

Curriculum Vitae

General Information

Name:	Abdel-Rahman Al-Qawasmi
Degree:	Ph.D. in Electrical Engineering
Major:	Electrical Engineering
Minor:	Telecommunications Engineering
Research interests	Signal Processing, Renewable energy (Energy efficiency)
Academic Rank:	Associate professor
Date of Birth:	23\9\1969
Marital tatus:	Married
Children:	5 daughters
Nationality:	Jordanian
E-mail:	a.alqawasmi@mu.edu.sa
Mobile:	+966531404525
Current workplace	Dhofar University (20224-Now)
Previous workplace:	Majmaah University (2011-2023)
Previous workplace:	Philadelphia University/Jordan (2001-2011)
Academic Experience:	25 Years
Quality Experience	Academic Accreditation Expert and Consultant (ABET & NCAAA) https://www.youtube.com/channel/UCwbJMHqKGr1QfHYAO32ILOQ
Other experience:	One Year in JORAMCO/2001- 2002/ Queen Alia Airport/Jordan
Google Scholar and LinkedIn	https://scholar.google.com/citations?hl=en&user=LdeUBioAAAAJ&view_op=list_works&authuser=1&sortby=pubdate https://www.linkedin.com/in/qawasmi/
Research:	• 52 published papers (20 ISI, 15 Scopus and 17 Conferences), • One published chapter • One published refereed textbook.

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Certificates

No	Degree	Year	University	Country
1	Ph.D. in Electrical Engineering/ Communications	1999	Kyiv University of Civil Aviation	Ukraine
	Thesis's Title	Enhancement of the effectiveness of Mobile telecommunication systems of civil Aviation based on the improvement of the quality of Demodulators of wide-band signals		
2	Master Degree (High Diploma)	1994	Kyiv University of Civil Aviation	Ukraine
	Thesis's Title	Study and Design of a Receiver of Discrete Wide-band Signals with Frequency Modulation		

Main Quality and Administrative Experiences:

- Coordinator of Quality Assurance Committee at Dhofar University
- Head of Programs and study plans administration in the vice-rector office.
- Chair and member of NCAAA reviewing panel for program academic Accreditation
- External Reviewer for NCAAA program accreditation (2020-Now) [More than 12 programs)
- Head of the Quality Unit During the visit to ABET 2017
- NCAAA international Academic Accreditation Observer (Mainly ABET Accreditation)
- Self-study Report specialist for national and international engineering accreditation
- NCAAA institutional Academic accreditation Evaluator

-Publications: Continual improvement assessments based on the ABET accreditation process: overcome challenges implementing the management system, International Journal of Continuing Engineering Education and Life-Long Learning (In Press), - https://www.inderscienceonline.com/doi/abs/10.1504/IJCEELL.2021.118295

Al-Qawasmi A (2026;), "A Web-based academic quality management system for evidence traceability and continuous improvement in engineering education: the QAMS case study". Quality Assurance in Education, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/QAE-05-2026-0208.

Other Quality and Administrative Experiences:

Description	Philadelphia University	Majmaah University	**Dhofar University**	Period
NCAAA reviewer	Saudi Arabia			2020- Now
Coordinator of Academic Accreditation Committee			X	2026-Now
Coordinator of Quality Assurance Committee			X	2024-2026
Member of the Quality Assurance Department (University Level)				**2024-Now**

