

CURRICULUM VITAE

MOHAMMAD M. HAMASHA, PH.D.
Associate Professor

**Department of Industrial Engineering
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Contact and Basic Information

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Nationality: Jordan

Marital Status: Married (Two Children: Ghena and Khalid)

EDUCATION

- | | |
|------------|--|
| Dec, 2011 | Ph.D., Industrial and Systems Engineering, State University of New York at Binghamton, NY, USA |
| June, 2008 | M.S., Industrial Engineering, Jordan University of Science and Technology, Jordan |
| June, 2005 | B.S., Biosystems Engineering, Jordan University of Science and Technology, Jordan. |

PROFESSIONAL EXPERIENCE

- Sep '20 – **Associate Professor**, The Hashemite University, Jordan
- Sep '18 – Sep '20 **Assistant Professor**, The Hashemite University, Jordan
- May '18 – August '18 **Associate Professor**, Prince Sultan University, Riyadh, Saudi Arabia
- August '15 – May '18 **Assistant Professor**, Prince Sultan University, Riyadh, Saudi Arabia
- Sep '13 – August '15: **Assistant Professor**, University of Business and Technology, Jeddah, Saudi Arabia
- Dec '11 – June '13: **Postdoctoral Research Associate**, Center for Autonomous Solar Power (CASP), State University of New York at Binghamton, Binghamton, NY, USA
- Sep'09 – Dec '11: **Research Assistant**, Department of Systems Science and Industrial Engineering, State University of New York at Binghamton, Binghamton, NY, USA
- Aug'11 – Dec'11: **Guest Lecturer**, Department of Systems Science and Industrial Engineering, State University of New York at Binghamton, Binghamton, NY, USA
- Jun'09 – Sep'09: **Internship**, Universal Instrument Corporation, Conklin, NY, USA
- Jan'09 – May'09: **Teaching Assistant**, Department of Systems Science and Industrial Engineering, State University of New York at Binghamton, Binghamton, NY, USA
- Aug'08 – Jan'09: **Research Assistant**, Department of Systems Science and Industrial Engineering, State University of New York at Binghamton, Binghamton, NY, USA
- June'05 – Aug'08: **Teaching Assistant**, Industrial Engineering Department, Jordan University of Science and Technology, Jordan
- Jan'06–Jan'07: **Maintenance Engineer**, Department of Machine Maintenance, Irbid Agricultural Directorate, Jordan
- June'06 – Aug'06: **Part-time Lecturer**, King Abdullah II Fund for Development (KAFFD), University of Science and Technology Office, Irbid, Jordan
- June'05 – Aug'05: **Guest Lecturer**, Biosystems Engineering Department, Jordan University of Science and Technology, Jordan

COURSES TAUGHT

- **Graduate**

403731 *Economy and Cost in Maintenance* The Hashemite University

- **Undergraduate**

IE541 *Simulation* The Hashemite University

IE442 *Quality Control* The Hashemite University

IE436 *Production Planning and Control* The Hashemite University

IE426 *Manufacturing Processes (2)* The Hashemite University

IE352 *Properties of Materials* The Hashemite University

IE344 *Statistical Analysis* The Hashemite University

IE242 *Statistics and Probabilities* The Hashemite University

IE325 *Manufacturing Processes Lab* The Hashemite University

EM438 *Modeling and Simulation* Prince Sultan University

EM347 *Quality Management* Prince Sultan University

EM345 *Production Planning and Control* Prince Sultan University

EM335 *Operations Research* Prince Sultan University

EM206 *Material Science* Prince Sultan University

EM492 *Cooperative Training* Prince Sultan University

STAT210 *Probability Theory* Uni. of Business and Tech.

IE322 *Computer Applications in Industrial Engineering I* Uni. of Business and Tech.

IE323 *Computer Applications in Industrial Engineering II* Uni. of Business and Tech.

IE331 *Probability and Statistics* Uni. of Business and Tech.

IE332 *Engineering Statistics* Uni. of Business and Tech.

IE422 *Industrial Systems Simulation* Uni. of Business and Tech.

IE499 *Senior Project* Uni. of Business and Tech.

SSIE510 *Enterprise Systems Engineering* State University of NY at Bing.

BSE212 *Engineering Dynamics* Jordan Uni. of Sci. and Tech.

