma13173748>
19. Q1 Zafar, M.S., Javed, U., Khushnood, R.A., **Nawaz, A.**, Zafar, T. (2020). Sustainable incorporation of waste granite dust as partial replacement of sand in autoclave aerated concrete. *Construction and Building Materials*. Vol. 250. Elsevier. <https://doi.org/10.1016/j.conbuildmat.2020.118878>

20. Q1 Salahuddin, H., Qureshi, L.A., **Nawaz, A.**, Raza, S.S. (2020). Effect of recycled fine aggregates on performance of Reactive Powder Concrete. *Construction and Building Materials*. Vol. 243. Elsevier. <https://doi.org/10.1016/j.conbuildmat.2020.118223>
21. Q3 Maqsoom, A., Hashmi, A.A.Q., Zeeshan, M., Arshad, Q., **Nawaz, A.**, Salahuddin, H. (2019). A system dynamics-based economic performance simulation of construction waste reduction management: effective application of prefabrication. *Environmental Engineering & Management Journal*. Vol. 18(11). <https://eemj.eu/index.php/EEMJ/article/view/3991>
22. Q1 Salahuddin, H., **Nawaz, A.**, Maqsoom, A., Mehmood, T. (2019). Effects of elevated temperature on performance of recycled coarse aggregate concrete. *Construction and Building Materials*. Vol. 202. Elsevier. <https://doi.org/10.1016/j.conbuildmat.2019.01.011>
23. Q4 Joyklad, P., **Nawaz, A.**, Hussain, Q. (2018). *Effect of fired clay brick aggregates on mechanical properties of concrete*. Suranaree Journal of Science & Technology. Vol. 25(4). <http://ird.sut.ac.th/e-journal/Journal/pdf/180101242.pdf>
24. Q1 **Nawaz, A.**, Julnipitawong, P., Krammart, P., Tangtermsirikul, S. (2016). Effect and limitation of free lime content in cement-fly ash mixtures. *Construction and Building Materials*. Vol. 102. Elsevier. <https://doi.org/10.1016/j.conbuildmat.2015.10.174>

Research domain: Behaviour of structural elements

25. Q1 Joyklad, P., Gadagamma, C.K., Maneengamlert, B., **Nawaz, A.**, Ejaz, A., Hussain, Q. and Saingam, P. (2024). Structural behavior of RC one-way slabs strengthened with ferrocement and FRP composites. *Engineering Failure Analysis*. p.108328. Elsevier. <https://doi.org/10.1016/j.engfailanal.2024.108328>
26. Q3 Siddique, A., Mehmood, T., Qazi, S., Khan, S., **Nawaz, A.**, Tufail, R.F. (2022). Seismic performance evaluation of code compliant and non-compliant RC walls. *Australian Journal of Structural Engineering*. Taylor & Francis. <https://doi.org/10.1080/13287982.2022.2133721>
27. Q1 Rodsin, K., Mehmood, T., Kolozvari, K., **Nawaz, A.**, Samiullah, Q., Parichatprecha, R. (2022). Experimental and numerical seismic assessment of non-ductile reinforced concrete (RC) columns strengthened with glass fiber reinforced polymer (GFRP). *Bulletin of Earthquake Engineering*. Vol. 20(13). Springer. <https://doi.org/10.1007/s10518-022-01479-9>
28. Q1 Rodsin, K., Mehmood, T., Kolozvari, K., **Nawaz, A.** (2020). Seismic assessment of non-engineered reinforced concrete columns in low to moderate seismic regions. *Bulletin of Earthquake Engineering*. Vol. 18. Springer. <https://doi.org/10.1007/s10518-020-00918-9>
29. Q3 Mehmood, T., Qureshi, M.I., Ahmed Najam, F., Maqsoom, A., **Nawaz, A.**, Salahuddin, H., Tufail, R.F. (2020). New nonlinear modal decomposition method for seismic analysis of tall RC core wall buildings. *Iranian Journal of Science and Technology, Transactions of Civil Engineering*. Vol. 44. Springer. <https://doi.org/10.1007/s40996-020-00376-y>
30. Q3 Mehmood, T., Maqsoom, A., **Nawaz, A.**, and Zeeshan, B.U.A., (2020). Experimental and numerical seismic evaluation of RC walls under axial compression. *Periodica Polytechnica Civil Engineering*. Vol. 64(1). <https://doi.org/10.3311/PPci.14333>
31. Q2 Rodsin, K., Hussain, Q., Joyklad, P., **Nawaz, A.**, Fazliani, H. (2020). Seismic strengthening of nonductile bridge piers using low-cost glass fiber polymers. *Bulletin of the Polish Academy of Sciences: Technical Sciences*. Vol. 6. <https://doi.org/10.24425/bpasts.2020.135383>
32. Q2 Ahmad, S., Shah, A., **Nawaz, A.**, Salimullah, K. (2010). Shear strengthening of corbels with carbon fibre reinforced polymers (CFRP). *Materiales de Construcción*. Vol. 60(299). <https://doi.org/10.3989/mc.2010.50009>

