



UNIVERSITY OF ŽILINA  
Faculty of Mechanical  
Engineering

**Study in Slovakia!**  
**Study in Žilina!**



- 
- Žilina is the 4th largest city in Slovakia.

<https://youtu.be/9dEHYkzCzVY>



Žilina has one of the most beautiful university campuses in Slovakia.



# WHY STUDY IN ŽILINA?

UNIZA has 7 faculties. The Faculty of Mechanical Engineering is historically one of the founding and oldest faculties. **It is the BEST Mechanical Engineering Faculty in Slovakia** according to the independent assessment of the quality of science and research VER 2022.

How does it look here?

**Virtual tour of the university:**

<https://www.uniza.sk/index.php/verejnost/uniza-v-obrazoch/virtualna-prehliadka>

**Virtual tour of the faculty**

<https://www.fstroj.uniza.sk/index.php/akreditacia/laboratoria/prehliadka>





**Žilina has the most beautiful university campus in Slovakia with TOP services in the field of education, business, sports and catering.**



# Faculty of Mechanical Engineering



# WHY STUDY IN ŽILINA?

You will live in the most beautiful  
dormitories in Slovakia right on  
the university campus,  
10 minutes from the faculty:

<https://vd.internaty.sk/>

Price for accommodation:

**49 € – 64 €/per month**



# WHY STUDY IN ŽILINA?

No need to worry about hunger! As a student, you'll get well-prepared, nutritious meals at pocket-friendly prices. Plus, each day, you'll have a variety of 8 dishes to choose from, catering to both meat enthusiasts and vegetarians. And guess what? It's all conveniently located right on the UNIZA campus!

<https://menza.uniza.sk/galeria/>

Price for food:  
**1,60 € – 4,20 €.**



Treska Bar also serves  
dinner and  
is open From:  
7:00 AM to 7:30 PM



# WHY STUDY IN ŽILINA?

If you're passionate about sports and the great outdoors, then the Faculty of Mechanical Engineering at UNIZA is tailor-made for you. Here, you'll not only receive a top-notch education but also immerse yourself in the beauty of nature, right on one of Slovakia's most picturesque university campuses. Complete with an athletic track and nestled in a city where nature is within easy reach, it provides an unmatched setting for both academic excellence and outdoor adventures.



<https://www.youtube.com/watch?v=l6eMlcJw3fg>

<https://www.youtube.com/watch?v=8QRfQH3aMpo>

# WHY STUDY IN ŽILINA?

**Getting to our college campus is a breeze!**  
Whether you prefer walking, driving,  
cycling, scootering or public transport, we  
have everything for you.

Check out the different ways to reach us:

<https://www.youtube.com/watch?v=vYuWjVHtmWQ>



# WHY STUDY IN ŽILINA?

**Now it's decision time!**

**All our study programs are accredited**, ensuring that after graduation, you'll find a well-paying job, not only in Slovakia but potentially abroad as well:

[https://www.youtube.com/watch?v=M3T\\_o\\_x9iL9Q](https://www.youtube.com/watch?v=M3T_o_x9iL9Q)





## What else do we offer:

- **Mathematics and physics courses for new students;**
- **Slovak language course;**
- **Incentive scholarships;**
- **Foreign mobilities within ERASMUS+;**
- **Excursions and internships in companies.**