- **Training Course**

Lean Six-sigma Green Belt Prince Sultan University

RESEARCH INTEREST

- Probability, Statistics and Reliability Engineering
 - Operations Research
 - Modeling and Simulation
 - Operations Management
 - Quality Control and Management
 - Material Science
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PUBLICATIONS

JOURNAL PAPERS

1. **Hamasha, M. M.**, Ali, H., Hamasha, S., Ahmed, A., "A Mathematical Approximation to Left-sided Truncated Normal Distribution Based on Hart's Model for Quality Engineering Applications", Accepted, Journal of Applied Engineering Science.
2. Alzoubi, K., Alkhazali, Choi, G., **Hamasha, M. M.**, Al-Bahri, S., DeFranco, J., Lu, S., Westgate, C. R., "Comparisons of the Thermal Stability of Poly (3, 4-ethylenedioxythiophene) (PEDOT) and ITO on Flexible Substrates", Vol. 10, No. 8, pp. 1259 - 1265, IEEE Transaction on Components, Packaging and Manufacturing Technology, 2020.
3. Jian, M., Su, S., Hamasha, S., **Hamasha, M. M.**, Alkhazali, A., "Fatigue Properties and Microstructure of Snagcu Bi-Based Solder Joint", Transactions of the ASME Journal of Electronic Packaging, Vol. 143, No. 1, 011008 (13 pages), 2020.
4. Alkhazali, A., Alsukker, A., Etier, M., **Hamasha, M. M.**, "Modeling the Impedance Behavior of Ionic Conductors (AgPO₃)_{1-x}(Ag₂SO₄)_x Glass System Using Artificial Neural Network", Universal Journal of Mechanical Engineering, Vol. 8, No. 3, pp. 152-162, 2020.
5. Alkhazali, A., Al-Rabayah, M., **Hamasha, M. M.**, F., "A New High Accuracy Mathematical Approximation to the Cumulative Normal Density Function", Jordan Journal of Mechanical and Industrial Engineering, Vol. 13, No. 4, pp. 247-251, 2019.
6. **Hamasha, M. M.**, "Mathematical approximation of single and double-sided truncated normal distribution using logistic function", International Journal of Industrial Engineering: Theory, Practice and Applications, 26(6), 934-944, 2019.
7. Su, S., Akkara, F., Thaper, R., Thaper, R., Alkhazali, A., **Hamasha, M. M.**, Hamasha, S., A State-of-the-art Review of Fatigue Life Prediction Models for Solder Joint, Transactions of the ASME Journal of Electronic Packaging, Vol. 141, No. 4, 040802 (13 pages), 2019.
8. **Hamasha, M. M.**, "Generate random variates using a newly introduced approximation to cumulative density of lower truncated normal distribution for simulation applications", International Journal of Mathematics in Operational Research, Vol. 13, No. 2, pp. 265-279, 2018.
9. **Hamasha, M. M.**, Al-Rabayah, M., Aqlan, F., "Standard Tables of Truncated Standard Normal Distribution using A New Summarizing Method", World Journal of Engineering, Vol. 15, No. 2, pp. 216-247, 2018.
10. **Hamasha, M. M.**, Al-Rabayah, M., "A Simple Approximation to the Lower Truncated Cumulative Normal Distribution Based on Mill's Ratio", Pakistan Journal of Statistics, Vol. 33, No. 5, pp. 369-382, 2017.
11. Aqlan, F., Amer, A., Ashour, O., Shamsan, A., **Hamasha, M. M.**, "An Approach for Rush Order Acceptance Decisions Using Simulation and Multi-attribute Utility Theory", European Journal of Industrial Engineering, Vol. 11, No. 5, pp. 613-630, 2017.