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Head of Communications and Electronics Department	X			2005-2010
Director of Computer Center	X			2011-2012
Director of Quality Center in the Engineering college		X		2013-2015
ABET Experience in the College of Engineering: 1- Consulting for Preparing the academic program for ABET accreditation 2- Supervision of writing the preliminary and final. 3- Performing ABET educational activities (Lectures, workshops, students' and instructors' awareness...) 4- Preparing course portfolio 5- ABET evaluation, recommendations, action plans and program development) 6- Mapping Old Learning outcomes with new ABET Learning outcomes for the 2019\2020 accreditation cycle, 7- Representative of the College of Engineering in the ABET (Quality Coordinator)		X		2015-now
Member of High committee of program academic accreditation to prepare the University for institutional NCAAA accreditation:		X		2014-2015
1- checking and preparing course specifications and course reports for accreditation.				
Strategic Planning Consultant in the Strategic planning administration (Representing the Vice-rectorate of Academic Affairs): 1- Writing the University strategic plan 2- Following the operational plans and measuring the performance indicators 3- writing needed reports with analysis and recommendations.		X		2016-now
Supervisor of study programs and development in the Vice Rectorate for Academic Affairs: 1- Writing the regulations and standard for preparing the new study plans 2- creating forms and guides for colleges 3- Evaluation (technically) all programs submitted to be approved by the University council 4- Writing and implementation the operational plan of the vice-rectorate of academic affairs.		X		2015-2021
Head of study program and curriculum in the Vice Rectorate for Academic affairs		X		2012-2014
Head of Examination committee in Engineering College				2011-2012
Member of College Quality Assurance Committee	X			2005-2010

Representative of College in E-learning Deanship				2009-2011
Head of Academic Advising in the Engineering College				2011-2012
Head of Health and professional safety and college representative in the University Vice-Rectorate: The College Labs accredited by OHSAS 18001 in 2017	X			2015-2016
Head of programs quality committee in the department		X		2013-now
Reviewer of a committee for preparation of programs for national accreditation				2012-2014
Head of Academic Advising Committee	X			2009-2011
Head of Assessment and Evaluation committee in the department		X		2015-2017
Reviewer in the 6-th students' conference in Jeddah		X		2015

Teaching Experience:

- Taught more than 20 courses in electrical engineering, math and engineering economics
- Supervised several undergraduate projects
- Supervised master thesis
- External reviewer for master's and PhD thesis

Personal Achievements:

- Developing the Educational Quality Management System for Academic Accreditation http://eqmsystem.com
- Developing the Online Paper Submission Tracking Manager http://opstmanager.com/Default.aspx
- Developing the QAMS https://www.duqams.com

Skills Development:

Training Courses
TQT Certificate
Academic programs preparation for academic accreditation certificated
Teaching strategies certificated
E-learning certificated from UNESCO Study programs preparation
D2L- Implementation certificated
ICDL
And many others...

Lectures, Workshops presented by me (Dhofar University):

Title	Date
Academic Integrity at Dhofar University	29 October 2025
النزاهة الأكاديمية في جامعة ظفار	3 December 2025

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Workshop in CE: ABET Philosophy in CLO–SO Mapping	13 October 2025
CLO/SO/GA Mapping	2 October 2025
Completing QAMS Tasks for ABET Accreditation Preparation	2 Feb 2026
Academic Advising in the College of Engineering	FS 2024/2025
Measurement of PLOs and their impact on students performance	FS 2024/2025
Measuring PLOs using rubrics	FS 2024/2025

Lectures, Workshops presented by me (Majmaah University):

Title	Date
Study plans: Procedures, Quality and implementations	1434\11\27
Automation of quality work in the EE department	1436
Academic Advising in the College of Engineering	1436\12\15
"What do you expect from a quality center."	1434\11\6
Building and development of curriculums	1435\5\2
Preparation and development of curriculums in the Saudi Universities	1436
Creation of academic programs	1436
Preparation of curriculums and steps of their approval	1435\5\17
Preparation and accreditation of curriculums	1434\3\11
Professional Ethics for EC students	1436\6\16
How to fill the course specifications	1436
Key-Performance Indicators (KPIs)	1436
preparation of Electronic Courses	2009
E-learning management systems	2011\5\15
Academic Advising in the College of Engineering	18\10\2015
How to fill the course report	21\10\2018
Standards and additional requirements for ABET accreditation	18\7\1437
Distribution of quality culture in the College of Engineering	29\3\2017
Preparation for ABET visit	27\4\2017
The fourth criteria in ABET	26\11\2015
Indirect Assessment and faculty report	27\1\2016
Quality management system (software)	22\12\1438
Key performance Indicators (The importance and measuring procedures)	15\4\2018
The study program conditions and the ways of development	20\3\2018
How to fill the new NCAAA 2018 course report	21\10\2018

