
Summary

- Demonstrate exceptional teaching ability by employing a practical and applied approach.
- Teach a diverse range of graduate and undergraduate courses across multiple universities and programs.
- Identify research opportunities for students, supporting data collection and drawing meaningful conclusions for their projects.
- Foster dynamic learning environments that prioritize instructor and student interaction.
- Supervised a group of 24 students at the Masters level across various programs at The University of Jordan.
- Possess an impressive track record of research capability and a prolific publication record in the field of science.
- Accumulated a comprehensive collection of professional certificates focused exclusively on quality-related disciplines.

Education

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|--------------------------|--|
| 1998-03 – 2001-05 | Doctor of Engineering: Industrial and Manufacturing Engineering
<i>Cleveland State University, Cleveland, OH, USA</i> |
| 1996-09 – 1998-03 | Master of Science: Industrial and Manufacturing Engineering
<i>Cleveland State University, Cleveland, OH, USA</i>
Concentration: Quality engineering |
| 1989-09 – 1995-01 | Bachelor of Science: Chemical Engineering
<i>The University of Jordan, Amman, Jordan</i> |

Leadership Experience

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|--------------------------|--|
| 2016-09 – 2018-01 | Director of the Center of Consultations & Training
<i>The University of Jordan, Amman, Jordan</i> |
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Responsibilities and Accomplishments

- Led strategic planning efforts and develop the center's new strategy and business plan, aligning it with The University of Jordan's overall strategy
- Supervised day-to-day operations of the center, providing monthly assessments to evaluate performance and progress.
- Oversaw the development and implementation of the training course schedule.
- Ensured the quality of training courses, including the review and approval of instructional materials
- Successfully developed and implemented an action plan with specific Key Performance Indicators (KPIs), driving the center's strategic goals.
- Created of a new portfolio of services tailored to market needs, resulting in the acquisition of new customers
- Restructured center units and sections, optimizing operational efficiency
- Automated vital center operations, enhancing workflow and productivity
- Renovated center halls and computer labs, providing an improved learning environment
- Established and regulated partnerships with external companies, achieving the following:
- Implemented streamlined processes for accepting new partnership applications and managing renewals
- Developed rigorous criteria for accrediting new training companies and conducted comprehensive evaluations of existing partners

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| 2013-09 – 2014-09 | Dept Chair - Industrial Engineering Department
<i>The University of Jordan, Amman, Jordan</i> |
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Responsibilities and Accomplishments

- Led the development of robust and engaging curricula, ensuring they meet high standards of quality
- Made well-documented recommendations regarding faculty retention, promotion, and tenure, based on thorough evaluations
- Provided suitable opportunities for faculty to actively engage in departmental affairs and contribute to decision-making processes

- Addressed student grievances, requests, and issues promptly, ensuring adequate supervision for student activities and organizations.
- Collaborated with faculty to arrange academic counseling and effectively disseminate pertinent information to students.
- Oversaw the day-to-day operations of the department, ensuring smooth functioning and efficient coordination

Academic EXPERIENCE

Positions

2022-10 – Current	Professor
2015-07 – 2022-10	Associate Professor
2009-09 – 2015-07	Assistant Professor

Department of Industrial Engineering / The University of Jordan

Responsibilities

- Instruct and develop curriculum for various Industrial Engineering courses at both the graduate and undergraduate levels.
- Identify research opportunities for students, assisting them in data collection and drawing conclusions for their projects.
- Cultivate an engaging educational environment that prioritizes meaningful interaction between instructors and students.
- Guide and support students in developing and showcasing comprehensive knowledge, critical thinking abilities, effective communication skills, and problem-solving prowess
- Supervise Master's students across different programs, providing mentorship and guidance
- Take a leadership role and actively participate in committees within the IE department and School of Engineering, including:
 - School of Engineering: Study Plan committee and Students Grievances & Disciplinary committee
 - Industrial Engineering Department: ABET, Curriculum, and Study Plan Committee; Masters Comprehensive Exam Committee; Senior Graduation Project Committee; and New Faculty Application Examination Committee

2019-08 – 2023-08	Associate Professor
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Department of Industrial Engineering / American University of the Middle East

Responsibilities

- Instruct and contribute to the development of the curriculum for various Industrial Engineering (IE) courses at the undergraduate level
- Actively participate in departmental committees within the IE department, including ABET, Accreditation, and Curriculum committees

2009-02 – 2019-09	Associate Professor (Part time)
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**School of Management and Logistic Sciences
Industrial and Management Systems Engineering / German Jordanian University**

- Deliver courses at both the graduate and undergraduate levels

2009-02 – 2005-06	Adjunct Faculty
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Grado Dept. of Ind. and Sys. Eng. / Virginia Tech.