12. **Hamasha, M. M.**, Rumbe, G., "Determining Optimal Policy for Emergency Department using Markov Decision Process", *World Journal of Engineering*, Vol. 14, No. 5, pp. 467-472, 2017.
13. **Hamasha, M. M.**, "Practitioner Advice: Approximation of the Cumulative Density of Left-Sided Truncated Normal Distribution Using Logistic Function and Its Implementation in Microsoft Excel", *Quality Engineering*, Vol. 29, No. 2, pp. 322-328, 2017.
14. **Hamasha, M. M.**, "Mathematical Approximation of Left-sided Truncated Normal Distribution Using the Cadwell Approximation Model", *Engineering, Technology and Applied Science Research*, Vol. 7, No. 1, pp. 1382-1386, 2017.
15. **Hamasha, M. M.**, Elsaadi, E., Hassonah, Y., Maghrabi, L., Alamudi, H., "Analysis of Service Delivery System Using Markov Chain Approach and M/G/1 Queuing Systems", *Asian Journal of Industrial Engineering*, Vol. 8, No.(1-3), pp. 1-9, 2016.
16. Hamasha, E., Massadeh, G., Sharihah, A., **Hamasha, M. M.**, Hamasha, K., "Aluminum Induced Crystallization of Amorphous Silicon Thin Films with Assistance of Electric Field for Solar Photovoltaic Applications" *Solar Energy*, Vol. 27, pp. 223-231, 2016.
17. Hamasha, K., Hamasha, E., Massadeh, G., Sharihah, A., **Hamasha, M. M.**, "Aluminum Induced Crystallization of Hydrogenated Amorphous Silicon Thin Films with Assistance of Electric Field for Solar Photovoltaic Applications" *IEEE Journal of Display Technology*, Vol. 12, No. 1, pp. 82-88, 2016.
18. **Hamasha, M. M.**, Alazzam, A. R., Hamasha, S. M., Aqlan, F., Almeanazel, O. T., Khasawneh, M. T., "Multimachine Flexible Manufacturing Cell Analysis Using a Markov Chain-Based Approach", *IEEE Transaction on Components, Packaging and Manufacturing Technology*, Vol. 5, No. 3, pp. 439 – 446, 2015.
19. Alkhazali, A. S., **Hamasha, M. M.**, Lu, S., and Westgate. C. R., "A Comparative Study on Electrical and Mechanical Behavior of Indium Tin Oxide and Poly (3, 4-ethylenedioxythiophene) Thin Films under Tensile Loads", *IEEE Transactions on Device and Materials Reliability*, Vol. 15, No. 2, pp. 174-180, 2015.
20. Alkhazali, A. S., **Hamasha, M. M.**, Choi, G., Lu, S., and Westgate. C. R., "Reliability of Thin Films: Experimental study on mechanical and thermal behavior of Indium Tin Oxide and Poly(3,4-ethylenedioxythiophene)", *Microelectronics Reliability*, Vol. 55, No. 3-4, pp. 538-546, 2015.
21. **Hamasha, M. M.**, Rumbe, G., Khasawneh, M. T., "Optimisation of Single-Queue Service Delivery Systems Using a Markovian Approach", *International Journal of Industrial and Systems Engineering*, Vol.13, No.4, pp. 424 – 441, 2013.
22. Peng, C., **Hamasha, M. M.**, VanHart, D., Lu, S., Westgate, C. R., "Electrical and Optical Degradation Studies on Aluminum-Doped Zinc Oxide Transparent Conductive Thin Films under Cyclic Bending Conditions" *IEEE Transactions on Device and Materials Reliability*, Vol. 13, No. 1, pp. 236-244, 2013.
23. **Hamasha, M. M.**, Dhakal, T., Vasekar, P., Alzoubi, K., Lu, S., Vanhart, D., Westgate, C. R., "Reliability of Sputtered Deposited Aluminum-Doped Zinc

- Oxide under Harsh Environmental Conditions”, *Solar Energy*, Vol. 89, pp. 54-61, 2013.
24. Sudarsanam, H., Peng, C., **Hamasha, M. M.**, Lu, S., and Westgate, C. R. “Cost Effective Green Grid System (Grid-Tied Photovoltaic System): A Simulation-Based Optimization Study”, *Journal of Management and Engineering Integration*, Vol. 5, No. 1, pp. 49-55, 2012.
 25. **Hamasha, M. M.**, Dhakal, T., Alzoubi, K., Albahri, S., Qasaimeh, A., Lu, S., Westgate, C. R. “Stability of ITO Thin Film on Flexible Substrate under Thermal Aging and Thermal Cycling Conditions”, *IEEE Journal of Display Technology*, Vol. 8, No. 7, pp. 383-388, 2012.
 26. Alzoubi, K., **Hamasha, M. M.**, Wang, L., Zhang, H., Yin, J., Luo, J., Lu, S., Samakia, B., Zhong, C.-J., Poliks, M., “Stability of Interdigitated Microelectrodes of Flexible Chemiresistor Sensor Arrays”, *IEEE Journal of Display Technology*, Vol. 8, No. 7, pp. 377-383, 2012.
 27. Dhakal, T., **Hamasha, M. M.**, Nandur, A., Lu, S., Vanhart, D., Westgate, C. R., “Moisture Induced Surface Corrosion in AZO Thin Films Formed by Atomic Layer Deposition”, *IEEE Transactions on Device and Materials Reliability* Vol. 12, No. 2, pp. 347-356, 2012.
 28. **Hamasha, M. M.**, Alzoubi, K., Switzer III, J. C., Lu, S., Poliks, M., Westgate, C. R., “Reliability of Sputtered Aluminum Thin Film on Flexible Substrate under Cyclic Bending Fatigue Conditions”, *IEEE Transaction on Components, Packaging and Manufacturing Technology*, Vol. 2, No. 12, pp. 2007-2016, 2012.
 29. **Hamasha, M. M.**, Mayyas, A., Hayajneh, M. T., Hassan, A. M., “The Effect of Time, Percent of Copper and Nickel on Naturally Aged Al-Cu-Ni Cast Alloys”, *Journal of Minerals and Materials Characterization and Engineering*, Vol. 11, No.2, pp.117-131, 2012.
 30. Mayyas, A., **Hamasha, M. M.**, Alrashdan, A., Hassan, A. M., Hayajneh, M. T., “Effect of Copper and Silicon Carbide Content on the Corrosion Resistance of Al-Mg Alloys in Acidic and Alkaline Solutions”, *Journal of Minerals and Materials Characterization and Engineering*, Vol. 11, No.4, pp.435-452, 2012.
 31. **Hamasha, M. M.**, Tashtouth, T. H., Hamasha, S. M., Khasawneh, M. T., “Analysis of Two-Machine Flexible Manufacturing Cell Under Unbalanced Machining Time”, *Journal of Management and Engineering Integration*, Vol. 4, No. 2, pp. 26-31, 2011.
 32. Aqlan, F., **Hamasha, M. M.**, Almeanazel, O. T., Khasawneh, M. T., Al-Hawari, T., “Stochastic Analysis of Pull Production Systems”, *Journal of Management and Engineering Integration*, Vol. 4, No. 1, pp. 36-44, 2011.
 33. Almeanazel, O. T., **Hamasha, M. M.**, Aqlan, F., Khasawneh, M. T., “A Study on the Effect of Smoking, Gender, and Hand Dominancy on Hand Grip Endurance Limit”, *International Journal on Intelligent Technologies and Engineering Systems*, Vol. 1, No. 1, pp. 67-73, 2011.
 34. **Hamasha, M. M.**, Alzoubi, K., Lu, S., Desu, S. B., “Durability Study on Sputtered Indium Tin Oxide Thin Film on Poly Ethylene Terephthalate Substrate”, *Thin Solid Films* Vol. 519, No. 18, pp. 6042-6047, 2011.
 35. **Hamasha, M. M.**, Alzoubi, K., Switzer III, J. C., Lu, S., Desu, S. B., Poliks, M., “A Study on Crack Propagation and Electrical Resistance Change of

- Sputtered Aluminum Thin Film on PET Substrate under Stretching", *Thin Solid Films* Vol. 519, No. 22, pp. 7918-7924, 2011.
36. **Hamasha, M. M.**, Mayyas, A., Hayajneh, M. T., Hassan, A. M., "The Effect of Time, Percent of Copper and Nickel on the Natural Precipitation Hardness of Al - Cu - Ni Powder Metallurgy Alloys Using Design of Experiments", *Journal of Minerals and Materials Characterization and Engineering*, Vol. 10, No.6, pp.479-492, 2011.
 37. **Hamasha, M. M.**, Alzoubi, K., Lu, S., "Behavior of Sputtered Indium-Tin-Oxide Thin Film on Poly-Ethylene Terephthalate Substrate Under Stretching", *IEEE Journal of Display Technology*. Vol. 7, No. 8, pp. 426-433, 2011.
 38. Alzoubi, K., **Hamasha, M. M.**, Lu, S., Samakia, B., "Bending Fatigue Study of Sputtered ITO on Flexible Substrate", *IEEE Journal of Display Technology*. Vol. 7, No. 11, pp. 593-600, 2011.

