

**Curriculum Vitae**  
**Md. Shamsuzzaman, PhD**  
**September, 2018**

**General Details:**

Dr. Md. Shamsuzzaman

Associate Professor, Department of Industrial Engineering and Engineering Management  
College of Engineering, PO Box 27272

University of Sharjah

Sharjah, United Arab Emirates

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Date of birth: 06 August 1970

**Academic Qualification:**

- PhD, Systems and Engineering Management (2002 – 2005)  
Nanyang Technological University, Singapore  
Specialization: Quality Control  
Thesis title: Integrated control chart systems  
Degree awarded: October 2005
- MEng, Industrial Systems Engineering (1999 – 2000)  
Asian Institute of Technology, Bangkok, Thailand  
Specialization: Industrial Engineering  
Thesis title: Selection of FMS based on Fuzzy Sets and AHP methods  
Degree awarded: December 2000
- BScEng, Mechanical Engineering (1987-'88 – 1990-'91)  
Bangladesh Institute of Technology Chittagong, Bangladesh  
Specialization: Mechanical Engineering  
Senior Design Project Title: Repairing and maintenance of a four-cylinder, four-stroke CI engine and performance test at different operating conditions.  
Degree awarded: October 1994

**Professional Experience:**

- January 2013–Present: Associate Professor  
Department of Industrial Engineering and Engineering Management, College of Engineering, University of Sharjah, United Arab Emirates
- September 2008–January 2013: Assistant Professor  
Department of Industrial Engineering and Management, College of Engineering, University of Sharjah, United Arab Emirates
- June 2011–August, 2011: Visiting Research Fellow (under UoS Summer Visit Grant)  
Division of Systems and Engineering Management, Nanyang Technological University (NTU), Singapore  
Research Project: Optimization Design of Shewhart-EWMA Control Chart.
- January 2007–December 2007: Research Fellow  
Department of Industrial and Systems Engineering, National University of Singapore (NUS), Kent Ridge Crescent, Singapore 119260  
Research project: Quality Control Methods for Equipment Failure Monitoring

- January 2001–August 2008: Assistant Professor\*  
Department of Mechanical Engineering, Dhaka University of Engineering and Technology (DUET), Gazipur, Bangladesh.  
\*On leave: Mar '02–Apr '05 & Jul '05–Sept '05 for PhD; Jan '07–Dec '07 for Postdoctoral studies
- November 1995–December 2000: Lecturer#  
Department of Mechanical Engineering, Bangladesh Institute of Technology (BIT) Dhaka, Gazipur, Bangladesh  
#On leave: May '99–Dec '00 for M.Eng studies
- January 2001 – December 2001: Adjunct Faculty  
Department of Mechanical Engineering, International University of Business, Agriculture and Technology (IUBAT), Bangladesh

### **Professional Development:**

- Attended workshop on “Designing a Course-Based Assessment Approaches”, organized by Institute of Leadership in Higher Education, University of Sharjah, 16<sup>th</sup> January 2018.
- Attended seminar on “Blackboard Analytics Session”, organized by Deanship of Academic Support Services, University of Sharjah, 11<sup>th</sup> May 2016.
- Attended seminar on “Blackboard Collaborate Session”, organized by Deanship of Academic Support Services, University of Sharjah, 12<sup>th</sup> May 2016.
- C/C++ Computer Programming. Two months study organized by Bangladesh University of Engineering and Technology (BUET), Computer Center, Bangladesh (13 June '98 –11 Aug '98)
- Total quality solutions for the manufacturing marketplace with products for Quality Planning and Control, Data Collection, Precision Measurement, Analysis and Reporting, and Gage Management. One day workshop organized by ASI DataMyte, Inc., Singapore (17 Jan '05–17 Jan '05)
- Technology Management. Five days workshop organized by Islamic University of Technology (IUT), OIC, Bangladesh (20 Nov '05–24 Nov '05)
- Team-Based Learning (TBL) in Higher Education. Two days workshop organized by the College of Engineering, University of Sharjah, UAE (15–16 Nov, 2009)

### **Research & Publication:**

#### **Research Interests**

Statistical quality control and Improvement, Applied statistics, Optimization design, Multicriteria decision-making, Reliability Engineering, Simulation

#### **List of articles published in refereed journal**

1. Maged, A., Haridy, S., Shamsuzzaman, M., Alsyof, I., and Zaied, R. (2018). Application of Shewhart charts and response surface methodology in non-traditional machining, *International Journal of Engineering Materials and Manufacture*, Vol. 3, No. 2, pp. 68-77.
2. Shamsuzzaman, M., Haridy, S., Alsyof, I., and Rahim, A., Design of economic  $\bar{x}$  chart for monitoring electric power loss through transmission and distribution system, *Total Quality Management & Business Excellence*, Published online on 04 Feb 2018 <https://doi.org/10.1080/14783363.2018.1433028>.
3. Shamsuzzaman, M., Alzeraif, M., Alsyof, I., and Khoo, M.B.C., Using Lean Six Sigma to improve mobile order fulfillment process in a telecom service sector, *Production Planning and Control*, Vol. 29, No. 4, pp. 301-314, 2018.

