

Óbuda University Donát Bánki Faculty of Mechanical and Safety Engineering		Institute for Natural Sciences and Basic Subjects		
Subject name/code: OSH safety engineering / BTEMBE3BNF English language course 2026/2027 autumn semester		Credits: 4		
Mechatronics Engineering BSc programme				
Subject leader:	Dr. Szabó Gyula	Instructor:	dr. Lourdes Ruiz	
Prerequisites:	-			
Weekly hours:	Lecture: 1	Group seminar: 2	Lab: 0	Consultation: 0
Requirements:	examination			
Course description				
The aim of the course is to enable students to provide safe and non-hazardous working conditions for themselves and their subordinates as future responsible middle managers. They will be capable of addressing control, educational, and organizational tasks related to ensuring safe and healthy working environments. Students will be able to participate in the risk assessment of existing and planned workplaces and machinery, as well as in the development of accident prevention measures and interventions.				
Schedule				
Week	Topic			
1	Framework Directive. Tripartite consultation			
2	Risk assessment			
3	Workplace, temporary or mobile work sites			
4	Machinery safety and work tools			
5	Physical hazards and biological agents			
6	Personal protective equipment			
7	Workload, ergonomic risks			
8	Chemical agents and chemical safety			
9	Psychosocial risks and workplace health			
10	Sector specific and worker related provisions			
11	Occupational health and safety management			
12	Accident investigation			
13	General and individual assessment. Re-take test			
Requirements:				
Participation in classes: Compulsory (only 30% absence is accepted). To successfully complete this university course, students must fulfill the following requirements: Presentation: Each student is required to independently prepare on a chosen topic and deliver a presentation during the semester. The evaluation of the presentation will be based on three criteria of equal weight: content quality, formal quality, and presentation quality. The presentation must be delivered within the given time frame. If a presentation is missed, the student will be disqualified unless a makeup session is scheduled on the last available date. Examination: The examination consists of two parts. Firstly, students must complete a test consisting of 10 questions and achieve a minimum score of 50% to pass this part. Following a successful test, students must provide written or verbal responses to three questions. To aid in exam preparation, students will receive 30 orientation questions at the beginning of the semester.				

Students have the option to respond in writing to the provided questions and will be given 30 minutes for completion.

Recommended references:

1. Szabó Gyula: Practice of ergonomics, Obuda University
2. OSHWIKI.EU
3. Guide to application of the Machinery Directive 2006/42/EC
4. PPT presentations will be available on Moodle system.

28 May 2026

Dr. Szabó Gyula