Dr. Muhammad Wasif, PMP

Professor / Director - QEC

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Personal Details

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Personal Vision & Objective

Revolutionizing society through pioneering research and innovative solutions, empowering global industries and shaping future leaders.

My objective is to contribute cutting-edge knowledge and innovative solutions to enhance industrial processes, ultimately fostering industry advancement. Committed to bridging the gap between theory and application, I aspire to impart this knowledge to the next generation, shaping a future leaders equipped with the latest insights and skills.

Awards and Fundings

- HEC-Best National University Teacher Award 2020 (Awarded by the President of Pakistan Dr. Arif Alvi on 8th September 2021 in President House, Islamabad)
- HEC Best University Teacher Award 2020 (in 151 Academic Council of NEDUET)
- NED Best Researcher Award for the years; 2022, 2021 and 2020.
- NEDAASC Best University Teacher Award 2019 and 2016
- NEDAASC Best Research Publication Award 2020 and 2016
- NED University Contact Coordinator, GetInnovative4Impact Project from Erasmus+ (EU grant) of worth Euro 718,000 (PKR, 208m, USD 0.75m), (Introduction of Innovative Practices and Methodologies for Effective Teaching and Industry-Academia Linkages in Pakistan and Malaysia).
- Principal Investigator (PI), Center for Advanced Precision Machining from Planning Commission of Pakistan of worth PKR 94.1 million (USD 0.34m).
- Co-Principal Investigator (PI), HEC-NRPU 2021-2024, Investigation of the Distortion and Surface Integrity of Aluminum Aerospace Grade Alloys during High-Speed CNC Milling Machining Operations, Grant Amount: PKR 15.67 million (USD 56,489)
- Co-Principal Investigator (PI), HEC-NRPU 2023-2024, Development of Thermal Assisted Friction Stir Welding Machine for Solid State Joining of Space, Grade Aluminum Alloys used for Cryogenic Tanks, Grant Amount: PKR 18.67 million (USD 67304)
- Co-Principal Investigator (PI), HEC-NRPU 2022-2024, Framework Development and Risk Analysis of logistics network in Pakistan to make Supply chains resilient in wake of Pandemic Crisis, Grant Amount: PKR. 6.43 million (USD 23,180)

- Principal Investigator (PI), HEC-NRPU 2022-2024, Optimization of Tooling and Machining Parameters for Enhanced Quality of Holes in Composite Laminates, Grant Amount: PKR. 4.73 million (USD 17,051)
- Co-Principal Investigator (Co-PI), HEC-NRPU 2022-2024, Development of Additively Manufactured Low-cost Moulds for the Manufacturing of FRP Products, Grant Amount: PKR 6 million (USD 21,629)
- NEDAASC FYDP and IGNITE Fundings for Smart Workstations 1.0/2.0.
- Research Assistantship by the Faculty of ENCS, Concordia University, Canada
- **PhD Scholarship** through Faculty Development Programme of HEC to purse higher education in Concordia University, Montreal (Quebec), Canada 2008.
 - # NEDAASC = NED Alumni Association of Southern California

Certification & Qualification

2024 SECP Director	SECP Certified Board Director from IBA, Karachi.
2023 PEV	PEC Programme Evaluator for Outcome-based Education.
2017 QMS Auditor	IRCA Registers Lead Auditor for the ISO 9001:2015 Standards
2016 PMP	Certified Project Management Professional (PMP) from PMI.
2009 – 2013 PhD	Doctor of Philosophy with specialization in Computer-aided
	Design and Manufacturing (Mechanical Engineering) from
	Concordia University, Montreal (Canada).
2005 – 2007 MEngg.	Master's in Engineering in Industrial and Manufacturing
	from NED University of Engineering and Technology.
$2000 - 2003 \; \mathbf{BE}$	Bachelor's in engineering in Mechanical Engineering from NED
	University of Engineering and Technology, Karachi.

Career & Experience

Professor in the Department of Industrial and Manufacturing Engineering, NED University of Engineering and Technology, Karachi since October 2025.

- HEC Approved Supervisor and supervising PhDs and Masters' thesis students.
- Member of Committee to develop Teaching Excellence Framework (TEF) for Pakistan (A project of British Council and HEC).
- HEC-National Academy of Higher Education (NAHE) Resource Person for training faculty members in higher education institutes.
- Produced three PhD scholars in the year 2023 and 2024.
- International Panel Member for the Evaluation of Engineering Programmes under the Washington Accord (Outcome-based Education) for the Institute of Engineers, Sri Lanka.
- Managing fundings of Research Centers, Laboratories and NRPU projects.
- Teaching PhD, Masters (MEM and M.Engg.) and Undergraduate (BE) level courses.
- Developed several PhD, Masters, Undergraduate level courses including Smart Manufacturing, Applications of AI in manufacturing and Data Analytics and Dashboards.
- Developed Postgraduate Diploma (PGD) in Project Management for NED Academy.
- Revised Masters of Engineering (MEM) programme in NED University as MEM Review Committee Member.

