1. Information at the invitation of undergraduates for the internship program.

The Department of" Industrial transport "invites undergraduates to train under the educational program" Organization of transport, traffic and operation of transport". During the internship, undergraduates get acquainted with the material and technical base and scientific developments of the Department. The internship takes place at the base and branches of the Department. Undergraduates visit the station "Karaganda-Sorting" of the Karaganda branch of the road of JSC " NC "Kazakhstan Temir Zholy", cargo stations of the Karaganda loading and transport Department of the UD of JSC AMT "ArcelorMittal Temirtau". Pass a course of lectures on the subject of scientific and technical patent information and scientific and technical creativity.

2. Educational program «Organization of transportation, traffic and operation of transport».

7M11301 – «Organization of transportation, traffic and operation of transport»

3. The laboratory of the Department of "Industrial transport" is located at the branch in the Karaganda training center for railway transport workers (KUTSRZHT).
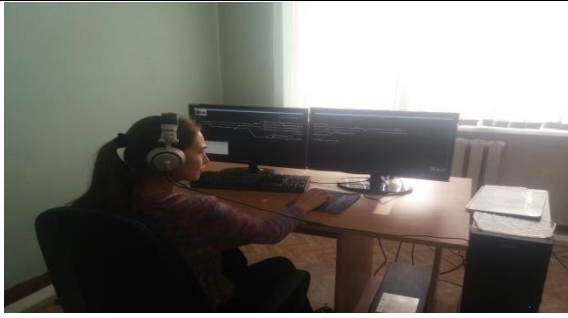
4. Photo lab.

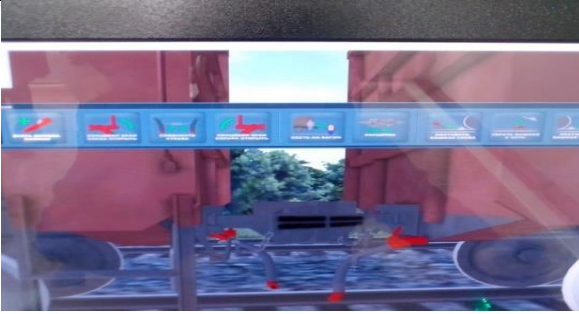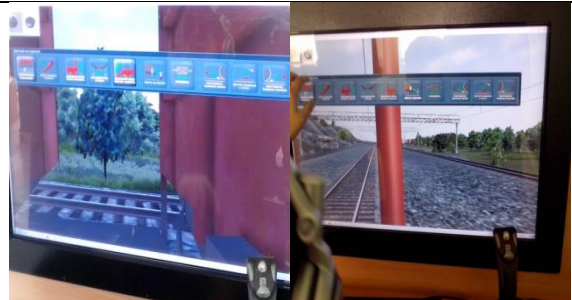|	
Classes in the gym	*Study of the transportation process on the current model* «ТОРФЕСТ-ПЕРСОНАЛ»

5. Photo of laboratory equipment

Automated workplace of the station attendant

Automated workplace of the car inspector

Automated workplace of the originator

Simulator of a shunting locomotive driver

6. List of laboratory equipment

In the laboratories of the branch of the Department "Industrial transport" classes are held at the Training complex "Torvest-Personnel". The complex includes automated workplaces:

- driver of a shunting locomotive;
- compiler's;

- inspection of railcars;
- station attendant.

7. Description of laboratories/research direction

The training complex "Torvest-Personnel" allows you to work out the interaction skills of the main participants of the transportation process both in normal mode and in case of various non-standard situations that arise in real life. The software and hardware organization of the complex makes it possible to replace some of the participants in the transportation process with intelligent computer models (for example, virtual trains) that simulate their activities.

Unlike video training systems, this complex uses digital graphics, so the world is simulated in real time and presented to the observer with real physical properties. This gives great advantages over traditional video trainers, in which the world is scrolled at different speeds, on pre-captured film.

The main advantage that digital graphics provide, in contrast to video recording, is the exclusion of linking the properties of physical objects to the speed of the locomotive (there are no twitches at low speed, the possibility of observing an oncoming train when parked on a nearby track, etc.). This makes it possible to simulate a significant number of different situations, their appearance is possible at any time and in any place in the virtual space.

The software allows you to connect additional options that expand the capabilities of the training complex (connection of additional locomotives, service stations, duty stations, etc.).