BOOK CHAPTERS

39. **Hamasha, M. M.**, Dhakal, T., Alzoubi, K., Westgate, C. R., "Reliability of Indium Tin Oxide: Properties under Mechanical and Thermal loads", Book Title: Indium: Properties, Technological Applications and Health Issues, **ISBN: 978-1-62257-700-2**, Publisher: Nova Science Publishers, Inc. 2012

CONFERENCE PAPERS

40. Almomani, H. A., Khazaleh, A., Bashir, A., **Hamasha, M. M.**, A Psychophysical Approach for Predicting Maximum Voluntary Contraction in Jordanian Cancer Patients at King Hussein Cancer Foundation Centre, Annual World Conference of the Society for Industrial and systems engineering, October 11-12, 2018, SUNY Binghamton, New York, USA
41. Ahmad, A., **Hamasha, M. M.**, "An optimization model for scheduling patients at an interpreting agency", Institute of Industrial and Systems Engineers Annual Conference and Expo, May 19-22, 2018, Orlando, Florida, USA.
42. Alzoubi, K., Choi, G., **Hamasha, M. M.**, Alkhazali, A. S., DeFranco, J., Lu, S., Sammakia, B. and Westgate. C. R., "Comparisons of the Mechanical Behaviors of Poly (3, 4-ethylenedioxythiophene) (PEDOT) and ITO on Flexible Substrates", Material Science Society Fall Meeting & Exhibit, November 25-30, 2012, Boston, Massachusetts, USA.
43. Peng, C., Sudarsanam, H., **Hamasha, M. M.**, Lu, S., Dhakal, T., Westgate C. R., "Performance of Aluminum-Doped Zinc Oxide under Bending Fatigue Conditions", 8th annual conference Long Island Systems, Applications and Technology, May 4, 2012, Long Island, USA.
44. **Hamasha, M. M.**, Alzoubi, K., Dhakal, T., Qasaimeh, A., Lu, S., Westgate, C. R., "Stability of Aluminum Thin Films on Flexible Substrate under Thermal and Isothermal Conditions", ISMTA Conference and Exhibition, October, 16-20, 2011; Fort Worth, TX, USA.
45. Dhakal, T. P., **Hamasha, M. M.**, Sunkari, S., Ganta, L., Vasekar, P., Westgate, C. R., "Fabrication of Cu₂ZnSnS₄ Thin Film Solar Cell Using Chemical Method", IEEE Photovoltaic Specialist Conference Proceedings, June 19-24, 2011, Seattle, Washington, USA.

46. Alzoubi, K., **Hamasha, M. M.**, Yin, J., Zhang, H., Wang, L., Luo, J., Lu, S., Samakia, B., Zhong, C., Poliks, M., "Stability of Interdigitated Microelectrodes of Flexible Sensor Arrays", 2011 Flexible Electronics & Displays Conference Proceedings, February, 7-10, 2011, Phoenix, Arizona, USA.
47. **Hamasha, M. M.**, Dhakal, T., Alzoubi, K., Qasaimeh, A., Lu, S., Liu, X. "Stability of ITO Thin Film on Flexible Substrate under Thermal Aging and Thermal Cycling Conditions", 2011 Flexible Electronics & Displays Conference Proceedings, February, 7-10, 2011, Phoenix, Arizona, USA.
48. Alzoubi, K., **Hamasha, M. M.**, Lu, S., Samakia, B., Mark Poliks "Effect of Lamination on the Bending Fatigue Life of Copper Coated PET Substrate", Proceedings of SPIE, January, 21-27, 2011, San Francisco, California, USA.
49. Almeanazel, O. T., **Hamasha, M. M.**, Irshaidat, F., Halaweh, M., Khasawneh, M. T., "Effect of Color and Gender on Reaction Time in Cognitive Tasks", International Conference on Manufacturing and Engineering Systems (ICMES 2010), Dec. 16-18. 2010, Tainan, Taiwan.
50. Almeanazel, O. T., **Hamasha, M. M.**, Halaweh, M., Lu, S., Khasawneh, M. T., "The Effect of Smoking, Gender, and Hand Dominancy on Hand Grip Endurance Limit", International Conference on Manufacturing and Engineering Systems, December, 16-18, 2010, Tainan, Taiwan.
51. Hassan, A. M., Hayajneh, M. T., **Hamasha, M. M.**, "A Study of Natural Precipitation Hardening of Cast and P/M Al-Cu-Ni Alloys", 7th International Material Technology Conference and Exception, June 13-16, 2010, Sarawak, Malaysia.

