

## Personal Details

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Gender :Male  
Nationality :Pakistani

## Career Objectives

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- To develop and promote Total Quality Culture within industries/organizations of Pakistan.
- To develop and implement the Principles & Practices and Tools & Techniques of Total Quality to produce Product(s)/Process(es) for gaining Max Productivity, Higher Quality, and Minimum Cost ie. Error/Defect Free, hence acquiring higher Customer Satisfaction and Business Growth within Pakistani Industries/organizations.

## Career & Experience

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2003 – to date, Assistant Professor, Department of Industrial & Manufacturing,  
NED University of Engineering & Technology (NED UET), Karachi.

### Current Responsibilities:

- Teaching Postgraduate and Undergraduate Courses.
- Create Liaison between Department & Industries regarding Final Year Projects/ Postgraduate or ISP /Research Projects, Internships, Industrial Visits, Recruitment Drives, Seminars, Webinars, Guest Sessions or any other matter regarding industries.
- Teaching Professional Training Courses.
- Conducting Corporate Trainings
- Consulting Industrial Projects related to Quality.
- Member Board of Studies (BoS)-Department of Management Sciences.
- Member Board of Review (BoR)-Directorate of Industrial Liaison.
- Class Advisor
- Member Industrial Advisory Board.
- Committee Member- Appx. One Million Tree Drive in collaboration with Indus Motor Company Limited.
- Committee Member-Development of “One Window Operation” i.e. NED’s Commercial Services for Industry.

### Past Experience:

- Director Industrial Liaison-NED University.
- Director, University Advancement & Financial Assistant-NED UET.
- Project Director, Benazir Bhutto Shaheed Youth Development Program (BBSYDP).
- Focal Person, Verification of Graduate Records Prime Minister’s Youth Training Scheme (PMYTS).
- Chief Coordinator and Industrial Linkage, DICE Automotive/DICE

Energy & Water, at NED University.

- Chief Advisor DICE Energy & Water-2018, at NED University.
- Coordinator, Master of Engg./Master of Engineering Management (MEM).
- Coordinator, Final Year Projects (FYP).
- Chief Advisor DICE Automotive/ DICE Energy & Water at NED UET.
- Focal Person at NED UET for World Wind Energy Conference & Exhibition-2018 (Organized by World Wind Energy Association)

**2002 – 2003, Assistant Engineer, Dawood Yamaha Limited (Taha Engineering)**

**Responsibilities:**

- In charge Special Purpose Machining (SPM) Shop.  
(Designing & Machining of Dies, Molds, Jigs, Fixtures etc. on CNC Milling, CNC EDM, CNC Wire Cut Machines)
- In charge Quality Control
- ISO Coordinator

**1999 – 2001, Assistant Manager, Agri Auto Industries Limited**

**Responsibilities:**

**Production Engineering:**

- Seeking & implementing methods to improve Productivity, Quality and Safety.
- Designing of Tools (Jigs/Fixtures) in coordination with Tool Room & Design Department.
- Technical Projects for Productivity & Quality improvement.

**Production:**

- **Meeting Monthly Demands** of Shock Absorber and Struts for OEM and Replacement Market through Just in Time (JIT) Cells, and different production lines including CNC Turning Centers, Grinding Lines, Buffing, Nickel/Zinc Platings, Welding Processes (TIG, MIG, Seam, Spot Welding etc.) and Tube Cutting Processes.
- **Meeting Monthly Demands** of other Products i.e Camshaft, Gears, Engine Sleeves, Gaskets etc. for OEM and Market, through CNC Turning Center, Gear Hobbing and Shaving, Honing, Lapping, Mechanical Presses, Hydraulic Presses, Pneumatic Presses, Shaping Machines, and Heat Treatment Processes

**Quality & Maintenance:** Deploy and Monitor Templates of Quality Tool's at Shop Floor, Assisted in Analysis of Pattern and Interpretation and finally Recommendations.

**Member Quality Improvement Teams, Quality Circles, 5S, Kaizen.**

**1998 – 1999, Trainee Engineer, CompuTech. Engineering Services**

(HVAC/Pipe Designing Consultant)

- Involved in Designing of HVAC System.

## Qualification

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<b>In-progress</b>	PhD. (Quality)
<b>2003</b>	Completed: Master of Engineering with Specialization in Manufacturing.
<b>1998</b>	Completed: Bachelor of Engineering in Mechanical Engineering.

