

#### ANNEX 2

#### UNI-TEL e-course: Draft syllabus and questions concerning the material production process

Code of the topic M3-6	Name of the topic Best practices of virtual and remote labs: A global perspective and the Iranian experience	
Names of subject experts		Email
First name	Surname	
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## Learning objectives

- Objective 1: Learners will be introduced to the place of the concept of virtual lab and remote laboratory in the e-learning system.
- Objective 2: Learners will be introduced to the concept of virtual laboratory and remote laboratory.
- Objective 3: Learners will understand the importance of designing a virtual lab and distance lab in engineering education.
- Objective 4: Learners get an overview of the best examples of virtual labs and global remote labs.
- Objective 5: Learners should get acquainted with the sample design of virtual laboratories and distance laboratories in Iranian engineering education.
- Objective 6: Learners will recognize the factors on the effectiveness of remote labs in learning outcomes.
- Objective 7: By presenting an Iranian case study, learners understand students' perspectives on the quality of design and activity and their learning outcomes in virtual and distance labs.

## Content of the topic:

- The status of the virtual lab and remote laboratory concepts in the e-learning system
- The concepts of virtual laboratory and remote laboratory
- The importance of designing a virtual lab and distance lab in engineering education
- The best examples of virtual labs and global remote labs: A global perspective
- Design of virtual laboratories and distance laboratories in Iranian engineering education, Shiraz University
- Factors on the effectiveness of remote labs in learning outcomes
- Students' perspectives on the quality of design and activity and their learning outcomes in virtual and distance labs: an Iranian experience

# **Evaluation methods and criteria**

- Evaluation and assessment of learners' knowledge will be measured immediately after the end of the course with a gamification approach.
- The best experiences and lessons learned by the audience from designing remote and virtual laboratories will be shared.

### Questions at this point of the process?

Note: add the names of subject experts also in GoogleDrive: