



# National Technical University "Kharkiv Polytechnic Institute"

department for  
Transport engineering industry



1892

Department of  
Electrical transport  
and Construction of Diesel locomotives





## specialities



### Electric transport

electric locomotives, electric trains,  
subway trains, the power supply systems



### Locomotives and locomotive economy

locomotives, diesel locomotives, carriages

### Qualification after graduation:

Bachelor of electricity, electrical and  
electromechanical

Master of electricity, electrical and  
electromechanical

Bachelor of railway transport

Master of railway transport





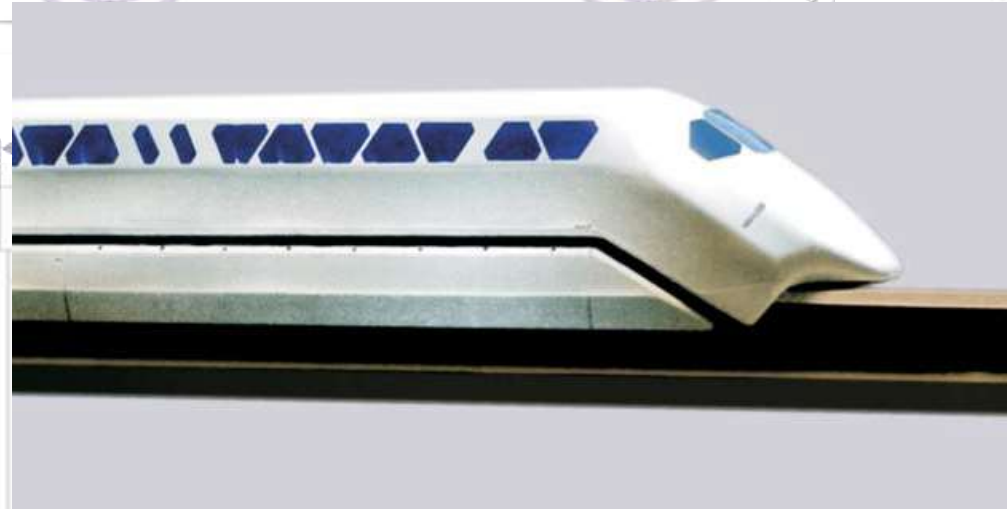
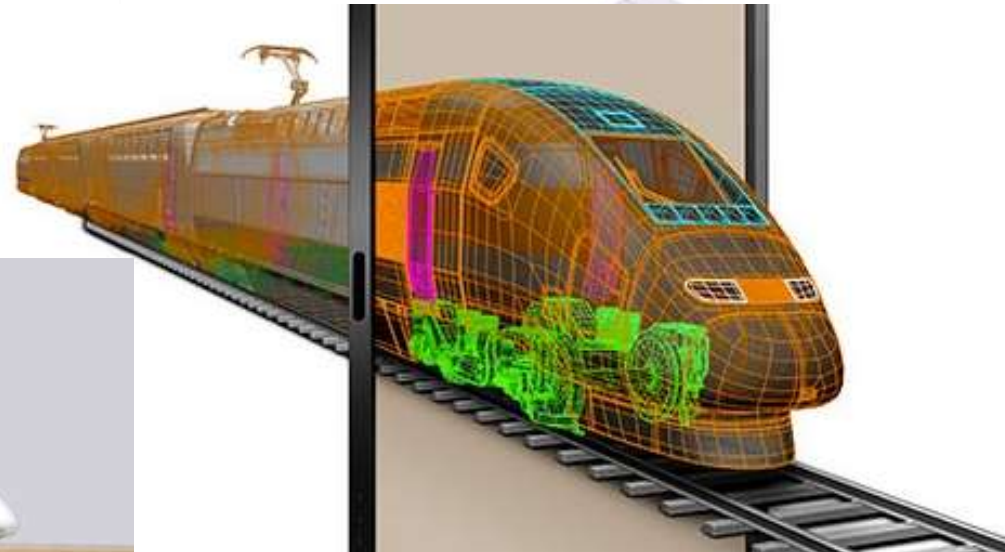
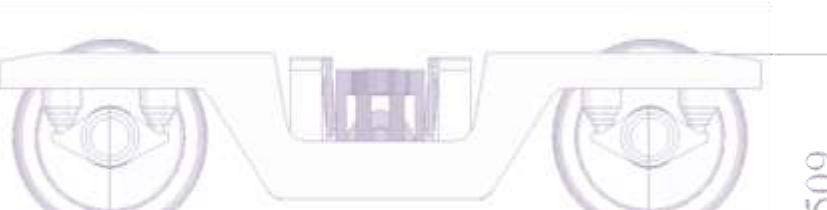
# Department of Electrical transport and Construction of Diesel locomotives



## Direction of educating

Preparation of students on a specialty "Electric transport" is conducted, oriented not only on the traditional types of electric transport for railways but also on perspective - high-speed wheeled, and also high-speed maglev.