Research domain: Multidisciplinary

33. Q2 Rana, I.A., Nisar, M.A., Lodhi, R.H., Waseem, H.B., **Nawaz, A.**, Aslam, A. and Shah, A.M. (2024). Multi-Phase Residential Fire Vulnerability Assessment. *Fire Technology*. p1-31. Springer. <https://doi.org/10.1007/s10694-024-01673-y>
34. Q1 Rana, I.A., Niazi, I.U.H.K., Khalid, Z., **Nawaz, A.** and Najam, F.A. (2023). A novel framework to assess multidimensional disaster resilience of children: From conceptualization to quantification. *International Journal of Disaster Risk Reduction*. Vol. 96. Elsevier. <https://doi.org/10.1016/j.ijdrr.2023.103914>
35. Q1 Rana, I.A., Khan, M.M., Lodhi, R.H., Altaf, S., **Nawaz, A.** and Najam, F.A. (2023). Multidimensional poverty vis-à-vis climate change vulnerability: Empirical evidence from flood-prone rural communities of Charsadda and Nowshera districts in Pakistan. *World Development Sustainability*. Vol. 2. Elsevier. <https://doi.org/10.1016/j.wds.2023.100064>
36. Q1 Zia, A., Rana, I.A., Arshad, H.S.H, Khalid, Z., **Nawaz, A.** (2023). Monsoon flood risks in urban areas of Pakistan: A way forward for risk reduction and adaptation planning. *Journal of Environmental Management*. Vol. 336. Elsevier. <https://doi.org/10.1016/j.jenvman.2023.117652>
37. Q2 Rana, I.A., Khalid, S., Jamshed, A., **Nawaz, A.** (2022). Social protection in disaster risk reduction and climate change adaptation: A bibliometric and thematic review. *Journal of Integrative Environmental Sciences*. Vol. 19(1). Taylor and Francis. <https://doi.org/10.1080/1943815X.2022.2108458>
38. Q1 Rana, I.A., Lodhi R.H., Zia, A., Jamshed, A., **Nawaz, A.** (2022). Three-step neural network approach for predicting monsoon flood preparedness and adaptation: Application in urban communities of Lahore, Pakistan. *Urban Climate*. Vol. 45. Elsevier. <https://doi.org/10.1016/j.uclim.2022.101266>
39. Q1 Rana, I.A., Sikander, L., Khalid, Z., **Nawaz, A.**, Najam, F.A., Khan, S.U., Aslam, A. (2022). A localized index-based approach to assess heatwave vulnerability and climate change adaptation strategies: A case study of formal and informal settlements of Lahore, Pakistan. *Environmental Impact Assessment Review*. Vol. 96. Elsevier. <https://doi.org/10.1016/j.eiar.2022.106820>
40. Q2 Khan, A.A., Rana, I.A., **Nawaz A.**, Waheed A. (2020). Gender-based emergency preparedness and awareness: Empirical evidences from high school students of Gilgit, Pakistan. *Environmental Hazards: Human and Policy Dimensions*. Vol. 20(4). Taylor and Francis. <https://doi.org/10.1080/17477891.2020.1839375>
41. Q1 Khan, A.A., Rana, I.A., **Nawaz, A.** (2020). Gender-based approach for assessing risk perception in a multi-hazard environment: A study of high schools of Gilgit, Pakistan. *International Journal of Disaster Risk Reduction*. Vol. 44. Elsevier. <https://doi.org/10.1016/j.ijdrr.2019.101427>
42. Q2 Maqsoom, A., Mughees, A., Zahoor, H., **Nawaz, A.**, Mazher, K.M. (2020). Extrinsic psychosocial stressors and workers' productivity: Impact of employee age and industry experience. *Applied Economics*. Vol. 52(26). Taylor and Francis. <https://doi.org/10.1080/00036846.2019.1696936>
43. Q3 Maqsoom, A., Rehman, J.U., Umer, M., Thaheem, M.J., Khan, M.J., **Nawaz, A.**, Najam, M., Nazir, T. (2020). Exploring managerial perspectives of using building management system through TAM: An empirical study of commercial sector of Pakistan. *Periodica Polytechnica Civil Engineering*. Vol. 64(3). <https://doi.org/10.3311/PPci.15323>

