

Professor Abdulhakim A. Albabtain



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Personal Information



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Operations Research,
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Skills

Statistical Software
Application

Research Methodologies and Design



Highlights

- Develop effective standards for the deployment of quality culture in academic and administrative practices at King Saud University.
- Formulate future work directions and determine 2022 strategic paths for MAS center based on recent changes happening to the tourism sector in KSA.



Goals

- O Developing strategic directions and action plans for effective management of available resources to achieve the final goals.
- Assisting organizations to attain quality and excellence in performance via utilizing effective approaches and techniques for business development.
- Monitoring and analyzing performance to attain quick wins and improvement of management.
- Creating and designing educational and training programs, based on internal and external needs in accordance with the stakeholders' requirements.
- o Building and training young graduates to generate qualified teams able to achieve the desired change of the Kingdom 2030 vision.



Educational Qualifications and Certificates

2001 • Doctor of Philosophy in Statistics (Ph.D.)

University of Southampton, United Kingdom.

1991 Master of Science in Mathematical Statistics (M.Sc.)

(Additional studies in Econometrics)

Carleton University,
Ottawa, Ont., Canada.

1987 **a** Bachelor of Science in Statistics (B.Sc.)

King Saud University, Saudi Arabia.



Professional Experience & Academic Ranking

2021 **Full Professor**

Department of Statistics & Operations Research- College of Science, King Saud University.

2016-2019

Director General of Tourism Information & Research Center (MAS)

Saudi Commission for Tourism and National Heritage. Main achievements,

- Acquiring, organizing and arranging the data of the Tourism Information and Research Center (MAS), which lead to the Kingdom of Saudi Arabia accomplishing the first and fourth rank consecutively at 2017 and 2019 of the comprehensiveness of annual travel and tourism data index. This is global competitiveness Report which is issued by the World Economic Forum.
- Working and obtaining the ISO 20252 certificate in the field of research and studies for MAS Center.
- Launching the electronic portal on 2018, and the interactive tourism indicators dashboard, which serves as an interactive electronic platform for displaying tourism indicators.

2015 Dean for Development and Quality

Deanship of Development and Quality, King Saud University. Main achievements,

- o Combine the Deanship of Development and Deanship of Quality into one Deanship under the title of "Deanship of Development and Quality".
- o Developing the Board of Assessors (BOA) for the Quality Management System (KSU-QMS) and training 42 assessors for the university programs from various university faculty members.
- Establishing and running the risk management department for the university.
- o Establishing and running the alumni center for the university.

2014 **Associate Professor**

Department of Statistics & Operations Research- College of Science, King Saud University.

2014 Dean (In-Charge) for Quality

Deanship of Development and Quality, King Saud University.

2013 **Dean for Development**

Deanship of Development and Quality, King Saud University.

2010 Vice-Dean for Development and Quality

College of Science, King Saud University.

2008 Head of Quality Unit

College of Science, King Saud University.

2002 **Assistant Professor**

Department of Statistics & Operations Research- College of Science, King Saud University.

1996 **Lecturer**

Department of Statistics & Operations Research- College of Science, King Saud University.

1995 **Lecturer**

General Department of Economic and Financial Program (GDEF), Institute of Public Administration (I.P.A.).

1991 **Trainer**

Institute of Public Administration (I.P.A.).

1987 **Teaching Assistant**

Department of Program Design and Evaluation, (I.P.A.).

1981 Mail Agent

Saudi Arabian Airlines.



Consulting Experience

2012-2016

Statistics and Quality Advisor

Saudi Commission for Tourism and National Heritage.

2009-2010

Consultant and Lecturer on Statistics and Operations Research

King Faisal Air Academy.

2009-2010

Statistics and Quality Advisor

The Centennial Fund (TCF).

2008-2009

Supervisor- International Scientific Twinning Program

College of Medicine- College of Tourism and Archaeology, King Saud University.

2007-2008

Consultant- Information Center Establishment Project

King Fahd Medical City (KFDC)- Ministry of Health. Main achievements,

- Establishing Information Control Center with Enterprise Data Warehouse (EDW) in KFMC.
- Providing support for auditing and accreditation process to meet external quality assurance requirements.
- Developing operational Business Intelligence services.
- o Providing up-to-the-moment statistics that is relevant to user needs and the accessibility in terms of location and availability.
- Participating on Benchmarking, Dashboards, Balance Scorecard, and Reporting System activities.