- Examiner for PhD and Masters' thesis for national and international universities.
- Corporate Trainline for Technology Integration, Project Management, CAD/CAM, Operations and Production Management, Inventory Management, Lean System.
- Consulting Industrial/Research Projects.

Director Quality Enhancement Cell (QEC) at NED University of Engineering and Technology since February 2023 to date.

- Member of Strategic Planning Committee of the university.
- Member of all statutory bodies, including, Syndicate and Senate.
- Deputed in CIEC of Sindh HEC for the development of Inspection and Evaluation Manual, evaluation documents and forms.
- Development and Review of University-wide policies such as Intellectual Rights, Health and Safety, Environmental, Conflict of Interest, Sustainable Investment and Procurement Policies etc.
- Implementation and monitoring/control of HEC policies, such as Undergraduate, Master and PhD, plagiarism, affiliated colleges policies, faculty appointment criterion etc.
- Internal and External Evaluator of HECs Institutional Performance Evaluation (IPE)
- Developing and reviewing Statutes, Regulations, Quality System Procedures (QSPs) and Standard Operating Procedures (SOPs) of the university QMS
- Planning, managing and conducting Internal and Surveillance Audits (ISO 9001)
- Facilitating External Institutional Performance Evaluation (HEC-IPE) and Master/PhD
 Programme Evaluations in NED University and conducting Self-IPE and Programme
 Evaluation as Internal Auditor.
- Conducting PEC-Outcome Based Education (OBE) internal audits and reviews within the NED University.
- Administrating the Quality Enhancement Cell at the campuses and affiliated colleges.
- Managing Compliance with the requirements of Higher Education Commission (HEC) of Pakistan and Pakistan Engineering Council (PEC)
- Master Trainer for Quality Assurance in higher education, ISO 9000:2015, Academic procedures and activities, University Ranking Criterion to the Chairpersons, Head of the Departments, Faculty and Employees.

Associate Professor in the Department of Industrial and Manufacturing Engineering, NED University of Engineering and Technology from January 2022 to October 2025.

Deputy Director Quality Enhancement Cell (QEC), NED University of Engineering and Technology from April 2016 to January 2023.

Assistant Professor in Department of Industrial and Manufacturing Engineering, NED University of Engineering and Technology, Karachi from July 2007 to January 2022.

Lecturer in Department of Industrial and Manufacturing Engineering, NED University of Engineering and Technology, Karachi from January 2006 to July 2007.

Executive and Trainee Engineer in Production and Project at Hinopak Motors Limited (Chassis Assembly Plant) Karachi.

Research and Industrial Projects

Successfully produced following PhD Scholars

- Supervised Dr. Ali Zulqarnain who completed his PhD degree in 2023, Topic: Development of Quality Management Maturity Framework.
- Supervised Dr. Irshadullah (Manager SUPARCO) who completed his PhD degree in 2024, Topic: Experimental Investigation for the effects of Molds produced by Additive Manufacturing over the Quality of Fiber-Reinforced Composites.
- Supervised Dr. Muhammad Kashif (General Manager SUPARCO) who completed his PhD degree in 2024, Topic: Optimization of Tooling and Machining Parameters for Enhanced Quality of Holes in Composite Laminates

Research Supervisor of the following research projects

- Co-Supervising Mr. Naseem Ahmed (General Manager SUPARCO), Topic: Investigation of the Distortion and Surface Integrity of Aluminum Aerospace Grade Alloys during High-Speed CNC Milling Machining Operations
- Supervising Mr. Muhammad Fahad (Chief Engineer SSGC), Topic: Integrating Supply Chain Risks and Agent Based Modeling for the Robust Demand Forecast
- Supervising Mr. Muhammad Danish Saleem (Lecturer NED University), Topic: A systematic ergonomics approach to analyze the impact of technological advancements on cognitive interventions
- Supervising Syed Ahsan Mustaqeen (Strategic and Programme Planning Manager in PPL), Topic: Application of Advanced Technologies in Project Management.
- Supervising Mr. Abdul Aziz (Deputy General Manager SUPARCO), course work in progress.