Book Chapters

1. Suhail, S., Najam, A., **Nawaz, A.** (2017). Modeling and Analysis of Soil-Pile Interaction for Dynamic Loading-A Review. In *Soil Dynamics and Soil-Structure Interaction for Resilient Infrastructure*. Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-319-63543-9_12

Conference/Seminar Papers Publications

1. Hussain, M., Mehtab, F., **Nawaz A.** (2019). Use of steel mill slag in concrete as fine aggregates". 1st Conference on Sustainability in Civil Engineering. Islamabad. Pakistan.
2. **Nawaz, A.**, Hussain, Q., Joyklad, P., Suparp S. (2018). Behavior of hollow cement clay interlocking bricks under cyclic axial compression loading". The 7th Asia Conference on Earthquake Engineering. Bangkok. Thailand.
3. Siddique, A., Mehmood, T., Samiullah, Q., **Nawaz, A.** (2018). Seismic evaluation of high-rise RC buildings in Pakistan. The 7th Asia Conference on Earthquake Engineering, 22-25 Nov 2018, Bangkok, Thailand.
4. Suhail, S., Danish, M., Sheikh, A., **Nawaz, A.** (2017). Monitoring pile performance using fiber optic sensor technology – an account on recent developments. International Conference on New Challenges in Geotechnical Engineering. Lahore. Pakistan
5. **Nawaz, A.**, Julnipitawong, P., Krammart, P., Tangtermsirikul, S. (2015). Influence of free lime and SO₃ contents in fly ash on mechanical and durability properties of cement-fly ash mixtures". AUN/SEED-NET Regional Conference 2015 on Material Engineering. Bangkok. Thailand.
6. **Nawaz, A.**, Julnipitawong, P., Krammart, P., Tangtermsirikul, S. (2015). Effect of high free lime and high SO₃ content on volume change of cement-fly ash mixtures". The 10th International Symposium in Science and Technology, Sep 2015, Bangkok Thailand.
7. **Nawaz, A.**, Julnipitawong, P., Krammart, P., Tangtermsirikul, S. (2015). Effect of free lime content on mechanical properties of cement-fly ash mixtures. The 7th Joint Student Seminar on Civil Infrastructures, Aug 2015, Bangkok Thailand.
8. Anwar, N., **Nawaz, A.** (2011). Advancements in computing tools and their application in structural engineering". The 15th ASEP International Convention (15AIC). The Association of Structural Engineers of the Philippines, Inc. (ASEP). Manila, Philippines.

Research Grants

Title	Designation	Budget	Program and Funder
<i>An investigative study on the manufacturing process and mechanical properties of bricks in Pakistan and impact on surrounding communities.</i>	Principal investigator	9.0 million PKR (~USD 65,000 at the time of award)	National Research Program for Universities (NRPU), Higher Education Commission (HEC), Pakistan
<i>Use of hemp fiber reinforced polymer composites for confinement of brick waste aggregate concrete</i>	Co researcher	2.8 million PKR	Academic Melting Pot Program, National Research Council, Thailand

Services

Academic and Administrative Services

- Chairperson of the Department of Civil Engineering (Sep 2024 – till present)
- Head of Departmental Outcome Based Education Committee while successfully securing Level-II accreditation from Pakistan Engineering Council as per the Washington Accord requirement (Jan 2018 – till present)

- Convener of Campus Works Committee (Apr 2023 – till present)
- Member of the Civil Engineering Departmental Graduate Advisory Committee (Dec 2018 – till present)
- Member of the Mechanical Engineering Departmental Graduate Advisory Committee (Apr 2024 – till present)
- Member of Unfair Means Control Committee (Dec 2016 – till present)
- Member of Undergraduate Departmental Admission Committee (July 2016 – till present)
- Member of Departmental Academic Review Committee (Feb 2020 – till present)
- Member of Campus Make-Up Exams Requests Review Committee (Jan 2024 – till present)
- Advisor for Students on Probation (Sep 2017 – till present)
- Member of Technical Committee for Campus Telephone Exchange (Apr 2024 – till present)
- Member of Committee for Procurement of Equipment for Structural Lab (Mar 2018)
- Member of Committee for Departmental Short Listing of Faculty/Non-Faculty Members for Civil Engineering Department (Dec 2018 – till present)
- Member of Purchase Committee (July 2021 – till present)
- Class counselor for Students (Aug 2016 – till present)
- Member of Departmental Evaluation Committee for Online Course Content (During COVID-19)
- Involved in organizing CUI, Wah Campus including Truss Bridge Competition, Dam Prototype Competition, Open House, CPDs
- Conducted various training programs at CUI, Wah Campus as well as at other national universities,
- External committee member of MS and Ph.D. students of other national universities
- Member of the Industrial Advisory Board of the Department of Civil Engineering, CUI Wah Campus
- Graduate Coordinator for the Department of Civil Engineering, COMSATS University Islamabad, Wah Campus