2004-2006

Consultant- Central Department of Statistics (Currently General Authority for Statistics)

Central Department of Statistics (CDS), Ministry of Planning. Main achievements,

- Support and training on Quality Data Collection.
- Participating in questionnaire design for the Population and Housing Census.
- Participating in the design of Population and Housing Census
- Training census staff on data collection in the Population and Housing Census.
- Assessment of economic and social survey reports.
- Participate in designing the Household surveys.

2002-2006

Consultant and Lecturer

The National Institute for Specialized Health Training, Dallah Al Baraka Group. Main achievements,

- Developing and designing courses in Biostatistics and mathematics, based on the objectives of the institute programs and approved by Loma Linda University.
- As well, teaching those courses in academic years 2005 and 2006.



Research Refereeing

- Referee- Research Papers on Statistics and Quality Control, College of Science Journal, King Saud University.
 - Referee- Research Papers on Statistics and Quality Control, King Abdulaziz University.
- Referee- Books and Research Papers on Statistics and Quality Control, Institute of Public Administration (IPA).
- Reviewer "Statistical Process Control" chapter in the Handbook of Technology Management (Three Volume Set),

 John Wiley & Son Inc.
- Principle Reviewer of Academic Programs in the KSU System of Quality Management, King Saud University.



Teaching Experience

- Quality control, Quality Assurance, Quality Improvement, and Total Quality Management.
- Mathematics and Statistics.
- Research Methods and Survey Design.
- Survey Questionnaire Design.



Research Interests

- Applied Statistics Methods in Quality Control, Quality Improvement, and Quality Assurance.
- Statistical Sampling Techniques, Statistical Models, Data Processing and Analysis, Sample Design Effects on Data Processing.
- Time Series Applications and Forecasting Through Temporal Data Analysis, Cyclic and Seasonal and Non-Seasonal Trends.
- Applications of Statistical Methods in Marketing.
- Applications of Statistical Methods in Strategic Planning.
- Strategic Planning.
- Quality Assurance.



Training Experience

- Preparing various training courses for General Administration Institution such as: Quality Control, Quality Improvement, and Total Quality Management, with decomposing statistical data into fault tolerance and error recovery for enhancing quality performance to higher levels.
- Preparing principles of statistics course for General Establishment for Technical Education
 &Vocational Training 1424 H.
- Preparing Health Statistics course for National Institute for Specialized Health Training,
 member of Dela AL baraka Group 1425H.
- Preparing course of Applications of Mathematics for National Institute for Specialized Health Training 1425H.
- Preparing various courses of statistics training programs such as (Biostatistics, Analysis of Data by statistical packages &Environmental statistics).



Funded Research & Consulting Studies

- Job Saudization in the private education sector, research for the General secretariat of the council of the workforce. House of economic studies, costing SAR 295,000.
- 2004 Studying the market of dyes in the Kingdom of Saudi Arabia. House of economic studies, with a budget of SAR 600,000.
- The impact of a second mobile operator ion the Kingdom of Saudi Arabia, economic benefits and job opportunities. An initial report for SPOT ON company, UAE, Dubai. With a total coast of 15,000 \$.
- Study of the potential effects of the customs union between the Gulf cooperation council countries, on the localization of jobs in the Kingdom of Saudi Arabia. Special research planning agency, Ministry of Labor, cost SAR 235,000.
 - Studying mobile phone users in the Saudi market, research for Al Rowad consulting office.