4. Alsyouf, I., Shamsuzzaman, M., Abdelrahman, G. and Al-Taha, M., Improving reliability of repairable systems using preventive maintenance and time-between-failures monitoring, *European Journal of Industrial Engineering*, Vol. 10, NO. 5, pp.596-617, 2016.
5. Shamsuzzaman, M., Khoo, M.B.C., Haridy, S. and Alsyouf, I. An optimization design of the combined Shewhart-EWMA control chart. *International Journal of Advanced Manufacturing Technology*, Vol. 86, pp.1627-1637, 2016.
6. Shamsuzzaman, M. A review note on control chart systems for monitoring multi-stage and multi-stream manufacturing systems, *International Journal of Industrial and Systems Engineering*, Vol. 24, No. 4, pp.423-440, 2016.
7. Dweiri, F., Khan, S.A. and Shamsuzzaman, M. The use of statistical process control techniques in the web application products. *International Journal of Industrial and Systems Engineering*, Vol. 20, No.1, pp.69-83, 2015.
8. Yeong, W.C., Khoo, M.B.C., Shamsuzzaman, M. and Castagliola, P. Sensitivity analysis of the economic and economic-statistical design of the multivariate synthetic  $T^2$  chart. *Communications in Statistics-Simulation and Computation*, Vol. 45, pp.2541-2561, 2016.
9. Shamsuzzaman, M., and Wu, Z. Optimization of sample sizes, sampling intervals, and control limits of the  $\bar{x}$  & S chart system monitoring independent quality characteristics. *International Journal of Advanced Manufacturing Technology*, Vol. 77, pp.2083-2094, 2015.
10. Haridy, S., Wu, Z., Abhary, K., Castagliola, P. and Shamsuzzaman, M. Development of a multiattribute synthetic-np chart. *Journal of Statistical Computation and Simulation*. Vol. 84, No. 9, pp. 1884-1903, 2014.
11. Yeong, W.C., Khoo, M.B.C., Shamsuzzaman, M. and Castagliola, P. Economic-statistical design of the multivariate synthetic  $T^2$  chart using loss function. *International Journal of Industrial Engineering: Theory, Application and Practice*, Vol. 21, No. 5, pp.284-294, 2014.
12. Shamsuzzaman, M., Khoo, M.B.C., Haridy, S. and Alsyouf, I. An optimization design of the 3-EWMA scheme for monitoring mean shifts. *International Journal of Advanced Manufacturing Technology*, Vol. 74, pp.1061-1076, 2014.
13. Shamsuzzaman, M. Optimization design of 2-EWMA control chart based on random process shift. *Applied Mechanics and Materials*, Vol. 465-466, pp.1185-1190, 2014.
14. Sitt, C.K., Khoo, M.B.C., Shamsuzzaman, M. and Chen, C.H. The run sum t control chart for monitoring changes in the process mean. *International Journal of Advanced Manufacturing Technology*, Vol. 70, pp.1487-1504, 2014.
15. Shamsuzzaman, M., Sharif Ullah, A.M.M. and Dweiri, F. A fuzzy decision model for the selection of coals for industrial use. *International Journal of Industrial and Systems Engineering*, Vol. 14, No. 2, pp.230-244, 2013.
16. Sharif Ullah A.M.M. and Shamsuzzaman M. Fuzzy Monte Carlo simulation using point-cloud based probability-possibility transformation. *Simulation: Transactions of the Society for Modeling and Simulation International*, Vol. 89, No. 7, pp. 860-875, 2013.
17. Haridy S., Wu Z., Yu F. J. and Shamsuzzaman M. An optimization design of the combined np-CUSUM scheme for attributes. *European Journal of Industrial Engineering*, Vol. 7, No. 1, pp.16-37, 2013.
18. Shamsuzzaman M. and Wu Z. Design of EWMA control chart for minimizing the proportion of defective units. *International Journal of Quality & Reliability Management*, Vol. 29, No. 8, pp.953-969, 2012.
19. Zhang, H.Y., Shamsuzzaman, M., Xie, M., and Goh, T.N. Design and application of exponential chart for monitoring time-between-events data under random process shift. *International Journal of Advanced Manufacturing Technology*, Vol. 57, pp.849-857, 2011.
20. Ou, Y.J., Wu, Z., Yu, F.J. and Shamsuzzaman, M. An SPRT control chart with variable sampling intervals. *International Journal of Advanced Manufacturing Technology*, Vol. 56, pp.1149-1158, 2011.