Рама тележки



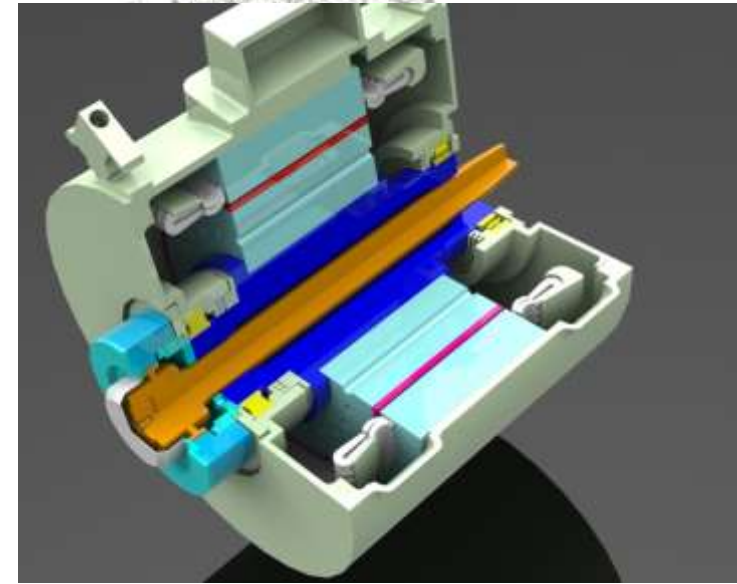
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## Direction of educating

Graduating students of specialty "Locomotives and locomotive economy" are able to design diesel engines, carriages and special railway technique, and also their components: a power equipment is combustion engines, electric machines and electric drive; mechanical part, control system by motion of both main and industrial railway transport. They can also carry out scientific and marketing research, operate railway rolling stock.





# Department of Electrical transport and Construction of Diesel locomotives



## Prospects of employment

The graduating students of department are highly sought not only in the field of railway transport (locomotive and rail car factories, manufacturing industry parts, repair factories and depots, subways, their power supply system)...





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## Prospects of employment

...but also in those industrial sectors which have a technological similarity with the objects of railways (energy, automotive, agricultural machinery, industrial and urban transport, electric power facilities and system of power supply of enterprises, cities and villages).





# Department of Electrical transport and Construction of Diesel locomotives



## Basic special disciplines for a level “bachelor”

Information technologies in transport;  
Basics of electric power and power supply;  
The theory of locomotive traction;  
The power electronic converter and microprocessor technology;  
The mechanical part of the rolling stock;  
Traction Drive;  
Independent power systems;  
Control systems;  
Technology of production of railway transport;  
Maintenance and repair of rail transport;  
Simulation of railway facilities;  
Modelling of processes of rail transport.

## Basic special disciplines for a level “master”

Electrical equipment of rolling stock and traction networks;  
Microprocessor based devices;  
Computer technologies in transport;  
Prospective rail transport;  
Social and environmental aspects of the operation of rail transport;  
Computer-aided design of the rolling stock;  
Automatic control systems;  
The design of the railway transport.



# Department of Electrical transport and Construction of Diesel locomotives



## Staff of department

**Valery Domanski**

doctor of technical sciences, professor.

**Vyacheslav Masliev**

doctor of technical sciences, professor.

**Boris Lyubarskii**

doctor of technical sciences, professor.

**Gennady Krivyakin**

Ph.D., associate professor.

**Dmytro Iakunin**

Ph.D., associate professor.

**Lilia Overyanova**

Ph.D., associate professor.

**Eugene Ryabov**

Ph.D., senior researcher.

**Elena Afanasyeva**

Ph.D., senior lecturer.

**Bagish Yeritsyan**

Ph.D., associate professor.

**Alexander Demidov**

senior lecturer.

**Victor  
Ivanovich  
Omelyanenko**

doctor of  
technical  
sciences,  
professor,  
Head of  
Department