- 1. **Al-Babtain**, **A**. **A**. (2010). Necessary Condition for the Optimality on Multi-Item Inventory Model. International Mathematical Forum, 5(2), 89 98.
 - 2. **Al-Babtain**, **A**. **A**. (2010). Optimal Control of Reverse Logistics Model with Logistic Demand and Return Rates. Applied Mathematical Sciences, 4(52), 2561 2568.
 - 3. Elbatal I., **Al-Babtain A**. **A**. (2014). Stochastic Orders of Past Lives based on Moment Generating Function Order. J. Stat. Appl. Pro. Lett., 1(2), 1–7.
 - 4. Ismail, Ali A., **Al-Babtain**, **A**. **A**., (2015). On Studying Partially Accelerated Life Tests Under Progressive Stress. Journal of Testing and Evaluation, 43(4), 897–905.
 - 5. **Al-babtain**, **Abdulhakim A**., Faton Merovci and Ibrahim I. Elbatal, (2015). The mcdonald exponentiated gamma distribution and its statistical properties. SpringerPlus 2015, Vol. 4(2), 2–22.
 - 6. **Abdulhakim Al-Babtain**, Ahmed A. Fattah, A-Hadi N. Ahmed, Faton Merovci, (2015). The Kumaraswamy-transmuted exponentiated modified Weibull distribution. Communication in Statistics- Simulation and Computation 46(5), 3812–3832.
 - 7. **Abdulhakim Al-Babtain**, Abdul Hadi Nabih Ahmed (2015). Preservation properties for the discrete mean residual life ordering. Pakistan Journal of Statistics and Operation Research, 11(1), 1–10.
 - 8. **Abdulhakim Al-Babtain**, Ahmed M. Eid, Faton Merovci and A-Hadi N. Ahmed (2015). The five parameter Lindley distribution, Pakistan Journal of Statistics. 31(4), 363–384.
 - 9. Ismail, Ali A., **Al-Babtain**, **A**. **A**., (2015). Planning failure-censored constant-stress partially accelerated life test, Journal of Systems Engineering and Electronics, 26(3), 644-650.
- 10. Mohammed Suleiman Gibreel, Ali I. Elamin, **Abdulhakim A Al-Babtain**, and Abdelsalam Mohamed Daoud (2015). Exploration of solutions to multicollinearity problem using ridge regression and principal components with Monte Carlo simulation. Asian Academic Research Journal of Multidisciplinary, 2(2), 384–403.

Publications

- 11. **Abdulhakim Al–Babtain** (2017). Transmuted Exponential Pareto Distribution with Applications. Journal of Computational and Theoretical Nanoscience, 14(11), 5484–5490.
- 12. **Al-Babtain**, **A**. **A**., Elbatal, I. and Yousof, H. M. (2020a). A new three parameter Fréchet model with mathematical properties and applications. Journal of Taibah University for Science, 14(1), 265–278.
- 13. **Al-Babtain**, **A**. **A**., Elbatal, I. and Yousof, H. M. (2020b). A new flexible three-parameter model: properties, Clayton Copula, and modeling real data, Symmetry, 12, 1–17.
- 14. Wafaa Y. Ahmed, A-Hadi N. Ahmed, Hiba Z. Muhammed and **Abdulhakim Al-Babtain** (2020). Bayesian and Non-Bayesian Estimation of Composed Inverted Generalized Exponential Exponential Distribution. Journal of Statistics Applications & Probability, 10(1), 185–201.
- 15. **Al-Babtain**, **A.A.**; Elbatal, I.; Chesneau, C.; Jamal, F. (2020). Box-Cox Gamma-G Family of Distributions: Theory and Applications. Mathematics, 8(10), 1801.
- 16. Shrahili, M.; **Albabtain**, **A.A.**; Kayid, M.; Kaabi, Z. (2020). Stochastic Aspects of Proportional Vitalities Model. Mathematics, 8(10), 1823.
- 17. **Al-Babtain**, **A**. **A**. (2020). A new extended Rayleigh distribution, Journal of King Saud University Science, 32(5), 2576–2581.
- 18. **Al-Babtain**, **A.A.**, Ahmed, A.H.N., Afify, A.Z. (2020). A New Discrete Analog of the Continuous Lindley Distribution, with Reliability Applications. Entropy, 22 (6), 603.
- 19. **Al-Babtain**, **A.A.**, MK Shakhatreh, M Nassar, AZ Afify (2020). A New Modified Kies Family: Properties, Estimation Under Complete and Type-II Censored Samples, and Engineering Applications. Mathematics, 8 (8), 1345.
- 20. **Al-Babtain**, **A**. **A**., Ahmed Z. Afify, and Ahmed M. Gemeay (2020). Estimation Methods for the Discrete Poisson-Lindley and Discrete Lindley Distributions with Actuarial Measures and Applications in Medicine. Journal of King Saud University Science, 33, 101224.
- 21. **Abdulhakim A**. **Al-Babtain**, Ibrahim Elbatal, Christophe Chesneau, and M. Elgarhy (2020). Sine Topp-Leone-G family of distributions: Theory and applications. Open Physics, 18(1) 574–593.

