

WP3 – Development of techniques for the implementation of the remote teaching and training process with the use of support tools

IO.7 – Development of methodology for conducting design classes

This task will be carried out within the package WP3 (Development of techniques for the implementation of the remote teaching and training process with the use of support tools). Within the framework of this task a methodology for conducting remote design classes will be defined. In this type of class in a traditional mode, students independently design road solutions, e.g., safe pedestrian crossings, permanent and temporary traffic organisation (during road works) and modernisation of dangerous sections of the road. Most of the projects are carried out with dedicated design tools such as AutoCAD. The developed methodology will present methods for the remote presentation of tools, including video presentations and video tutorials (i.e. step-by-step tutorials focused on learning by example, implemented in the form of video recordings, sometimes with elements of interactivity on the part of the user).

Methods of interaction between teacher and student to provide personalised support will be discussed. The possibilities of remote sharing of specialised software, including the use virtual machines and remote desktop sharing, will also be presented. Scenarios for the evaluation of student work will be presented, along with the option of adding comments remotely, including during the remote sessions. In addition, scenarios for remote group work on the project will be discussed, including tools enabling collaboration in the cloud.

Target groups:

Research and teaching staff from institutions involved in the project and ultimately other European institutions.

Innovative elements:

The development of a methodology for conducting remote design classes with the use of modern distance learning tools and techniques.

Expected impact:

The developed methodology will facilitate effective delivery of design classes in the remote mode both with and without the requirement of social distancing related to the epidemic threat. It can be applied in the teaching and training process throughout Europe.

Transferability potential:

The prepared methodology in the form of instructions and a developed handbook will be available on an online platform, for the use of academic teachers throughout Europe.

The division of work:

The work will be divided among all consortium participants and will include:

- defining objectives
- identifying problems and obstacles encountered in the course of remote design classes,
- selection of support tools, techniques and applications,
- development of evaluation scenarios,
- preparation of publications summarising the completed work.

The tasks leading to the production of the intellectual output:

The leading institution (CUT) will be responsible for supervising the development of the methodology. Consortium participants will cooperate in the development of these materials, supporting each other with their knowledge and experience.

Applied methodology:

Within this task a methodology will be gathered and developed for conducting remote design classes, along with a presentation of detailed didactic scenarios and instructions on the use of support tools, techniques and applications.