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Atılım University
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PERSONAL

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| Date of Birth | 26.05.1982 |
| Place of Birth | Ankara |

EDUCATION

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| 2007 – 2013 | Atılım University, Industrial Engineering (MODES), Ph.D. |
| 2004 – 2007 | Hacettepe University, Business Administration - Operations Management and Quantitative Methods, M.S. |
| 2000 – 2004 | Başkent University, Industrial Engineering, B.S. |

ACADEMIC POSITIONS

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| September 2023 – present | Professor, Department of Industrial Engineering, Atılım University, Turkey |
| January 2022 – September 2023 | Associate Professor, Department of Industrial Engineering, Atılım University, Turkey (ÜAK: October 2017) |
| February 2015 – January 2022 | Assistant Professor, Department of Industrial Engineering, Atılım University, Turkey |
| September 2013 – February 2015 | Lecturer (PhD), Department of Industrial Engineering, Atılım University, Turkey |
| September 2009 – September 2013 | Lecturer, Department of Industrial Engineering, Atılım University, Turkey |
| March 2006 – September 2009 | Research Assistant, Department of Industrial Engineering, Atılım University, Turkey |

ADMINISTRATIVE DUTIES

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| September 2023 – present | Vice President, Atılım University, Turkey |
| February 2022 – September 2023 | Vice Dean, Faculty of Engineering, Atılım University, Turkey |
| 2015 – 2022 | Vice Chair, Department of Industrial Engineering, Atılım University, Turkey |

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| 2009 – present | Assistant Director, PMARC Research Center, Atilim University, Turkey |
| 2021 – present | Member, YÖKAK Organizational Accreditation Project Commission, Atilim University, Turkey |
| 2021 – present | Member, Organizational Change Management Project, Atilim University, Turkey |
| 2017 – present | Cooperative Education coordinator, Department of Industrial Engineering, Atilim University, Turkey |
| 2015 – 2023 | Member, PhD Qualification Committee, Department of Modeling and Design of Engineering Systems, Graduate School of Natural and Applied Sciences, Atilim University, Turkey |
| 2010 – July 2019 | MÜDEK coordinator, Department of Industrial Engineering, Atilim University, Turkey |
| 2014 – 2018 | Bologna coordinator, Department of Industrial Engineering, Atilim University, Turkey |
| 2015 – 2016 | Summer Internship coordinator, Department of Industrial Engineering, Atilim University, Turkey |

RESEARCH INTERESTS

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| 1 | Performance Evaluation and Management |
| 2 | Strategic Management |
| 3 | Real-life Large-Scale Optimization and Decision Making |
| 4 | Business Process Reengineering |
| 5 | Enterprise Resource Planning Systems |

PROFESSIONAL SERVICE

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| 1 | Served as a Reviewer for: European Journal of Operational Research, International Journal of Industrial Engineering: Theory Applications and Practice, Neural Computing and Applications, International Journal of Sustainable Transportation, Sustainable Cities and Society, Springer Nature-Environment, Development and Sustainability, Engineering Computations, Knowledge Management Research and Practice, Scientific Research and Essays, Human Factors and Ergonomics in Manufacturing & Service Industries, Computer Applications in Engineering Education, Tehnicki Vjesnik-Technical Gazette, Scientia Iranica, International Journal of Information and Decision Sciences, Journal of Industrial and Production Engineering, British Journal of Mathematics & Computer Science, International Journal of Applied Management Science, African Journal of Marketing Management, African Journal of Business Management, Journal of Civil Engineering and Construction Technology, Advances in Research, and more... |
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PUBLICATIONS