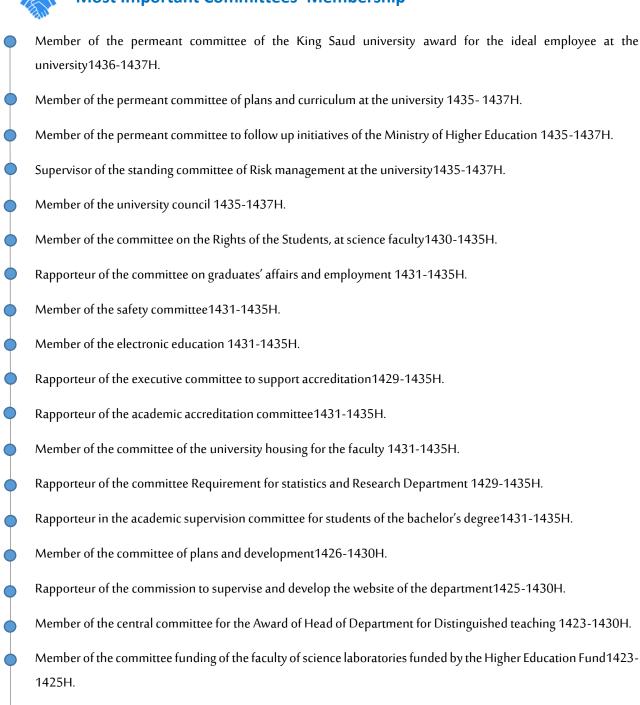
Publications

- 22. **Albabtain**, **A.A**.; Shrahili, M.; Alshagrawi, L.; Kayid, M. (2020). A Dynamic Failure Time Degradation–Based Model. Symmetry, 12, 1532.
- 23. **Albabtain**, **A.A**.; Shrahili, M.; Al-Shehri, M.A.; Kayid, M. (2020). Stochastic Comparisons of Weighted Distributions and Their Mixtures. Entropy, 22, 843.
- 24. **AA Al-Babtain**, AS Hassan, AN Zaky, I Elbatal, M Elgarhy (2021). Dynamic cumulative residual Rényi entropy for Lomax distribution: Bayesian and non-Bayesian methods. AIMS Mathematics 6 (4), 3889–3914.
- 25. **Al-Babtain**, **A.A**.; Elbatal, I.; Chesneau, C.; Jamal, F. (2020). Box-Cox Gamma-G Family of Distributions: Theory and Applications. Mathematics, 8, 1801.
- 26. **Al-Babtain**, **A.A**.; Elbatal, I.; Chesneau, C.; Jamal, F. (2020). The Transmuted Muth Generated Class of Distributions with Applications. Symmetry, 12, 1677.
- 27. **Al-Babtain AA**, Elbatal I, Chesneau C, Elgarhy M. (2021). Estimation of different types of entropies for the Kumaraswamy distribution. PLoS One, 16, e0249027.
- 28. **Abdulhakim A. Al-Babtain**, Devendra Kumar, Ahmed M. Gemeay, Sanku Dey, Ahmed Z. Afify (2021). Modeling engineering data using extended power-Lindley distribution: Properties and estimation methods. Journal of King Saud University Science, 33(8), 101582.
- 29. **Al-Babtain**, **A**. **A**., Sherwani, R. A. K., Afify, A. Z., Aidi, K., Nasir, M. A., Jamal, F. and Saboor, A. (2021). The extended Burr–R class: properties, applications and modified test for censored data. AIMS Mathematics, 6(3), 2912–2931.
- 30. **Al-Babtain**, **A**. **A**., Elbatal I., Chesneau C., Elgarhy M. (2021). On a new modeling strategy: The logarithmically-exponential class of distributions. AIMS Mathematics, 6(7), 7845–7871.
- 31. **Al-Babtain A**. **A**., Elbatal I., Al-Mofleh H., Gemeay A. M., Afify A. Z., & Sarg A. M. (2021). The Flexible Burr X-G Family: Properties, Inference, and Applications in Engineering Science. Symmetry, 13(3), 474.

Books

- Abdulhakim A. Al-Babtain, Reda Hilmi Ahmed Samour (2020). "Quality and Academic Accreditation in Higher Education". King Saud University Press.
- Ahmed Akkawi and Abdulhakim A. Al-Babtain (2018). "Excellence in University Management". A book was arbitrated and approved for printing by the Deanship of Scientific Research at King Saud University.