The following are the selected Masters Project Thesis supervised

- Assessment of Digital Project Management implementation in third-world countries.
- Process optimization of 3D printed molds
- Maturity assessment of digital project management in Pakistan
- Investigation of opportunities of implementing Artificial Intelligence in Manufacturing Industry
- Investigation of drilling holes in composite laminates through FEA
- Assessment of Agile Project Management Adaptability in Developing Countries
- Development of Quality 4.0 framework for the Manufacturing Industry
- Evaluation of CF for the implementation of Industry 4.0 in the Third World Countries
- Impact of SC technology over the delivery performance of Pakistani manufacturing industries
- Development of Quality 4.0 framework for the Manufacturing Industry
- Learning paths for organizations transitioning in Industry 4.0: An empirical study concerning Pakistani Manufacturers
- Study of various surface preparation techniques to achieve better surface finish on 3D printed mold for composite manufacturing.

Research Interests

- Smart / Digital Manufacturing/ Industry 4.0, Application of AI, Data Analytics.
- Technology Integration in higher education
- Manufacturing of Composite using conventional and additive manufacturing
- Optimization and enhancement of productivity in production and service industry

- Optimization of integrated supply chains using the analytical and simulation methods
- Modeling and simulation of production and service facilities
- Project management, processes and project governance
- Computer-aided design (CAD) and computer-aided manufacturing (CAM)

Teaching and Trainings

Taught following graduate, undergraduate and corporate level courses;

- Technology Integration in Higher Education (HEC-NAHE course taught to faculty members in Dow University of Health and Sciences-Karachi, Government College University-Hyderabad, Shaheed Zulfiqar Ali Bhutto University of Law-Karachi)
- Technopreneurship, Big Data Analytics and applications of Generative AI (provided cascading training to faculty members of Mechanical, Manufacturing, Material and Metallurgical Engineering Faculty members under EU-GetInnovative4Impact project)
- Project Management (courses offered to OGDCL Trainee Management Programme by IBA).
- Mastering Project Management (Course offered in IBA for PARCO)
- Warehouse and Inventory Management Training to the warehouse management of K-Electric Limited in 2018 and 2019.
- Smart Manufacturing (BE in Industrial and Manufacturing Engineering)
- Agile Project Management (PGD Course)
- PMP Examination Preparation in Center of Professional Excellence of NED
- ISO 9001:2015 Training to faculty members and employees
- Quality Assurance in Higher Education Trainings to Chairpersons and faculty
- Optimization and Forecasting Techniques (PhD Course)
- Advanced Material Processing Techniques Composite Mfg. (PhD Course)
- Advanced Optimization using MATLAB (PhD Course)
- Design of Experiments (PhD Course)
- Design and Analysis of Experiments (Masters Course)
- Strategic Planning and Decision Making (Masters Course)
- Computer-aided Design using CATA, Pro/E and AutoCAD (Undergraduate course)
- Production Management in Automobile Industries (Hino-Pak Motor Ltd.- 2014)
- Other Trainings conducted for faculty members of HEIs: Classroom Management, Outcome-based Education, Project Management in Research Project, Industry 4.0, Strategic Planning for Higher Education Institution, Quality Management System (ISO 9001:2015), How to conduct online classes, Teachers are transformers, Team Management, Leaders are transformers, Statistical Analysis using Minitab, How to write Self-Assessment Report, How to evaluate SAR, Root cause Analysis.

Courses/Curriculum Designed

I have designed the following PhD, Masters and Undergraduate level courses and curriculums;

- Revising the curriculum of Masters of Engineering Management (MEM) at NEDUET
- Applications of AI in Manufacturing (offered in BE, M.Engg. and MEM programmes)
- Data Analytics and Dashboard/Visualization (offered in BE, M.Engg. and MEM programmes)
- Manufacturing of Composites (offered in M.Engg.)
- Post Graduate Diploma (PGD) in Project Management offered by NED Academy

- Project Management Professional Course offered by NED Academy
- Computer-aided Engineering Design (CAED) course offered in BE (IM-NED UET)
- Tool Design course offered in BE (IM-NED UET)
- Smart Manufacturing (Industry 4.0), an elective course offered in BE (IM-NED UET)
- Advances in Smart Manufacturing (elective course of M.Engg. and MEM programmes)
- Advanced Research in Smart Manufacturing (elective course in PhD-IM Deptt.)
- Advanced Optimization using MATLAB (elective course in PhD-IM Deptt.)
- Advanced Production Technologies in Industry 4.0 (elective course in PhD-IM Deptt.)
- Advanced Sustainable Manufacturing (elective course in PhD-IM Deptt.)
- Designed several courses in HEC-National Curriculum and Review Committee (NCRC) for BE/ME in Industrial Engineering and BS/MS in Supply Chain Management

Patents

- 1. **Design Patent of "Plier Tool"** (File No. 20937) approved by IPO Pakistan, published in Patents' Journal No. 211119 on 19-11-2021.
- **2. Design Patent of "Smart Workstation"** (App. No. 780/2021) approved by IPO Pakistan, published in Patents' Journal No. 211115 on 15-11-2021.
- **3.** Patent of "Metal cutting tool design inspired by snake skin structure" (App. No. 383/2022) submitted to IPO Pakistan.

Publications

- M. Bilal, T. Jamil, M. Wasif, I. Ahad, "Impact of Fiber Orientation and Stacking Sequence on the Severity of Drilling Induced Delamination in Carbon Fiber Reinforced Polymer (CFRP) Laminates", accepted in International Journal on Interactive Design and Manufacturing (IJIDeM) Vol. 19, pages 6537–6545, 2025. DOI: https://doi.org/10.1007/s12008-023-01699-6 (HJRS "X" Category, JCR, Impact Factor 2.1)
- 2. M. Kashif, M. Wasif, S.A. Iqbal, "Improved quality of holes in carbon composite laminates produced by the optimized drilling, drill tool parameters and modified laminates", International Journal on Interactive Design and Manufacturing (IJIDeM), Vol. 18, pages 733–747, 2024. DOI: https://doi.org/10.1007/s12008-023-01699-6 (HJRS "X" Category, JCR, Impact Factor 2.1)
- 3. Irshadullah, M. Wasif, M. Tufail, "Analysis of shrinkage and dimensional accuracy of additively manufactured tooling for the composite manufacturing", International Journal on Interactive Design and Manufacturing (IJIDeM), Vol 18, pages 673-684, 2024. DOI: https://doi.org/10.1007/s12008-023-01640-x. (HJRS "X" Category, JCR, Impact Factor 2.1)
- **4.** Anis Fatima, **M. Wasif**, Aqeel Ahmed and Saima Yaqoob, "Effect of rake face surface of cutting tool on tool crater wear", Manufacturing Review, Vol 10, Article No. 15, page 1 to 10, 2023. DOI: https://doi.org/10.1051/mfreview/2023013. (HJRS "X" Category, **JCR**, **Impact Factor 1.9**)
- 5. M. Wasif, M. Rababah, A. Fatima, H. Karim, "Prediction of Springback using the Machine Learning Technique in high-tensile strength sheet metal during the V-Bending Process", Jordan Journal of Mechanical and Industrial Engineering (JJMIE), Vol. 17 (4), page 481-488, 2023. https://jjmie.hu.edu.jo/vol17/vol17-4/03-JJMIE-216-23.pdf HJRS "X" Category, JCR, Impact Factor 1.7).