21. Zhang, H.Y., Xie, M., Goh, T.N. and Shamsuzzaman, M. Economic design of time-between-events control chart system. *Computers & Industrial Engineering*, Vol. 60, No. 4, pp.485-492, 2011.
22. Liu, Y.F., He, Z., Shamsuzzaman, M. and Wu Z. A combined control scheme for monitoring the frequency and size of an attribute event. *Journal of Applied Statistics*, Vol. 37, No. 12, pp.1991-2013, 2010.
23. Shamsuzzaman, M. Wu, Z. and Elias, M.R.S. Designs of  $\bar{x}$ &S control charts with optimal manpower deployment. *Computers & Industrial Engineering*, Vol. 56, pp.1589-1596, 2009.
24. Shamsuzzaman, M., Xie, M., Goh, T.N. and Zhang, H.Y. Integrated control chart system for time-between-events monitoring in a multistage manufacturing system. *International Journal of Advanced Manufacturing Technology*, Vol. 40, pp.373-381, 2009.
25. Wu, Z., Shamsuzzaman, M. and Wang, Q. The cost minimization and manpower deployment to SPC in a multistage manufacturing system. *International Journal of Production Economics*, Vol. 106, pp.275-287, 2007.
26. Wu, Z., Shamsuzzaman, M. and Wang, Q. Designs of control charts with optimal manpower deployment. *International Journal of Production Research*, Vol. 44, No.11, pp.2119-2132, 2006.
27. Wu, Z. and Shamsuzzaman, M. The updatable  $\bar{x}$  & S control charts. *Journal of Intelligent Manufacturing*, Vol. 17, pp.243-250, 2006.
28. Shamsuzzaman, M. and Wu, Z. Control chart design for minimizing the proportion of defective units. *Journal of Manufacturing Systems*, Vol. 25, No. 4, pp.269-278, 2006.
29. Lam, Y.C., Shamsuzzaman, M., Zhang, S. and Wu, Z. Integrated control chart system-optimization of sample sizes, sampling intervals and control limits. *International Journal of Production Research*, Vol. 43, No. 3, pp.563-582, 2005.
30. Wu, Z., and Shamsuzzaman, M. The design and application of the integrated control charts for monitoring process mean and variance. *Journal of Manufacturing Systems*, Vol. 24, No. 4, pp.302-314, 2005.
31. Shamsuzzaman, M., Lam, Y.C. and Wu Z. Control chart system with independent quality characteristics. *International Journal of Advanced Manufacturing Technology*, Vol. 26, pp.1298-1305, 2005.
32. Wu, Z., Lam, Y.C., Zhang S. and Shamsuzzaman, M. Optimization design of control chart systems. *IIE Transactions*, Vol. 36, pp.447-455, 2004.
33. Wu, Z., Shamsuzzaman, M. and Pan, E.S. Optimization design of control charts based on taguchi's loss function and random process shifts. *International Journal of Production Research*, Vol. 42, No. 2, pp.379-390, 2004.
34. Wu, Z., Shamsuzzaman, M. and Pan, E. Minimization of total SPC cost. *Journal of Quality Science*, Shanghai Academy of Quality Management, China (ISSN1004-7816), Vol. 1, No. 1, pp.44-51, 2003.
35. Shamsuzzaman, M., Sharif Ullah, A.M.M and Bohez, E.L.J. Applying linguistic criteria in FMS selection: Fuzzy-set-AHP approach. *Integrated Manufacturing System*, Vol. 14, No. 3, pp.247-254, 2003.

#### **List of articles published in international conference proceedings**

1. Abdelrahman, G.M., Shamsuzzaman, M., and Alsyouf, I. (2018). Integrating quality control charts with maintenance: a brief literature review. International Conference on Industrial Engineering and Operations Management (IEOM Paris), July 26-27, 2018, Paris, France.
2. Aghniaei, M., Shamsuzzaman M., and Hamdan, S., An Optimization Design of the Exponentially Weighted Moving Average Control Chart, IEEE International Conference on Industrial Engineering and Operations Management (IEEM), December 10-13, 2017, Singapore.