- Deliver courses at both the graduate and undergraduate levels

2003-10 – 2009-01	Senior Research Associate
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Center for sustainable mobility / Virginia Tech Transportation Institute (VTI)

2001-05 – 2003-10	Research Associate (Digital Ships Lab Manager)
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Engineering Science & Mechanics Department / Virginia Tech.

Courses taught

The University of Jordan

Applied Engineering Statistics (IE 0936702)	graduate level
Special Topics in Industrial Management (IE 0906726) "Data Analytics"	graduate level
Advanced Quality Management (IE 0906757)	graduate level
Selected Topics (IE 0936500) "Introduction to Data Mining"	undergraduate level
Selected Topics (IE 0946500) "Lean Six Sigma"	undergraduate level
Operations Research I (IE 0906353)	undergraduate level
Probabilistic Operations Research (IE 0916555)	undergraduate level
Operations Research II (IE 0906552)	undergraduate level
Engineering Statistics I (IE 0936251)	undergraduate level
Engineering Statistics II (IE 0906355)	undergraduate level
Marketing Engineering (IE 0906527)	undergraduate level
Logistics and Supply Chain Management (IE 906525)	undergraduate level
Human Factors Engineering (IE 906481)	undergraduate level
Motion and Time Studies (IE0906384)	undergraduate level
Cost Accounting (IE 906423)	undergraduate level

The American University of the Middle East

Industrial Applications of Statistics (IE 553)	undergraduate level
Six Sigma & Quality Management (MGMT 405)	undergraduate level
Quality Control (IE530)	undergraduate level
Computing in Industrial Engineering (IE 332)	undergraduate level

German Jordanian University

Applied Data Analysis (LOGS 711)	graduate level
Operations Research II (IE 537)	undergraduate level
Reliability and Quality Control (IE 599)	undergraduate level
Engineering Statistics (Math 251)	undergraduate level
Engineering Economics (IE 353)	undergraduate level
Safety and Ergonomics (IE 561)	undergraduate level

Virginia Polytechnic Institute and State University

Optimization II (ISE 5406)	graduate level
Operations Research (ISE 5104)	video conferencing / graduate level
Deterministic Operations Research (ISE 2404)	undergraduate level
Introduction to Manufacturing Processes (ISE 2204)	undergraduate level

Cleveland State University

Engineering Economy (ESC282)	undergraduate level
Engineering Probability and Statistics (ESC310)	undergraduate level

Graduate Academic Advising

M.Sc. of Ind. Eng. /Management

Dept. of Ind. Eng. – JU

- Supervisor –M.Sc. degree
 - Completed:
 1. Heba Issa Falah Al-Shahwan (August, 2020), "Excellence Awards: A Proposed Solution to Scheduling of Assessors Problem"
 2. Khaled W. Abu-Shattal, (July, 2019), "Facility Location Optimization Model: An Evolutionary Based Approach"
 3. Rania A. Nsour, (July, 2019), "The Integration of Facility Layout Problem with Space Syntax Theory for The Evaluation of Emergency Departments in Jordan"
 4. Mohammad S. Dawodieh, (July, 2019), "Implementation of an Agent-based Simulation for Patient Discharge Process"
 5. Mohammad A. Abdel Wahab, (Nov., 2016), "A Lean Six Sigma Application Guideline to Aviation Maintenance, Repair and Overhaul (MRO) Industry"
 6. Nadia Yacoub Ramadan, (January, 2014), "Assessing Readiness and Obstacles for Applying, Sustaining and Implementing Lean Six Sigma in Jordanian Healthcare Institutions"
- Co-Supervisor – M.Sc. degree
 - Completed:
 7. Ahmad Alaskar (December, 2019) "Evaluation Of The Use Of Fuzzy Logic Based Scoring In The King Abdullah li Award For Excellence"
 8. Mohannad M. Mustafa (December, 2019) "Analysis Of The Inter-Relationships Between Enablers & Results In King Abdullah II Award For Excellence Model"
 9. Izdiad Atallah, (April, 2017), "Optimization Of Depots Locations For Fruit And Vegetable Supply Chain In Jordan"
 10. Rana Al-Ansari, (July 2015), "A multi-criteria Genetic Algorithm based outpatient clinics scheduling"
 11. Ahid Abu Tayyim, (May, 2014), "A Hybrid Taguchi Simulated Annealing Method for Effective Market Segmentation"
 12. Maha Mohammed Ali El Hayek, (May, 2014), "Market Segmentation Using Genetic Algorithms and Nonlinear Principle Component Analysis"
 13. Haneen M. Abuzaid, (April 2014), "Optimizing photovoltaic Station's Efficiency with Multiple Responses Using Response Surface Methodology (RSM)"
 14. Soumayya Yasser Hunaiti, (December 2013), "Mining Fuzzy Association Rules For Identifying Cancer Data"
 15. Israa Kamal Mousa, (November, 2013), "Using Data Envelopment Analysis to Compare the Effectiveness of Different Churn Prediction Models. Case Study: Jordan Telecom Company"