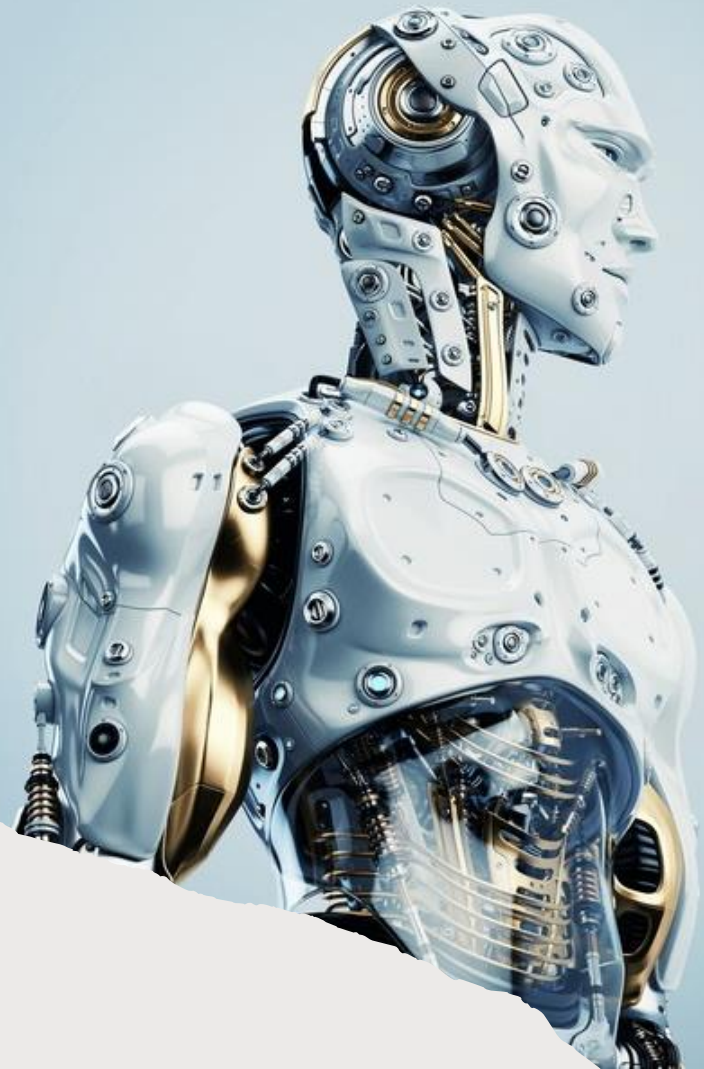


ŽILINSKÁ UNIVERZITA V ŽILINE  
Strojnícka  
fakulta

[WWW.SVETSTROJOV.SK](http://WWW.SVETSTROJOV.SK)



UNIVERSITY OF ŽILINA  
Faculty of Mechanical  
Engineering



**Study programs offered:**



## **Full-time bachelor's degree:**

- **Computer Design and Simulation**
- **Mechanical Engineering Technologies**
- **Energy and Environmental Technology**
- **Industrial Engineering**
- **Vehicles and Engines**

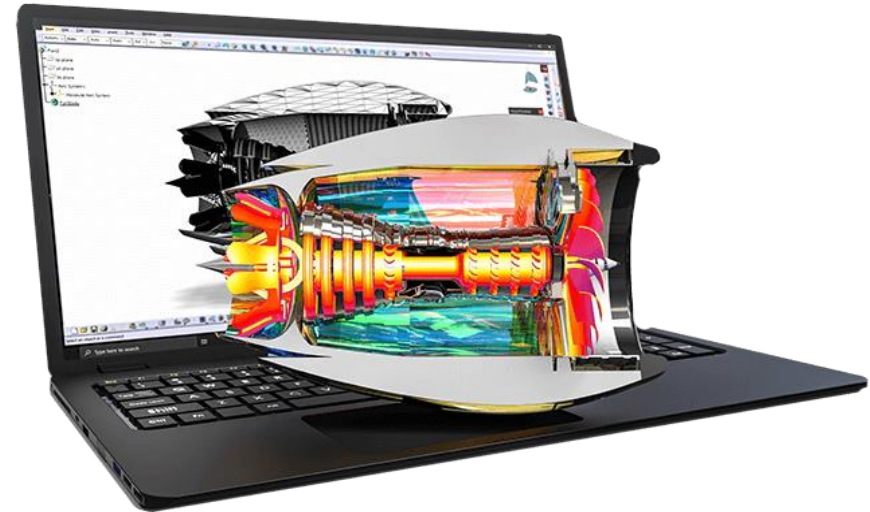
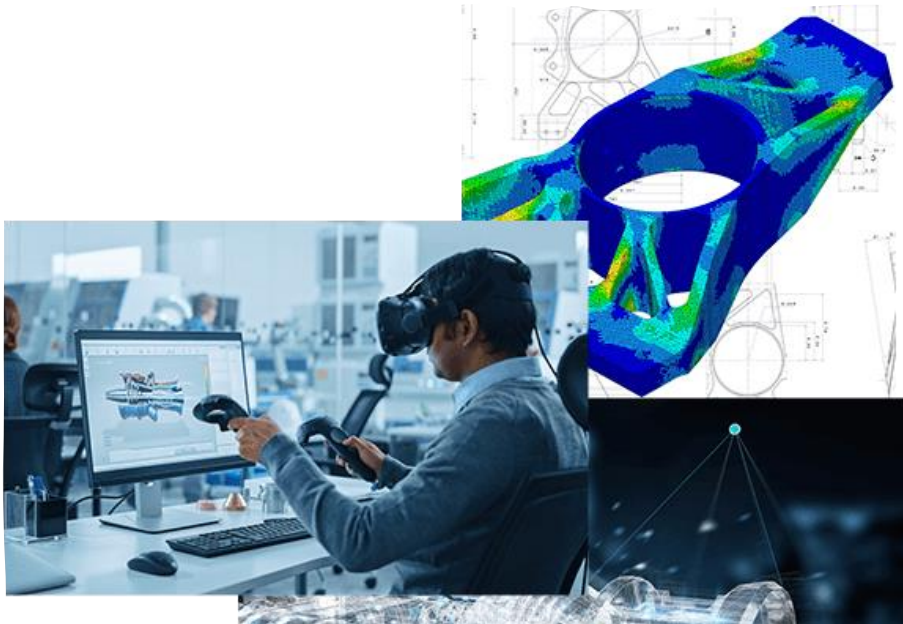
**LENGTH OF STUDY 3 YEARS**



