

AHMET DENIZ YUCEKAYA, PhD

Prof. Dr., Muhendislik Fakultesi, Kadir Has University
Cibali, Fatih, Istanbul, Turkey,
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EDUCATION

Doctor of Philosophy, Industrial & Systems Engineering, December 2008
Auburn University, AL, USA

- Dissertation Topic: “*Electric Power Bidding Models for Competitive Markets*”
- Simulation Models, Quadratic and Nonlinear models and Heuristic Approaches for bidding power into the market.
- Energy derivatives, financial/engineering economics models and statistical analysis

Master of Science, Industrial Engineering, August 2005
University of Pittsburgh, Pittsburgh, PA, USA

- Conducted and developed models for service operations research, product design, engineering management and stochastic processes

MBA Certificate, Personal Development Institute, Istanbul, Turkey June 2003

- Financial Management, Marketing, supply chain management, TQM, learning organizations and many other topics deeply analyzed under the supervision and experience of industry leaders.

Master of Science, Strategy Development, August 2004
Istanbul Technical University, Istanbul, Turkey

- Basis of Thesis: “*An Analytic Hierarchy Process Application for ERP Selection in Project Driven Companies*”
- Projects related with Management Theory, Economic and Multi-attribute evaluation of industrial investments, multiple criteria decision making and systems planning/management

Bachelor of Science, Industrial Engineering, June 2000
Istanbul Technical University, Istanbul, Turkey

- “*Financial Management and the Internet Era*”
- Projects related with Financial Management, Investment Planning, Cost Engineering, Organization Theory, Operations Research, Statistics, Simulation, Mathematical Programming and Engineering Economics

RESEARCH INTERESTS

- Auction Theory, Bidding, Pricing, Electric Power Systems, Energy Derivatives, Commodities, Energy markets, Blockchain and data science
- Optimization Theory, Stochastic Programming, Linear/Nonlinear/Integer Programming, Mathematical Modeling, Statistical Decision Making and Analysis, Advanced Engineering Economics, Operations Management

ACADEMIC & PROFESSIONAL EXPERIENCE

- Prof. Dr. of Industrial Engineering, Kadir Has University, Istanbul** 2020-
- Assoc. Prof. Dr. of Industrial Engineering, Kadir Has University, Istanbul** 2014- 2020
- Asst. Prof. Dr. of Industrial Engineering, Kadir Has University, Istanbul** 2009- 2014
- Courses: IE 401 Production Planning& Control, EC 309 Economics for Engineers, IE 505 Advanced Production Planning & Control, IE 342 Materials Management, IE 489 Decision Support Systems, GE 401 Engineering Problem Solving, IE 216 Engineering Economics
- Energy Market & Modeling Analyst,** 2008 - 2009
American Electric Power, Columbus, OH
- Developing Mathematical models, database applications, spreadsheet applications, C++ applications, Matlab applications and presentations
 - Using high-level programming languages to develop solution techniques to the problems that are Np-hard
- Research Assistant, Industrial & Systems Engineering,** 2005-2008
Auburn University, Auburn, AL
- Research with Dr. Jorge Valenzuela, Dr. Chan S. Park, and Dr. Gerry Dozier.
 - Research activities related with the energy industry that include developing Mathematical models, database applications, spreadsheet applications, C++ applications, Matlab applications and presentations
 - Teaching assistant for the courses Information Technology for operations (advanced database applications), Decision Support Systems for OM and Engineering Economics
- Research Assistant, Industrial Engineering,** 2004-2005
University of Pittsburgh, Pittsburgh, PA
- Worked with Yan Wang and Bart Nnaji in center for e-design.
 - Research activities related with service operations research, stochastic processes, engineering management
- Planning Manager, Sistem Out-door Signs Inc, Istanbul, Turkey** 2002-2004
- Material requirement and procurement planning using project analysis and financial methods
 - Long term manufacturing planning using demand forecasting and statistical data analysis
 - Transportation planning using the optimization tools developed myself
- Consultant, MBS Technology and Software, Istanbul, Turkey** 2000-2002
- Consultation services for BEA weblogic e-business and Cool:Gen IT products

ADMINISTRATIVE

- Department Head, Industrial Engineering Department, Kadir Has University, 2015-
- Vice Director, Center for Technology and Society, Kadir Has University, 2015- 2018
- Executive Board Member, Faculty of Engineering and Natural Sciences, KHU, 2015- 2024
- Academic Board Member, Faculty of Engineering and Natural Sciences, KHU, 2015-2024
- Internship Coordinator, Industrial Engineering Department, KHU, 2010- 2015
- IE Lab Coordinator, Industrial Engineering Department, KHU, 2010- 2024
- Graduate student advisor, Industrial Engineering Department, KHU, 2009- 2024
- Member of Internship committee, Faculty of Engineering, KHU, 2010- 2016
- Member of promotion committee, Faculty of Engineering, KHU, 2015- 2024
- Member of Senior Design Project committee, Faculty of Engineering, KHU, 2015- 2024

SKILLS

- **Software Packages:** GAMS, AMPL, Arena, Matlab, CPLEX, ILOG, Lingo, Minitab, Weblogic, @Risk, Visio, Crystal Ball, Linux
- **Programming** : C, C++, VB, HTML, MySQL, Fortran
- **Spoken Languages** : English: Fluent German: Intermediate Turkish: Native

SCHOLARSHIP

REFEREED JOURNAL PAPERS (SCI, Scopus)

1. Kalafat, İ., Hekimoğlu, M., Yücekaya, A. D., Kirkil, G., Ediger, V. Ş., & Yıldırım, Ş. (2025). An Integrated Framework for Internal Replenishment Processes of Warehouses Using Approximate Dynamic Programming. *Applied Sciences*, 15(14), 7767.
2. Yıldırım, Ş., **Yücekaya, A. D.**, Hekimoğlu, M., Ucal, M., Aydın, M. N., & Kalafat, İ. (2025). AI-Driven Predictive Maintenance for Workforce and Service Optimization in the Automotive Sector. *Applied Sciences*, 15(11), 6282.
3. **Yucekaya, A.**, Bilge, A. H., Yukseltan, E., & Yıldırım, Ş. (2025). Disaggregation of Hourly Electricity Consumption into Subconsumptions. *International Journal of Energy Economics and Policy*, 15(1), 384-396.
4. **Yucekaya, A.**, Bilge, A. H., Yukseltan, E., & Aktunc, E. A. (2025). Segregation of Hourly Electricity Consumption: Quantification of Demand Types Using Fourier Transform. *International Journal of Energy Economics and Policy*, 15(1), 384-396.
5. **Yucekaya, A.**, Ayağ Z., (2024), "A Hesitant Fuzzy Linguistic Terms Set-Based AHP and TOPSIS Methodology for Fuel Coal Type Selection Problem of Industrial Facilities", *Journal of Multiple-Valued Logic and Soft Computing*, Journal of Multiple-Valued Logic and Soft Computing 43 (4-6), 473-496.

6. Yukseltan, E., Aktunc, E. A., Bilge, A. H., & **Yucekaya, A.** (2024). An overview of electricity consumption in Europe: models for prediction of the electricity usage for heating and cooling. *International Journal of Energy Economics and Policy*, 14(2), 96-111.
7. Savun-Hekimoğlu, B., İşler, Z., Hekimoğlu, M., Burak, S., Karlı, D., **Yücekaya, A.**, Ediger, V., (2023). Optimization of wastewater treatment systems for growing industrial parks, *Science of The Total Environment*, 167223.
8. Guzel, T., Cinar, H., Cenet, M. N., Oguz, K. D., **Yucekaya, A.**, & Hekimoglu, M. (2023). A Framework to Forecast Electricity Consumption of Meters using Automated Ranking and Data Preprocessing, *International Journal of Energy Economics and Policy*, 13(5), 179.
9. Yükseltan, E., Kok, A., **Yucekaya, A.**, Bilge, A., Agca Aktunc, E., Hekimoğlu, M., & (2022). The Impact of COVID-19 Pandemic and Restrictions on the Electricity Demand and Daily Demand Curve in Turkey. *Utilities Policy*, Vol.76, pp. 1-17
10. **Yucekaya, A.**, (2022), Electricity trading through spot, derivative and bilateral contract market considering uncertainty, *Renewable & Sustainable Energy Reviews*, 159, pp. 112-189
11. Kok, A., Yükseltan, E., Hekimoğlu, M., Agca Aktunc, E., **Yücekaya, A.**, & Bilge, A. (2022). Forecasting Hourly Electricity Demand Under COVID-19 Restrictions. *International Journal of Energy Economics and Policy*, 12(1), 73–85
12. Önay, S., **Yücekaya, A.**, Bilge, A., & Aktunç, E. A. (2021). A Supply and Demand Analysis for the Turkish Electricity Market: Supply Adequacy and Resource Utilization. *International Journal of Energy Economics and Policy*, 11(6), 315.
13. **Yucekaya, A.**, Valenzuela, J. (2021). Electric Power Bid Determination and Evaluation for Price Taker Units under Price Uncertainty. *International Journal of Energy Economics and Policy*, 11(6), 35.
14. Yükseltan, E., **Yücekaya, A.**, Bilge, A., Aktunç, E. A. (2021). Forecasting Models for Daily Natural Gas Consumption Considering Periodic Variations and Demand Segregation. *Socio-Economic Planning Sciences*, Vol. 74, 100937.
15. Yukseltan, E., **Yucekaya, A.**, Bilge, A., (2020), “Hourly Electricity Demand Forecasting using Fourier Analysis with Feedback”, *Energy Strategy Reviews*, vol.31, 100524
16. Aktunç, E. A., Yükseltan, E., **Yücekaya, A.**, & Hümeýra, A. (2020). Managing Natural Gas Demand for Free Consumers under Uncertainty and Limited Storage Capacity. *Journal of Natural Gas Science and Engineering*, vol. 79, 103322.
17. Ayağ, Z., **Yucekaya, A.** (2019). A fuzzy ANP-based GRA approach to evaluate ERP packages. *International Journal of Enterprise Information Systems (IJEIS)*, 15(1), 45-68.
18. Gayretli, G., **Yucekaya, A.**, Bilge, A., (2019), “An analysis of price spikes and deviations in the deregulated Turkish power market”, *Energy Strategy Reviews*, Vol.26, 100376
19. Yukseltan, E., **Yucekaya, A.**, Bilge, A., (2017), “Forecasting electricity demand for Turkey: Modeling periodic variations and demand segregation”, *Applied Energy*, Vol.193, pp.287-296
20. Haridass, K., Valenzuela, J., **Yucekaya, A.**, Mcdonald, T., “Scheduling a Log Transport System Using Simulated Annealing”, *Information Sciences*, 264 (2014), pp.302-316