M.Sc. of Maintenance Eng. & Quality Management

Dept. of Ind. Eng. – JU

- Supervisor –M.Sc. degree
 16. Feras Rteimeh, (Nov. 2016), "The Evaluation And Monitoring Of The Performance Of Manufacturing Companies Using Financial And Operational Indicators"
 17. Muhannad Nsour, (Nov. 2016), "Comparison of total quality management between nonprofit and for-profit organizations in Jordan Risk Assessment in Real Estate Investment Projects in Jordan"

M.Sc. of Civil Eng. – Eng. Project Management

Dept. of Civil Eng – JU

- Co-Supervisor – M.Sc. degree
 - Completed:
 18. Mustafa Al-Hayek, (December, 2017), "How To Avoid Failure Of Construction Projects Budget And The Role Of New Technology Therein"

19. Mahmood Sultan Alrasheed, (December, 2017), "Major Factors Contributing To The Construction Delays In The Kingdom Of Bahrain"
20. Fuad J. Al-Khzouz, (December, 2017), "Risk Assessment in Real Estate Investment Projects in Jordan"
21. Lina Ghazi Gharaibeh, (July, 2017), "Causes And Effects Of Design Changes On Construction Projects Performance : The Case Of Jordan"
22. Dareen R. Al-Tawal, (July, 2017), "A Model Utilizing The Artificial Neural Network In Cost Estimation Of Construction Projects"
23. Reema Abdel-Halim, (August, 2016) "Critical Success Factors for Enterprise Resource Planning (ERP) Systems From Stakeholders' Perspective: The case of Jordan"

M.Sc. of Mech. Eng. – Renewable Energy**Dept. of Mech. Eng. – JU****● Co-Supervisor – M.Sc. degree**

○ Completed:

24. Leen Mukhaymar, (July, 2015), "Energy Audit For Non-Residential Buildings: Applying Six Sigma Tools"

Publications

Refereed Journal Publications

- AA Sleem, **M Arafah**, S Al-Shihabi, R Obiedat, Y Al Zain (2024), "Glass-Reinforced Aluminum Matrix Composite: Synthesizes, Analysis, and Hardness and Porosity Modeling Using Artificial Neural Networks", *Jordan Journal of Mechanical and Industrial Engineering (JJMIE)*, Vol. 18, No. 3, p. 509-519.
- **Mazen Arafah** (2022), "Using the Laney p' control chart for monitoring Covid-19 cases in Jordan", *Journal of Healthcare Engineering*, Vol. 2022.
- Khaldoun Shatanawi, Alsharifa Hind Mohammad, Taleb Odeh, **Mazen Arafah**, Maha Halalsheh, Ghada Kassab (2022) "Analysis of Historical Precipitation in Semi-Arid Areas–Case Study of Amman Zarqa Basin", *Journal of Ecological Engineering*, Vol. 23, No. 8, p. 101-111.
- S Al-Shihabi, M AlDurgham, M Arafah, (2021), "COVID-19 repatriation programs — Classification and optimization models", *Transportation Research Interdisciplinary Perspectives*, Vol. 12.
- I Rawabdeh, **M Arafah**, MM Mustafa, (2021) "Analysis of the interrelationships between enablers and results in King Abdullah II award for excellence model", *Benchmarking: An International Journal*, Vo. 29, No. 3, p.931-962
- **Arafah, M.**, Khader, M., Desouky, T., Azzam, N., & Aljundi (2021), "Six sigma application for raising student academic achievement", *Management Science Letters*, Vol. 11, No. 3, p. 699-710.
- Altawal, D., **Arafah, M.** & Sweis, G. (2021) "A Model Utilizing the Artificial Neural Network In Cost Estimation Of Construction Projects In Jordan", *Engineering, Construction and Architectural Management*, Vol. 28, No. 9, p. 2466-2488.
- Kassab, G., Khater, D., Odeh, F., Shatanawi, K., Halalsheh, M., **Arafah, M.**, & van Lier, J. B. (2020), "Impact of Nanoscale Magnetite and Zero Valent Iron on the Batch-Wise Anaerobic Co-Digestion of Food Waste and Waste-Activated Sludge", *Water*, 12(5), 1283.
- Lina Gharaibeh, L., Matarneh, T., **Arafah, M.**, Sweis, G. (2020), "Factors leading to design changes in Jordanian construction projects", *International Journal of Productivity and Performance Management*.
- Abdel Halim, R., **Arafah, M.**, Sweis, G., and Sweis, R. (2019), "Critical success factors for enterprise resource planning systems from the stakeholders' perspective: the case of Jordan", *Modern Applied Science*, Vol. 13, No. 1.
- Al-Zain, Y., Alfandi, L., **Arafah, M.**, Salim, S., Al-Quraini, S., Al-Yaseen, A., and Abu Taleb, D. (2019), "Implementing Lean Six Sigma in a Kuwaiti Private Hospital", *International Journal of Health Care Quality Assurance*, Vol. 32, No. 7.
- **Arafah, M.**, Barghash, M., Haddad, N., Musharbash, N, Nashawati D., Al-Bashir, A., and Assaf, F. (2018), "Using Six Sigma DMAIC Methodology and Discrete Event Simulation to Reduce Patient Discharge Time in a king Hussein Cancer Center", *Journal of Healthcare Engineering*, Vol. 2018.
- Saleh, F., Sweis, R., Abdelqader, B., Abdallah, A., and **Arafah, M.** (2017) "The Effect of TQM Dimensions on the Performance of International Non-Governmental Organizations Operating in Jordan", *International Journal of Productivity and Quality Management*, Vol. 21, No. 4.
- Mkhaimer, L., **Arafah, M.**, and Sakhrieh, A. (2017), "Effective implementation of ISO 50001 energy management system: Applying Lean Six Sigma approach", *International Journal of Engineering Business Management*, Vol. 9.
- **Arafah, M.** (2016), "Leveraging Six Sigma Tools and Methodology to Improve Student English Language Performance at Elementary School", *American Journal of Operations Research (AJOR)*, Vol. 6, No. 4, p. 261–274.
- Tahboub, K., Barghash, M., **Arafah, M.**, and Ghazal, O. (2016), "An ANN-GA framework for optimal engine modeling", *Mathematical Problems in Engineering* 2016.
- Hemeimat, R., Al-Qatawneh, L., **Arafah, M.**, and Masoud, S. (2016), "Forecasting Spare Parts Demand Using Statistical Analysis", *American Journal of Operations Research (AJOR)*, Vol. 6, No. 2, p. 113–120.
- Ramadan, N. and **Arafah, M.** (2016), "Healthcare quality maturity assessment model based on quality drivers", *International Journal of Health Care Quality Assurance*, Vol. 29, No. 3.
- **Arafah, M.** (2015), "Combining Lean concepts & tools with the DMAIC framework to improve processes and reduce waste", *American Journal of Operations Research (AJOR)*, Vol. 5, No. 3, p. 209–221.
- **Arafah, M.** (2015), "Selecting the Six Sigma Project: A Multi Data Envelopment Analysis Unified Scoring Framework", *American Journal of Operations Research (AJOR)*, Vol. 5, No. 3, p. 129–150.

