

# Abu Zeeshan Bari

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Al-Madinah Al-Munawwarah, Saudi Arabia

## PROFESSIONAL SUMMARY

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I have been a university lecturer for the past 15 years at leading public sector universities in Pakistan, United Kingdom and in Saudi Arabia. I am a mechanical engineer with a doctorate in the field of Medical Rehabilitation. Through this diverse educational experience, I have taught a number of courses spanning Mechanical engineering, Biomedical engineering and Medical Rehabilitation Sciences during my career. I am an expert user of motion analysis lab equipment, and have worked in the gait laboratories in Pakistan as well as in the United Kingdom.

## WORK EXPERIENCE

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### Assistant Professor

Feb 2018 - Present

Taibah University, Al-Madinah Al-Munawwarah, Saudi Arabia

- Conducting research in the field of Rehabilitation.
- Teaching undergraduate Prosthetics & Orthotics (P&O) students the courses of Mechanics, Biomechanics, Material Science and Technology, Principles of Medical Rehabilitation, Ethics in Medical Practice, Gait Analysis, Engineering Drawing, Lower Limb Prosthetics and Upper limb & Spinal Orthoses
- Curriculum development and upgrade as per requirements of International Society of Prosthetics & Orthotics (ISPO).
- Propose and supervise undergraduate research projects.
- Planning and Coordination of Program Plan for the P&O department.
- Attending departmental and faculty meetings, conferences and seminars.
- Counselling students on academic matters.
- Serving on faculty and research committees.
- Mentoring of junior academic staffs in the P & O department.
- Weekly consultation at the P& O clinic at the Medical Rehabilitation Hospital, Madinah.

### Assistant Professor

Sep 2005 - Feb 2018

NED University of Engineering & Technology, Karachi, Pakistan • Karachi

- Preparing and delivering lectures for the courses of Engineering Mechanics, Mechanics of Materials, Fluid Mechanics, Heat Transfer, Engineering Drawing, Biomechanics and Rehabilitation Engineering.
- Conducting laboratory sessions, marking assignments, setting examination papers, developing curriculum and modifying course contents as required.
- Propose and supervise undergraduate and graduate research projects
- Counselling students on academic matters and guide them in solving their related issues.

## EDUCATION

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### PhD in Rehabilitation Sciences

Jan 2009 - Sep 2013

The University of Salford • Salford

My PhD research looks at developing efficient energy storage and return prosthesis. During this research, I developed two novel energy efficient design concepts for lower limb prosthesis.

Based on this research, we were able to secure an EPSRC (Engineering & Physical Sciences Research Council) grant of £0.7 m for the development of prototype prosthesis in collaboration with the Blatchford Group, U.K. During this period , I also served as a teaching assistant and frequently instructed for an undergraduate level course on “Introduction to Motion Analysis”.

**Master of Mechanical Engineering**

NED University of Engineering & Technology • Karachi

Jan 2003 - Jun 2006

**Bachelor of Mechanical Engineering**

NED University of Engineering & Technology • Karachi

Jan 1998 - Mar 2002

**SKILLS**

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- Research Skills
- Report and Paper Writing Skills
- Planning and Organization Skills
- Teaching and mentoring Skills
- Curriculum design, Teaching and student support Skills
- Ability to work in multi-disciplinary teams
- Adaptability to new work roles, responsibilities and environments
- Laboratory setup and quality management system skills
- Proficient user of MS Office suite
- Proficient user of MATLAB, Visual3D, and SPSS

**TEACHING & RESEARCH INTERESTES**

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**Teaching Interests**

- Biomechanics, Gait Analysis
- Rehabilitation Engineering Design
- Prosthetics and Orthotics
- Computational Methods in Rehabilitation Engineering
- Fluid Mechanics, Heat Transfer
- Engineering Mechanics, Mechanics of Materials
- Research Methodology

**Research Interests**

- Motion Analysis of Normal and Pathological Gait
- Design of Lower Limb Prosthetics and Orthotics
- Prosthetics and Orthotics Outcomes
- Computational Biomechanics

**RESEARCH & GRANTS**

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My research profile can be viewed at <https://orcid.org/0000-0001-6572-1376>