21. **Yucekaya, A.**, “The Operational Economics of Compressed Air Energy Storage Systems under Uncertainty”, *Renewable&Sustainable Energy Reviews*, 22 (2013), pp. 298-305
22. **Yucekaya, A.**, “Bidding of Price Taker Power Generators in Deregulated Turkish Power Market”, *Renewable&Sustainable Energy Reviews*,22 (2013), pp.506-514
23. **Yucekaya, A.**, “Managing Fuel Coal Supply Chain with Multiple Objectives and Multimode Transportation”, *ASEM-Engineering Management Journal*, Vol.25 (1), pp.58-70, June 2013.
24. **Yucekaya, A.**, “Multi-objective Fuel Supply for Coal-fired Power Plants Under Emission, Transportation and Operational Constraints”, *Energy Sources, Part B: Economics, Planning, and Policy*, Vol.8(2), pp.179-189, (2013).
25. **Yucekaya, A.**, “Landfill gas to energy potential of Turkey: A scenario Based Multi-period Simulation”, *Energy Sources, Part B: Economics, Planning, and Policy*,Vol.8 (3), pp.227-234, (2013)
26. Hantush, M. M., Kalin,L., Isik, S., **Yucekaya, A.**,”Nutrient Dynamics in Flooded Wetlands: I.Model Development”, *Journal of Hydrologic Engineering*, Vol.18(12), (2012), pp.1709-1723
27. Kalin, L., Hantush, M., **Yucekaya, A.**, Jordan, J., “Modeling Wetland Nitrogen Dynamics: II. Application”, (2012), *Journal of Hydrologic Engineering*, Vol.18(12), pp.1724-1738, (2013).
28. **Yucekaya, A.**, Valenzuela, J., “Agent Based Optimization to Estimate Nash Equilibrium in Power Markets”, *Energy Sources, Part B: Economics, Planning, and Policy*, Vol.8 (2), pp.209-216, (2013)
29. **Yucekaya, A.**, Valenzuela J., Dozier, G. "Strategic bidding in electricity markets using particle swarm optimization”, *Electric Power Systems Research* (2009), Vol. 79, No.2, pg. 335-345.

REFEREED PAPERS IN OTHER JOURNALS

1. Kalafat, İ., Hekimoğlu, M., **Yücekaya, A. D.**, Ay, N., & Gültekin, H. (2021). Workload Forecasting of Warehouse Stations: Comparison Between Classical Time Series Methods and XGBoost. *Data Science and Applications*, 4(2), 19-24.
2. Altun, Y., **Yucekaya, A.** “A Probabilistic Approach for Cross-selling of Financial Products”, *American Scientific Research Journal for Engineering Technology and Sciences*, Vol.79(1), 2021, pp.1-14
3. **Yucekaya, A.** “An Analysis of Industrial Change in Turkey. II: Sectoral Development and Value Adding”, *Journal of Engineering Technology and Applied Sciences*, 3(3), 2019, 205-222.
4. **Yucekaya, A.**,”An Analysis for Industrial Development in Turkey. I: Distribution of the Largest Companies”, *Journal of Engineering Technology and Applied Sciences*, 3(1), 2018, 83-105.
5. **Yucekaya, A.**, “Evaluating the Electricity Supply in Turkey Under Economic Growth and Increasing Electricity Demand”, *Journal of Engineering Technology and Applied Sciences*, 2(2), 2017, 81-89.

6. Yukseltan, E., **Yucekaya, A.**, Bilge, A., “Forecasting Electricity Demand for Turkey Using Modulated Fourier Expansion”, *American Scientific Research Journal for Engineering Technology and Sciences*, Vol.14(3), 2015, pp.83-94
7. **Yucekaya, A.**, “A Black-Scholes approach for the Pricing of Electric Power Options in Turkish Power Market”, *International Journal of Industrial Electronics and Electrical Engineering*, Vol. 3, No: 8, 2015, pp.1-5.
8. **Yucekaya, A.**, “A Simulation Approach to Evaluate Operational Economics of Wind Power Investments in Turkey”, *Journal of Clean Energy Technologies*, Vol.3, No:5, 2015, pp. pp.378-382.
9. **Yucekaya, A.**, “Evaluating the Energy Resources in Turkey Under Economic Growth and Increasing Energy Demand”, *Social Sciences Research Journal*, Vol. 4, No: 2, 2015, pp.225-231.
10. **Yucekaya, A.**, “Cost Minimizing Coal Logistics for Power Plants Considering Transportation Constraints”, *Journal of Traffic and Logistics Engineering*, Vol.1, No.2, June 2013, pp. 122-127
11. **Yucekaya, A.**, Metin, S., “Scheduling Pumped Hydro Power Storage Systems Under Price and Flow Uncertainty”, *International Journal of Environmental Monitoring and Analysis*, Vol. 1(5), 2013, pp.188-193

WORKING PAPERS

1. Ergun Yukseltan, **Ahmet Yucekaya**, Ayse Bilge, A Comparative Electricity demand analysis of European countries using clustering and classification, *Applied Energy*

BOOK CHAPTERS

1. **Yucekaya, A.**, “Energy Storage with Pumped Hydro Storage Systems under Uncertainty”, *Energy Systems Management*, Springer International Publishing, ISBN: 978-3-319-16023-8, Editor: A. N. Bilge et al., 2015, Chp.4, pp.:43-55.
2. **Yucekaya, A.**, “An Analysis for Coal Transportation and Demand in US and International Markets”, *Handbook of Research on the Applications of International Transportation and Logistics for World Trade*, IGI Global, ISBN: 9781799813972, Editor: G. Ceyhun, December 2019, Chp.14.

ARTICLES IN PERIODICALS

1. **Yucekaya, A.**, “Dijital geleceğimiz ve blokzincir”, *Panorama Khas*, Summer, 2018
2. **Yucekaya, A.**, “Dördüncü Sanayii Devrimi Ya da Endüstri 4.0”, *Panorama Khas*, Fall, 2017
3. **Yucekaya, A.**, “Kim Doğadan Esinlenmiyor ki Mühendislik de Esinlenmesin”, *Panorama Khas*, Fall, 2012