3. Shamsuzzaman, M., Haridy, S., and Zhang, L., Design of multiattribute EWMA chart. International Conference on Industrial Engineering and Operations Management (IEOM), March 6-8, 2018, Bandung, Indonesia.
4. Albalghouni, A., Alkatheeri, F., Elbaoumy, N., Albaiti, W., Alsyouf, I., Shamsuzzaman, M. and Hamdan, S. Challenges of implementing ISO 55000: a case study from an educational institute. International Conference on Industrial Engineering and Operations Management (IEOM), March 6-8, 2018, Bandung, Indonesia.
5. Almazrouei, S., Hamid, A.K. and Shamsuzzaman, M., Predictive energy management in large-scale grid connected PV-batteries system. 5th International Conference on Renewable Energy: Generation and Applications (ICREGA), February 26-28, 2018 Al Ain, Abu Dhabi, United Arab Emirates.
6. Shamsuzzaman, M., Jasim, E., and Alsyouf, I. Application of statistical process control chart for monitoring electric power losses through transmission and distribution system: A case study. International Conference on Industrial Engineering and Operations Management, Sept 23-25, 2016, Detroit, Michigan, USA.
7. Shamsuzzaman, M., Alsyouf, I., and Ali, A., Optimization design of  $\bar{x}$  & EWMA control chart for minimizing mean number of defective units per out-of-control case. IEEE International Conference on Industrial Engineering and Operations Management, December 6-9, 2015, Singapore.
8. Albloushi, T., Suwaidi, A., Zarouni, N., Abdelrahman, A. and Shamsuzzaman, M. Design of  $\bar{x}$  & R control charts for monitoring quality of care for hypertension. International Conference on Industrial Engineering and Operations Management, March 3-5, 2015, Dubai, United Arab Emirates (Won Honorable Mention Award in Student Paper Competition Track).
9. Alsyouf, I., Shamsuzzaman, M., Al-Taha, M., Abdelrahman, G., Design of control chart for monitoring time-between-failures of a repairable system: a case study. International Conference on Industrial Engineering and Operations Management, March 3-5, 2015, Dubai, United Arab Emirates.
10. Shamsuzzaman, M., Optimization design of 2-EWMA control chart based on random process shift. International Conference on Mechanical and Manufacturing Engineering, December 17-18, 2013, Putrajaya, Kuala Lumpur, Malaysia.
11. Shamsuzzaman, M., Integrated control chart system: a new charting technique. International Conference on Industrial Engineering and Operations Management, January 3-6, 2012, Istanbul, Turkey.
12. Dweiri, F., Khan, S.A. and Shamsuzzaman, M., The Use of statistical quality control charts for the acceptance and sign-off process for web application products. International Conference on Industrial Engineering and Operations Management, January 3-6, 2012, Istanbul, Turkey.
13. Shamsuzzaman, M. and Wu, Z., EWMA control chart that minimizes the numbers of defectives for out-of-control cases. IEEE International Conference on Industrial Engineering and Engineering Management, December 7-10, 2010, Macau, China.
14. Shamsuzzaman, M., Dweiri F., and Ullah, A.M.M., Ranking of Bangladeshi coals based on fuzzy set theory. International Conference on Industrial Engineering and Operations Management, January 9-10, 2010, Dhaka, Bangladesh.
15. Zhang, H.Y., Xie, M., Goh, T.N. and Shamsuzzaman, M., Economic design of exponential chart for monitoring time-between-event data under random process shift. ISSAT International Conference on Reliability and Quality in Design, August 7-8, 2008, Orlando-Florida, USA.
16. Zhang, H.Y., Xie, M., Goh, T.N. and Shamsuzzaman M., An integrated design of exponential chart system with independent quality characteristics. International Conference on Quality and Reliability, November 5-7, 2007, Chiang Mai, Thailand.

17. Shamsuzzaman, M., Wu, Z., Xie, M. and Elius, R.S., Economic design of  $\bar{x}$  & S control chart based on deployed manpower and random process shift. International Conference on Quality and Reliability, November 5-7, 2007, Chiang Mai, Thailand.
18. Zhang, H.Y. Xie, M., Goh, T.N. and Shamsuzzaman M., Economic design of integrated time-between-events chart system with independent quality characteristics. IEEE International Conference on Industrial Engineering and Engineering Management, December 2-5, 2007, Singapore.
19. Shamsuzzaman, M., and Wu, Z., Taguchi's loss function based  $\bar{x}$  control chart. International Conference on Advanced Manufacturing Technology, May 11-13, 2004, Kuala Lumpur, Malaysia.
20. Shamsuzzaman, M., and Wu, Z., Integrated control chart system with optimal control limits. International Conference on Advanced Manufacturing Technology, May 11-13, 2004, Kuala Lumpur, Malaysia.
21. Shamsuzzaman, M., and Wu, Z., Minimization of expected total SPC cost by optimizing deployed manpower. IEEE International Engineering Management Conference, October 18-21, 2004, Singapore.
22. Shamsuzzaman, M., and Wu, Z., Economic designs of control charts based on deployed manpower and defective rate. Asia-Pacific Industrial Engineering and Management Systems Conference, December 12-15, 2004, Gold Coast, Australia.
23. Shamsuzzaman, M. and Wu, Z., Integrated control chart system for multi-stage and multi-stream manufacturing processes. International Conference on Mechanical Engineering, December, 26-28, 2003, Dhaka, Bangladesh.
24. Shamsuzzaman, M., Bohez, E.L.Z, Sharif Ullah, A.M.M and Nagarur, N.N., Selection of flexible manufacturing system through fuzzy multicriteria-decision-making. Advanced Technologies Symposium, School of Advanced Technologies, Asian Institute of Technology, December 1, 2002, Bangkok, Thailand.

### **Article under review**

1. Alsayouf, I., Hamdan, S., Shamsuzzaman, M., Haridy, S., and Alawaysheh I., On preventive maintenance policies: a selection framework using MCDM and multi-objective optimization.
2. Alsayouf, I., Alsuwaidi, M., Hamdan, S. and Shamsuzzaman, M., Impact of ISO55000 on organizational performance: evidence from certified UAE firms.
3. Nger Ling, MBC Khoo, S. Haridy and M. Shamsuzzaman, A multiattribute CUSUM-np (MCUSUM-np) chart for detecting upward shifts in fraction nonconforming

### **Research Profile**

<https://scholar.google.com/citations?user=oCwEGJkAAAAAJ&hl=en>

[https://www.researchgate.net/profile/M\\_Shamsuzzaman](https://www.researchgate.net/profile/M_Shamsuzzaman)

<https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=7801556863&zone=>

<https://orcid.org/0000-0002-1242-9627>

### **Monograph**

1. Shamsuzzaman, M., Design and Application of Integrated Control Chart System- SPC for Multi-stage Manufacturing System, VDM Verlag Dr. Muller GmbH & Co. KG, Germany, ISBN 978-3-639-31580-6, 2010.

### **Research Grants**

- Project title: Ranking of coals for industrial use through fuzzy multicriteria decision-making, Duration- 2008-9 to 209-10 (Completed), Principle Investigator, Fund- UoS Seed Grant, Project No. 090416 (Amount- AED15,000/=).

- Project title: Optimization Design of Shewhart-EWMA Control Chart, Duration- June 2011-Aug 2011 (Completed), Fund- UoS Summer Research Grant (Ref. G.R.C./S.R. 291) (Amount- AED 11,000/=).
- Project title: Comparison study on effectiveness of EWMA control charts for monitoring process mean, Duration- 2015-16 to 2017-18, Principle Investigator, Fund: UoS Collaborative Research Project Grant, Project No. 15020405014-P (Amount- AED100,000/=).
- Project title: ISO 55000 (PAS 55) Standard—effects on engineering assets performance and implementation challenges: a benchmarking study based on RTA experience in- and University of Sharjah pilot study for- adopting the standards, Duration- 2015-16 to 2016-17, Co-Investigator, Fund: UoS Collaborative Research Project Grant, Project No. 1502040519-P (Amount- AED133,000/=).
- Project title: The impact of condition based maintenance (CBM) and intelligent machine monitoring on engineering asset sustainability—A case study on Dubai Public Transport Agency, Duration- 2016-17 to 2017-18, Co-Investigator, UoS Targeted Research Project Grant, Project No. 1602040538-P (Amount- AED196,000/=).
- Project title: Multiattribute Control Charts for Effective Monitoring of Fraction Nonconforming, Duration: 2 years, Fund: UoS Collaborative Research Project Grant, Amount: AED 58,000 (application under review).
- Research Group Member, Sustainable Engineering Asset Management (SEAM) Research Group, Approved by the University Research Board, University of Sharjah, Entitled to get Research Grant of AED 640,000/= over 2015-16 to 2016-17.

## **Teaching:**

### **University of Sharjah, UAE (2008-09 to 2017-18)**

- Fall and Spring 2017-18: Quality Control and Improvement (two times), Stochastic System Simulation (two times).
- Fall and Spring 2016-17: Quality Control and Improvement (two times), Facilities Planning, Quality Engineering Principles and Analysis, Quality Engineering (Master course).
- Fall and Spring and Summer 2015-16: Engineering Statistics (two times), Quality Control and Improvement (three times), Quality Engineering (Master course), Engineering Statistical Analysis (Master course).
- Fall and Spring 2014-15: Engineering Statistics (two times), Stochastic System Simulation, Quality Control and Improvement (two times), Engineering Statistical Analysis (Master course).
- Fall and Spring 2013-14: Engineering Statistics (two times), Quality Control and Improvement, Engineering Probability and Statistics (Tutorial), Engineering Statistical Analysis (Master course).
- Fall and Spring 2012-13: Engineering Statistics (two times), Quality Control and Improvement (two times), Facility Planning.
- Fall and Spring 2011-12: Engineering Statistics (two times), Project Management, Facility Planning.
- Fall and Spring 2010-11: Engineering Probability and Statistics (two times), Engineering Statistics, Facilities Planning, Manufacturing Technology Lab.
- Fall and Spring 2009-10: Engineering Probability and Statistics (two times), Engineering Statistics, Facilities Planning, Project Management.
- Fall and Spring 2008-09: Engineering Probability and Statistics, Engineering Statistics, Facilities Planning, Project Management

### **Dhaka University of Engineering and Technology, Bangladesh (1995-2007)**

- Measurement and Quality Control and related practical class, Production Planning and Control, Industrial Management, Advanced Quality Control (Master course), Seminar course for final year bachelor students, Thermodynamics and related lab class, Computer Programming on C/C++, Mechanical Engineering Drawing, Thermo-fluid Mechanics and related lab class, Metallurgy and Material Engineering and related lab class.

### **International University of Business, Agriculture and Technology (IUBAT), Bangladesh (2001)**

- Statistics and quality control, Basic Thermodynamics and related lab class, Material Engineering.

### **Supervision:**

#### **PhD Supervision**

- PhD thesis title—“A framework for utilizing the intangible impacts of Lean Six Sigma in creating innovation climate in an organization” (Student’s name: Mohamed Ahmed Ibrahim Abdalla Al Blooshi, passed proposal defense in Fall 2017-18), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.

#### **Master Supervision**

- Master thesis title—“Linguistic evaluation of Bangladeshi coals: a fuzzy set-AHP approach” (Student’s name: Binoy Krishna Biswas, graduated in 2007), Department of Mechanical Engineering, Dhaka University of Engineering and Technology (DUET), Gazipur, Bangladesh.
- Master project title—“Design of statistical process control chart for monitoring water loss through distribution system: a case study” (Student’s name: Aisha Mohamed Abdulhamid Abdulrahman AL Hammadi, study postponed), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.
- Master project title—“Design of X&MR chart for monitoring electrical power losses through transmission and distribution system: a case study” (Student’s name: Eman Jasim Mohamed Abdelkarim Al-Ali, graduated in Fall 2015-16), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.
- Master project title—“Improving fulfillment process in telecom service sector using Lean Six Sigma” (Student’s name: Mariam Jasim Hassan AlZeraif, graduated in Fall 2015-16), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.
- Master project title—“Application of AHP in assessing heritage and modern buildings based on sustainability” (Student’s name: Sara Ahmed Mohamed Ali Abduli, graduated in Fall 2016-17), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Co-supervision).
- Master thesis title—“Optimization design of EWMA control chart based on random process shift and deployed manpower” (Student’s name: Mona Abdulrahman, graduated in Fall 2017-18), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.



- Master project title—“Identifying key factors that affect the loyalty of employees in Sharjah Government sectors” (Student’s name: Abdalla Ibrahim Ahmed Alkos Al Ali, graduated in Spring 2016-17), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.
- Master thesis title—“An integrated model for forecasting power demand and control energy flow in a large-scale grid-connected PV system” (Student’s name: Sumayya Saeed Al Mazrouei, graduated in Fall 2017-18), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Co-supervision).
- Master project title —“A Lean Six Sigma approach to improve customer satisfaction in a Building Projects Department” (Student’s name: Aisha Saud Sultan Mohamed Sabt Binsabt Suwaidi, graduated in Fall 2017-18), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.
- Master thesis title—“An integrated model for joint optimization of process control and maintenance” (Student’s name: Gasim Mohamed Mustafa Abd Elrahman, expected to graduate in Summer 2017-18), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.
- Master project title—“Identifying Key Performance Indicators in conservation of water and electricity: a case study” (Student’s name: Jawaher Mubarak Obaid Omran Humaid, expected to graduate in Fall 2018-19), Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE.

### **Acted as Graduate Thesis/Project report and Proposal Examiner:**

#### **Master Thesis/Thesis Proposal**

- Hamed Ahmed—(Proposal) Thesis titled “Energy management of UAE data centre using optimized photovoltaic system”, Fall 2014-15, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Prof. Abdul Kader and Dr Ali Cheaitou).
- Sadeque Mohammad—(Proposal) Thesis titled “Green supplier selection and order allocation”, Fall 2014-15, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Ali Cheaitou).
- Basma Ibrahim Hamdan—(Proposal) Thesis titled “Factor-analysis based approach for decomposing traveling salesman problem”, Fall 2014-15, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Hamdi Bashir).
- Asil Abdel—(Proposal) Thesis titled “A comprehensive model for organizational and related influencing factors”, Fall 2014-15, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Hamdi Bashir).
- Majid Touqan—(Proposal) Thesis titled “Current project management practices in the construction industry in the United Arab Emirates”, Fall 2014-15, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Hamdi Bashir).
- Noura Marzouqi—(Proposal and Final Project Report) Project titled “An approach based on lean six sigma methodology to improve lead time of online orders in a supply chain”, Fall 2015-16, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Vipul Jain).
- Fatima Alhammadi—(Proposal and Final Project Report) Project titled “Improving aircraft structure defect detection in aircraft maintenance using Lean Six Sigma”, Fall 2017-18,

Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Imad Alsyouf).

- Hebah Alhammadi—(Proposal and Final Project Report) Project titled “A framework for technology roadmap: enhancing credibility”, Fall 2017-18, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor-Dr Fikri Dweiri).
- Mohammad Wadah—(Proposal) Thesis titled “Same day delivery in B2C E-commerce systems in the context of UAE”, Spring 2017-18, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor- Prof. Mohammad Affan Badar).
- Samya Ali Aldhuhoori—(Proposal) Project titled “Green rating system for higher education institute in the Arabian Gulf”, Spring 2017-18, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor- Dr Imad Alsyouf and Dr Emad Mustaha).
- Tamador Alblooshi—(Proposal) Project titled “Optimization design and comparative study of np and CUSUM charts for monitoring attributes”, Spring 2017-18, Department of Industrial Engineering and Engineering Management, University of Sharjah, UAE (Supervisor- Dr Salah Haridy).

