

Somaye Ghandi Bidgoli Assistant Professor

College: Faculty of Engineering

Department: Industrial Engineering

Education						
Degree	Graduated in	Major	University			
BSc	2005	Industrial Engineering (minor: Industrial Technology)	Isfahan University of Technology (IUT)			
MSc	2007	Industrial Engineering	University of Tehran (UT)			
Doctoral	2015	Industrial Engineering	Tarbiat Modares University (TMU)			

Employment Information							
Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade			
Industrial Engineering, Faculty of Engineering, University of Kashan, Kashan, Ravand Blvd, Iran	Assistant Professor	On Contract	Full Time	6			

# Work Experience

Electric goods company, Natanz.Planning and project control Undertaking, Planning Deputy, Feb. 2008 – Jun. 2010

# Awards

Ranked 1st among the Ph.D. graduates of the Industrial Engineering Department, Tarbiat Modares University, 2015

Ranked 3st among the all applicants at the Iranian Ph.D. University Entrance Exam (Concourse), September 2011.

Member of exceptional talents at Isfahan University of Technology in undergraduate degree

Admission at the master's degree in Isfahan University of Technology in Industrial Engineering Through the quota of outstanding students

Evaluation of the PhD dissertation with a high degree (score 19.7 / 20)

Evaluation of the Master's Thesis with a high degree (score 19.5 / 20)

## Subjects Taught

- -Production planning
- -Operations Sequencing Theory
- -Principles of simulation
- -Engineering Economics
- -Manufacturing Methods
- -Statistical quality control
- -Project Control
- -Operation Management
- -Principles of Management and the Organization theory

## **Executions And Scientific Activities**

Artificial Intelligence and Expert Systems Optimization metaheuristic algorithms Sequencing and Scheduling Operations Research Simulation and its applications Robotics and Robot Motion Planning

### **Course Topics**

- -Production planning
- -Operations Sequencing Theory
- -Principles of simulation
- -Engineering Economics
- -Manufacturing Methods
- -Statistical quality control
- -Project Control

-Operation Management

-Principles of Management and the Organization theory

#### Papers in Conferences

1. Mehdi Pirzal , Somay] Ghandi،Scheduling of industrial valve repair operations in the mechanical repair workshop of Mashal Pouya Espadana Company،۱۰th International Conference on Industrial and Systems Engineering،۱ - ۱۸ ۹۹ ۲۰۲۴. مشهد،

2. Omid Ghafari, Somay] Ghandi،Mathematical modeling and solution of flexible open shop scheduling problem considering reverse flows] sequence-dependent setup time and job release time،۱۹th Iranian International Industrial Engineering Conference،۱ - ۱۵ ۵۵ ۲۰۲۴.

3. haniyeh jebeli, Somay⊡ Ghandi،Designing a business intelligence dashboard to analyze the performance of Kowsar Forghani's store،۱۹th Iranian International Industrial Engineering Conference،۱ - ۱۵ ∘۵ ۲۰۲۶ .

4. Fateme Heydar Zaman Abadi , Somay□ Ghandi.Solving The Single Machine Scheduling Problem with Sequence-dependent Setup Time, Precedence Delays and the Limitation of Access to Machines.۹th International Conference on Industrial and Systems Engineering.۲۰۳۰۹ ۱۲.

5. Fateme Ajalluian , Somay Ghandi، Determining the optimal stock portfolio using the knapsack model considering risk and stock classification، ۹th International Conference on Industrial and Systems Engineering، ۱ - ۱۲ ۹۰ ۲۰۲۳، مشهد، ۳۲۰ ۲۰

6. Omid Ghafari , Somay□ Ghandi،Mathematical modeling and solving of flexible open shop scheduling problem considering reverse flows, sequence-dependent setup times and task release times،۱۹th Iranian International Industrial Engineering Conference،۲۰۲۴ օ۵ ۱۵.

7. Haniyeh Gebelli , Somay□ Ghandi،Designing a business intelligence dashboard to analyze the performance of Kosar Forghani store،۱۹th Iranian International Industrial Engineering Conference،۲۰۲۴ ∘۵ ۱۵.

8. Mohammad Hossein Abdali و Somay□ Ghandi،Investigating the effect of packaging factors of beverage products on the choice of consumers and the amount of sales (case study: Tehran and Isfahan cities)، Ath International Conference on Logistics and Supply Chain، רש אין אין אין.

9. Somay Ghandi <sub>9</sub> Fateme Damyar،Solving the problem of multi-period and multi-product hybrid manufacturing/remanufacturing planning with demand substitution،۱۸th Iranian International Industrial Engineering Conference،۲۰۲۱ ۱۱ ۱۲.

10. Somay Ghandi و Marzie Naghdi،Solving the problem of cellular manufacturing planning with consideration of the amount of energy consumption using the Particle Swarm Optimization (PSO) algorithm،۱۷th Iranian International Industrial Engineering Conference،۲۰۷۱ ۰۲ ۰۳.

11. Somay Ghandi و Mahboobe Haghshenas،Simulation analysis of service desks of the Health Insurance organization- Case study: Isfahan province،۱۶th Iranian International Industrial Engineering Conference،۲۰۲۰ م) ۲۲.