Reviewer Services (selected)

- Construction and Building Materials (CBM) (ISSN: 0950-0618)
- Journal of Materials in Civil Engineering (ISSN: 1943-5533)
- International Journal of Civil Engineering (ISSN: 2383-3874)
- Journal of Engineering Science and Technology (ISSN: 1823-4690)
- Engineering Journal (ISSN: 0125—8281)
- Member of Technical Review Committee of Conference on Sustainability in Civil Engineering (Capital University of Science and Technology) (Aug 2019 – till present)
- Reviewer of research projects of the Higher Education Commission of Pakistan (HEC)
- Reviewer of research projects of Pakistan Science Foundation (PSF)

Professional Services

- Member of Board of Studies of Civil Engineering (Feb 2020 – till present), providing expertise as the subject matter expert
- HEC Approved Ph.D. Supervisor in the discipline of Engineering & Technology by the Higher Education Commission of Pakistan.
- Collaborating with the industry for conducting research projects as well as for providing consultancy services
- Associated with the Pakistan Engineering Council (PEC)
- Involved in organizing and conducting various Continuing Professional Development (CPD) activities (seminars, workshops)

Community Services

Involved in the following extra-curricular activities:

- Books donation drive

- Clean green walk
- Tree plantation drive
- The blood donation drive
- Judge of the webinar “Restore Our Earth” organized under the umbrella of UNESCO Chair on Knowledge Systems for Integrated Water Resources Management (IWRM). 2021. CUI Wah Campus.
- Conducted different surveys at brick kilns in Pakistan to assess the conditions of children and women living or working at brick kilns, and the type of brick kilns, the brick manufacturing process, mix design ratio, production capacity, fuel type, and consumption of the brick kilns of Pakistan
- Conducting surveys at high schools of Gilgit, Pakistan to assess the gender-based emergency preparedness, awareness, and risk perception of male and female students
- Member of the Mosque operational committee
- Coordinator and Manager of 3rd Asia Conference on Earthquake Engineering (ACEE). Dec 2010. Bangkok. Thailand
- Coordinator of Photographic Exhibition: “Culture & Arts through the Lens”. Oct 2011. Bangkok. Thailand
- Coordinator of Art Exhibition: “The Color of the Narrative – Contemporary Art from Pakistan”. July 2012. Bangkok. Thailand
- Coordinator and Manager of AIT Technology Event. Jul 2013. Bangkok. Thailand

Educational Activities

Courses

2024 - present	Structural Evaluation and Rehabilitation of Structures	Post Graduate Level
2018 - present	Concrete Repair and Maintenance	Graduate Level
2017 – present	Advanced Concrete Technology	Graduate Level
2019 – present	Reinforced Concrete Design-1	Undergraduate Level
2016 – present	Properties of Concrete	Undergraduate Level
2016 – present	Matrix Analysis of Structures	Undergraduate Level
2017 – 2018	Civil Engineering Materials	Undergraduate Level
2016 – present	Final Year Design Project	Undergraduate Level

Student Supervision

Past Master Students

Student Name	Thesis Title	Role
• Ameer Murad	Mechanical and durability assessment of fly ash concrete incorporating COVID-19 single use face mask	Supervisor
• Muhammad Zohaib Asim	An investigative study on mechanical properties of bricks and axial and diagonal compressive behavior of brick masonry walls.	Supervisor
• Javed Islam	Effect of using brick powder as binder and quarry dust as fine aggregates on properties of concrete mixtures.	Supervisor
• Muhammad Saad Hussain	Use of steel mill scale as replacement of fine aggregates in concrete.	Supervisor
• Saad Attique	Behavior of unconfined and CFRP confined rubberized concrete with additives of graphite nano-micro platelets.	Supervisor
• Israr Hussain	Effect of carbonaceous nano particles on properties of cementitious composites.	Supervisor
• Mughees Ahmed	Vulnerability assessment of existing buildings against progressive collapse.	Co-Supervisor