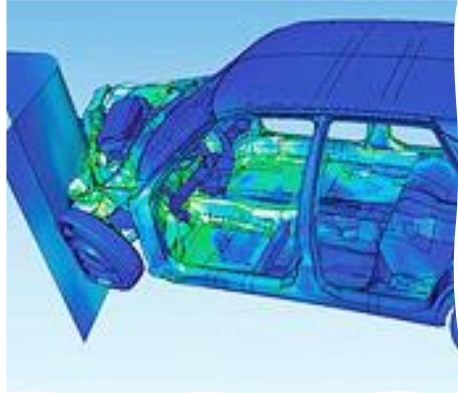
# Computer Design and Simulation

# ...intelligent machines, devices, elements

- designing machine parts, assembly units and creating technical documentation
- working with modern 2D and 3D CAD systems to support construction and modeling
- work with systems for calculation, analysis and simulation of parts of technical systems and their mechanisms in dynamic and FEM analyses





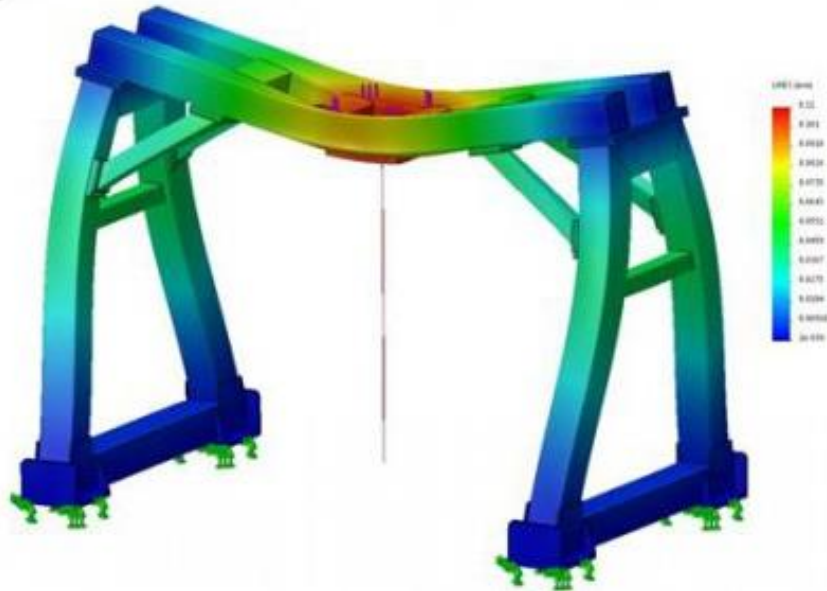


# Modern equipment of classrooms and laboratories

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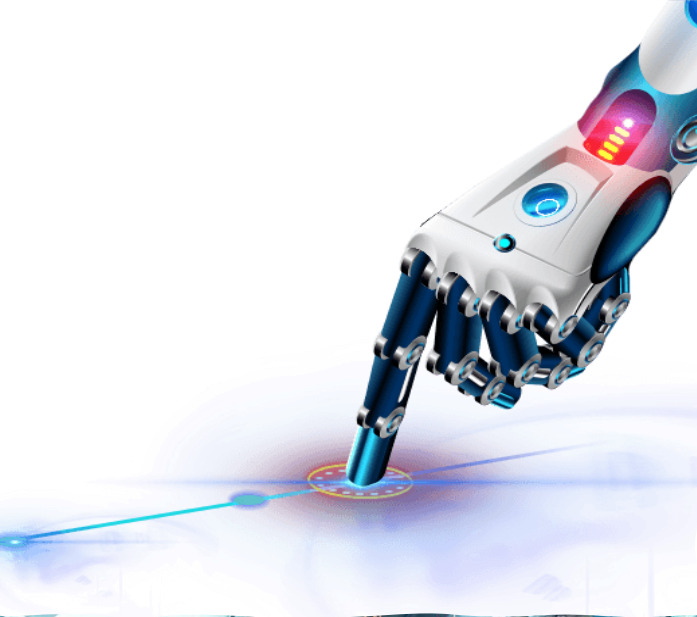
- computer rooms with powerful computers and the most modern CAD/CAM/CAE systems;
- laboratories for testing and diagnostics of bearings and gearboxes, research in the field of tribological properties of materials, testing of electric cars, devices such as Rapid Prototyping, Rapid Tooling and a bionics laboratory;
- Laboratories of dynamics and FEM analysis for research in the areas of optimal design of structures, reliability, failure and fatigue of structures under static and dynamic loading.

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**Mechanical Engineering Technologies**



# ...intelligent engineering technologies

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- engineering production technologies and their management CIM
- implementation of CNC technologies in engineering production
- application of IT to engineering production such as CAX systems
- SMART automation and CAPP robotization
