

CURRICULUM VITAE

Mahdi Gerdooei

Associate Professor of Mechanical Engineering (Ph.D.)

A. Personal Data

- Address: Faculty of Mechanical Engineering, Shahrood University of Technology, Shahrood, Iran
- Email: gerdooei@shahroodut.ac.ir
- WhatsApp: +98-912-231-9682
- Website: <http://www.shahroodut.ac.ir/en/as/index.php?id=S386>
- ORCID ID: 0000-0003-4937-5981
- Google scholar: <https://scholar.google.com/citations?hl=en&user=eW7FSgkAAAAJ>
- LinkedIn: <https://www.linkedin.com/in/mahdi-gerdooei-18142b4b>



B. Education

- **Ph.D, Mechanical Engineering** (Amirkabir University of Technology, Iran, 2009)
Dissertation: Theoretical and experimental investigation of strain rate effects on sheet metals formability
- **M.Sc, Mechanical Engineering** (Amirkabir University of Technology, Iran, 2003)
Thesis: Preform die design using backward deformation method in multi-stages hot forging process
- **B.Sc, Mechanical Engineering** (Amirkabir University of Technology, Iran, 2001)

C. Taught Courses

- Strength of Materials
- CAD/CAM/CAE
- Theory of plasticity
- Computer Numerical Control (CNC)
- Forging Die Design
- Metal Forming Analysis

D. Research Interests

- Design and Fabrication of Springs: Recent Materials and Developments
- Advanced bulk and sheet metal forming processes
- Biomaterial manufacturing interest in dental implants
- Failure and fatigue analysis of structures using macro- and micromechanical methods

E. Professional Experience

Consultant to CEO, Fanarloom Iran Company (Coil spring design and manufacturing Co.)

March 2024–Present

- Vehicle spring design and fatigue analysis
- Process planning for new product development

Dean, Faculty of Mechanical Engineering, Shahrood University of Technology

Dec. 2019–Sep. 2023

Founder and Director, Laboratory for Mechanics of Materials and Metal Forming, Shahrood University of Technology

Dec. 2009–Present

- Established to provide engineering services to international scientific and industrial centers
- Link: <https://www.researchgate.net/lab/Shahrood-University-of-Technology-Metal-Forming-Lab-Mahdi-Gerdooei>

Associate Professor, Shahrood University of Technology

Dec. 2009–Present

- Courses: Statics, Strength of Materials, CAD/CAM/CAE, Metal Forming Analysis, Plasticity
- Supervised theses in CAD/CAM and metal forming

Visiting Lecturer, Semnan University

May 2009–Present

- Supervised theses in metal forming processes

Lecturer, Shahid Rajaee Teacher Training University

Jan. 2007–Jul. 2007

- Course: Forging Die Design

Teaching Assistant, Amirkabir University of Technology

Sep. 2002–2009

- Developed metal forming lab and explosive forming processes

Design Engineer, Mehdi Tools Company, Damghan

Jul. 2000–2008

- Designed forging dies, jigs, fixtures, and CNC programs

Instructor, Fanar Lool Iran, Damghan

Jun. 2010–Jun. 2014

- Course: Computer-Aided Analysis using ABAQUS

F. Technical Skills

- Experimental and numerical stress strain analysis of structures
- Programming languages: Python, Fortran, Matlab
- CAD/CAM Packages: MDT, CATIA, SolidWorks, MasterCam, Delcam
- FEM Software: ABAQUS, FEMFAT, FESAFE, ANSYS/ AUTODYN, Deform 3D, MARC/Mentat, MARC/Autoforge, MSC/Super forge.

G. Membership

- Society of Manufacturing Engineering of Iran
- Iranian Society of Mechanical Engineers

H. Publication

- Google Scholar: <https://scholar.google.com/citations?user=eW7FSgkAAAAJ&hl=en>
- ORCID: <https://orcid.org/0000-0003-4937-5981>
- ResearchGate: <https://www.researchgate.net/profile/Mahdi-Gerdooei>
- Shahrood University: <https://shahroodut.ac.ir/en/as/?id=S386#publications>

I. Thesis

- Shahrood University: <https://shahroodut.ac.ir/en/as/index.php?id=S386#thesis>
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