Most Important Committees' Membership



- Member of the computer committee 1423-1430H.
- Member of the committee supervise the final exams of the faculty of science 1423-1425H.
- Member of the committee of the students affairs1423-1427H.
- Member of the library committee periodicals and journals, Department of Statistics and Research1422-1430H.



Community Service Activities

- Consulting, assessor, lecturing and the evaluating of development issues (Strategic Planning & Quality) to several bodies such as the General Education Assessment Authority, King Abdelaziz University, Majmaah University, Umm Al Qura University, Shaqra University, Prince Sultan University.
 - Speaker at "Tourism Statistics in the Kingdom" workshop which was held under the patronage of His Royal Highness Prince Sultan bin Salman bin Abdelaziz, President of the Saudi Commission for Tourism and National Heritage (SCTH), organized by the Tourism Research and Information Center (MAS) 1436 H corresponding to 16/03/2015.
- Presentation of a working paper entitled "Governance in Information Centers" at the "Information Quality Forum" organized by the Riyadh Chamber represented by the Research and Information Sector on Tuesday 19/05/2011 under the patronage of His Excellency the Minister of Economy and Planning Khalid bin Mohammed.
- Designing a website, specialized in analyzing the Saudi stock market and includes a program of graphics and technical analysis contains more than 51 indices.
- Volunteer at the Centennial Fund in relation to quality management and statistical exploratory research, February 2008.
- Speaker at a workshop at Princess Nora bint Abdul Rahman University literary sections entitled "Methods of Scientific Research" on April 2007.
- Speaker at a workshop at Princess Nora bint Abdul Rahman University, literary sections entitled "Total Quality in Higher Education" on the first of November 2006.
- Speaker at a workshop at Princess Nora bint Abdul Rahman University, literary sections entitled "Methods of data collection and analysis" from 19 to 20 March 2006.
- Presentation of a workshop at Princess Nora bint Abdul Rahman University, literary sections entitled "Methods of data collection and analysis" from 5 to 6 August 2006.
- Delivering lectures on "Quality of work in the collection of census data" at the Central Department of Statistics (CDS).
- Administrative duties for the Saudi Club in Ottawa city, Canada during the study of the Masters in the period from 1410 to 1412 e, including (financial supervisor, supervisor of sports activities).



Conferences, seminars and workshops

Category	#	Name	Organizing Agency	Date
Conferences, Seminars, and Forums	1	UNWTO Committee on Statistics	World Tourism Organization (UNWTO)	2016-2018
	2	Participation of the General Authority for Tourism and National Heritage in a special pavilion at GITEX Technology Fair	GITEX Technology in Dubai	14-18/10/2018
	3	The 13th session of the Okaz market	Saudi Commission for Tourism and National Heritage	23-28/6/2018
	4	Representing the Kingdom at the Eighth Meeting of Ministers of Tourism of the States bordering the Silk Road	World Tourism Organization (UNWTO)	6-8/3/2018
	5	The Tourism Intelligence Forum	The Tourism Intelligence Forum, Palma de Mallorca, Spain	10-15/3/2018
	6	Participation of the General Authority for Tourism and National Heritage in the meetings of the tenth session of the Tourism Ministers of the Organization of Islamic Cooperation	Dhaka, Republic of Bangladesh	5-7/2/2018
	7	Teaching and Learning Institute Professional Enrichment Program	Dalhousie University, Halifax, Canada	23-27/3/2014
	8	12th Brazilian Meeting on Bayesian Statistics	International Society for Bayesian Analysis (ISBA)	10-14/3/2013
	9	Third International Conference on Quality Assurance for Secondary Education	National Commission for Academic Accreditation and Evaluation (NCAAA) in collaboration with Dammam University. Held in Dammam, Kingdom of Saudi Arabia	27-29/4/2013
	10	5th Quality Conference in the Middle East	Hamdan Bin Mohammed e-University (UAE)	31/1/2011
	11	Data Preview and Analysis Organized	University of Southampton, UK	22-25/8/1999
	12	Research at the 23rd Conference of Research Students in Probability and Statistic	Lancaster University, UK	15-18/5/1995
	13	World Conference on Scientific and Statistical Distributions	Carleton University, Ottawa, Canada	5-8/5/1991