- Al-Shihabi, S, **Arafah, M.**, and Barghash, M. (2015), "An improved hybrid algorithm for the set covering problem", *Computers & Industrial Engineering*, Vol. 85, p. 328–334.
- **Arafah, M.**, Barghash, M.A., Sallam, E., AlSamhouri, A., (2014), "Six Sigma applied to reduce patients' waiting time in a cancer pharmacy", *International Journal of Six Sigma and Competitive Advantage (IJSSCA)*, Vol. 8 No. 2, p. 105–124.
- Rakha, H., **Arafah, M.**, and Park, S. (2012), "Modeling Inclement Weather Impacts on Traffic Stream Behavior", *International Journal of Transportation Science and Technology*. Vol. 1, No. 1, p. 25–48.
- Rakha, H., El-Shawarby, I., and **Arafah, M.** (2010), "Trip Travel-Time Reliability: Issues and Proposed Solutions," *Journal of Intelligent Transportation Systems*. Vol. 14, Issue 4, p. 232–250.
- Rakha, H., Fitch, G., **Arafah, M.**, Blanco, M., and Hanowski, R. (2010), "Evaluation of Safety Benefits from a Heavy-Vehicle Forward Collision Warning System", *Transportation Research Record: Journal of the Transportation Research Board*. Vol. 2194, No. 1, p. 44–54.
- Rakha, H. and **Arafah, M.** (2010) "Calibrating Steady-State Traffic Stream and Car-following Models using Loop Detector Data", *Transportation Science*. Vol. 44, No. 2, p. 151-168
- Rakha, H., Farzaneh, M., **Arafah M.**, and Sterzin, E. (2008), "Inclement Weather Impacts on Freeway Traffic Stream Behavior", *Transportation Research Record: Journal of the Transportation Research Board*, No. 2071, p. 8-18.
- Medina Flintsch, A., Rakha, H., **Arafah, M.**, Dua, D., Abdel-salam, A., and Abbas, M. (2008), "Safety Impacts of Access Control Standards on Crossroads in the Vicinity of Highway Interchanges", *Transportation Research Record: Journal of the Transportation Research Board*, No. 2075, p 42-52.
- Rakha H., Medina A., Ahn K., El-Shawarby I., and **Arafah M.** (2005), "Evaluating Alternative Lane Management Strategies along I-81", *Transportation Research Record: Journal of the Transportation Research Board*, No. 1925, p 76-86.

Books/Chapter(s)

- Rakha H., **Arafah M.**, Abdel-Salam G. Abdel-Salam, Guo F., and Medina (2008), "Linear Regression Crash Prediction Models: Issues and Proposed Solutions," *Efficient Transportation and Pavement Systems: Characterization, Mechanisms, Simulation and Modeling* (Editors: Al-Qadi, Sayed, Alnuaimi, and Masad), Taylor and Francis, ISBN: 978-0-415-48979-9 (Hand Book), ISBN: 978-0-203-88120-0 (Electronic Book), pp. 241-256.

Fully Refereed Conference Publications

- Rakha, H., El-Shawarby, I. Park, S. and **Arafah, M.**, (2010) "Modeling Framework for the Evaluation of Alternative Truck Lane Management Strategies," 13th International IEEE Conference on Intelligent Transportation Systems (IEEE ITSC10), pp. 1025-1032, September 19 - 22, 2010. Madeira Island, Portugal.
- Rakha, H., **Arafah M.**, Abdel-salam, A., and Medina Flintsch, A., (2008) "Linear Regression Crash Prediction Models: Issues and Proposed Solutions", *Efficient Transportation and Pavement Systems: Characterization, Mechanisms, Simulation and Modeling*, Taylor and Francis, ISBN: 978-0-415-48979-9 (Hand Book), ISBN: 978-0-203-88120-0 (Electronic Book), pp. 241-256.
- Rakha, H. and **Arafah, M.** (2007) "Tool for Calibrating Steady-State Traffic Stream and Car-following Models", the 86th Transportation Research Board Annual Meeting, Jan. 22-25, Washington D.C.
- Rakha, H., El-Shawarby, I., **Arafah M.**, and Dion, F., "Estimating Path Travel Time Reliability," the 9th International IEEE Conference on Intelligent Transportation Systems (IEEE ITSC06), September 17-20, 2006, Toronto, Canada.
- **Arafah M.** and Rakha, H., (2005), "Genetic algorithm approach for locating automatic vehicle identification readers", the 8th IEEE International Conference on Intelligent Transportation Systems (IEEE ITSC05), p 1153-1158. September 13-16, Vienna, Austria.