Research Supervision of PhD and MS Students of other HEIs

Student Name	HEI Name	PhD/MS	Role	Status
• Syed Safdar Raza	UET, Taxila	PhD	Research Committee Member	On-going
• Sandheera Choudary	UET, Taxila	PhD	Research Committee Member	On-going
• Anum Khalid	NUST Islamabad	PhD	Member Evaluation Committee	On-going
• Nafeesa Shaheen	NUST Islamabad	PhD	Member Evaluation Committee	On-going
• Maria Kanwal	NUST Islamabad	PhD	Member Evaluation Committee	Completed
• Junaid Farooq	CUST, Islamabad	MS	External Examiner	Completed
• Hafiz Waheed Iqbal	NUST Islamabad	MS	Member Evaluation Committee	Completed
• Kiffayat Ullah	UET, Taxila	MS	External Examiner	Completed
• Khadim Hussain	UET, Taxila	MS	External Examiner	Completed
• Rabeah Kanwal	UET, Taxila	MS	External Examiner	Completed
• Inzizam Ul Haq	UET, Taxila	MS	External Examiner	Completed

Invited Talks

- 21st Sep 2023 Seminar on "A Guide to Impactful Research Presentations", COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 25th Aug 2022 Implementation of OBE system in a STEM Class. Department of Mechatronics Engineering. Wah Engineering College. Wah Cantt. Pakistan
- 15th Oct 2021 Design and Assessment of Complex Engineering Problems, Open Ended Labs and Problem- based Learning. Department of Civil Engineering. International Islamic University. Islamabad. Pakistan
- 2nd Aug 2021 Implementation of Outcome based Education in Engineering Curriculum. Mechanical Engineering Department. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 15th June 2021 Employment of Complex Engineering Problems in Civil Engineering Curriculum. Department of Civil Engineering. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 7th June 2021 Webinar on "How to Write Academic Papers". Department of Civil Engineering. Wah Engineering College. Wah Cantt. Pakistan.
- 19th Mar 2020 Adaptation of Outcome-based Education in Civil Engineering. Department of Civil Engineering. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan

Continuing Education (Participation in Seminars, Workshops, Trainings, and Certifications)

- 18th Sep 2024 Webinar on Understanding Research Metrics and Elsevier's Science Direct by Elsevier
- 12th Sep 2024 Webinar on Application of AI/ML in Civil Engineering by Pakistan Engineers Forum
- 12th Sep 2024 Cities and Climate Change, completed e-course offered by United Nations Institute for Training and Research
- 3rd Sep 2024 Plastic Waste and the Basel Convention, completed e-course offered by United Nations Institute for Training and Research
- 1st Sep 2024 Net Zero 101: What, Why and How, completed e-course offered by United Nations University Institute for the Advanced Study for Sustainability
- 27th Sep 2023 Integrating Technologies in Civil Engineering. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan

- 27th Feb – 2nd Mar 2023 Reviewers Capacity Building Workshop under Pak UK Education Gateway Project by the Higher Education Commission of Pakistan and the British Council. Islamabad. Pakistan
- 13th Oct 2022 Impact of Machine Learning in the Field of Civil Engineering. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 23rd May 2022 Earthquake Risk Reduction in Pakistan: Issues and Challenges. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 18th May 2022 Shear Strength of High-Performance Concrete. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 3rd Nov 2021 Non-destructive Test Methods for Concrete Bridges. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 6th - 7th Mar 2020 Outcome Based Education Faculty Training by Pakistan Engineering Council and PMAS Arid Agricultural University. Rawalpindi. Pakistan
- 7th Nov 2019 Implementation of Outcome-based Education Workshop. HITEC University. Taxila. Pakistan
- 19th Sep 2018 The resistance of Cement-Based Materials under Hydrocarbon Fire. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan
- 25th May 2017 Self-Consolidating Concrete. COMSATS University Islamabad. Wah Campus. Wah Cantt. Pakistan

Expertise and Interests

- Use of Wastes and Recycled Materials in Cement and Concrete Composites
- Development of Sustainable Construction Materials
- High Performance Cementitious based Materials
- Utilization of Nano Materials in Concrete Composites
- Incorporation of E-waste in Concrete Mixtures

Languages

• English	Excellent	• Hindi	Very good
• Urdu	Excellent	• Thai	Good
• Punjabi	Very good		

Technical Expertise

• Design Expert (DoE)	• Cyberlink Power Director	• STAAD Pro
• AutoCAD	• Videoscribe	• MS Office
• ArcGIS	• MS Teams/Zoom	

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