INTERNATIONAL CONFERENCE PAPER AND PRESENTATIONS

1. Kucuksari, Z., Guvercinoglu, T., & **Yucekaya, A.** A Decision Framework for Allocating Advertisement Budget to Online and Offline Channels. 42nd ROME International Conference on “Science, Technology, Social Sciences & Education” (STSSE-25) June 23-25, 2025 Rome, Italy.
2. K p, B.  ., K p, E. T., **Y cekaya, A. D.**, Hekimođlu, M., & Koak, G. (2024). Real-Time Prediction of Delivery Delay in Supply Chains Using Machine Learning Approaches. Book of Abstracts and Full texts, 48.
3. **Yucekaya, A.**, Bilge, A. H., Yukseltan, E., & Aktunc, E. A. A framework to segregate hourly electricity consumption into subconsumptions, ISTEK 2024, October 17-18, 2024, Baku, Azerbaijan
4. Yildirim, Ő., **Y cekaya, A. D.**, Hekimođlu, M., &  zcan, B. (2023, May). A Comparative Application of Machine Learning Approaches to Win-back Lost Customers. In 2023 2nd International Joint Conference on Information and Communication Engineering (JCICE) (pp. 184-187). IEEE.
5. Bozkurt, H. I., Gemici, S., **Yucekaya, A.**, & Hekimoglu, M. (2022, December). Blockchain Technology In Loyalty Program Applications. In Proceedings of the 2022 International Conference on Big Data, IoT, and Cloud Computing (pp. 1-4).
6. Hast rk,  . S., elebi, E., **Y cekaya, A. D.**, & Kirkil, G. (2022, September). GENeSYS-MOD Turkey: Quantitative Scenarios for Low Carbon Futures of the Turkish Energy System. In 2022 18th International Conference on the European Energy Market (EEM) (pp. 1-6). IEEE.
7. Yuksel, H. B., Bolat, S., Bozkurt, H., & **Yucekaya, A.** (2021, December). The implementation of smart contract via blockchain technology in supply chain management: a case study from the automotive industry in Turkey. In 2021 International Conference on Artificial Intelligence and Blockchain Technology (AIBT) (pp. 90-94). IEEE.
8. **Yucekaya, A.**, “An Analysis for Coal Logistics and Demand from Mining to Consumption”, 4th International Conference on Civil Environmental, Geology and Mining Engineering (ICOCEM ‘2019), April 20-22, 2019 Trabzon, Turkey
9. **Yucekaya, A.**, “A Decision Support System for the Portfolio Optimization of Crypto investments”, 4th International Conference on Advances in Natural and Applied Sciences (ICANAS‘2019), June 19-22, 2019 Agri, Turkey, pp.189
10. **Yucekaya, A.**, “A Simulation Approach of Revenue Maximization Strategies for Turkish Domestic Airlines”, *International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES’18)*, May 11-13, 2018 Safranbolu, Turkey, pp.369-373
11. **Yucekaya, A.**, “Cost Minimizing Fuel-coal Selection for Power Plants under Operational Constraints”, *International Conference on Advances and Innovations in Engineering (ICAIE)*, pp.97-103, May, 10-12, 2017, Elazig, Turkiye
12. **Yucekaya, A.**, “A Decision Support System for the Optimum Log Transportation”, *International Conference on Advances and Innovations in Engineering (ICAIE)*, pp.124-128, May, 10-12, 2017, Elazig, Turkiye
13. **Yucekaya, A.**, “A Simulation Approach to Evaluate the Effect of Generator and Compressor Capacity on the Economic Performance of Compressed Air Energy Storage Systems”,

International Conference on Energy and Thermal Engineering, pp.353-357, 25-28 April 2017, Yildiz Technical University, Istanbul, Turkiye

14. **Yucekaya, A.**, “Evaluating the Electricity Supply in Turkey Under Economic Growth and Increasing Electricity Demand”, *International Congress on Fundamental and Applied Sciences (ICFAS’2017)*, 21-25 August, 2017 Sarajevo, Bosnia and Herzegovina
15. **Yucekaya, A.**, “A Multi-Period Simulation Approach To Evaluate Landfill Gas Energy Potential Of Turkey Based On The EPA Model”, 8th International Ege Energy Symposium and Exhibition, 11-13 Mayıs, 2016, Afyonkarahisar, Turkiye
16. **Yucekaya, A.**, “Job Scheduling Using Sequence Dependent Changeover Times: Unilever Case”, 17th International Symposium on Econometrics, Operations Research and Statistics (ISEOS 2016), 2-4 June, 2016, Sivas, Turkiye
17. **Yucekaya, A., Ringim, I.**, “A Decision Support System for the Assembly Line Balancing Problem”, 17th International Symposium on Econometrics, Operations Research and Statistics (ISEOS 2016), 2-4 June, 2016, Sivas, Turkiye
18. **Yucekaya, A.**, “A Black-Scholes approach for the Pricing of Electric Power Options in Turkish Power Market”, IIER 19th International Conference on Engineering and Natural Science (ICENS’2015), 5-6 June, 2015, St. Petersburg, Russia
19. **Yucekaya, A.**, “Evaluating the Energy Resources in Turkey Under Economic Growth and Increasing Energy Demand”, 16th International Symposium on Econometrics, Operations Research and Statistics (ISEOS 2015), 7-12 May, 2015, Edirne, Turkiye
20. **Yucekaya, A.**, “A Simulation Approach to Evaluate Operational Economics of Wind Power Investments in Turkey”, 1st Journal Conference on Clean Energy and Technologies (JCCET 2014), 15-16 September, 2014, Paris, France
21. **Yucekaya, A.**, “Energy Storage with Pumped Hydro Storage Systems under Uncertainty”, *International Conference on Energy and Management, ICEM’2014*, June 5-7, 2014, İstanbul, Turkey
22. **Metin, S., Yucekaya, A.**, “Scheduling Pumped Hydro Power Storage Systems Under Price and Flow Uncertainty”, *The Second International Conference on Water Resources and Environmental Management (ICWRE’2013)*, 9-11 Nisan, 2013, Cenevre, İsviçre
23. **Yucekaya, A.**, “Cost Minimizing Coal Logistics for Power Plants Considering Transportation Constraints”, *2nd International Conference on Traffic and Logistic Engineering (ICTLE’2013)*, March 15-16, Istanbul, Turkey
24. **Yucekaya, A.**, “Evaluating the Energy Demand and Sources in Balkan Countries”, 2. *International Balkan Annual Conference*, October 11-14, 2012, Tirana, Albania
25. **Yucekaya, A.**, “Landfill Gas to Energy in Turkey: Current and Future”, *The 4th International Symposium on Sustainable Development (ISSD2013)*, May 24-26, Sarajevo, Bosnia and Herzegovina
26. **Yucekaya, A.**, “Natural gas purchase commitment for short term contracts under take-or-pay constraint and demand uncertainty”, Proceedings of the 2012 International Conference on Industrial Engineering and Operations Management, IEOM’12, Istanbul, Turkey, July 3 – 6, 2012

27. **Yucekaya, A.**, Ayag, Z., Samanlioglu, F., “Option Pricing for Electricity Commodity in Turkish Power Market”, Proceedings of the 2012 International Conference on Industrial Engineering and Operations Management, IEOM’12, Istanbul, Turkey, July 3 – 6, 2012
28. **Yucekaya, A.**, Samanlioglu, F., Ayag, Z., “Compressed Air Energy Storage Systems: Current, Future and Operational Analysis”, 5th International Mechanical Engineering Forum, Prague, Czech Republic, 20-22 June, 2012
29. **Yucekaya, A.**, “Multi-Objective Fuel Supply for Coal-Fired Power Plants Under Emission, Transportation and Operational Constraints”, Women in Engineering Academia, Istanbul, Turkey, June 1 – 1, 2012
30. Samanlioglu, F., **Yucekaya, A.**, Ayag, Z., “A Network Model for the Location-Routing Decisions of a logistics Company”, Proceedings of the 2012 Industrial and Systems Engineering Research Conference, IERC 2012, Orlando, Florida, USA
31. Samanlioglu, F., Ayag, Z., **Yucekaya, A.**, “Selection of a Nuclear Power Plant Site in Turkey With Fuzzy Topsis Approach”, 3. Annual Conference of European Decision Sciences Institute, EDST 2012, Istanbul, Turkey
32. Ayag, Z., Samanlioglu, F., **Yucekaya, A.**, “Intelligent Approach to Simulation Software Evaluation”, Proceedings of the 2012 International Conference on Industrial Engineering and Operations Management, IEOM’12, Istanbul, Turkey, July 3 – 6, 2012
33. Ayag, Z., Samanlioglu, F., **Yucekaya, A.**, “Concept Evaluation in a NPD Environment: An Intelligent Approach”, 2. International Fuzzy Systems Symposium, FUZZYSS’11, Ankara, Turkey
34. **Yucekaya, A.**, Ayag, Z., (2011), “Cost and SO₂ minimizing coal resource selection for power plants”, *The 21st International Conference on Multiple Criteria Decision Making*, MCDM 11, June 13-17, 2011, Jyväskylä, Finland
35. Ayag, Z., **Yucekaya, A.**, (2011), “Alpha-cut Fuzzy Analytic Network Process Based Approach to Evaluate Simulation Software Packages”, *Analytic Hierarchy/Network Processes, ISAHF 2011*, Napoli, Italy
36. **Yucekaya, A.**, Valenzuela, V., (2011), “A Particle Swarm Optimization Method for Power Bidding Coal Units in Competitive Auctions”, 8. *International Conference on the European Energy Market*, May, 25-27, EEM 11, Zagreb, Croatia
37. **Yucekaya, A.**, Ayag, Z., Samanlioglu, F., “Evaluating the Energy Dependency of Balkan Countries and the Effect of the Natural Gas Pipelines”, 9-13 May, 2011, *International Balkan Annual Conference, IBAC 11*, Skopje, Macedonia
38. **Yucekaya, A.**, Ayag, Z., Samanlioglu, F., “Price Taker Bidding for Power Plants in Turkish Power Market”, *International Conference on Applied Operational Research, 2011*, ICAOR 11, Besiktas, Istanbul, Turkey
39. Hantush, M., Kalin, L., **Yucekaya, A.**, Isik, S., “Modeling Wetland Nitrogen Dynamics: I. Model development and sensitivity analysis”, *World Environmental & Water Resources Congress*, EWRI 11, May 22-26, 2011, Palm Springs, California

40. Kalin, L., Hantush, M., **Yucekaya, A.**, Isik, S., “Modeling Wetland Nitrogen Dynamics: II. Application and Uncertainty Analysis”, *World Environmental & Water Resources Congress*, EWRI 11, May 22-26, 2011, Palm Springs, California
41. Hantush, M.M., L. Kalin, A. **Yucekaya**, S. Isik (2012), “Phosphorus Dynamics in Flooded Wetlands: I. Model Development and Sensitivity Analysis”, ASCE World Environmental & Water Resources Congress, May 20-24, 2012, Albuquerque, NM.
42. L. Kalin, Hantush, M.M., S. Isik, A. **Yucekaya**, T. Jordan (2012), “Phosphorus Dynamics in Flooded Wetlands: II. Application to a Restored Wetland”, ASCE World Environmental & Water Resources Congress, May 20-24, 2012, Albuquerque, NM.
43. Funda Samanlioglu, Zeki Ayag, **Ahmet Yucekaya**, Alev Kilic, Ilgim Balkuvar, Zeray Cikrikci, “A Mathematical Model for Ambulance Location and Deployment”, *The Second International Fuzzy Systems Symposium, FUZZYSS'11*, November 17-18, 2011, Hacettepe University, Ankara
44. Funda Samanlioglu, Zeki Ayag, **Ahmet Yucekaya**, Duygu Elibol, İlke Depe, Gokce Ozdemir, Cemal Ersin Davarci, “A Location-Routing Model for Regional Blood Banks”, 9. International Logistics & Supply Chain Congress, 2011, Cesme, Izmir
45. **Yucekaya, A.**, “Scheduling Compressed Air Energy Storage Systems”, *Jordan International Energy Conference*, 20-22 September, 2011
46. **Yucekaya, A.**, Ayag, Z., Samanlioglu, F. (2010) “Economic evaluation of wind power investments through multi-year simulation and operational constraints”, 2. *International Conference on Nuclear and Renewable Energy Resources (NURER'10)*, July 4-7, Gazi University, Ankara, Turkey
47. Ayag, Z., Samanlioglu, F., **Yucekaya, A.** (2010) “Fuzzy analytic network process (FANP) approach for shopping centersite problem”, *VIII. International Logistics and Supply Chain Congress (LM-SCM'10)*, November 4-5, Maltepe University, Istanbul, Turkey
48. **Yucekaya, A.**, “Electric Power Bidding Models and Equilibrium for Competitive Markets”, Seminar, Industrial & Systems Engineering, Auburn University, Auburn, AL, 2008.
49. **Yucekaya, A.**, “A comparison of Nonlinear Programming and Decomposition Based Particle Swarm Optimization method for Electric Power Bidding”, presented at INFORMS Annual Conference, Seattle, 4-7 November, 2007.
50. **Yucekaya, A.**, "A Strategic Bid Determination Technique for Bidding into Electricity Markets", presented at Auburn University Graduate Research Forum, Auburn, AL, 2007

NATIONAL CONFERENCE PAPER AND PRESENTATIONS

1. Kaya, M., Çarpanalı, H., **Yucekaya, A.**, Hekimoğlu, M., Prognostic Alert System And Proportional Hazard Model For Coal Power Plant Failures, The 43th Operations Research / Industrial Engineering National Congress, November 2-4, 2024, Trabzon, Turkey
2. **Yucekaya, A.**, Bilge, A., Hekimoglu, M., Yukseltan, E., Kok, A., “The Impact of COVID-19 Pandemic and Restrictions on the Electricity Demand and Daily Demand Curve in Turkey”, The 42th Operations Research / Industrial Engineering National Congress, November 1-3, 2023 Gaziantep, Turkey

3. **Yucekaya, A.**, “Multi-objective fuel-coal supply for power plants under operational constraints”, The 39th Operations Research / Industrial Engineering National Congress, June 12-14, 2019 Ankara, Turkey
4. Yukseltan, E., **Yucekaya, A.**, Bilge, A., “Turkiye Elektrik Talebi Tahmini için bir Fourier Serisi Modeli”, *Yöneylem Araştırması Ve Endüstri Mühendisliği (YAEM) 37. Ulusal Kongresi*, 5-7 Temmuz, 2017, Istanbul, Turkiye
5. **Yucekaya, A.**, (2015) “Al ya da Öde Kısıtı ve Talep Belirsizliği Altında Kısa Dönem Doğalgaz Alım Taahhüdü Problemi”, 35.Yöneylem Araştırması ve Endüstri Mühendisliği (YAEM’15), September, 9-11, Odu, Ankara, Turkey
6. **Yucekaya, A.**, (2014) “A Revenue Stream Based Simulation to Evaluate Wind Power Investments in Turkey”, 34.Operation Research and Industrial Engineering National Congress (YA/EM’11), June 25-27, Uludag University, Bursa, Turkey
7. Kocabiyik, B., Gultekin, S., Han, A., **Yucekaya, A.**, (2011) “A Marginal-cost based Simulation for Bid Evaluation in Turkish Power Market”, 31.Operation Research and Industrial Engineering National Congress (YA/EM’11), July 3-5, Sakarya University, Sakarya, Turkey
8. **Yucekaya, A.**, Ayag, Z., (2011), “Artan Enerji Talebi ve Yakıt Maliyetleri Işığında Türkiye’de Enerji Planlamasının İncelenmesi”, 8.Endustri-Isletme Muhendisligi Kurultayi, 1-3 Aralik, 2011, Bursa, Turkiye
9. Ayag, Z., **Yucekaya, A.**, (2011), “Proje Yönetimi ve Risk Faktörleri Açısından Kurumsal Kaynak Planlama (ERP) Yatırımlarının Değerlendirilmesi”, 8.Endustri-Isletme Muhendisligi Kurultayi, 1-3 Aralik, 2011, Bursa, Turkiye
10. **Yucekaya, A.**, Ayag, Z., Samanlioglu, F. (2010) “ERP software selection through AHP in a project-based production company”, *X.National Production Research Symposium (UAS’10)*, September 16-18, Girne American University, Girne, Cyprus
11. Samanlioglu, F., Ayag, Z., **Yucekaya, A.** (2010) “Multiple-criteria cross docking model with flexible time window ”, *X.National Production Research Symposium (UAS’10)*, September 16-18, Girne American University, Girne, Cyprus
12. Ayag, Z., Samanlioglu, F., **Yucekaya, A.** (2010) “Fuzzy AHP approach to CAD software selection problem”, *X.National Production Research Symposium (UAS’10)*, September 16-18, Girne American University, Girne, Cyprus
13. Gokoluk, S., Tasdemir, E. Kirgoz, D., Cakir, H., **Yucekaya, A.**, Ayag, Z., Samanlioglu, F. (2010) “A mixed integer multi-period capital budgeting model for investment companies”, 30.*Operation Research and Industrial Engineering National Congress (YA/EM’10)*, June 30- July 2, Sabancı University, Istanbul, Turkey
14. Alacan, M., Ozal, C., Cetinkaya, I., Altıok, I., Kok, G., **Yucekaya, A.**, Ayag, Z., Samanlioglu, F. (2010) “A personnel supply planning system for hospital call centers”, 30.*Operation Research and Industrial Engineering National Congress (YA/EM’10)*, June 30- July 2, Sabancı University, Istanbul, Turkey
15. Samanlioglu, F., Sezenler, E., Ayag, Z., **Yucekaya, A.** (2010) “A hazardous waste location-routing problem”, 30.*Operation Research and Industrial Engineering National Congress (YA/EM’10)*, June 30- July 2, Sabancı University, Istanbul, Turkey

16. Elibol, D., Depe, I., Ozdemir, G., Davarci, C., Samanlioglu, F., Ayag, Z., **Yucekaya, A.** (2010) “A logistics, location and routing problem of Istanbul Kızılay blood banks”, *30. Operation Research and Industrial Engineering National Congress (YA/EM'10)*, June 30- July 2, Sabancı University, Istanbul
17. Alew, K., Cikrikci, Z., Balkuvar, I., Samanlioglu, F., Ayag, Z., **Yucekaya, A.** (2010) “A location problem of first aid ambulances”, *30. Operation Research and Industrial Engineering National Congress (YA/EM'10)*, June 30-July 2, Sabancı University, Istanbul, Turkey
18. Kayakus, O., Ergin, D., Samanlioglu, F., Ayag, Z., **Yucekaya, A.** (2010) “A mathematical model of pandemic influenza A/H1N1”, *30. Operation Research and Industrial Engineering National Congress (YA/EM'10)*, June 30- July 2, Sabancı University, Istanbul, Turkey
19. Duman, B., Erdem, M., Isik, E., Ozkaya, E., Ayag, Z., Samanlioglu, F., **Yucekaya, A.** (2010) “Cloth selection problem for passenger seats in public transport vehicles through TOPSIS”, *30. Operation Research and Industrial Engineering National Congress (YA/EM'10)*, June 30-July 2, Sabancı University, Istanbul, Turkey
20. Has, M., Taskiran, I., Turkyilmaz, M., Ayag, Z., Samanlioglu, F., **Yucekaya, A.** (2010) “Evaluating shopping center location alternatives through ANP: A case study”, *30. Operation Research and Industrial Engineering National Congress (YA/EM'10)*, June 30- July 2, Sabancı University, Istanbul

INVITED TALKS AND PRESENTATIONS

1. Yucekaya, A., “Energy Storage Systems”, İTÜ Teknolojik ve Ekonomik Geliştirme Araştırma Merkezi, May, 2017
2. Yucekaya, A., “Scheduling Energy Storage Systems Under Uncertainty: Modeling and Analysis of Pumped Hydro and Compressed Air Energy Storage Systems”, Kadir Has University, İstanbul, November, 2016
3. Yucekaya, A., “An overview of logistics in Turkey”, Università Di Bologna, Italy, May, 2013
4. Yucekaya, A., “An overview of logistics in Turkey”, Fachhochschule Sudwestfalen, Soest, Germany, May, 2012
5. Yucekaya, A., “Industrial Engineering Research Problems in Electric Power Systems”, Copenhagen University College of Engineering, Copenhagen, Denmark, April, 2011

PHD DISSERTATION SUPERVISED

1. Ergün Yükseltan, “Models for Electricity Demand Forecasting, Classification, and Imbalance Reduction in Competitive Markets”, Kadir Has University, 2023, Co-advised with Ayse Bilge
2. Ramazan Arkan, “Trend Forecast and Collection Management in Apparel Retail”, Kadir Has University, 2023, Co-advised with Esra Agca

THESIS SUPERVISED (MASTER OF SCIENCES)

1. Ece Özer, “Decarbonization Pathways For Turkish Power System Using The Leap Model”, July 2021 – Co-Advisor
2. Yasemin Yağmur Yalçın, “2050 Yılına Kadar Sıfır Karbon Emisyon Hedefi: Türkiye'de %100 Temiz Elektrik Uygulanabilirliği”, December 2021 – Co-Advisor
3. Gizem Gayretli, “Türkiyede Elektrik Piyasasında Tahmin Hatalarının Fiyata Etkisi ve İkili Anlaşmaların Hesaplanması”, KHU, January 2017 – Co-Advisor
4. Selim Önay, “Türkiyede Elektrik Piyasası için Arz ve Talep Değerlendirmesi ve Projeksiyonları: 2010-2016 Dönemi”, KHU, May 2017 – Co-Advisor
5. Yasin Altun, “ A Probabilistic Approach for the Marketing of Banking Products”, KHU, May, 2016
6. Mohammed Jasim, “An Evaluation of Energy and Electricity in Pakistan”, KHU, February, 2016 (Co-advisor)
7. Ferhan Otnar, “An analysis of development indicators for Turkey based on the historical development of 500 largest industrial organizations”, KHU, August 2015
8. Ibrahim Uba Ringhim, “ A Decision Support System for the Assembly Line Balancing”, KHU, August 2015
9. Ecem E. Tasdemir, “Energy Trading in Turkish Power Market through Options, Bilateral Agreements and Spot Market”, KHU, June, 2013
10. Seda S. Gokoluk, “Scheduling Pumped Hydro-Power Resources Under Price and Flow Uncertainty”, KHU, August 2012
11. Esmâ S. Kara, “Economic and Operational Analysis of Compressed Air Energy Storage Systems (CAES)”, KHU, August, 2011

THESIS COMMITTEE MEMBERSHIP

1. Büşra Ülkü, “Real time prediction of delivery delay with machine learning”, KHAS, 2023
2. Ali Kök, “Optimum Spare Parts Inventory Control In The Existence Of A Non-Stationary installed Base”, KHAS, 2021
3. Mohsina Majeed, “Potential And Status Of Renewable Energy Development In Energy Import-Dependent Countries, Turkey And Pakistan”, KHAS, 2021 – Committee member
4. Nida Nur Küçük, “Risk constrained self scheduling for a power producer using power to hydrogen storage in day-ahead markets”, KHU, December 2018 – Committee member
5. Meryem İpek Özkoca, “Kojenerasyon ve güneş enerjisinin bütünleştirildiği hibrit sistemin ekonomik ve emisyon analizi”, ITU Energy Institute, May 2019 – Committee member
6. Tuğçe Özkenar, “Debris removal strategies to improve accessibility of road networks”, KHU, August 2019 Committee member

7. Mahdi Samarah, “Multi-objective disaster relief logistics”, KHU, August 2018 – Committee member
8. Burak Gökçe, “Impact of Renewable Energy on the Power Market”, ITU Energy Institute, May 2018 – Committee member
9. Mehmet Özer, “Küçük Organize Sanayi Bölgesinde Hibrit Enerji Tesisi ve Batarya Kullanım Önerisi”, ITU Energy Institute, May 2018 – Committee member
10. Zeki Uyan, “Co-optimization Models of Generation and Transmission Investments with Market-clearing Equilibrium”, January 2018 Committee member
11. B. Cansev, “Revealing the regional and global carbon and energy hotspots of Turkish Manufacturing Supply Chains: A global multiregional input-output analysis”, ISU, December, 2016- Committee member
12. Mohsan Hussain, “Determination of Time-of-use prices in Electricity Markets Using Clusterin Analyses”, KHU, September, 2016- Committee member
13. Ergün Yükseltan, “Türkiye Elektrik Enerjisi Tüketiminin Zaman Serileri ile Analizi”, KHU, February, 2016- Committee member
14. Sylvian Boakai, “A Fuzzy Best-Worst Multi-Criteria Decision Making Method for Third Party Logistics Provider Selection”, KHU, June, 2016- Committee member
15. Izdihar Al-muwaffaq, “Use of Machine Learning Techniques for Diagnosis of Thyroid Gland Disorder”, KHU, May, 2016- Committee member
16. Mohammad Sohaib, “ Protein-Protein Interaction Network Alignment Using GPU”, KHU, May, 2016- Committee member
17. Hande Çakır, “Market Price Simulations for Turkish Electricity Market Using Equilibrium Models”, KHU, May, 2014- Committee member
18. Özen Özer, ““Sabit Oranlı Portföy Sigortalama Stratejisinde Sabit Çarpanın Fiyat/Kazanç Oranı Yardımı ile Belirlenmesi ve Bir Uygulama”, KHU, June, 2014- Committee member
19. Ecem Sezenler, “A Multiobjective Model for Nuclear Power Plant location Selection”,KHU, June, 2011- Committee member

PHD DISSERTATION COMMITTEE MEMBERSHIP

1. İbrahim Ersöz, “Planning and stochastic evaluation of combined cooling heat and power systems under uncertainty”, ITU Energy Institute, May 2019 Committee member
2. Tasbih Tuffafa, “The rest difference problem in Round-robin tournaments”, KHAS, 2022

PROFESSIONAL AFFILIATIONS

- **Infirms**, Institute for Operations Research and Management Science
- **İİE**, Institute of Industrial Engineers
- **YAD**, Yöneylem Araştırması Derneği

SELECTED HONORS AND AWARDS

- Tübitak Bidep Advisory Board - Member 2020-...
- Best paper award, STSSE 2025, Rome Italy 2025
- Distinguished Professor Award, IEOM International Society 2022
- Tübitak EU support and writing award 2022
- Tübitak 2028 Networking support award 2021
- Tübitak 2023 Horizon Europe Project writing support award 2019, 2021
- Industrial Engin. Department Second Best Senior Design project 2020
- Industrial Engin. Department Second Best Senior Design project 2020
- Industrial Engin. Department Third Best Senior Design project 2020
- Industrial Engin. Department Best Senior Design project 2019
- Industrial Engin. Department Best Senior Design project 2018
- Industrial Engin. Department third Best Senior Design project 2018
- Evaluation committee member for Sustainable Business awards, Turkey 2017-....
- US Environmental Protection A. Scientific and Technologic Achievement Award 2016
- Industrial Engin. Department third Best Senior Design project 2017
- Industrial Engin. Department third Best Senior Design project 2017
- Kadir Has University Academic Achievement Award, Kadir Has University, 2014
- Faculty of Engineering and Natural Sciences Rising Star Award, KHU 2012
- Industrial Engin. Department Best Senior Design project 2016
- Industrial Engin. Department third Best Senior Design project 2016
- Industrial Engin. Department Best Senior Design project 2015
- Industrial Engin. Department Second Best Senior Design project 2015
- Industrial Engin. Department Best Senior Design project 2014
- Industrial Engin. Department Best Senior Design project 2012
- Industrial Engin. Department Best Senior Design project 2011
- Recipient of the Julia & Albert Energy Fellowship 2007-2008
- Auctions/Bidding Session Chair in **INFORMS** Annual Conference, Seattle 2007
- Nominated and selected for **INFORMS** combined colloquia 2007
- Presidential fellowship for doctoral studies at Auburn University 2005-2008
- Presidential fellowship for doctoral studies at University of Pittsburgh 2005

REFEREING & EDITORSHIP

- Energy-Referee
- Energy Economics-Referee
- Socio Economic Planning Sciences-Referee
- International Journal of Electrical Power and Energy Systems-Referee

- Computers & Operations Research-Referee
- Journal of Intelligent Manufacturing-Referee
- Turkish journal of electrical engineering and computer sciences - Referee
- IEEE Transactions on Power Systems- Referee
- Energy Sources, Part B: Economics, Planning, and Policy- Referee
- Energy Systems- Referee
- Renewable & Sustainable Energy Reviews-Referee
- Energy Conversion and Management- Referee
- International Journal of Production Research-Referee
- Frontiers of Information Technology & Electronic Engineering-Referee

RESEARCH PROJECTS

1. Integrated Resource Management for Natural Gas Power Plants, Tübitak Ardep 1001, 2025-2028, Budget: 2M TL **PI(Yürütücü)**
2. Fourier Transformasyonu ile Toplam Elektrik Tüketim Verisinin Tüketim Çeşitlerine Ayrıştırılması, Tübitak Ardep 1002, 2023-2024, **PI(Yürütücü)**
3. Covid-19 Salgını Sürecinde Elektrik Tedariğinin, Üretim Kaynaklarının Ve Talebinin Yönetilmesi, Tübitak Ardep 1001 Covid Özel Çağrısı, Budget: 73000 TL, **PI(Yürütücü)**
4. ENGINE – Engineering curricula modernization in renewable energy in Albanian Universities, AB Erasmus+, Budget: €42088, Meltem Ucal (Coordinator), researcher with G. Kirkil, E.Celebi, V. Ediger, 2020-2023, **Researcher(Araştırmacı)**
5. Otomotiv Sektöründe Satış Sonrası Hizmetler İçin Makine Öğrenmesi Çözümlerinin Geliştirilmesi, Tübitak 2244 Sanayii Doktora Programı, Kadir Has Ü.-Doğuş- Teknoloji, 2020-2024, **Araştırmacı – Yürütücü (PI)**
6. Openentrance: Open Energy Transition for Low Carbon Economy, EU H2020 CSA, €181.000, researcher with G. Kirkil, E.Celebi, V. Ediger, 2019-2023, **Researcher(Araştırmacı)**
7. S-PARCS: Envisioning and Testing New Models of Sustainable Energy Cooperation and Services in Industrial Parks, EU H2020 CSA, €106.375, researcher with G. Kirkil, E.Celebi, V. Ediger, 2018-2021, **Researcher(Araştırmacı)**
8. Annual natural gas demand forecasting for free eligible customers under take or pay constraint, demand uncertainty and storage constraint, Kadir Has U. fund, TL 21000, with A. Bilge, E. Agca, 2017-2018, **PI(Yürütücü)**,
9. EERA (European Energy Research Alliance) Joint Program E3S Steering Committee Meeting, TUBITAK UIDB 361881, Budget: 3300 TL, **Researcher(Araştırmacı)**, 2017
10. EERA (European Energy Research Alliance) Joint Program E3S Internal Workshop, TUBITAK UIDB 139182, Budget: 1500 TL, **Researcher(Araştırmacı)**, 2014-2015
11. Urban Engineering Studies in İstanbul, the prestigious IBM Shared University Research (SUR) award, 137,000 \$, 2013-2015 (Project member/**Researcher**), PI: Şirin Tekinay
12. Project Member, AEP project: “an optimization model for Claytor hydro facility annual schedule under elevation, flow and price uncertainty”, American Electric Power, 2008 - 2009.
13. Project Member, AEP project: “a stochastic optimization approach for reliability price modeling in PJM power market”, American Electric Power, 2008 - 2009.

14. Project Member, AEP project: “a Monte Carlo simulation based heuristics approach for a coal-fired power plant under outage uncertainty and peak hour penalty”, American Electric Power, 2008 - 2009.
15. Project Member, EPA project: “Nitrogen and Phosphorous Cycling in Wetlands”, Auburn University, 2008 - 2011.
16. Project Member, NSF project: “An Optimization Model for Log Transport”, Auburn University, 2006 - 2007.
17. Project Member, Center for e-design - Upitt Project: “Remote Accessibility Assessment for the Built Environment for Individuals Who Use Wheeled Mobility Devices”, University of Pittsburgh, 2004-2005.

TEACHING INTERESTS

Production Planning and Control, Engineering Economics and Cost Analysis, Operations Research, Stochastic Processes, Decision Analysis under Uncertainty, Spreadsheet Based Modeling and Programming, Energy Markets, Electric Power Systems, Market Desing for Deregulated Markets, and Research Methods.

TEACHING ENHANCEMENT ACTIVITIES

My classroom is supported by a dynamic online platform that provides students with immediate access to all course materials—including slides, homework, examples, and announcements—from the first day of class. To enhance comprehension, I integrate technology directly into my teaching through curated tutorials and instructional videos. Furthermore, students apply their knowledge in a real-world context via collaborative group projects based in industrial facilities. These projects are designed to develop critical professional skills in teamwork, technical report writing, and presentation.

TEACHING & COURSE COORDINATION

- **2021--**

IE 401 Production Planning & Control
 IE 342 Materials Management
 IE 323 Product Design and Development
 IE 216 Engineering Economics
 IE 354 Engineering Economics & Cost Analysis
 GE 400 Engineering Desing Project - Spring
 IE 598 Graduate Seminar-Spring/Fall
 GSE 501 Research Methods and Scientific Ethics
 IE 599 Master Thesis-Spring/Fall
 FBE 698 PhD Seminar –Spring/Fall

- **2020-2021**

IE 401 Production Planning & Control	: 70 students
IE 342 Materials Management	: 90 students
IE 323 Product Design and Development	: 50 students
IE 216 Engineering Economics	: 92 students
IE 354 Engineering Economics & Cost Analysis (Summer)	: 26 students

GE 400 Engineering Desing Project - Spring	: 67 students
IE 598 Graduate Seminar-Spring/Fall	: 5 students
IE 599 Master Thesis-Spring/Fall	: 2 students
FBE 698 PhD Seminar –Spring/Fall	: 5 students

• **2019-2020**

IE 401 Production Planning & Control	: 74 students
IE 342 Materials Management	: 62 students
IE 323 Product Design and Development	: 40 students
IE 216 Engineering Economics	: 66 students
IE 354 Engineering Economics & Cost Analysis (Summer)	: 11 students
GE 400 Engineering Desing Project - Spring	: 69 students
GE 401 Engineering Problem Solving and Project Management	: 157 students
IE 598 Graduate Seminar-Fall	: 3 students
IE 598 Graduate Seminar-Spring	: 6 students
IE 599 Master Thesis-Fall	: 1 students
IE 599 Master Thesis- Spring	: 1 students
FBE 698 PhD Seminar -Fall	: 7 students
GSE 501 Research Methods and Scientific Ethics-Fall	: 23 students

• **2018-2019**

IE 401 Production Planning & Control	: 77 students
IE 342 Materials Management	: 79 students
IE 323 Product Design and Development	: 39 students
IE 216 Engineering Economics	: 90 students
IE 354 Engineering Economics & Cost Analysis (Summer)	: 11 students
GE 400 Engineering Desing Project - Spring	: 71 students
GE 401 Engineering Problem Solving and Project Management	: 146 students
IE 598 Graduate Seminar-Fall	: 3 students
IE 598 Graduate Seminar-Spring	: 6 students
IE 599 Master Thesis-Fall	: 5 students
IE 599 Master Thesis- Spring	: 3 students
FBE 698 PhD Seminar -Fall	: 7 students
GSE 501 Research Methods and Scientific Ethics-Fall	: 31 students
GSE 501 Research Methods and Scientific Ethics- Spring	: 29 students

• **2017-2018**

IE 401 Production Planning & Control	: 61 students
IE 505 Advanced Production Planning & Control	: 7 students
IE 342 Materials Management	: 78 students
IE 323 Product Design and Development	: 13 students
IE 354 Engineering Economics & Cost Analysis	: 74 students
IE 354 Engineering Economics & Cost Analysis (Summer)	: 18 students
GE 400 Engineering Design Project - Spring	: 56 students
GE 401 Engineering Problem Solving and Project Management	: 42 students
IE 598 Graduate Seminar-Fall	: 8 students
IE 598 Graduate Seminar-Spring	: 7 students

IE 599 Master Thesis-Fall	: 7 students
IE 599 Master Thesis- Spring	: 8 students
FBE 698 PhD Seminar -Fall	: 10 students
GSE 501 Research Methods and Scientific Ethics-Fall	: 30 students
GSE 501 Research Methods and Scientific Ethics- Spring	: 24 students

• **2016-2017**

IE 401 Production Planning & Control	: 52 students
IE 505 Advanced Production Planning & Control	: 7 students
IE 342 Materials Management	: 70 students
IE 354 Engineering Economics & Cost Analysis	: 53 students
IE 354 Engineering Economics & Cost Analysis (Summer)	: 18 students
GE 400 Engineering Design Project - Spring	: 57 students
GE 400 Engineering Design Project- Fall	: 11 students
GE 401 Engineering Problem Solving and Project Management	: 44 students
IE 598 Graduate Seminar-Fall	: 10 students
IE 598 Graduate Seminar-Spring	: 10 students
IE 599 Master Thesis-Fall	: 10 students
IE 599 Master Thesis- Spring	: 8 students
FBE 698 PhD Seminar – Fall	: 2 students

