



Amirkabir University of Technology  
(Tehran Polytechnic)



**ALI HATAM**

Assistant Professor  
Department of Mathematics and Computer  
Science  
Applied Mathematics

Email:  
[alihatam@aut.ac.ir](mailto:alihatam@aut.ac.ir)

Phone:

h-index (Scopus):

**3**

Citations (Scopus):

**23**

### Supervised MSc Theses

#	Thesis title	By	Date
1	Application of blockchains Technology in Stock trade in Stock Exchange	Pouya Garshasebi & Ali Hatam	March 2021
2	On the codes based on connecting SC-LDPC chains	Alireza Eshraghi Dehaghani & Ali Hatam	February 2021
3	Optimal Control and Marker & Cell Method (MAC) in Navier-Stokes Equations	Amir Hossein Ahmadi & Ali Hatam	June 2016
4	Numerical and Heuristic Methods for Solving Zero-Sum Differential Game Problems	Saman Fakharzadeh Kermani & Ali Hatam	February 2016
5	A LEGENDRE-GALERKIN SPECTRAL METHODS FOR OPTIMAL CONTROL PROBLEMS GOVERNED BY STOKES EQUATIONS	Mohammad Amin Ghiasi & Ali Hatam	February 2015
6	numerical solution of Burgers equation by using B-spline	Nasrin Samadyar & Ali Hatam	October 2014
7	Connectedness of Efficient Solutions in Multiple Objective Combinatorial Optimization	Samaneh Mohamadi Nasab & Ali Hatam	October 2013
8	optimizing the rank position of the dmu as secondary goal in DEA cross evaluation	Mina Mirzaeifar & Ali Hatam	October 2013
9	Improving the Efficiency of Epsilon-Dominance Based Grids	Hossein Baqerzadeh & Ali Hatam	September 2013



10	Computing the Pareto frontier of a bi-objective bi-level linear problem using a multiobjective mixed-integer programming algorithm	Vahid Borji & Ali Hatam	September 2013
11	Global formulation for interactive multiobjective optimization	Azam Lotfi & Ali Hatam	October 2012
12	A two phase method for multi-objective integer programming and its application to the assignment problem with three objectives	Mehraneh Gholami & Ali Hatam	October 2012
13	A mixed integer programming approach to a class timetabling problem	Fatemeh Habibi & Ali Hatam	September 2010
14	Using linear programming to decode binary linear code	Mahdi Beiranvand & Ali Hatam	June 2010
15	Linear programming decoding of non binary codes	Aliakbar Mirzaee & Ali Hatam	June 2010
16	An investigation on the pairs of controllable matrices where have different characteristics and minimal	Sahar Alsadat Babaie Kashani & Ali Hatam	January 2010







## Journal Papers

### Portal Records

- 1 Saeed Kazem, Ali Hatam, "A modification on strictly positive definite RBF-DQ method based on matrix decomposition", ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, January 2017 Vol. 76, Num. 0, Page 90-98, January 2017,
- 2 Edmund A Chadwick, Ali Hatam, Saeed Kazem, "Exponential function method for solving nonlinear ordinary differential equations with constant coefficients on a semi-infinite domain", PROCEEDINGS OF THE INDIAN ACADEMY OF SCIENCES-MATHEMATICAL SCIENCES, February 2016 Vol. 126, Num. 1, Page 1-19, February 2016,
- 3 Saeed Kazem, Edmund A Chadwick, Ali Hatam, Mehdi Dehghan, "Using generating functions to convert an implicit (3,3) finite difference method to an explicit form on diffusion equation with different boundary conditions", NUMERICAL ALGORITHMS, September 2015 Vol. 70, Num. 1, Page 1-28, September 2015,
- 4 Edmund Chadwick, Ali Hatam, "Slender body expansions in potential theory along a finite straight line, Edmund Chadwick(1) and Ali Hatam(2), Z. Angew. Math. Phys. 61 (2010), 493–508 c 2010 Birkhäuser / Springer Basel AG, 0044-2275/10/030493-16", Zeitschrift für Angewandte Mathematik und Physik (ZAMP), March 2010 Vol. 61, Num. 3, Page 493-508, March 2010,
- 5 Edmund Chadwick, Ali Hatam, "The Physical Interpretation of The Lift Discrepancy in Lanchester -Prandtl Lifting Wing Theory For Euler Flow ,Leading to The Proposal of an Alternative Model in Oseen Flow", , July 2007 Vol. , Num. 463, Page 0-0, July 2007,

## Taught Courses

#	Course title	Description	Headlines	Date
1	Numerical Analysis	Developing the basic understanding of numerical algorithms and skills to implement algorithms to solve mathematical problems on the computer, emphasizing on some properties such as stability, convergence and applicability of the algorithms		Spring 2022
2	Engineering Mathematics	Applying Fourier series and integrals for solving PDEs, specially Laplace, wave and heat equations with different boundary and initial conditions and Linear Discrete systems		Spring 2022

3	Engineering Mathematics	Applying Fourier series and integrals for solving PDEs, specially Laplace, wave and heat equations with different boundary and initial conditions and Linear Discrete systems		Fall 2021
4	Numerical Analysis	Developing the basic understanding of numerical algorithms and skills to implement algorithms to solve mathematical problems on the computer, emphasizing on some properties such as stability, convergence and applicability of the algorithms		Fall 2021
5	Advanced Engineering Mathematics	Learning the mathematical concepts required in activities related to mineral processing		Fall 2021
6	Numerical Analysis	Developing the basic understanding of numerical algorithms and skills to implement algorithms to solve mathematical problems on the computer, emphasizing on some properties such as stability, convergence and applicability of the algorithms		Spring 2021
7	Engineering Mathematics	Applying Fourier series and integrals for solving PDEs, specially Laplace, wave and heat equations with different boundary and initial conditions and Linear Discrete systems		Spring 2021
8	Numerical Analysis	Developing the basic understanding of numerical algorithms and skills to implement algorithms to solve mathematical problems on the computer, emphasizing on some properties such as stability, convergence and applicability of the algorithms		Spring 2021