## **University Service:**

### **Department of Industrial Engineering and Engineering Management, University of Sharjah (UoS)**

- Member, Department Faculty Search Committee; Member, Department Website Development Committee; Member, Department Lab Equipments Purchasing Committee; College Research and Scholarship Committee (2008-09).
- Member, Department ABET Accreditation Committee; Member, Department Faculty Search Committee; Member, College Teaching and Learning Committee (2009-10).
- Associate to Department Chair; Member, Department Faculty Search Committee; Member, Department Website Development Committee; Member, Department ABET Accreditation Committee; Coordinator, Department Local Accreditation Committee (2010-11).
- Member, Department Teaching, Learning and Accreditation Committee; Coordinator, Department Scientific Research Committee; Member, College Research and Scholarship Committee (2011-12).
- Member, Department Teaching, Learning and Accreditation Committee; Coordinator, Department Scientific Research Committee; Member, College Research and Scholarship Committee (2012-13).
- Member, Department Teaching, Learning and Accreditation Committee; Member, MEM (Master’s in Engineering Management) Application and Proposal Committee; Member, College Teaching and Learning Committee (2013-14).
- Member, Department Teaching, Learning and Accreditation Committee; Member, Department Faculty Search Committee; Member, MEM Application and Proposal Committee; Member, MEM Steering Committee; Coordinator, Faculty Promotion Committee (Department level); Member, Course Planning and Scheduling Committee; Associate to Department Chair; Member, College Teaching and Learning Committee (2014-15).
- Member, Department Teaching, Learning and Accreditation Committee; Member, Department Faculty Search Committee; Member, MEM Application and Proposal Committee; Member, MEM Steering Committee; Member, Course Planning and Scheduling

Committee; Associate to Department Chair; Member, College Council; Member, College Faculty Promotion Committee (2015-16).

- Member, Department Teaching, Learning and Accreditation Committee; Member, Department Faculty Search Committee; Member, MEM Steering Committee; Member, College Council; Coordinator, Department Faculty Promotion Committee (Dr Ali) (2016-17).
- Member, Department Teaching, Learning and Accreditation Committee; Coordinator, Department Faculty Search Committee; Member, MEM Steering Committee; Member, NE Department Faculty promotion Committee (Dr Zubair), Member, MEM Accreditation Committee (2017-18).
- Member, Department Teaching, Learning and Accreditation Committee; Coordinator, Department Faculty Search Committee; Member, MEM Steering Committee; Member, Member, MEM Accreditation Committee, Member, Senior Design College Committee (2018-19).

### **Department of Mechanical Engineering, Dhaka University of Engineering and Technology, Gazipur, Dhaka, Bangladesh**

- Coordinator, MSc/MEng Courses (2006)
- Supervisor, Metrology Lab (2005-06)
- Supervisor, Departmental Computer Lab (2005-06)
- Coordinator, BSc.Eng Courses (1998-99)

### **Community Service:**

- Participated in various 'University Open Day' sessions and represented the IEEM Department (2008-17).
- Given seminars to UoS Community (Title- Integrated Control Chart System: A new charting technique, 2011; Title-Optimization design of 2-EWMA control chart based on random process shift, 2014).
- Given seminar to IEEM students (Title- A guide to write a term paper, 2013).
- Design and proposed a training course (Title- Statistics and Design of Experiments) for UoS Center for Continuing Education (2009-10).
- Participated in various Department field trips to local Industries (2008-11).
- Prepared a list of required measuring instruments for Department Metrology Lab (2008-09).
- Collaborated with Dr Linda L. Zhang, Department of Operations, University of Groningen, the Netherlands, who presented a two days seminar series at UoS (2008-09).
- Member, Technical Committee, International Conference on Industrial Engineering and Operations Management (IEOM 2010, Jan 9-10), Dhaka, Bangladesh.
- Session Chair, International Conference on Industrial Engineering and Operations Management (IEOM 2010, Jan 9-10), Dhaka, Bangladesh (9 Jan 2010, Room-3/3.00-4.30 PM).
- Member, Technical Committee, 2<sup>nd</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2011, Jan 22-24), Kuala Lumpur, Malaysia
- Member, Technical Committee, 3<sup>rd</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2012, July 3-6), Istanbul, Turkey.
- Member, Technical Program Committee, IEEE International Conference on Quality and Reliability (ICQR 2011, 14-17 Sept.), Bangkok, Thailand.
- Member, Technical Committee, 4<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2014, January 7-9), Bali, Indonesia.
- Member, Technical Committee, 1st International Conference on Information, Operations Management and Statistics (ICIOMS 2013, September 1-3), Kuala Lumpur, Malaysia.