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| 13 | Yörük G., Bac U., Yerlikaya-Özkurt F., Ünlü K.D., Strategic Electricity Production Planning of Turkey via Mixed Integer Programming Based on Time Series Forecasting. <i>Mathematics</i> , 2023, 11 (8): 1865. DOI: 10.3390/math11081865. |
| 12 | Bac U., Strategic Alignment of Management Information System Functions for Manufacturing and Service Industries with an F-MCGDM Model. <i>Sustainability</i> , 2022, 14 (21): 14428. DOI: 10.3390/su142114428. |
| 11 | Bac U., Erdem M. Optimization of Electric Vehicle Recharge Schedule and Routing Problem with Time Windows and Partial Recharge: A Comparative Study for an Urban Logistics Fleet. <i>Sustainable Cities and Society</i> , 2021, 70. DOI: 10.1016/j.scs.2021.102883. |
| 10 | Bac U., The Role of Environmental Factors in the Investment Prioritization of Facilities Using Recycled PVC, <i>Polish Journal of Environmental Studies</i> . 2021, 30 (4), 2981–2993. DOI: 10.15244/pjoes/130636. |
| 9 | Bac U., Alaloosi K.A.M.S., Turhan C., A Comprehensive Evaluation of the Most Suitable HVAC System for an Industrial Building by Using a Hybrid Building Energy Simulation and Multi Criteria Decision Making Framework. <i>Journal of Building Engineering</i> , 2021, 37: 102153. DOI: 10.1016/j.job.2021.102153. |
| 8 | Baç U., An Integrated SWARA-WASPAS Group Decision Making Framework to Evaluate Smart Card Systems for Public Transportation. <i>Mathematics</i> , 2020, 8 (10): 1723. DOI: 10.3390/math8101723. |
| 7 | Erdebilli B., Baç U., Erkan T.E., Sector Selection for ERP Implementation to Achieve Most Impact on Supply Chain Performance by Using AHP-TOPSIS Hybrid Method. <i>Journal Tehnički Vjesnik/ Technical Gazette</i> , 2014, 21 (5), 933–938. |
| 6 | Baç U., Erkan T.E., A Model to Evaluate Supply Chain Performance and Flexibility. <i>African Journal of Business Management</i> , 2011, 5 (11), 4263–4271. |
| 5 | Erkan T.E., Özdemir Y.S., Baç U., AHP Based Decision Making Process for Zero Energy House Building. <i>Journal of Advanced Management Science</i> , 2015, 4 (4), pg. 329–332. |
| 4 | Baç U., Success of Knowledge and Technology Management in Manufacturing Companies. <i>International Journal of Operations and Logistics Management</i> , 2014, 3 (1), 74–79. |
| 3 | Erkan T.E., Baç U., Supply Chain Performance Measurement: A Case Study about Applicability of SCOR Model in a Manufacturing Industry Firm. <i>International Journal of Business and Management Studies</i> , 2011, 3 (1), 381–390. |
| 2 | Erkan T.E., Baç U., Özdemir T.S., Intellectual Capital Management's and Enterprise Resource Planning's Implementation Effects on Supply Chain's Performance. <i>AWER Procedia Information Technology & Computer Science</i> , 2013, 3, 1189–1197. |

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| 1 | Çalipınar H., Baç U., The Factors Effecting the Realization of Innovation in SMEs and a Field Survey. <i>Ege Academic Review, Journal of Economics, Administrative, International Relations and Political Sciences</i> , 2007, 7 (2), 453–466. |
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PROJECTS