Conference Publications

- Rakha H., Medina Flintsch A., Ahn K., El-Shawarby I., and **M. Arafah**, (2005) "Evaluating Alternative Management Strategies along I-81" *Transportation Research Record 84th Meeting*, Washington D.C., CD-ROM [Paper 05-2086].

- **Arafah M.** and Svestka, J, "Applying DOE in genetic algorithm parameters determination" presented at the 2002 INFORMS Annual Meeting, San Jose, California.

Reviewer Experience

Actively involved in reviewing papers submitted to reputable academic journals such as:

- International Journal of Lean Six Sigma
- Journal of Health Organization and Management
- Quality and Reliability Engineering International
- Statistical Papers
- Journal of Social Sciences
- Journal of Health Care Management Science
- Journal of Management and Engineering Integration
- Jordan Journal of Business Administration
- Jordan Journal of Mechanical and Industrial Engineering

Books Reviewed

- Operations Research: an Introduction, by Hamdy Taha.7th ed. Review for Prentice Hall

Committees

- Committee Chair for Accreditation of Master's Degrees of Logistic Management Program – Accreditation and Quality Assurance Commission for Higher Education
- Committee Chair – Quality Management, Environment, Health and Occupational Safety Qualification and Accreditation.
- Jordan Higher Council for Professional Qualification and Accreditation/ Jordan Engineers Association
- Steering Committee, The 5th Quality Health Care Conference and Exhibition, Policy and Practice: A Partnership for Better Outcomes November 11–13, 2019 Amman, Jordan
- Health Care Accreditation Council (HCAC) –Jordan
- ASQ MEA Regional Quality Conference – Organizing & Technical Committees:
 - 3rd (2017), November 01–02, 2017 Dubai, UAE
 - 2nd (2016) November 19–20, 2016 Dubai, UAE
 - 1st (2015) November 04–05, 2015 Dubai, UAE
- Organizing & Technical Committee (Conference Co–Chair) 1st International Conference on Industrial, Systems and Manufacturing Engineering (ISME'14) November 11–12, 2014 Amman, Jordan

Certificates

2019-08	HEALTH CARE Certified ACCREDITATION CONSULTANT (HCCAC) Accredited by Health Care Accreditation Council (HCAC) –Jordan
2019-03	ISO 9001 Lead Auditor Accredited by CQI/IRCA
2018-07	Certified Manager of Quality/Organizational Excellence Accredited by the American Society for Quality (ASQ)
2015-11	Consultant Engineer in Quality Management Accredited by Jordan Higher Council for Professional Qualification and Accreditation/ Jordan Engineers Association
2013-05	King Abdullah II Excellence Award Certified Assessor Accredited by the King Abdullah II Center for Excellence (KACE)
2012-06	EFQM Certified Assessor Accredited by the European Foundation for Quality Management (EFQM)
2012-06	Basics of Supply Chain Management (BSCM) Accredited by the American Production and Inventory Control Society (APICS)
2010-10	Six Sigma Black Belt (ASQ–SSBB) Accredited by the American Society for Quality (ASQ)
2005-01	Lean Enterprise II Accredited by the Institute of Industrial Engineers (IIE)
2003-09	Six Sigma Green Belt (SSGB) Accredited by the Institute of Industrial Engineers (IIE)

Training Experience

- Possess extensive expertise in providing training on **Quality Management** and **Excellence** practices
- Accumulated over 10 years of experience delivering training in **Lean Six Sigma** at all levels
 - Successfully led and facilitated over 50 training programs focused on Six Sigma, Lean Management, Kaizen, and Total Quality Management methodologies.
 - Designed and customized training programs to meet the specific needs and challenges of diverse industries, including healthcare, banking, manufacturing, pharmaceuticals, telecommunications, airlines, and services.
 - Developed engaging and interactive training materials, incorporating real-world examples and case studies to enhance participants' understanding and application of the concepts.
 - Utilized effective instructional techniques to deliver comprehensive training sessions, ensuring participants gained practical knowledge and skills to drive process improvement and achieve quality excellence.
 - Received positive feedback from participants, demonstrating the ability to effectively communicate complex concepts and empower individuals and teams to implement continuous improvement practices in their respective industries.

