

## PERSONAL INFORMATION

## Alma Žiga



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 [www.mf.unze.ba](http://www.mf.unze.ba)

Sex Female | Date of birth 4/9/1973 | Nationality Bosnian-Herzegovinian

## WORK EXPERIENCE

26/10/2016–present

**Professor**

Associate Professor in Mechanics of Materials, 2021 - now

Assistant Professor in Mechanics of Materials, 2016 - 2021

University of Zenica, Faculty of Mechanical Engineering (Bosnia and Herzegovina)

- teaching (lectures and exercises)
- educational, research and professional projects
- consultancy work
- exam organization
- supervising diploma works and master thesis
- administrative duties
- chairman of the Faculty scientific council (2020 - 2024)

2001-2016

**Teaching assistant**

Senior teaching assistant in Engineering Mechanics (2007 - 2016)

Teaching assistant in Engineering Mechanics (2001 - 2007)

University of Zenica, Faculty of Mechanical Engineering (Bosnia and Herzegovina)

- teaching (exercises)
- educational, research and professional projects
- consultancy work
- assisting in exam organization
- administrative duties

2000-2001

**Apprentice mechanical engineer**

'UNIS Kovina' Visoko

- Production of steel structures, winter equipment, reservoirs, upgrades to vehicles, utility equipment

## EDUCATION AND TRAINING

2016

**PhD in Mechanical Engineering**

EQF level 8

University of Zenica, Faculty of Mechanical Engineering

PhD Thesis: "The influence of contact, variable stresses on the durability of cast steel support rollers on rotary kilns"

2006

**PhD in Mechanical Engineering**

EQF level 7

University of Zenica, Faculty of Mechanical Engineering

Master Thesis: "Foot design of an above-the-knee prosthesis with built-in hydraulic actuators in the ankle and knee"

1999 **Mechanical engineer**

EQF level 6

University of Zenica, Faculty of Mechanical Engineering

Manufacturing and design

Diploma work: Calculation of centrifugal pump parameters using the Fortran programming language and its connection with AutoCAD

## PERSONAL SKILLS

**Mother tongue(s)** Bosnian

**Other language(s)**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	B2	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

**Job-related skills**

- Excellent knowledge of engineering mechanics and its application in engineering design
- FEM analysis (ABAQUS, SolidWorks Simulation): stresses and strains, kinematic analysis
- CAD: 2D drawing (AutoCAD) and 3D modelling (SolidWorks)
- Application of mathematical software in engineering problems (Wolfram Mathematica)
- Basic knowledge of various mechanical engineering fields and application software

**Digital competence**

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Independent user	Basic user	Basic user

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

**Driving licence** B

## ADDITIONAL INFORMATION

**Research interest** Engineering mechanics, Design of mechanical STEM models, Plywood laser cutting, 3D printing

**Publications**

- 2 text-book
  - 5 journal papers and 22 conference papers
- (profiles on [orcid.org](#), [scholar.google.com](#), [researchgate.net](#))