- 6. A. Zulqarnain, M. Wasif, S.A. Iqbal, "Developing a Quality 4.0 Implementation Framework and Evaluating the Maturity Levels of Industries in Developing Countries". Sustainability 2022, 14, 11298. https://doi.org/10.3390/su141811298 (HJRS "W" Category, JCR, Impact Factor 3.9)
- 7. M. Rababah, F. M. AL-Oqla, M. Wasif, "Application of analytical hierarchy process for the determination of green polymeric-based composite manufacturing process", International Journal on Interactive Design and Manufacturing (IJIDeM), Vol. 16, page 943–954, 2022. https://doi.org/10.1007/s12008-022-00938-6 (HJRS "X" Category, JCR, Impact Factor 2.1)
- 8. H. Rehman, F. Boor, M. Wasif, S. A. Iqbal, "A Novel Method for Process Planning of Die and Mould Manufacturing using Expert System Approach", Transactions of FAMENA, Vol. 54, Issue 4, page 105-130, 2022. https://doi.org/10.21278/TOF.454027821 (JCR Impact Factor 1.19)
- M. Wasif, Y. A. Khan, A. Zulqarnain, S. A. Iqbal, "Analysis and Optimization of Wire Electro-Discharge Machining Process Parameters for the Efficient Cutting of Aluminum 5454 Alloy", Alexandria Engineering Journal, Vol. 61, Issue 8, pages 6191-6203, 2022. https://doi.org/10.1016/j.aej.2021.11.048 (HJRS "W" Category, JCR Impact Factor 6.62)
- 10. A. Ahmed, M. Wasif, A. Fatima, L. Wang, S. A. Iqbal, "Determination of the feasible setup parameters of a workpiece to maximize the utilization of a five-axis milling machine", Frontiers of Mechanical Engineering, Vol. 15, page 298–314. 2021. https://doi.org/10.1007/s11465-020-0621-3. (HJRS "W" Category, JCR Impact Factor 4.06)
- 11. S. Haroon, M. Wasif, R. Khalid, S. Khalidi, "Supply chain practitioners' perception on Sustainability: An empirical study", Sustainability, Vol. 13, Issue 17, page 9872, 2021. https://www.mdpi.com/2071-1050/13/17/9872. (HJRS "W" Category, JCR, Impact Factor 3.9)
- 12. M. Wasif, A. Fatima, A. Ahmed, S. A. Iqbal, "Investigation and Optimization of Parameters for the Reduced Springback in JSC-590 sheet metals occurred during the V-bending Process" Transaction of Indian Institute of Metals, Vol. 74, page 2751–2760, 2021. https://doi.org/10.1007/s12666-021-02357-9. (HJRS "X" Category, JCR, Impact Factor 1.39)
- 13. A. Fatima, M. Wasif, M. O. Mumtaz, "Optimization of process parameters in turning of nuclear graded steel alloy (AISI-410) for sustainable manufacture", Journal of Engineering Research, published online, 2021. https://doi.org/10.36909/jer.11239. (JCR Impact Factor 1.32)
- **14. M. Wasif**, S. A. Iqbal, Y. A. Khan, M. Tufail, "Analysis and Multi-Objective Optimization of Wire Cut Process Parameters for Efficient Cutting of Tapered Carbon Steels Using Wire EDM", Journal of Engineering Research, published online, 2021. https://doi.org/10.36909/jer.11965. (JCR Impact Factor 1.32)
- **15. M. Wasif**, A. Fatima, S. A. Iqbal, M. Tufail, H. Karim, "Analysis and Optimization of Springback during the V-bending of Hot-Rolled High Strength Steels (JSH440)", Journal of Engineering Research, published online, 2021. https://doi.org/10.36909/jer.11027. (JCR Impact Factor 1.32)
- 16. S. H. Raza, R. Khalid, M. Wasif, "Impact of Critical Risks on the Major Constraints of Small Engineering Projects", Mehran University Research Journal of Engineering and Technology (ESCI Clarivate Analytics), Vol. 40, Issue 2, page 415-425, 2021. https://doi.org/10.22581/muet1982.2102.15. (HEC "X" Category Journal, paper accepted on 26-11-2019 before the implementation of HJRS, 01-07-2020)
- 17. R. Zubair, S. M. Hasan, M. Wasif, S. A. Khan, "A Conceptual Framework to Integrate New Product Development and Supply Chain Management with Organizational Business Flow in