Excellence Awards Assessment (King Abdullah II Awards for Excellence since 2012)

- **Government Performance and Transparency Award**
 - Jordan Government's Excellence Model (KACE-5.0) (9th Cycle – 2023/2024)
 - Training, legislation and participation Sector
 - Institute of Public Administration
 - Local and social development sector
 - National Agricultural Research Center
 - Education and Training Sector (8th Cycle – 2016/2017)
 - Institute of Public Administration
 - Prince All Hussein bin Abdullah II Academy of Civil Protection
 - Healthcare Sector (7th Cycle – 2014/2015)
 - Al-Husain Medical City
 - Al-Bashir Hospital
 - Government Performance and Transparency Award (6th Cycle – 2012/2013)
 - Ministry of Health
 - Jordan Traffic Institute
 - Jordan Radio and Television Corporation (JRTV)
- **Government Innovation Award** (2nd Cycle – 2014/2015)
 - Ministry of Education
 - Jordan Customs
 - Licensing of vehicles and drivers Department
 - Jordan Ministry of Energy and Mineral Resources
- **Environmental Sustainability Award** (1st Cycle – 2014/2015)
 - As Samra Waste Water Treatment Plant
- **Excellent Governmental Service Award** (3rd Cycle – 2014)
 - Taxation Department
- **Private sector**
 - Large Service Organizations
 - University of Petra (10th Cycle – 2023/2024)
 - Small and Medium Size Manufacturing Organizations
 - Jordan Gases Company (10th Cycle – 2023/2024)
 - Alhadaf Inter. Com. For Importing & Industry (RZ) (9th Cycle – 2017/2018)

Projects /Consultations Experience

Quality Improvement Projects/ Healthcare Sector

- **Al-Bashir Hospital**
 - Conducted a comprehensive capacity assessment of Al-Bashir hospitals' quality management structure and functions
 - Performed a thorough gap analysis comparing the hospital's current quality and patient safety practices against the standards set by the HCAC Quality and Patient Safety cluster
- **Al-Bashir Hospital – Emergency Department**
 - Led a team of experts from the Health Care Accreditation Council (HCAC) to implement a Lean Management Project aimed at improving patient flow in the Emergency Department (ED)
- **King Hussain Cancer Center, Amman, Jordan.**
 - **Outpatient Appointment Scheduling Process**
 - Reduced patient waiting times by utilizing Six Sigma methodology and Computer Simulation
 - **Discharge Process**
 - Successfully reduced discharge process time by applying Lean Six Sigma methodology and DE Simulation
 - **Emergency Department**
 - Successfully reduced the length of stay (LOS) and long waiting time (WT) for emergency room (ER) patients.
 - **Outpatient Pharmacy**
 - Successfully reduced prescription preparation time by implementing Six Sigma methodology and Computer Simulation
 - Implemented Lean concepts, such as five S and value stream mapping, to optimize processes.
 - Conducted time studies to analyze and improve efficiency.
 - Evaluated staffing requirements to ensure adequate resources for optimal performance.

Quality Improvement Projects/ Education Sector

- **Al-Nukhba (The Elite) School, Amman, Jordan.**
 - Enhanced the quality of teaching in the School for grades one through three by implementing Six Sigma tools in subjects such as Math, English, and Arabic
- **Al-Ridwan Schools, Amman, Jordan.**
 - Enhanced the quality of teaching in the English Language Department for grades one through three by implementing Six Sigma tools

Quality Improvement Projects/Jordan Industrial Sector

- **Petra Aluminum Co., Amman, Jordan.**
 - Conducted in-house training for 20 staff members
 - Led the implementation of multiple Lean Six Sigma projects company-wide.
 - Identified and prioritized projects for areas of improvement.
 - Created process flowcharts to visualize operations.
 - Identified and diagnosed value-added and non-value-added operations.
 - Streamlined and simplified systems, processes, and operations.
 - Assisted in analyzing the Employee Opinion Survey.

Computer Skills

Statistical packages: Minitab, SPSS, R, SmartPLS

Modeling languages: AMPL, MPL, GAMS, LINGO

Optimization solvers: ILOG CPLEX, LINDO/LINGO API, MINOS, CONOPT, Excel Solver

Traffic simulation software: INTEGRATION

Simulation packages: ARENA

Other: Matlab, Access, C, C++, Visual Basic

Professional Affiliations

2014 – 2019	Jordan Society for Quality elected member – Board of Directors
2010 – Current	American Society for Quality (ASQ)
2013 – 2018	American Society for Quality (ASQ) – Elected Country Counselor
1995 –Current	Jordan Engineers Association