Instructor's Quality awareness list	18\2\2020
The experience of College of Engineering in preparation for quality accreditation for college of computer	28\1\2020
The experience of College of Engineering in preparation for quality accreditation for College of Science	6\12\2019
Preparation of college of Engineering for NCAAA academic accreditation	26\11\2019
The Quality operational plan	29\10\2019
Workshop for the Quality coordinators in the college of Engineering	24\1\2019
How to fill the course specifications	10\2\2020

Skills

- asp.net VB.net Developer
- Computer skills **Membership:**
- Jordanian Engineering Association
- IEEE member **Publications**

Publications in Quality:

1- Al-Qawasmi A (2026;), "A Web-based academic quality management system for evidence traceability and continuous improvement in engineering education: the QAMS case study". *Quality Assurance in Education*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/QAE-05-2026-0208

2- Abdel-Rahman Al-Qawasmi, Abdullah Almuhaisen, Iskander Tlili

Continual improvement assessments based on the ABET accreditation process: overcome challenges implementing the management system, International Journal of Continuing Engineering Education and Life-Long Learning (In Press), https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijceell , **DOI:** 10.1504/IJCEELL.2021.10028376 **Book**

authored:

Differential Equations: Engineering Applications, 2011 **Scientific**

books co-authored:

Chapter 7 "Discrete Wavelet Transform & Linear Prediction Coding Based Method for Speech Recognition via Neural Network", By K.Daqrouq, A.R. Al-Qawasmi, K.Y. Al Azzawi and T. Abu Hilal, DOI: 10.5772/20978. http://www.intechopen.com/ **Journal**

Publications:

ISI Journals:

1. Al-Qawasmi A (2026;), "A Web-based academic quality management system for evidence traceability and continuous improvement in engineering education: the QAMS case study". *Quality Assurance in Education*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/QAE-05-2026-0208
2. Abo-Khalil, Ahmed G., Al Qawasmi, Abdel-Rahman, Hassan, Al Amir, Comparative Review of Traditional, Intelligent, and Hybrid MPPT Techniques for Enhanced Photovoltaic System Efficiency Under Dynamic Operating Conditions, *International Transactions on Electrical Energy Systems*, 2026, 6465506, 40 pages, 2026. https://doi.org/10.1155/etep/6465506