• **2015-2016**

IE 401 Production Planning & Control	: 75 students
IE 505 Advanced Production Planning & Control	: 9 students
IE 342 Materials Management	: 70 students
IE 354 Engineering Economics & Cost Analysis	: 53 students
IE 354 Engineering Economics & Cost Analysis (Summer)	: 13 students
GE 401 Engineering Design Project	: 62 students
IE 598 Graduate Seminar-Fall	: 13 students
IE 598 Graduate Seminar-Spring	: 12 students
IE 599 Master Thesis-Fall	: 10 students
IE 599 Master Thesis- Spring	: 8 students
FBE 698 PhD Seminar – Fall	: 1 student

• **2014-2015**

IE 401 Production Planning & Control	: 61 students
IE 505 Advanced Production Planning & Control	: 10 students
IE 342 Materials Management	: 73 students
IE 354 Engineering Economics & Cost Analysis	: 66 students
GE 401 Engineering Design Project	: 51 students
IE 598 Graduate Seminar	: 10 students

• **2013-2014**

IE 401 Production Planning & Control	: 65 students
IE 489 Decision Support Systems for Operations Mn.	: 15 students
IE 342 Materials Management	: 65 students
IE 354 Engineering Economics & Cost Analysis	: 39 students

- **2012-2013**

IE 401 Production Planning & Control	: 63 students
IE 505 Advanced Production Planning & Control	: 10 students
IE 342 Materials Management	: 57 students
IE 354 Engineering Economics & Cost Analysis	: 47 students

- **2011-2012**

IE 401 Production Planning & Control	: 68 students
IE 489 Decision Support Systems for Operations Mn.	: 8 students
IE 342 Materials Management	: 67 students
IE 354 Engineering Economics & Cost Analysis	: 37 students

- **2010-2011**

IE 401 Production Planning & Control	: 61 students
IE 505 Advanced Production Planning & Control	: 10 students
IE 342 Materials Management	: 56 students
IE 354 Engineering Economics & Cost Analysis	: 41 students

- **2009-2010**

IE 401 Production Planning & Control	: 68 students
EC 309 Economics for Engineers	: 50 students
IE 342 Materials Management	: 62 students
IE 354 Engineering Economics & Cost Analysis	: 37 students

SENIOR DESIGN PROJECTS SUPERVISED

- ***SPRING 2025***

1. Strategic Railway Line Selection for Sustainable Industrial Development, Regional Connection, and Economic Transformation, Yankı Yiğit Uçar, Deniz Ceren Duygun, Mert Bıçakçioğlu, İlke Ölçücü, Egemen Can
2. Beyond reality: transforming line at Bsh with Digital Twin technology in industry 4.0, Ayberk Dinçkol, Sude Göksel, Sude Çıbık, İsmet Mertel
3. Greener Cement, Smarter Supply Chains: Emission Analysis and Optimization, Doğa İpek, Şevval Özyalçın, Şule Özmen

- ***SPRING 2024***

4. A Decision Support System for Biomass Power Investments: BioKhas, İdrishan Altıntaş, Deniz Gültekin, Ecenaz İşbilen, İdil Sude San
5. Location Selection for Evs on highways Hasan Birkan Taner, Gizem Nur Yıldız, Berfin Işıl Durak, Mert Eraslan, Zeynep Köse

- **SPRING 2023**

6. Decision Support System for Designing A Company's Warehouse Layout, Sude Öztürk, İrem Aydın, Melisa Şener
7. Airline Profit Evaluation and Airplane Assignment System, Umutcan Özdarende, Emre Tanrıvermiş, Anıl Altan
8. Applicability of Lot Sizing Methods in Furniture Accessories Production, Atahan Nuri Kızıltan, Mehmet Basmacı, Zeynep Maden, İrem Önkuzu – *Second Best Senior Design project*

- **SPRING 2022**

9. Increasing sales on Hepsiburada using Fitsizeavatar, Arrayan Mrabet, Barış Ocuk, Handenur Çeltik, Deniz Pektaş - *Best Senior Design project*
10. Designing lean manufacturing with Arena in Hose Production, Aynur Çakmak, Deniz Can Bektaş, Gülçin Bilge

- **SPRING 2021**

11. A Decision Support System For Investment Evaluation Of Projects: Investment Analyzer, Feyza Kılınç, Sadiye Kocabacak, Mert Polat
12. Improvement Analysis Of Redbutton A.Ş.: Redbutton Mrp System, Deniz Keskin, Yiğit Dursun

- **SPRING 2020**

13. House Price Value Prediction With Multilinear Regression Modeling, Ece Toksöz, Şenda Yıldırım, İltara Yüksel, Edanur Güngör – *Second Best Senior Design project*
14. Virtual Reality (Vr) Solutions For Retail Companies, Cenk Tuna, Ece Takur, Emre Şentürk, Eren Lokman (Co-advisor: Dr. Esra Ağca) – *Second Best Senior Design project*
15. Asir Plast Mrp System, Volga Hazal Kopan, Habibe Aslankaya – *Third Best Senior Design project*

- **SPRING 2019**

16. İmder Production Manager, Ceren Meyvacioğlu, Gizem Nur Baş, İrem Kalafat, Nur Gamze Geyik - *Best Senior Design project*
17. Stock Level Optimization of Johnson&Johnson Medical, Alina Kasanova, Damla Kök, Selin Akyüz

- **SPRING 2018**

18. The Auditor Assignment of Turkish Airlines: The Airline Inspector, Berkant Tapan, Ecem Karakoç, İmran Yıldız, Nilüfer Savaş - *Best Senior Design project*
19. A Decision Support System for the Portfolio Optimization of Cryptoinvestments, Ali Kök, Furkan Barut, Mert Yağlı, Seden Karadirek - *third Best Senior Design project*

- **SPRING 2017**

20. A Decision Support System for Allocating Advertisement Budget to Online and Offline Channels, Zeynep Sarı, Tuğba Güvercinoğlu - *third Best Senior Design project*
21. Performance Improvement and No-Frost Assembly Line Balancing for B/S/H, Sadife Tarih, Özgür Parlak - *third Best Senior Design project*

- **SPRING 2016**

22. A Decision Support System for the Sealed Bid and Open Tender Auctions, Selen Eşli, Sena Bingül, Safiye Şeyma Kaya- *third Best Senior Design project*
23. Elvan Food MRP System Development, Çağla Kaftancıoğlu, Dilay Kaya, Füsün Tayan, Hatice Alataş- *Best Senior Design project*
24. A Decision Support System for the Portfolio Management of the Investment Companies : “Portfolio Manager”, Büşra Nur Uzunoğlu, Funda Aksoy, Gokhan Kılıcı, Şeyma Karaca

- **SPRING 2015**

25. A Decision Support System for Revenue management of Aircargo companies, Merve Tok, İlkay Sezin Günaydın, İpek İpekoğlu- *second Best Senior Design project*
26. Changeover time minimizing scheduling for Univeler production lines, Ayşe Keleş, Didem Sert, Pelin duran, Melike Genç
27. Scheduling and sequencing for textile painting shops , Hande Tanık, Cemil Yağmuroğlu, Selen Kuruç
28. Space utilization and warehouse design for Tofaş Plant, Damla Öncü, Elif Tekin–*Best project*

- **SPRING 2014**

29. A Decision Support System for Material Requirement Planning for Lock Manufacturing , Sebiha Dilan Aydın, Emine Merve Arık, Zeliha Ceren Dumlupınar- *Best project*
30. Kontal Elektronik Material Requirement Planning Application, Burak Altıntaş, Erdi Eryılmaz, Gülşah Kaya Oğuz-*Best project*
31. A Decision Support System for Pharmacy Shift Problem: Acıbadem Case, İlker Dağlı, Arif Anıl Ös, Serhat Yüksel, Gökhan Muhassıoğlu
32. Workforce Planning for Siemens, Gizem Sevim Sert, Bahadır Konuk, Gökçe Arıkan

- **SPRING 2013**

33. A Decision support system for advertisement management of companies, Ayşenur Gündüz Mert Başar Ali Burak Tuğrul-*Best project*
34. A Decision Support System for Investment Portfolio Management, Cansu Mutlu Doga Karacallık Koray Ozdemir
35. Lot Sizing and an Application in Pasabahca plant, Oyku Mutlu Esra Kaftancıoğlu Ecem Albayrak Gozde Turkoglu

- **SPRING 2012**

36. Revenue management for airline companies, Büşra Ertekin, Mehmet Gülbudak, Nihan Hanoglu

37. A Decision Framework for Natural Gas Commitment in Industrial Organizations, T. Deniz, A. Tunbar, B. Sezer
 38. Option Pricing in Turkish Power Market Using Black and Scholes Model , N. Karaca, D. Bayraktaroglu, M. Can, T. Karaaslan
 39. FurERP S&OSS Sales and Order Sub system at Katmancılar, Arzu Önal
 40. Reliability Analysis of a Switchgear in Schneider Electric Company, Sevda Üstündağ, Merve Dinç, Sedat Akyol
- **SPRING 2011**
41. Evaluation of the Day-Ahead Bidding Process in Turkish Power Market, Alkan Han, Beyza Kocabiyik, Şeyma Gültekin- *Best project*
 42. Lot Sizing for Coal Plants, Simge Kaplan, Burcu İnci Balgün, Çağla Darı
 43. Long-Term Economic Evaluation of Solar Power Investments, Turgay Kayaer, Emir Has, Yağmur Kasar

CURRICULUM & PROGRAM DEVELOPMENT:

Department of Industrial Engineering ABET Accreditation Program Director: The learning outcomes and objectives for the core courses and elective courses are defined, ECTS credits and ABET conditions were applied to the department, Mission-Vision statements were revised, a whole 400 pages report was prepared and submitted to local ABET office for the evaluation.

Department of Industrial Engineering Ph.D. Curriculum development: Developed competencies for the doctoral students, core values, core courses and conditions, and developed the objectives and research areas in IE PhD program.

Master of Industrial Engineering Non-thesis option degree program: In addition to MSc with thesis option, a non-thesis option for graduate students is designed and the conditions and objectives are defined.

Department of Industrial Engineering Summer Schools for Highschool Students: Curriculum development for high school students to teach basic concepts in Industrial Engineering

PROFESSIONAL SERVICE

Technical committee member, Global Joint Conference on Industrial Engineering and Its Application Areas, 12-15 August, 2025, İstanbul, Turkey

Technical committee member, (EEET 2025) 2025 8th International Conference on Electronics and Electrical Engineering Technology , 5-7 December, 2025, Chiba, Japan

Technical committee member, 2025 Graduate Student Conference on Energy and Sustainable Development, November, 2025, İstanbul, Turkey

Technical committee member, 9th International Conference on Electrical and Electronics Engineering, September 24-25, 2025, İstanbul, Turkey

Publication Chair, The International Conference on European Energy Markets (EEM), June, 2024, İstanbul, Turkey

Technical committee member, 2024 Graduate Student Conference on Energy and Sustainable Development, December, 2024, İstanbul, Turkey

Scientific committee member, 43. Yöneylem Araştırması ve Endüstri Mühendisliği (YA/EM) Ulusal Kongresi, November, 2024, Trabzon, Türkiye

Technical committee member, International Conference On Industrial And Manufacturing, 2023, Las vegas, USA

Technical committee member, 5th International Conference on Electrical Engineering and Control Technologies (CEEECT 2023), December, 2023, Chengdu, China

Technical committee member, X. Global Conference on Engineering and Technology Management, August, 2023, İstanbul, Turkey

Technical committee member, 2023 Graduate Student Conference on Energy and Sustainable Development, October, 2023, İstanbul, Turkey

Scientific committee member, 42. Yöneylem Araştırması ve Endüstri Mühendisliği (YA/EM) Ulusal Kongresi, November, 2023, Gaziantep, Türkiye

Scientific committee member, 41. Yöneylem Araştırması ve Endüstri Mühendisliği (YA/EM) Ulusal Kongresi, October, 2022, Denizli, Türkiye

Technical committee member, 2022 4th International Conference on Electrical Engineering and Control Technologies (CEEECT 2022), December, 2022, Shangai, China

Committee member, Hybrid IX. Global Conference on Engineering and Technology Management, October, 2022, İstanbul, Turkey

Scientific committee member, 12th Annual International Conference on Industrial Engineering and Operations Management (IEOM 2012), March, 2022, İstanbul, Turkey

Technical committee member, 2022 Graduate Student Conference on Energy and Sustainable Development, October, 2022, İstanbul, Turkey

Technical committee member, 9th International Conference on Electrical and Electronics Engineering, February, 2022, Alanya, Turkey

Technical committee member, 2021 International Symposium on Electrical, Electronics and Information Engineering, February, 2021, Seoul, Korea

Technical committee member, 2021 International Conference on Artificial Intelligence and Blockchain Technology, December, 2021, Beijing, China

Technical committee member, 2021 International Conference on Haptics and Virtual Reality, December, 2021, Budapest, Hungary

Technical committee member, 8th International Conference on Electrical and Electronics Engineering, April 9, 2021, Turkey

Conference chair- Technical Committee member, 2021 Graduate Student Conference on Energy and Sustainable Development, October, 2021, İstanbul, Turkey

Technical committee member, International Conference on Information System and Network Security, December 26-28 , 2020, Shenzhen, China

Technical committee member, 7th International Conference on Electrical and Electronics Engineering, April 14-16, 2020, Antalya, Turkey

Technical committee member, International Conference on Electronics, Communications and Information Technology (CECIT 2020), December 26-28 , 2020, Shenzhen, China

Program committee member, 4th International Conference on Energy Science and Electrical Engineering(ICESEE 2020), 13-15, September, 2020, Prague, Czech Republic

Scientific committee member, Global Joint Conference on Industrial Engineering and Its Application Areas, 14-15, August, 2020, İstanbul, Turkey

Program committee member, 3rd International Conference on Energy Science and Electrical Engineering(ICESEE 2019), 25-27, September, 2019, Amsterdam, Netherlands

Technical committee member, 39. Operations Research / Industrial Engineering National Congress (YAEM), June 12-14, 2019, Ankara, Turkey

Technical Committee member, 2019 Graduate Student Conference on Energy and Sustainable Development, May 3, 2019, İstanbul, Turkey

Technical committee member, International Symposium on Electrical, Electronics and Information Engineering (ISEEIE 2018), December 13-15 , 2018, Wellington, New Zealand

Technical committee member, 2018 the 2nd International Conference on Sustainable Energy Engineering (ICSEE 2018), June 15-17 , 2018, Sydney, Australia

Program committee member, 2.International Conference on Energy Security and Geopolitics in the Eastern Mediterranean (ENSGEM 2017), 16-18, November, 2017, İstanbul, Turkey

Technical committee member, 2017 International Conference on Energy Science and Electrical Engineering (ICESSE 2017), Oct.20-22, 2017, Budapest, HUNGARY

Technical committee member, 5th International Conference on Electrical and Electronics Engineering, May 3-5, 2018, İstanbul, Turkey

Technical Committee Chairman, 2018 Graduate Student Conference on Energy and Sustainable Development, May 4, 2018, İstanbul, Turkey

Program committee member, 2017 International Conference on Green Energy (ICOGE 2017) , 23-26 July, 2017, Singapore

Technical committee member, 2017 6th International Conference on Petroleum Industry and Energy (ICPIE 2017), June 12-13 , 2017, Madrid, Spain

Technical committee member, 2nd International Conference on Renewable Energy and Conservation (ICREC 2017), June 12-14, 2017, Perth, Australia.

Organizing committee member, 3rd International Conference and Exhibition on Industrial Engineering, November 14-15, 2016, Dubai.

Technical committee member, 4th International Conference on Electrical and Electronics Engineering, April 8-10, 2017, Gazi University, Ankara, Turkey

Program committee member, 2nd Global conference on Engineering and Technology Management GCETM 2015, 4-9 September, 2015, Chicago, USA

Technical committee member, 5th International Conference On Traffic and Logistic Engineering, 25-26 April, 2016, Dubai, UAE

Program committee member, III. Global Conference On Engineering and Technology Management, June 14-15, 2016, İstanbul, Türkiye

Technical committee member, IEEE International Conference On Intelligent Transportation Engineering (ICITE 2016), August 20-22, 2016, Singapore

Technical committee member, 2015 4th International Conference on Computer Engineering and Bioinformatics (ICCEB) April 6-7, 2015, Orlando, USA

Technical committee member, 2015 4th International Conference on Traffic and Logistic Engineering (ICTLE 2015) April 6-7, 2015, Orlando, USA

Program committee member, The 5th Multinational Energy and Value Conference, May 7-9, 2015, İstanbul, Turkey

Program committee member, The 2nd Global Conference on Engineering and Technology Management (GCETM 2015), September 4-5, 2015, Chicago, Illinois, USA

Program Chair & Technical committee member, 2014 3th International Conference on Traffic and Logistic Engineering (ICTLE 2014) April 21-23, 2014, Antalya, Turkiye

CERTIFICATES & TRAININGS ATTENDED

1. Cyber Security Training for Critical Cyber Assets, AEP, June 8, 2009, AEP, Columbus, OH
2. Performance Coaching Phase 1- Planning, AEP, June 3, 2009, AEP, Columbus, OH
3. VBA Programming: Automate Your Work, May 19, 2009, AEP, Columbus, OH
4. Security Awareness Training, May 18, 2009, AEP, Columbus, OH
5. Barge Unloading, May 6, 2009, AEP, Columbus, OH
6. Commercial Operations, April 30, 2009, AEP, Columbus, OH
7. Operating Reserves, February 28, 2009, AEP, Columbus, OH
8. FERC Standards of Conduct, January 8, 2009, AEP, Columbus, OH
9. Antitrust: Overview, November 24, 2008, AEP, Columbus, OH
10. Recognizing Conflicts of Interest, November 24, 2008, AEP, Columbus, OH
11. Consent Decree and Emissions, November 20, 2008, AEP, Columbus, OH
12. PJM: Beyond the Basics, November 12, 2008, AEP, Columbus, OH
13. Wind Energy, November 5, 2008, AEP, Columbus, OH