## Research and Industrial Projects

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- A. As Supervisor or Co-Supervisor, successfully completed the following **Independent Study Research Projects (ISP)**:
1. Measurement System Analysis (Gage R&R Study) for Column Type Coordinate Measuring Machine (Spring 2019). *In Process*
  2. *\*Minimization of Defects and Process Improvement in Paint Shop by applying Six Sigma DMAIC Methodology at a Leading Automotive Manufacturer (OEM-Pak Suzuki Motor Company Limited) of Pakistan (Spring 2019). In Process.*
  3. *\*Reduction in Defect rate through Six Sigma Methodology in an, Automotive Industry (OEM-Ghandahara Nissan Limited) (Spring 2019). In Process*
  4. *\*Application and Evaluation of Six Sigma in Garment Manufacturing Industry (Artistic) (Spring 2019). In Process*
  5. *\*Development of a Process Control System of a Textile Firm (Al-Rahim Textile industries) (Spring 2019). In Process*
  6. *\*Analysis and Development of Process Control & Inspection Feedback Systems through Six Sigma Methodology for a newly established Automotive Industry (OEM- Kia Lucky Motors Pakistan Limited) in Pakistan (Spring 2019). In Process*
  7. Improved patient safety and customer satisfaction in health care through quality tools (Spring 2019) *In Process*
  8. Development of the Process Control Techniques / Procedure for Continuous Improvement in Two Wheelers Department (Fall 2018).
  9. *\*Implementing Six Sigma Methodology in Automobile Industry (Hinopak Motors Limited): Defects minimization using Six Sigma-DMAIC Approach (Spring 2018).*
  10. Investigation of Gap Analysis in SPC. (Fall 2017).
  11. Parameter Optimization of Electro Discharge Machining on Aero-Space Alloys with different Electrodes Materials. (Fall 2016).
  12. *\*Process Control System Development (Spring 2016).*
  13. Component Reliability for Preventive Maintenance Strategy (Fall 2015).
  14. Development & Implementation of Supplier Excellence Program for a Manufacturing Firm (Fall 2015).
  15. An Investigative Study on the Process Parameters Optimization of three Internal Coatings of Aluminum Collapsible Tubes (Fall 2014).
  16. *\*Line Percent Reduction by Improving Yarn Quality using Six Sigma Methodologies (Fall 2014).*
  17. Optimization of parameters for the plasma coating of aerospace alloys (Fall 2014).
  18. Comparative Study for MRR, Surface Roughness and Tool wear Rate for SKD11 on Die-Sinking EDM using different Electrode Materials (Spring 2014).

19. An investigative study of Electric Discharge Machining (EDM) of dissimilar metals in parallel (side by side) arrangement. (Fall 2013).
  20. Planning, Monitoring and Controlling Techniques to accommodate inconsistencies in an E&P design consultancy. A Proactive and Research Approach. (Fall 2013)
  21. Identification of Risk Variables and conducting a Simulation to study their impacts on an Engineering Project. (Fall 2013).
  22. *\*Development of Lean Six Sigma Framework for Aviation Maintenance and Repair Organizations (MROs)* (Spring 2013).
  23. An investigative study of the Wear and Tool Chip contact length phenomenon in the High Speed Turning of Two Engineering Alloys (Spring 2013).
  24. *\*Development of a Quality Cost Procedure for company wide deployment of a Cost of Quality (CoQ) Model* (Spring 2013).
  25. *\*Improvement in Productivity of Thermoforming Process using DOE under Six Sigma Methodology* (Fall 2012).
- \*Six Sigma Related ISPs*

**B.** As Supervisor, successfully completed number of **Final Year Projects (FYPs)** but here below few related to **Six Sigma** are:

1. *Development of Quality Improvement Techniques using Six Sigma Methodology at Automotive Industry (AuVitronics Pvt. Ltd., Fall 2019 in process).*
2. *Analysis & Development of Quality System using Quality Methodologies, for a Textile Firm (Al-Rahim Textile Industries, Fall 2019 in process).*
3. *Productivity Improvement through Six Sigma at a Leading Automobile Industry of Pakistan (Pak Suzuki Motor Company Limited/Vehicle Final assembly Dept, Fall 2019 in process).*
4. *Application of Quality Management Techniques for a Production Line of an Automobile Industry (Ghandhara Nissan Limited, Fall 2019 in process).*
5. *Quality Improvement Techniques using Six Sigma Methodology for Automotive Parts Manufacturer (Mehran Commercial Enterprises, Fall 2019 in process).*
6. *Waste Minimization and Productivity Enhancement in a apparel Manufacturing Using Lean Six Sigma (Artistic Milliners-AM 4, Fall 2019 in process).*
7. *Productivity Improvement through Six Sigma Methodology (A-One Techniques Pvt. Ltd., Fall 2018-19).*
8. *Productivity Improvement in a Manufacturing Firm (Mehran Commercial Enterprise, Fall 2018-19).*
9. *Reduction in defects for a Textile Company (Al-Karam Textile, Fall 2018-19)*
10. *Productivity improvement through Six Sigma (Dawlance Pvt. Ltd., Fall 2018-19).*
11. *Productivity Improvement through Six Sigma Methodology (Mehran Commercial Enterprise, 2018).*
12. *Productivity Improvement through Six Sigma Methodology (Noor Engineering, 2018).*

13. *Elimination of Dents from Refrigerator Body using Six Sigma Methodologies (Dawlance Pvt. Ltd., 2018).*
14. *Reduction in Re-work Rate for 3rd Generation G-4 Gas Meter Assembly line using Six Sigma Techniques at Meter Manufacturing Plant (SSGC, 2017).*
15. *Six Sigma Applications at Dawlance (2014).*
16. *Application of Lean Six Sigma at Amreli Steels Limited (2014).*
17. *Reduction in material handling Defects (specifically those defects that leads to washing) by using Six Sigma Methodologies (Feroz1888 Mills Ltd., 2013).*
18. *Reduction Of Defects Per Unit Using six Sigma Methodology (SSGC, 2012).*
19. *Six Sigma Implementation (Dawood Yamaha Limited, 2012).*

**C. Six Sigma Project's as an External Supervisor:**

1. *Reduction Of Defects/ Re-Work at Paint Shop Assembly Line At Pak Suzuki, using Six Sigma Methodology (2018)*
2. *Reduction of Defects in Weaving Shop At Artistic Fabrics (2018)*
3. *Various Six Sigma Projects completed during Workshops/Training Sessions.*

**D. Consultancy Projects:**

1. Implementation of **Cost of Quality** at Sui Gas Field (Pakistan Petroleum Limited).
2. Implementation of **Six Sigma** on the Crank Cases (Dawood Yamaha Limited).
3. Implementation of Visual Factory, and Process Improvement (Ali Brother Forging Pvt. Ltd.).
4. Metal Machining, House-keeping and overall Productivity enhancement (Shahab Engg. Pvt. Ltd.).

## Research Interests

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**Quality:**

- Six Sigma
- Statistical Process Control (SPC)
- Cost of Quality (CoQ)
- Total Quality Management (TQM)

**Manufacturing:**

- Metal Machining

## Teaching and Professional Trainings

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**Teaching:**

Post Graduate  
(Masters)

Total Quality Management  
Six Sigma Methodologies

Undergraduate  
(Bachelors)

Metrology & Industrial Quality Control  
Plant Engineering, Introduction to Probability  
& Statistics

## Professional Trainings:

Experienced in developing business Leaders, and trained more than a thousand professionals at various platforms. Experience in in-house Corporate Training. Professional Training Highlights include:

- Workshop conducted “Six Sigma Awareness” for Automobile OEM/Vendor, Academia, & other Industrial sectors.
- Workshop conducted (3 Full Days) on Cost of Quality (CoQ) at Feroz1888.
- Workshop conducted (3 Full Days) on Applied Six Sigma at International Industries Limited.
- Training (3 Full Days, several times) on Quality Management for Atlas Group of Companies.
- Workshop (4 Full Days, several times) on Applicative Six Sigma **Green** Belt Level.
- Workshop (2 Full Days, several times) on Cost of Quality (CoQ).
- Training (18 Hrs., several times) on “Preparation for Six Sigma **Green** Belt” at NED UET.
- Training (12 Hrs., several times) on “Certified Quality Professional (CQP)”.
- Training (3 Full Days) on Certified Quality Manager/Organizational Excellence (CQM/OE) i.e. “Quality Management Tools,” at Secretariat Army Stores & Clothing, Central Ordinance Depot, Karachi.
- Training (4 Full Days, several times) on Certified Quality Inspector (CQI) i.e. “Quality Assurance,” at Secretariat Army Stores & Clothing, Central Ordinance Depot, Karachi.
- Training (3 Hrs.) on Cost of Quality at Pakistan Petroleum Limited (Sui Gas Field).
- Training (2 Full Days) on Statistical Process Control (SPC) at Hino Pak Motor Company.
- Training Session (1 Full Day) on Six Sigma Concept understanding & Application, at College of Aviation Safety Management, Pak. Air Force Masroor Base.
- Awareness Session (3 Hrs.) on TQM and its industrial needs at Institute of Engineers Pakistan.
- Arranged various Seminars and Webinars of **Six Sigma Green** and **Yellow Belts** for Undergraduate, Postgraduate, Faculty, and Industries through Platform of NED Scholar’s from USA.

Experience of **Teaching** at **NUST-PNEC Karachi (Undergraduate)**, **IBA (Executive MBA/MBA, PGD Supply Chain Management/Healthcare Management, IoBM (MBA), Dow University of Health Sciences, PIQC Institute of Quality.**

## Publications

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1. **“Implementing Six Sigma Methodology in a Developing Country”**- International Journal of Process Management and Bench Marking, Vol. 3, No. 3, Pg 314-333, 2013.
2. **"Cost of Quality: Findings of a Wood Products Manufacturer"**- The TQM Journal, Vol. 28, pg. 2 – 20, **2016**.
3. **“Gage Repeatability & Reproducibility-An Assessment of method and Medium for a Laboratory”**- International Journal of Six Sigma & Competitive Advantage.
4. **“Improving Thermoform Productivity: Case of Design of Experiments”** - Journal of Quality Management, University of Punjab, Vol. XV, No. 1, pp. 87-106, June 2018, ISSN: 1816-2185 (HEC Recognized: X-Category)

# Awards and Accomplishments

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## Accomplishments:

As Director **Industrial Liaison** highlights of significant achievements are:

1. In Collaboration of DICE Foundation-USA, played a major role in arranging Exhibition/Competition/Symposium/Conference/DICE Shark on DICE Energy & Water, and DICE Automotive in 2014, 2015, 2016, 2017, 2018 (in progress) and made joint efforts in establishment of NED-DICE Energy Innovation Center inaugurated by Mohsin-e-Pakistan Dr. Abdul Qadeer Khan at NED University of Engineering & Technology. <https://dice.neduet.edu.pk/>
2. Signed **MoUs** with different Organization including, Pakistan Association of Automobile Parts & Accessories (PAAPAM), and Pak-Oasis Industries Pvt. Ltd.
3. Developed Standard Operating Procedures (**SoP**) of Directorate of Industrial Liaison.
4. Break through Improvements in Key Performance Indicators (**KPIs**) of Directorate of Industrial Liaison.
5. Significant Improvement in developing Industrial Contacts.
6. Acquired Funds/Donations from various platforms including NED Scholar's, Alumni, and Industries.
7. Commencement of Career Counseling sessions for Graduating Students.
8. Designed One Year Plan-Benazir Bhutto Shaheed Youth Development Program (BBSYDP) headed by Human Resource Research & Development Board (BBSHRRDB) Chief Minister's Secretariat, Government of Sindh.

As Faculty of **Department of Industrial and Manufacturing**, highlights of significant achievements are:

1. Developed Standard Operating Procedures (**SoP**) of Final Year Projects.
2. Developed Standard Operating Procedures (**SoP**) of M. Engg./Master of Engineering Management.
3. Played major rule in development of Department Advisory Board.
4. Developing close interaction between Department & Industry.
5. Acquired Funds/Donations for the department from industries.

## Languages

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- Urdu, and English

## Memberships and Affiliations

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### Memberships:

- American Society for Quality (ASQ), USA
- Society of Manufacturing Engineers (SME), USA
- Pakistan Engineering Council
- Institution of Engineers Pakistan

### Affiliation:

- **Certified & Qualified Six Sigma Black Belt, CQSSBB- SQII (Singapore) (2012/00187)**