- an Extended Environment", International Journal of Business Performance and Supply Chain Modelling, Vol. 12, Issue 2, page 129-146, 2021. https://doi.org/10.1504/IJBPSCM.2021.10039475 (Scopus, Cite Score 1.4)
- **18.** M.A. Khan, **M. Wasif**, M. Tufail, S.A. Iqbal, Irshadullah, "Impact of Process Parameters on the Surface Integrity of Fiber Reinforced Composites (FRC) during the Milling Process," Journal of Space Technology, Vol. 10, issue 1, pages 64-74, 2020. https://ist.edu.pk/jst-previous-issues-july-2020.
- 19. M. Wasif, S.A. Iqbal, A. Fatima, S. Yaqoob, M. Tufail, "Experimental Investigation for the Effects of Wire EDM Process Parameters over the Tapered Cross-Sectional Workpieces of Titanium Alloys (Ti6Al-4V)", Mechanical Sciences, Vol. 11, issue 1, page 221-232, 2020. https://doi.org/10.5194/ms-11-221-2020. (HJRS "X" Category, JCR Impact Factor 1.4)
- 20. M. Rababah, M. Wasif, & S.A. Iqbal, "Parametric relationship between hypoid gear teeth and accurate face-milling cutter", Advances in Manufacturing, Vol. 8, pages 537-555, 2020. https://doi.org/10.1007/s40436-019-00286-x. (HJRS "W" Category, JCR Impact Factor 3.83)
- 21. M. Wasif, S.A. Iqbal, M. Tufail, H. Karim, "Experimental Analysis and Prediction of Springback in V-bending Process of High-Tensile Strength Steels", Transactions of the Indian Institute of Metals, Vol. 73, page 285-300, 2020. https://doi.org/10.1007/s12666-019-01843-5. (HJRS "X" Category JCR, Impact Factor 1.39)
- 22. M. Wasif, S.A. Iqbal, A. Ahmed, M. Tufail, M. Rababah, "Optimization of simplified grinding wheel geometry for the accurate generation of end-mill cutters using the five-axis CNC grinding process", International Journal of Advanced Manufacturing Technology, Vol. 105, page 4325–4344, 2019. https://doi.org/10.1007/s00170-019-04547-8 (HJRS "W" Category, JCR Impact Factor 3.56)
- 23. M. Rababah, M. Wasif, M. Omari, S. Mutawe, "A Novel Approach to Profile-Milling for End-Mill Flutes in 4-Axis CNC Turn-Milling Machines, Part II: Simulation and Verification", International Review of Mechanical Engineering (IREME), Vol. 13, Issue 3, page 203-211, 2019. (Scopus, Cite Score 1.3)
- **24.** M. Rababah, **M. Wasif**, M. Omari, S. Mutawe, "A Novel Approach to Profile-Milling for End-Mill Flutes in 4-Axis CNC Turn-Milling Machines, Part I: Mathematical Modeling", International Review of Mechanical Engineering (IREME), Vol. 13, Issue 2, page 133-141, 2019. (Scopus, Cite Score 1.3)
- 25. M. Rababah, M. Wasif, A. Ahmed, S. A. Iqbal, "Accurate Machine-Settings for the Face-Milling of Hypoid Gears", International Review of Mechanical Engineering (IREME), Vol. 11, No. 12, page 931-944, 2018. (Scopus, Cite Score 1.3)
- 26. Irshadullah, M. Tufail, M. Wasif, "Experimental Investigation of Cutting Parameters Effects on the Surface Roughness and Tools Wear during the Drilling of Fiber Reinforced Composite Materials", Mehran University Research Journal of Engineering and Technology (ESCI Clarivate Analytics), Vol. 38, Issue 3, page 717-728, 2019. http://dx.doi.org/10.22581/muet1982.1903.15 (HEC "X" Category Journal)
- 27. M. Wasif, Z.C. Chen, "An accurate approach to determine the cutting system for the face milling of hypoid gears", International Journal of Advanced Manufacturing Technology, Vol. 84, Issue 9-12, page 1873-1888, Springer, 2016. https://doi.org/10.1007/s00170-015-7823-6 (HJRS "W" Category, JCR Impact Factor 3.56)
- 28. M. Wasif, Z.C. Chen, S.M. Hasan, "Determination of Cutter-Head Geometry for the Face-Milling of Hypoid Gears", International Journal of Advanced Manufacturing Technology, Vol. 86, Issue 9, page 3081-3090, Springer, 2016. https://doi.org/10.1007/s00170-016-8430-x (HJRS "W" Category, JCR Impact Factor 3.56)