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| 13 | Determining the Optimal Approach to Improve Energy Efficiency in Educational Buildings, LAP Project, Project Manager, 2021 |
| 12 | Determination of Key Performance Metrics that Provides Competitive Advantage and Their Effects on Decision Making Phase of Strategic Management, LAP Project, Project Manager, 2020 |
| 11 | TABİD, Ankara Sanayi 4.0 Hazırlıkları: “Mevcut Durum, Eğilim, Beklenti ve Öneriler”. Yerel İzleme Grubu Oluşturulması, T.C. Dışişleri Bakanlığı, Avrupa Birliği Başkanlığı, Yerel STK’lar Hibe Programı, Advisor, 2019. |
| 10 | Industry 4.0 Awareness and Application Level Determination Field Study in Ankara, LAP Project, Project Manager, 2019 |
| 9 | Design of an Evaluation Framework for R&D Projects in TAI, Advisor, 2014 |
| 8 | Determination of Design Management Models Used by Companies in Ankara During Innovation, LAP Project, Project Manager, 2018 |
| 7 | The Health-Care Services’ Performance Evaluation Using: DEA-IFMCDM Model, LAP Project, Project Co-Manager, 2014 |
| 6 | Determining the Differences Between Sectors in Operational Strategies which Affect the Performance by Using Critical Factor Indexes, LAP Project, Project Manager, 2013 |
| 5 | Determining the Operational Strategies which Affect the Performance by Using Critical Factor Index: Technology Rankings, LAP Project, Project Co-Manager, 2012 |
| 4 | Awareness, Applications and Necessity of ERP in Public Sector: A Monographic Study, BAP Project, Researcher, 2012 |
| 3 | Importance of Flexibility in Supply Chain and Awareness in SMEs, BAP Project, Researcher, 2012 |
| 2 | Selection of Business Intelligence Systems by AHP and Fuzzy AHP: An Empirical Study from Ankara Production Sector, LAP Project, Co-Manager, 2011 |
| 1 | Factors Affecting the Success of ERP and BPR in Supply Chains, BAP Project, Researcher, 2010 |

CONFERENCE PRESENTATIONS

| | |
|----|--|
| 17 | Demirel Ç. L., Aksu G., Kaleli K., Özçelik İ. B., Baç U., Warehouse Layout Optimization In A Furniture Company, Mühendislik Bilimleri ve Araştırmaları Öğrenci Kongresi, 11-12 Mayıs, 2023, Ankara, Türkiye. |
| 16 | Baç U., A Production Line Optimization Model to Improve Efficiency in a Motor Vehicle Factory, "28th International Multidisciplinary Conference Recent Research and Ideas" ICMS, May, 2022, Amsterdam/Netherlands. |
| 15 | Baç U., Erkan T.E., Adoption of Utilization Maximization Objective for a Job-Shop Scheduling Problem in Group Technology Production, "4th International Conference on Economics, Business Management and Social Sciences" ICEBSS, September, 2019, Budapest/Hungary. |
| 14 | Erkan T.E., Baç U., Resource Assignment Modelling: A Case Study in Health Sector, "4th International Conference on Economics, Business Management and Social Sciences" ICEBSS, September, 2019, Budapest/Hungary. |
| 13 | Baç U., Erkan T.E., Categorization of Design Management Models for Innovation, "International conference on knowledge and innovation in Engineering, Science and Technology", December, 2018, Berlin/Germany. |
| 12 | Baç U., Erkan T.E., Layout Improvement Method Selection for a Mass Production Facility, Proceedings of the International Conference on Industrial Engineering and Operations Management, July, 2018, Paris/France. |
| 11 | Özdemir Y.S., Baç U., Erkan T.E., ERP Key Performance Indicator Selection by Using Fuzzy TOPSIS and an Application, "International Conference for Business and Economic (IJAS'16)", June, 2016, Munich/Germany. |
| 10 | Baç U., Özdemir Y.S., How to Use Knowledge and Technology Management Strategies to Increase Supply Chain Performance in Service Sector" 2nd World Conference on Supply Chain Management (WCOSM'2016)", Vol.1, pg. 1-4, May, 2016, Bangkok/Thailand. |
| 9 | Baç U., Erkan T.E., Güldal G., Tansel G., Evaluating Operational Strategies that Affect Information System's Performance by Using FAHP Approach, "ISCAMI 2013", 2013, Malenovice/Czech Republic. |
| 8 | Baç U., Erkan T.E., Polat V., Tanrıverdi İ.U., Use of FAHP Approach in the Development of Performance Evaluation Methodology for Knowledge and Technology Management, "ISCAMI 2013", 2013, Malenovice/Czech Republic. |
| 7 | Erkan T.E., Baç U., Celepli C., Gurson P., Determination of Intellectual Capital Management Level by Fuzzy AHP, "ISCAMI 2013", 2013, Malenovice/Czech Republic. |
| 6 | Baç U., Erkan T.E., Effects of Business Process Reengineering and Enterprise Resource Planning on Supply Chain Management Performance, "International Conference on IT and Intelligent Systems", pg.80-83, December, 2013, Bangkok/Thailand. |
| 5 | Erkan T.E., Baç U., Özdemir Y.S., A Fuzzy AHP Ranking Model for Intellectual Capital Management Level in Ankara Industries, "ISCAMI 2012", 2012, Malenovice, Czech Republic. |

