## Assoc. Prof. Esra Baş

#### **Personal Information**

Email: atace@itu.edu.tr

#### **Education Information**

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği Anabilim Dalı, Turkey 2005 - 2008

Postgraduate, Technische Universitaet Berlin, Üretim Mühendisliği, Germany 2001 - 2004

Postgraduate, Yeditepe University, Institute Of Social Sciences, Uluslararası İşletme (Yl) (Tezli) (Almanca), Turkey 1999 - 2001

Undergraduate, Yildiz Technical University, Faculty Of Mechanical Engineering, Makine Mühendisliği Bölümü, Turkey 1994 - 1999

#### Foreign Languages

German

## **Academic Titles / Tasks**

Associate Professor, Istanbul Technical University, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, 2014 - Continues Assistant Professor, Istanbul Technical University, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, 2010 - Continues

# Academic and Administrative Experience

İstanbul Teknik Üniversitesi, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, 2013 - Continues

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. STPA methodology in a socio-technical system of monitoring and tracking diabetes mellitus Baş E.
  - APPLIED ERGONOMICS, vol.89, 2020 (SCI-Expanded)
- II. An integrated OSH risk management approach to surgical flow disruptions in operating rooms Baş E.
  - SAFETY SCIENCE, vol.109, pp.281-293, 2018 (SCI-Expanded)
- III. A three step methodology for GI classification GL estimation of foods by fuzzy c means classification and fuzzy pattern recognition and an LP based diet model for glycaemic control Baş E.
  - FOOD RESEARCH INTERNATIONAL, vol.0, 2016 (SCI-Expanded)
- IV. A robust optimization approach to diet problem with overall glycemic load as objective function Baş E.
  - Applied Mathematical Modelling, vol.0, 2014 (SCI-Expanded)

V. An integrated quality function deployment and capital budgeting methodology for occupational safety and health as a systems thinking approach: The case of the construction industry

Bas E.

ACCIDENT ANALYSIS AND PREVENTION, vol.68, pp.42-56, 2014 (SSCI)

VI. A framework for child safety and health management by analogy to occupational safety and health management

Baş E.

Safety Science, vol.0, 2014 (SCI-Expanded)

VII. A robust approach to the decision rules of NPV and IRR for simple projects

Baş E.

Applied Mathematics and Computation, vol.0, 2013 (SCI-Expanded)

VIII. The integrated framework for analysis of electricity supply chain using an integrated SWOT fuzzy
TOPSIS methodology combined with AHP The case of Turkey

Baş E.

International Journal of Electrical Power & Energy Systems, vol.0, 2013 (SCI-Expanded)

IX. Surrogate relaxation of a fuzzy multidimensional 0 1 knapsack model by surrogate constraint normalization rules and a methodology for multi attribute project portfolio selection

Bas E.

Engineering Applications of Artificial Intelligence, vol.0, 2012 (SCI-Expanded)

X. A capital budgeting problem for preventing workplace mobbing by using analytic hierarchy process and fuzzy 0 1 bidimensional knapsack model

Baş E.

EXPERT SYSTEMS WITH APPLICATIONS, vol.0, 2011 (SCI-Expanded)

XI. An investment plan for preventing child injuries using risk priority number of failure mode and effects analysis methodology and a multi objective multi dimensional mixed 0 1 knapsack model Bas E.

RELIABILITY ENGINEERING & SYSTEM SAFETY, vol.0, 2011 (SCI-Expanded)

XII. Fuzzy capital rationing model

BAŞ E., Kahraman C.

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.224, no.2, pp.628-645, 2009 (SCI-Expanded)

#### Articles Published in Other Journals

I. An Application of Fuzzy Data Envelopment Analysis Approach for Occupational Safety

Bas E.

PERFORMANCE MEASUREMENT WITH FUZZY DATA ENVELOPMENT ANALYSIS, vol.309, pp.231-242, 2014 (Scopus)

II. Fuzzy Capital Rationing Models

Baş E., Kahraman C.

FUZZY ENGINEERING ECONOMICS WITH APPLICATIONS, vol.233, pp.359-380, 2008 (Scopus)

#### **Books & Book Chapters**

I. Einführung in Wahrscheinlichkeitsrechnung, Statistik und Stochastische Prozesse

Baş E.

Springer-Verlag, Wiesbaden, 2020

II. Basics of Probability and Stochastic Processes

BAŞ E.

Springer Nature Switzerland AG, 2019

# III. 50 Soruda Endüstri Mühendisliği

Baş E.

Bilim ve Gelecek Yayınevi, İstanbul, 2017

# IV. Mühendislik Ekonomisi Temel Kavramlar ve Örnek Problemler

BAŞ E.

Beta Yayıncılık, 2012

#### **Metrics**

Publication: 23 Citation (WoS): 20 Citation (Scopus): 23 H-Index (WoS): 1 H-Index (Scopus): 1

# Non Academic Experience

Yeditepe Üniversitesi