- 29. Z.C. Chen, M. Wasif, "A Generic and Theoretical Approach to Programming and Post-Processing for Hypoid Gear Machining on Multi-Axis CNC Face-Milling Machines", International Journal of Advanced Manufacturing Technology, Vol. 81, Issue 1, page 135-148, Springer, 2015. https://doi.org/10.1007/s00170-015-7171-6 (HJRS "W" Category, JCR Impact Factor 3.56)
- 30. Anis Fatima, John L. Irwin, Muhammad Wasif, "Using digital twin to introduce sustainable manufacturing in engineering education", Proceeding of 2025 ASEE Annual Conference & Exposition, Montreal, Canada, 22nd 25th June 2025. https://nemo.asee.org/public/conferences/365/papers/46946/view
- **31.** Muhammad Danish Saleem and Muhammad Wasif, "Leveraging Machine Learning to enhance Supply Chain Agility and Strategic Operational Excellence", Proceeding of International Conference on Digital Manufacturing, Pahang, Malaysia, 16th 20th July 2025.
- **32.** Muhammad Mubashir Aftab, Anusha Ahmed,...,Muhammad Danish Saleem and Muhammad Wasif (2025), "Non-Contact Surface roughness Measurement: Prototype Development and Testing", International Conference on Digital Manufacturing, Pahang, Malaysia, 16th 20th July 2025.
- **33.** Muhammad Danish Saleem, Muhammad Wasif and Anis Fatima (2025), "Impact of Industry 4.0 on Sustainability", 14th International Mechanical Engineering Conference IMEC-2025, Karachi, Pakistan,
- **34.** A. Aziz, A. Fatima, **M. Wasif**, "Impact of 3D printing process parameter in printing of composite molds on energy consumption", Proceeding of 4th International Conference On Key Enabling Technologies KEYTECH-2024, Dublin, Ireland, 1st 2nd August 2024.
- **35. M. Wasif**, S. A. Iqbal, N. Ahmed, "Investigation of deviations in thin-walls machined by the milling process in the Aerospace Grade Aluminum", Proceeding of 13th International Mechanical Engineering Conference IMEC-2024, Karachi, Pakistan, 6th 7th March 2024.
- **36.** M. Iruj, A. Fatima, **M. Wasif**, M. Tufail, "Prediction & Comparison Of Optimal Machining Parameters Of Aluminium Alloy Al5454 By Wirecut Electrical Discharge Machine Using Statistical Method And Machine Learning Algorithm", Proceeding of 13th International Mechanical Engineering Conference IMEC-2024, Karachi, Pakistan, 6th 7th March 2024.
- **37.** Irshadullah, **M. Wasif**, A. Fatima, M. Tufail, "Accurate additively manufactured PETG molds for the composite manufacturing", Proceeding of 1299th International Conference on Science, Engineering & Technology ICSET 2023, Istanbul, Turkey, 20th 21st March 2023.
- **38.** M. Kashif, **M. Wasif**, A. Fatima, S. A. Iqbal, "Effect of water content on process parameter optimization for enhanced surface finish of Kevlar composite", Proceeding of 1299th International Conference on Science, Engineering & Technology ICSET 2023, Istanbul, Turkey, $20^{th} 21^{st}$ March 2023.
- **39.** A. Fatima, M. Wasif, D. Saleem, "On Optimization of Process Parameters of Inconel-718 Machining for Green Production", 3rd International Conference on Key Enabling Technologies, Istanbul, Turkey, 2023.
- **40.** S. A. Lodi, A. A. Shaikh, **M. Wasif**, F. A. Butt, "A Quality 4.0 Assurance Framework for the Higher Education Institutes", Proceeding of 8th International Conference on Higher Education Advances (HEAd'22), Valencia, Spain, 14th 17th June 2022.
- **41. M. Wasif**, A. A. Shaikh, F. A. Butt, S. Safi, "Framework towards the Digital Universities: challenges and issues", Proceeding of 3rd PNQAHE Conference on GOVERNANCE & QUALITY ASSURANCE IN HEIs, Khairpur, Pakistan, 8th 10th March 2022.
- 42. A. Fatima, A. Kamal, M. Wasif, "Use of Taguchi experimental design in an offline optimization estimation of surface finish in machining", Proceeding of 6th International

- Conference on Energy, Environment, and Sustainable Development (EESD), Jamshoro, Pakistan, 17th 19th January 2022.
- **43.** Asif A. Shaikh, **M. Wasif**, Riaz Uddin, "Excellence in Quality Education through Implementation of Strategic Framework and SMART KPIS in Higher Education Institute", Proceedings of 174th ISERD International Conference, New York, USA, 16th -17th October 2019.
- **44.** Asif A. Shaikh, **M. Wasif**, M. A. Bhutto, Riaz Uddin, "Risk-based approach and Smart KPIs for the Quality Assurance in Higher Education Institutions", presented in 2nd International Conference on Quality Assurance at Higher Education PNQAHE, April 23-25, 2019, University of Education, Lahore.
- **45.** M. A. Bhutto, Asif A. Shaikh, **M. Wasif**, Riaz Uddin, "Implementing Quality Assurance in Universities/HEIs by Ensuring and Promoting Stakeholders' Trust", presented in INQAAHE 15th Biennial Conference 2019, March 25-28, 2019, Colombo Sri Lanka.
- **46. M. Wasif**, A. A. Shaikh, S. H. Lodi, M. A. Bhutto, Riazuddin, "Implementation of Risk Management System to Improve the Quality of Higher Education Institutes", ICHE 2018: 20th International Conference on Higher Education, June 25-26, 2018, Paris, France.
- **47.** M. Aslam Bhutto, Asif. A. Shaikh, **M. Wasif**, "Impact of Quality Enhancement Practices", 1st International Conference on Quality Assurance at Higher Education, December 18-19, 2017, Khyber Medical University, Hayatabad Peshawar.
- **48.** M. Aslam Bhutto, Asif. A. Shaikh, **M. Wasif**, Riazuddin, "Improving Quality of the Academic Programs in Universities/HEIs through Self-Assessment Mechanism" Conference on Quality Assurance QCON '17, March 2017, LUMHS, Jamshoro.
- **49. M. Wasif**, M. Rababah, S. M. Hasan, S. A. Iqbal, "Determination of Accurate Machine-Settings for the Face-Milling of Hypoid Gear", 5th International Mechanical Engineering Congress, 9- 10th May, 2015, Karachi, Pakistan.
- **50.** S. M. Hasan, J. Gao, **M. Wasif** and S. A. Iqbal, "An Integrated Decision Making Framework for Automotive Product Development with the Supply Chain", 8th International Digital Enterprise Technology (DET) Conference, Stuttgart Germany, 2014.
- **51.** S. M. Hasan, **M. Wasif** and S.A. Iqbal, "A Collaborative framework for Product Development in Extended Enterprise", International Conference on Emerging Trends in Engineering and Technology (ICETET'2013), Dec. 7-8, Patong Beach, Phuket (Thailand), 2013.
- **52. M. Wasif**, Z. C. Chen, S. M. Hasan, "An Accurate Cutter-head Geometry for the CNC Face-milling of Hypoid Gears", International Conference on Emerging Trends in Engineering and Technology (ICETET'2013), Dec. 7-8, Patong Beach, Phuket (Thailand), 2013.
- **53. M. Wasif**, Z. C. Chen, "Cutter radius and blade angle selection model for the high speed face milling of hypoid gear", International conference on virtual machining process technology (VMPT 2012), May 28 to June 1, Montreal, 2011.
- **54. M. Wasif**, Z. C. Chen, "Mathematical model of the pressure and spiral angles on hypoid gear teeth machined with industrial blade", International conference on virtual machining process technology (VMPT 2012), May 28 to June 1, Montreal, 2011.

Software and Information Technology

- CAD Software: AutoCAD (Licensed Trainer), CATIA V5, SolidWorks.
- Statistical Analysis: Minitab, SPSS, R Studio.
- Programming Languages: Turbo C++, Visual Basic, Python.
- Application Software: MS-Office, MS-Project, MS-Visio.
- Graphics: CapCut, Adobe Photoshop, Freehand, CAMTASIA.

- Cloud based application: Google workspace, MS-Azure.
- Simulation Software: Siemens Technometric Plant Simulation.

Countries Visited

Canada (Montreal, Toronto, Quebec), China (Beijing, Shenzhen), France (Paris), Ireland (Dublin), Italy (Milan, Rome, Venice, Brecia), Malaysia (Perlis, Kuala Lumpur, Penang), Qatar (Doha), Saudi Arabia (Jeddah, Makkah, Madina), Spain (Barcelona, Valencia), Sri Lanka (Colombo, Kandy), Switzerland (Zurich), United Arab Emirates (UAE) (Dubai, Sharjah), United Kingdon (UK) (Birmingham, London).

Languages

- Fluency in English and Urdu.
- Basic Knowledge of French and Arabic.

Memberships and Affiliation

- Professional Engineer Pakistan Engineering Council (PEC).
- Member Institute of Engineers Pakistan (IEP).
- Executive Member Pakistan Network for Quality Assurance in Higher Education (PNQAHE).
- Member Productivity Certification Body of Pakistan (PCBP) under Asian Productivity Organization (APO).
- Member Committee for the development of MEG form for the Chartered Inspection and Evaluation Committee (CIEC) of Sindh Higher Education Commission (SHEC).
- Expert for the Evaluation of QECs and Research Publications for the Sindh Higher Education Commission (SHEC).
- Member National Curriculum and Review Committee of Higher Education Commission of BS/MS in Supply Chain and Logistics
- Member Project Management Institute (PMI), USA.
- Member American Society of Quality (ASQ).
- Member American Society of Engineering Education (ASEE).
- Member of all Statutory bodies of NED UET being the Director QEC.
- Expert member in Board of Studies of Mechanical Engineering Department, DHA Suffa University, Karachi.
- Member Board of Studies (Industrial and Manufacturing Engineering Deptt. and Polymer and Petrochemical Engineering Department)
- Reviewer for Masters/PhD Thesis Examination of Curtin University, Australia.
- Reviewer for Research Grant Proposal (NRPU, Local Challenge Funds and Grand Challenge Funds) offered by Higher Education Commission of Pakistan (HEC).
- Reviewer IEEE Access
- Reviewer Journal of Mechanical Science and Technology (JMST) Springer.
- Reviewer Journal of Advanced Manufacturing Technology (JAMT) Springer.
- Reviewer Advances in Mechanical Engineering (AME) SAGE.
- Reviewer in Conference organized by Project Management Institute (PMI), USA.
- Reviewer of International Mechanical Engineering Congress of Institute of Engineers Pakistan (IEP).