Category	#	Name	Organizing Agency	Date
Workshops	14	Project Manager Professional (PMP)	Trainings Knowledge Square. Held in Riyadh, Saudi Arabia.	14-23/6/2016
	15	Measurement of quality readiness and institutional excellence	General Organization for Technical and Vocational Training Held in Riyadh, Saudi Arabia	15-16/12/2014
	16	External Reviewer Training	The National Commission for Academic Accreditation and Evaluation in cooperation with the British Council. Held in Riyadh, Saudi Arabia	17-20/11/2013
	17	Planning and managing the quality of research activities	(NCAAA)	8-9/9/2013
	18	Educational Leadership Diploma	Florida Atlantic University, USA	17-28/6/2013
	19	Enhancement Teaching and Learning	Auburn University, USA	18-29/6/2012
	20	Teaching, learning and evaluation strategies in institutions and program	Organized by the National Commission for Academic Accreditation and Assessment (NCAAA) in cooperation with the British Council and Quality Assurance Agency for Higher Education (QAA). Held in Jeddah, Kingdom of Saudi Arabia	26-27/12/2011
	21	Management and implementation of self-study for institutional accreditation	(NCAAA)	1-2/1/2011
	22	Leadership for Senior Managers	King Saud University with the European Management Center. Held in Riyadh, Saudi Arabia	18-21/12/2010
	23	Teaching for Learning	Georgia Tech Institute, Atlanta, USA	26-30/7/2010
	24	Electronic Mind Maps	King Saud University Held in Riyadh, Saudi Arabia	26-27/4/2010
	25	How to prepare the educational institution as a prelude to the accreditation visit.	King Saud University. Held in Riyadh, Saudi Arabia.	27-28/2/2010
	26	Professional Development	University of Leeds, UK	16-20/11/2010
	27	Self-study of colleges and programs	King Saud University, Held in Riyadh, Saudi Arabia	11-12/11/2009
	28	Criteria for accreditation report for the educational institution	King Saud University. Held in Riyadh, Saudi Arabia	9-10/11/2009
	29	Quality in Higher Education	King Saud University, Held in Riyadh, Kingdom of Saudi Arabia	25/10/2009
	30	Quality and Accreditation in Higher Education	Cardiff Metropolitan University Held: Cardiff, United Kingdom	13-24/7/2009
	31	Work for accreditation Program	Imam Muhammad bin Saud	3-5/4/2009
	32	Quality in University Teaching	King Saud University Held in Riyadh, Saudi Arabia	17-18/1/2009
	33	Planning for Effective Teaching	King Saud University Held in Riyadh, Saudi Arabia	19-21/4/2008

Category	#	Name	Organizing Agency	Date
	34	Internal Audit System ISO 9001-ISO 10002	International Resources for Environment and Quality Systems Held in Riyadh, Saudi Arabia	14-15/6/2008
	35	King Abdul Aziz Award for Quality Award	Standards and Metrology Authority Held in Riyadh, Kingdom of Saudi Arabia	3-7/11/2007
	36	Strategic Thinking in Planning and Management	King Fahad Medical City Session: Riyadh, Saudi Arabia	13-15/10/2007
	37	Organizational culture	King Fahad Medical City Held in Riyadh, Saudi Arabia	21-23/6/2007
	38	Applications of modern technology in education	King Saud University Riyadh, Saudi Arabia	21/12/2004
	39	How to analyze the official for effective training needs	American Organization for Management Session: San Diego, USA	12-14/2/1995
	40	Statistical Processes in Quality Control and Improvement Systems	International Institute for Quality Control Session: Memphis, USA,	5-8/2/1995
	41	Statistical methods of analysis	Personnel Management Session: Atlanta, USA	2-6/3/1994
	42	Training programs: Design and improvement of their systems	Institute of Public Administration Session: Riyadh, Saudi	23-27/1/1993
	43	Training skills	Institute of Public Administration Session: Riyadh, Kingdom of Saudi Arabia	2-10/3/1992
	44	Statistical Estimation Theory	University of Ottawa. Professor B.K. O. Meeting: Ottawa, Canada 17-	1-4/5/1991



Skills and personality traits

- Work in any challenging environment alone or with a team to reach the set goals and assess the experiences and skills of others.
- Always strive towards continuous improvement of myself and any team I work or collaborate with.
- Commitment to outstanding performance as much as possible in the tasks assigned to the achieve the intended strategic objectives.



Hobbies and Personal Interests

- Sports Practitioner: A player in the Faculty of Science football team (1996-1997), a martial arts and kung fu trainee for five years from 1991.
- Master diver and an expert holding 12 certificates in diving.
- Reading, Exploring and Research.