ABSTRACT/PRESENTATIONS

52. *Sudarsanam, H., Peng, C., **Hamasha, M. M.**, Lu, S., and Westgate, C. R. "Cost Effective Green Grid System (Grid-Tied Photovoltaic System)", *Presented at Industry, Engineering, and Management Systems Conference*, March, 25-28, 2012, Cocoa Beach, Florida, USA.
53. ***Hamasha, M. M.**, Alzoubi, K. M., Switzer III, J. C., Lu, S., Westgate, C. R., Poliks, M. "Crack Development and Electrical Resistance Degradation of Aluminum Thin Films Deposited on Flexible Substrate under Cyclic Bending Fatigue Conditions", IMAPS Mid-Atlantic Microelectronics Conference, June 23-24, 2011, Atlantic City, New Jersey, USA.
54. ***Hamasha, M. M.**, Alzoubi, K. M., Switzer III, J. C., Tiberio, E. M., Lu, S., Westgate, C. R., Poliks, M. "Stress Concentration and Crack Development of Deposited Titanium Oxides on Flexible Substrate for Solar Photovoltaic Applications", IMAPS Mid-Atlantic Microelectronics Conference, June 23-24, 2011, Atlantic City, New Jersey, USA.
55. ***Hamasha, M. M.**, Tashtouth, T. H., Hamasha, S. M., Khasawneh, M. T., "Analysis of a Double-Machine Flexible Manufacturing Cell Under Unbalanced Machining Time", *Presented at Industry, Engineering, and Management Systems Conference*, March, 27-30, 2011, Cocoa Beach, Florida, USA.
56. Rumble, G., Khatri, A., Girme, A., Bhansali, S., ***Hamasha, M. M.**, Khasawneh M. T., "A Comparative Study of Holts-Winter Method and Artificial Neural Networks in Forecasting", *Presented at Industry,*

- Engineering, and Management Systems Conference, March, 27-30, 2011, Cocoa Beach, Florida, USA.*
57. Aqlan, F., ***Hamasha, M. M.**, Almeanazel, O. T., Khasawneh, M. T., "Analysis of Pull Production Systems using Markov Chains", *Presented at Industry, Engineering, and Management Systems Conference, March, 27-30, 2011, Cocoa Beach, Florida, USA.*
58. Aqlan, F., ***Hamasha, M. M.**, Almeanazel, O. T., Khasawneh, M. T., "Analysis of Hybrid Production Systems using Markov Chains", *Presented at Industry, Engineering, and Management Systems Conference, March, 27-30, 2011, Cocoa Beach, Florida, USA.*
59. Almeanazel, O. T., ***Hamasha, M. M.**, Aqlan, F., Irshaidat, F., Khasawneh, M. T., "Estimation of Performance Time for Tasks Requiring Hand Grip Strength Using Artificial Neural Networks", *Presented at Industry, Engineering, and Management Systems Conference, March, 27-30, 2011, Cocoa Beach, Florida, USA.*
60. ***Hamasha, M. M.**, "The Reynolds Equations of the Turbulent Motions", *Presented at Jordanian-German Winter Academy, February, 4-11, 2006, Amman, Jordan.*
- *Presenter**

Research Fund

Mohammad Hamasha (PI), *MODELING AND SIMULATION ANALYSIS OF UBT CAMPUS EVACUATION AND PLANNING TO MINIMIZE CLEARING TIME*, University of Business and Technology, KSA, (Amount 56,000 SR,)

PROFESSIONAL CERTIFICATES

Lean Six Sigma Brown Belt, February 2011, Thayer School of Engineering at Dartmouth, Dartmouth College, Certificate# 0118

Lean Six Sigma Green Belt, June 2010, Thayer School of Engineering at Dartmouth, Dartmouth College, Certificate# GB 0601

HONORS

- Graduate Student Award for Excellence in Research, Graduate School, State University of New York at Binghamton, March, 2012
- Member, Alpha Pi Mu (Industrial Engineering Honor Society), April, 2010
- Jordan Engineers Association's Award for Academic Excellence, June, 2005

SCHOLARSHIPS

- Research and Teaching Assistant, State University of New York at Binghamton, August 2008-December 2011
- Travel Grant Award, Graduate School, State University of New York at Binghamton, April 14, 2011
- Teaching Assistant, Jordan University of Science and Technology, August 2005-June 2008

Advisor/Master Student

- Aysar Abu-Wendi, Master of Crises Management, Graduated Summer 2019-2020

PROFESSIONAL AFFLICTIONS

- Member, Society for Health Systems (SHS)
- Member, Society for Engineering & Management Systems (SEMS)
- Member, Institute of Industrial Engineers (IIE)
- Member, International Microelectronics and Packaging Society (IMAPS)
- Member, Surface Mount Technology Association (SMTA)
- Member, Jordan Engineers Association (JEA)