12. Somay Ghandi <sub>9</sub> Farzane Karimi، Mixed model Two-sided Assembly Line Balancing in case of stochastic task times using Simulation-Based Optimization (Case Study: Beh Afarinan Datis Tiva Company)، 19th Iranian International Industrial Engineering Conference، ۲۰۲۰ ۱۲۲.

13. Mehdi Ojaghloo <sub>9</sub> Somay Ghandi، A fuzzy goal programming method for optimizing the time-cost balance، Proceedings of the Δth International Project Management Conference، Yoo 9 10 YF.

14. Masome Mahdieh , Mehdi Ojaghloo , Somay Ghandi , A memetic algorithm for the resourceconstrained project scheduling problem ,Proceedings of the 5th International Project Management Conference ,2009 10 26.

#### Papers in Journals

1. Fateme Mohaymeni و Somay Ghandi،Concurrent scheduling and lot sizing in a flexible flow shop environment considering intermediate and public buffers،Modern Researches in Decision Making،مجلد،۸٬۱۵۴ ۱۱۴،۲۰۲

2. Somay Ghandi و Reihane Bonroodi،Mathematical modeling and solving the Flexible Flow Shop scheduling problem with reverse flows and the limitation of access to machines،Journal of Industrial Engineering Research in Production Systems،۲۰ ۰۲ ۱٬۲۰۲۳ ۲۰۰۲ ۲۰۰۲ ۲۰۰۲ ۲۰۰۲ ۲۰۰۰ ISC.

**3**. Somay Ghandi ,& Ellips Masehian, Fitness landscape analysis of the simple assembly line balancing problem type 1, International Journal of Industrial Engineering Computations, Vol. 14, pp. 589, 2023 09 12, JCR.

4. Pariya Khaksari و Somay[] Ghandi،Mathematical Modeling and Solving the no-Wait Flow Shop Scheduling Problem Considering the Release Times and Preventive Maintenance Activities،Journal of Industrial Engineering Research in Production Systems،۲۰۳۴ ۱.

5. Somay Ghandi و Marzie Amini Rarani،Multi Agent Flow Shop Scheduling Model with Deteriorating Jobs and Sequence-Dependent Setup Times Using Multi Objective Particle Swarm Optimization (MOPSO) Algorithm،Journal of Industrial Engineering Research in Production Systems،۲۰۶.

6. Somay Ghandi و Marzie Karimi، A Simulation-Based Optimization Approach for Mixed model Twosided Assembly Line Balancing with stochastic task times (Case Study: Beh Afarinan Datis Tiva Company)، Journal of Industrial Engineering Research in Production Systems، ۲۰۲۰ ۰۶ ۰۵.

7. Reza Tavakkoli Moghaddam , Fariborz Jolai , Somay Ghandi, (Solving the Parallel Machine Weighted Earliness and Tardiness Problem with a Multi-objective Scatter Search algorithm (in Persian, The Technical Department of the University of Tehran Journal, Yoo 9 of Yo.

8. Somay Ghandi, Ellips Masehian, An efficient solution to the simple assembly line balancing problem type 1 using iterated local search, Engineering Applications of Artificial Intelligence, 2025 02 01.
9. Somay Ghandi, & Hadi Mokhtari, Comparison of Various Machine Learning Methods for Automatic Control and Guidance of Mobile Robot, Journal of Artificial Intelligence and Data Mining (JAIDM), 2022 03 13.

**10**. Somay Ghandi ,& Nafise Ghazavi,Landscape Analysis and a Hybrid Iterated Local Search (HILS) for Solving the Simple Assembly Line Balancing Problem type 2 (SALBP2),Journal of Quality Engineering and Production Optimization,2021 11 29.

11. Ellips Masehian ,& Somay Ghandi, Assembly sequence and path planning for monotone and nonmonotone assemblies with rigid and flexible parts, Robotics and Computer-Integrated Manufacturing, 2021 04 19.

12. Sahar Saeedi, Reihaneh Khorsand, Somay Ghandi, Mohammadreza Ramezanpour, Improved manyobjective particle swarm optimization algorithm for scientific workflow scheduling in cloud computing, Computers & Industrial Engineering, 2020 07 12.

**13.** Ellips Masehian, Somay Ghandi, ASPPR: A new Assembly Sequence and Path Planner/ Replanner for monotone and nonmonotone assembly planning, Computer-Aided Design, 2020 02 22.

**14**. Somay□ Ghandi ,& Ellips Masehian,Review and Taxonomies of Assembly and Disassembly Path Planning Problems and Approaches,Computer Aided Design (CAD) – ISI -,2015 10 01.

**15.** Somay Ghandi ,& Ellips Masehian, Assembly Sequence Planning of Rigid and Flexible Parts, Journal of Manufacturing Systems – ISI -, 2015 07 01.

**16**. Somay Ghandi ,& Ellips Masehian, A Breakout Local Search (BLS) Method for Solving the Assembly Sequence Planning Problem, Engineering Applications of Artificial Intelligence (EAAI)- ISI-,2014 12 16.