- Member, Local Committee, 5<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2015, March 3-5), Dubai, UAE.
- Track Chair, Senior Design Project Poster Competition, 5<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2015, March 3-5), Dubai, UAE.
- Session Chair, 5<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2015, March 3-5), Dubai, UAE (3 March 2015, Room-Pearl 3/15:45-17:15).
- Track Chair, Senior Design Project Poster Competition, 6<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2016, March 8-10), Kuala Lumpur, Malaysia.
- Track Chair, Senior Design Project Poster Competition, International Conference on Industrial Engineering and Operations Management Detroit (IEOM Detroit 2016, Sept 23-25), Detroit, Michigan., USA.
- Track Chair, Six Sigma Track, International Conference on Industrial Engineering and Operations Management Detroit (IEOM Detroit 2016, Sept 23-25), Detroit, Michigan., USA.
- Member, Technical Committee, IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2016, Dec 5-7), Bali, Indonesia.
- Track Chair, Senior Design Capstone Project/FYP Poster Competition, 7<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2017, April 11-13), Rabat, Morocco.
- Member, Technical Committee, IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2017, Dec 10-13), Singapore.
- Track Chair, Senior Design Capstone Project/FYP Poster Competition, 8<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2018, March 6-8), Bandung, Indonesia.
- Track Chair, Total Quality Management, 8<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2018, March 6-8), Bandung, Indonesia.
- Track Chair, Senior Design Capstone Project/FYP Poster Competition, 2<sup>nd</sup> IEOM European Conference on Industrial Engineering and Operations Management (IEOM Paris 2018, July 26-17), Paris, France.
- International Committee Member, The 4<sup>th</sup> International Conference on Engineering, Applied Science and Technology (iCeast 2018), July 4-7, 2018, Phuket, Thailand.
- Track Chair, Senior Design Capstone Project/FYP Poster Competition, 1<sup>st</sup> IEOM African Conference on Industrial Engineering and Operations Management (IEOM Africa 2018, Oct 29- Nov 1), Pretoria/Johannesburg, South Africa.
- Member, Technical Committee, IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2018, Dec 16-19), Bangkok, Thailand.
- Track Chair, Senior Design Capstone Project/FYP Poster Competition, 3<sup>rd</sup> IEOM North American Conference on Industrial Engineering and Operations Management (IEOM North America 2018, Sept 27-29), Washington DC, USA.
- Track Chair, Total Quality Management, 9<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2019, March 5-7), Bangkok, Thailand.
- Track Chair, Senior Design Capstone Project/FYP Poster Competition, 9<sup>th</sup> International Conference on Industrial Engineering and Operations Management (IEOM 2019, March 5-7), Bangkok, Thailand.
- Member, Editorial Board, Journal of Industrial Engineering, Hindawi Publishing Corporation (2015-2017)
- Member, Editorial Advisory Board, Amity Journal of Quality Management, Amity University (Since 2017)

- Member, Editorial Board, International Journal of Industrial Engineering and Operations Management, IEOM Society International (Since 2017)
- Member, Editorial Board, Modern Management Forum (Since 2017)
- Reviewer for the following Journals and Conferences  
Economic Quality Control (2006)  
IIE transaction (2007)  
International Journal of Systems Science (2007)  
Engineering Optimization (2008)  
Computational Statistics and Data Analysis (2008)  
The Open Industrial and Manufacturing Engineering Journal (2010)  
International Journal of Quality and Reliability Management (2010)  
Quality Technology & Quantitative Management (2007, 2011, 2018)  
International Journal of Energy Sector Management (2011)  
Computers and Industrial Engineering (2012, 2013, 2014)  
International Journal of Production Economics (2013, 2014)  
International Journal of Precision Engineering and Manufacturing (2014)  
International Journal of Intelligent Enterprise (2014)  
Communications in Statistics-Simulation and Computation (2015)  
Mathematical Problems in Engineering (2015)  
Journal of Statistical Computation and Simulation (2016)  
Arabian Journal for Science and Engineering (2017)  
The Journal of Engineering Research (2017)  
International Journal of Industrial and Systems Engineering (2017)  
European Journal of Industrial Engineering (2018)  
International Conference on Quality and Reliability (ICQR) 2011  
International Conference on Industrial Engineering and Engineering Management (IEEM) 2015-18  
International Conference on Industrial Engineering and Operations Management (IEOM) 2010-2018

### **Scholarship/Award:**

- 2015-16: University of Sharjah Scientific Research Award
- 2015: IEOM Outstanding Service Award, awarded at 2015 IEOM conference, Hyatt Regency, March 5, 2015, Dubai, United Arab Emirates.
- 2007 – 2007: NUS Research Scholarship (Postdoctoral)
- 2002 – 2005: NTU Research Scholarship (PhD)
- 1999 – 2000: DAAD Scholarship (MEng)
- 1988 – 1992: BIT Chittagong Merit Scholarship (BScEng)
- 1987 – 1988: Bangladesh Education Board Merit Scholarship (based on HSC result)

### **Professional Affiliation:**

Member, American Society for Quality (ASQ), USA

Member, European Network for Business and Industrial Statistics (ENBIS), Netherlands

Fellow, The Institution of Engineers Bangladesh (IEB), Bangladesh

### **References:**

To be provided upon request.