3. K Smida, MA Albedah, RF Rashid, AR Al-Qawasmi, Molecular dynamics method for targeting α-synuclein aggregation induced Parkinson's disease using boron nitride nanostructures, Engineering Analysis with Boundary Elements, 2023
4. R Alabdan, SU Khan, AR Al-Qawasmi, A Vakkar, I Tlili - Applications of temperature dependent viscosity for Cattaneo–Christov bioconvection flow of couple stress nanofluid over oscillatory stretching surface: a generalized thermal model, Case Studies in Thermal Engineering, 2021
5. Ahmed G Abo‐Khalil, Ali M Eltamaly, Walied Alharbi, Abdel‐Rahman Al‐Qawasmi, Mohammad Alobaid, Ibrahem M Alarifi, A modified active frequency islanding detection method based on load frequency and chopping fraction changes, 2021/11, International Transactions on Electrical Energy Systems, Volume 31, Issue 11, Pages e13033
6. Rana Alabdan, Sami Ullah Khan, Abdel-Rahman Al-Qawasmi, Ali Vakkar, Iskander Tlili, Applications of temperature dependent viscosity for Cattaneo–Christov bioconvection flow of couple stress nanofluid over oscillatory stretching surface: A generalized thermal model, 2021/12/1,Case Studies in Thermal Engineering, 28, Pages 101412, Elsevier
7. Ahmed G Abo‐Khalil, Walied Alharbi, Abdel‐Rahman Al‐Qawasmi, Mohammad Alobaid, Ibrahim Alarifi, Modeling and control of unbalanced and distorted grid voltage of grid‐connected DFIG wind turbine, International Transactions on Electrical Energy Systems, 2021
8. Ibrahim M Alarifi, Ahmed G Abo-Khalil, Abdel-Rahman Al-Qawasmi, Walied Alharbi, Mohammad Alobaid, On the effects of nanomaterials on the performance of solar distillation systems-A comprehensive review, Solar Energy, 2021
9. Zhang Bo, Leonardus WW Mihardjo, Mahidzal Dahari, Ahmed G Abo-Khalil, Abdel-Rahman Al-Qawasmi, Abdeliazim Mustafa Mohamed, Towhid Parikhani, Thermodynamic and exergoeconomic analyses and optimization of an auxiliary trigeneration system for a ship utilizing exhaust gases from its engine, Journal of Cleaner Production, 2021
10. Abdel-Rahman Al-Qawasmi, Ahmad Abokhalil, Smart Energy Management System using Wireless Sensing and Actuator Network, Journal of Engineering and Applied Sciences, 2021
11. AG Abo-Khalil, W Alharbi, AR Al-Qawasmi, M Alobaid, IM Alarifi, Maximum Power Point Tracking of PV Systems under Partial Shading Conditions Based on Opposition-Based Learning Firefly Algorithm. Sustainability 2021.
12. Sami Ullah Khan, Rana Alabdan, Abdel-Rahman Al-Qawasmi, Ali Vakkar, Mouna Ben, Bioconvection applications for double stratification 3-D flow of Burgers nanofluid over a bidirectional stretched surface: Enhancing energy system performance, Case Studies in Thermal Engineering, 2021
13. Rana Alabdan, Sami Ullah Khan, Abdel-Rahman Al-Qawasmi, Ali Vakkar, Iskander Tlili, Applications of temperature dependent viscosity for Cattaneo–Christov bioconvection flow of couple stress nanofluid over oscillatory stretching surface: A generalized thermal model, Case Studies in Thermal Engineering 2021
14. The Use of Arabic Vowels to Model the Pathological Effect of Influenza Disease by Wavelets K Daqrouq, AR Al-Qawasmi, A Balamesh, AS Alghamdi, MA Al-Amoudi Computational and mathematical methods in medicine 2019
15. Transient process in a finned triplex tube during phase changing of aluminum oxide enhanced PCM Z Li, M Sheikholeslami, Z Shah, A Shafee, AR Al-Qawasmi, I Tlili The European Physical Journal Plus 134 (4), 173
16. Ahmed G Abo-Khalil, Abdel-Rahman Al-Qawasmi, Ali M Eltamaly, BG Yu, "Condition Monitoring of DC-Link Electrolytic Capacitors in PWM Power Converters Using OBL Method". MDPI, Sustainability,2020.
17. K Daqrouq, M Ajour, AR Al-Qawasmi, A Alkhateeb," The Discrete Wavelet Transform Based Electrocardiographic Baseline Wander Reduction Method for Better Signal Diagnosis, Journal of Medical Imaging and Health Informatics 8 (8), 15901597 (2018)

18. Abdel-Rahman Al-Qawasmi and I. Tlili,"Energy efficiency and economic impact investigations for air-conditioners using wireless sensing and actuator networks". Energy Reports 2018, Accepted for publications
19. Abdel-Rahman Al-Qawasmi and I. Tlili, Energy Efficiency Audit Based on Wireless Sensor and Actor Networks: AirConditioning Investigation. Journal of Engineering. 2018
20. Abokhalil, A.G.; Awan, A.B.; Al-Qawasmi, A.-R. Comparative Study of Passive and Active Islanding Detection Methods for PV Grid-Connected Systems. Sustainability 2018, 10, 1798.

Scopus Journals:

1. Al Qawasmi, A.-R. (2026). Adaptive low-impact hybrid islanding detection for grid-connected PV inverters in unbalanced and weak power systems. *Clean Energy Science and Technology*, *4*(4). https://doi.org/10.18686/cest803
2. Ahmed G. Abo-Khalil, Abdel-Rahman Al Qawasmi, "Techno-Economic and System-Level Evaluation of PV-Integrated Energy Storage Systems for High Renewable Penetration Grids," WSEAS Transactions on Power Systems, vol. 21, pp. 211-239, 2026, DOI:10.37394/232016.2026.21.17
3. Abo-Khalil, A. G., Al-Qawasmi, A.-R., & Hassan, A. (2025). Hybrid Artificial Bee Colony and incremental conductance—Algorithm for enhanced MPPT in photovoltaic systems. *Clean Energy Science and Technology*, *3*(2), 335. https://doi.org/10.18686/cest335
4. Abdel-Rahman Al-Qawasmi ,An Energy Efficiency and Management of Hybrid Solar Renewable Energy System for Farms: Engineering Economic Present Worth Analysis Approach, University of Ha'il-Journal of Science (UOHJS), 2021
5. Abu-Isbeih, Al-Qawasmi, Al-Shaf'I, "Prove the Harm of Cell Phone via Biological Experiments", Research Journal of Pharmaceutical, Biological and Chemical Sciences, Volutme 7, Issue 3, Pages 1004-1011, 2016
6. M. ABU SHATTAL and ABDEL-RAHMAN AL-QAWASMI "The Effect of Interference on
7. Bluetooth Data Exchange over WLAN", WSEAS Transactions on Communications ISSN: 11092742 . Issue 10, Volume 11, October 2012
8. K. Daqrouq, A. Al-Qawasmi, O. Daoud, W. Al-Sawalmeh "Self-Organizing Map Weights and
9. Wavelet Packet Entropy for Speaker Verification", International Journal of Circuits, Systems and Signal Processing. Pp 1220.
10. Wael Al-Sawalmeh, Khaled Daqrouq, Omar Daoud and Abdel-Rahman Al-Qawasmi "Speaker Identification System-based Mel Frequency and Wavelet Transform using Neural Network Classifier" , European Journal of Scientific Research Vol 41 Issue 4. © EuroJournals Publishing, Inc. 2009
11. Wael Al-Sawalmeh, Khaled Daqrouq, Abdel-Rahman Al-Qawasmi, Tareq Abu Hilal, " The Use of Wavelets in Speaker Feature Tracking Identification System Using Neural Network", WSEAS TRANSACTIONS on SIGNAL PROCESSING, Issue 5, Volume 5, May 2009. ISSN: 1790-5052. Pages 167-177.
12. Abdel-Rahman Al-Qawasmi, Omar Al-Ayasrah and Ayman Al-Lawama " Forward Transmission over a Multipath Faded Channel in a DS CDMA System" Word Scientific and Engineering Academy and Society; WSEAS Transactions on circuits and systems. ISSN: 1109-2734. Issue 2, Volume 8, February 2009.
13. Abdel-Rahman Al-Qawasmi and Khaled Daqrouq "ECG Signal Enhancement Using Wavelet Transform" Word Scientific and Engineering Academy and Society; WSEAS Transactions on Biology and Biomedicine, ISSN: 1109-9518. Issue 2, Volume 7, April 2010

14. Ayman Al-Lawama, Abdel-Rahman Al-Qawasmi and Omar Al-Ayasrah " Optimum Control Using Signal Processing in Integrated Aerospace Navigation Systems", Word Scientific and Engineering Academy and Society; WSEAS Transactions on Communications ISSN: 11092742, 11(7) November 2008,
15. Mikhled Alfaouri Khaled Daqrouq, Ibrahim N. Abu-Isbeih, Emad F. Khalaf Abdel-Rahman Al-Qawasmi, and Wael Al-Sawalmeh "Quality Evaluation of Reconstructed Biological Signals", American Journal of Applied Sciences, 6(1) 187-193, 2009, USA.

Conferences:

1. . -R. Al-Qawasmi, "Present-Worth Analysis of a Hybrid PV-Diesel, Wsan-Enabled Energy-Efficient Power System for Remote Farms," *2025 IEEE PES GTD Grand International Conference and Exposition Asia (GTD Asia)*, Bangkok, Thailand, 2025, pp. 034-040, Doi: 10.1109/GTDAsia60461.2025.11313292.
2.
3. Al-Qawasmi A.K., K. Daqrouq "The Wavelet Transform Based Compression Method using Zero Position coding". The sixth International Philadelphian Engineering Conference: Philadelphia University, 2006-Page 506-510.
4. Al-Qawasmi A.K., A. Al-Lawama "Storing Digital Data Using Zero-Compression Algorithm", IEEE-SPIE ,Proceedings of SPIE ,Volume 6937, Photonics Applications in Astronomy, Communications, Industry, and High-Energy Physics Experiments 2007
5. Al-Qawasmi A.K., Ibrahim Abu-Isbeih "A Comparison of Parallel and Series Transmission Techniques with Mary FSK", Military Technical Collage, The 6th International Conference on Electrical Engineering ICEENG 2008, EE 061-(1-10), Egypt May 27-29, 2008.
6. Khaled Daqrouq Ibrahim Abu-Isbeih Abdel-Rahman Al-Qawasmi "QRS Complex Detection Based on Symmlets Wavelet Function" , IEEE 5th International MultiConference on Systems, Signals and Devices, 2008. IEEE SSD 2008., Philadelphia University, Jordan, ISBN: 978-1-4244-2205
7. Khaled Daqrouq, Wael Al-Sawalmeh, Abdel-Rahman Al-Qawasmi* and Ibrahim N. Abu- Isbeih "Speaker Identification Wavelet Transform Based Method", 5th International Multi-Conference on Systems, Signals and Devices, 2008. IEEE SSD 2008
8. Abdel-Rahman Al-Qawasmi, Ayman Al-Lawama "The Effect of Amplitude Fades on a Forward Transmission System Using DS CDMA" , Microwaves, Radar and Remote Sensing Symposium, 2008. MRRS 2008 IEEE MRRS-Ukraine 22-24
9. Omar Daoud, Abdel-Rahman Al-Qawasmi "Efficient Performance of COFDM-Based DVB-T", 6th International MultiConference on Systems, Signals and Devices - Conference on Communication and Signal ProcessingIEEE SSD'9, Tunis 2009, ISBN: 978-1-4244-4345-1, On page(s): 1-4.
10. Abdel-Rahman Al-Qawasmi, Ayman Al-Lawama and Nada Al-Khatib "Speech Compression Using Zeros-OnesPosition method". IEEE-SPIE, SPS-09, Poland
11. Wael Al-Sawalmeh, Khaled Daqrouq , Abdel-Rahman Al-Qawasmi and Mohammad " Multistage Speaker Feature Tracking Identification System Based on Continuous and Discrete Wavelet Transform", Proceedings of the 9th WSEAS International Conference on Multimedia Systems & Signal Processing ISSN: 1790-5117 30 ISBN: 978-960-474077-2, p 30-36
12. Khaled Daqrouq, Abdel-Rahman Al-Qawasmi, Wael Al-Sawalmeh and Tareq Abu Hilal " Wavelet Transform Based Multistage Speaker Feature Tracking Identification System Using Linear Prediction Coefficient", IEEE 2009 International Conference on Advances in Computational Tools for Engineering Applications - 2009 Advances in Computational Tools for Engineering Applications, Lebanon

13. K. Daqrouq, T. Abu Hilal, M. Sherif, S. El-Hajjar, and A. Al-Qawasmi," Speaker Identification System Using Wavelet Transform and Neural Network", IEEE 2009 International Conference on Advances in Computational Tools for Engineering Applications - 2009 Advances in Computational Tools for Engineering Applications, Lebanon.
14. K. Daqrouq1, A. Al-Qawasmi, "The study of Wavelet Filter Speech Enhancement Method", Third Mosharaka International Conference on Communications, Computers and Applications, MIC-CCA 2009.
15. K. Daqrouq, Emad Khalaf, Omar Daoud and Abdel-Rahman Al-Qawasmi " K-means Clustering Algorithm for Wavelet Transform Speaker Identification System", Third Mosharaka International Conference on Communications, Signals and Coding, MICCSC2009.
16. Abdel-Rahman Al-Qawasmi and Ayman Al-Lawama " Improvement of UWB - multiband OFDM BER performance using Barker signaling", Military Technical Collage, The 7th International Conference on Electrical Engineering ICEENG 2010,, Egypt May 2527, 2010
17. Abdel-Rahman Al-Qawasmi and Ayman Al-Lawama " Orthogonal Frequency Division Multiplexing Based DSSS Barker Code for Resistance to AWGN and Multipath", Lithuania, SPW 2010