

## **General Workshop Information**

**Workshop Title:** Biomechanical Analysis in Orthopedics

**Workshop Type:** Specialized Workshop of ICBME 2026

**Organizer:** The 33rd National Conference and the 11th International Conference on Biomedical Engineering

**Instructor:** Dr. Azadeh Ghoochani, Faculty Member at the University of Isfahan

**Date:** November 19, 2026

**Duration:** 3 hours

**Format:** In-person

**Venue:** Isfahan University of Technology

### **Workshop Overview**

This workshop aims to introduce participants to the fundamental concepts and principles of biomechanical analysis in orthopedics. The workshop will focus on the application of biomechanical analysis methods to the evaluation of the musculoskeletal system and their role in orthopedic assessment, diagnosis, treatment, and design.

### **Topics and Course Outline**

- ❖ Introduction to the fundamentals of biomechanics and its applications in orthopedics
- ❖ Analysis of forces, moments, and mechanical stresses in the musculoskeletal system
- ❖ Introduction to biomechanical analysis methods for evaluating the structure and function of the human body
- ❖ Applications of biomechanical analysis in orthopedic injuries and disorders
- ❖ Role of biomechanics in the design and evaluation of orthopedic implants and medical devices
- ❖ Applications of biomechanical analysis in treatment evaluation and functional improvement
- ❖ Challenges and future perspectives in biomechanical analysis for orthopedics

### **Registration Fee**

**General:** 7,000,000 R

**Conference Participant:** 5,000,000 R