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| 4 | Erkan T.E., Özdemir Y.S., Baç U., Intellectual Capital Management's Effects on Enterprise Resource Planning Implementation, "4th European Conference on Intellectual Capital", 2012, Helsinki/Finland. |
| 3 | Erkan T.E., Baç U., Erdebilli B., Effects of BPR on ERP Success and Supply Chain Performance, "3rd International Conference on Information Management and Evaluation", 2012, Ankara/Turkey. |
| 2 | Baç U., Erkan T.E., Ertüzün N., Lojistik Maliyetinin Düşürülmesi İçin Araç Rotalama Problemi Uygulaması: Kombi Dağıtımı, 31. Ulusal Yöneylem Araştırması Ve Endüstri Mühendisliği Kongresi, 2011, Sakarya, Türkiye. |
| 1 | Çelebi N., Baç U., Industrial Engineering Education and Team Learning, National VI. EIM Congress, 2007, Bursa, Türkiye. |

COURSES GIVEN

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|---|--------------------------------------|
| 1 | Operations Research I |
| 2 | Operations Research II |
| 3 | Facilities Planning |
| 4 | Engineering Economic Analysis |
| 5 | System Analysis and Design |
| 6 | Supply Chain Modeling II |
| 7 | Industrial Engineering Design I & II |
| 8 | Computer Aided Engineering Drawing |
| 9 | Industrial Engineering Seminars |

THESES SUPERVISED

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|---|--|
| 7 | MSc Thesis, Advisor, Multi Objective Optimization of Multimodal Hazardous Material Distribution Network, Refika Ruzin Güzey, Atılım University, Department of Industrial Engineering, 2020-2022 |
| 6 | MSc Thesis, Co-Advisor, A Multi-Criteria Decision Making Approach for Robot Selection in a Manufacturing Environment, Rasim Atakan Arslan, Atılım University, Department of Mechatronics Engineering, 2019-2022 |
| 5 | MSc Thesis, Advisor, Strategic Energy Production Planning of Turkey Using a Mixed Integer Programming, Gökay Yörük, Atılım University, Department of Industrial Engineering, 2019-2021. |
| 4 | PhD Thesis, Co-Advisor, Combining Analytic Hierarchy Process and Rank Order Centroid with Geographic Information System for Airport Site Selection: A Case Study in Libya, Wael Elsharida, Atılım University, Department of Industrial Engineering, 2016-2021. |
| 3 | MSc Thesis, Advisor, Selection of the Best HVAC System for Industrial Buildings by Using Multi Criteria Decision Making Methods, Khalid Abdlwahab Mohamed Saed Alalosi, Atılım University, Department of Industrial Engineering, 2019-2020. |
| 2 | MSc Thesis, Advisor, The Impact of Strategic Management on Marketing Performance of Small and Medium Sized Enterprises Using Multi-Criteria Decision Making Techniques, Burcu Şentürk, Atılım University, Department of Industrial Engineering, 2016- |
| 1 | MSc Thesis, Advisor, Analytical Hierarchy Process Approach for Selecting Enterprise Resource Planning Software Package in Oil and Gas Equipment Manufacturing Firms, Seyed Hajir Lesani, Atılım University, Department of Industrial Engineering, 2016. |