- CAQ inspection, quality and testing standards
- control of quality, chemical composition, heat treatment, production and production processes....

# Top laboratories

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- CAD/CAM/CAE systems and CNC programming, CNC technology
- automated production systems
- evaluation of technological processes
- foundry metallurgy and technology
- heat treatment and forming
- non-destructive technologies
- engineering metrology
- digital production
- metallography and testing of materials





# Industrial Engineering

## ... digital business and SMART management

- organization and management of production processes;
- production systems and their design;
- corporate logistics;
- production quality;
- information technologies;
- management and economics;
- organization of auxiliary and service operations.



# Top software equipment and laboratories

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- design of production and logistics systems;
- computer simulation;
- virtual and augmented reality;
- digital enterprise;
- digital ergonomic analyses;
- intelligent and reconfigurable production and logistics systems;
- new approaches and technologies in the construction and operation of the so-called intelligent plants



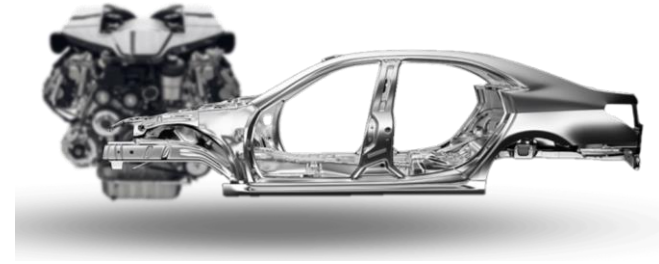


# Vehicles and Engines

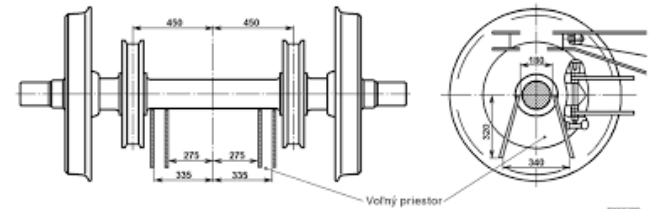
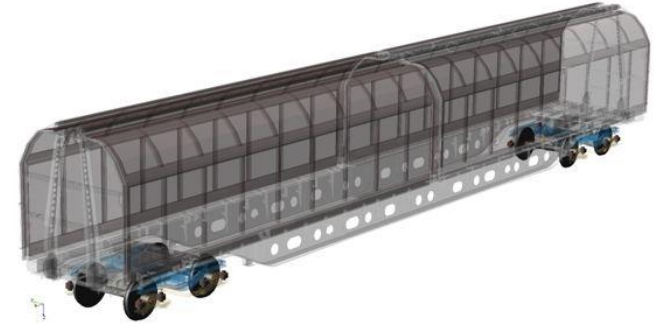


# ... intelligent structures and mobility

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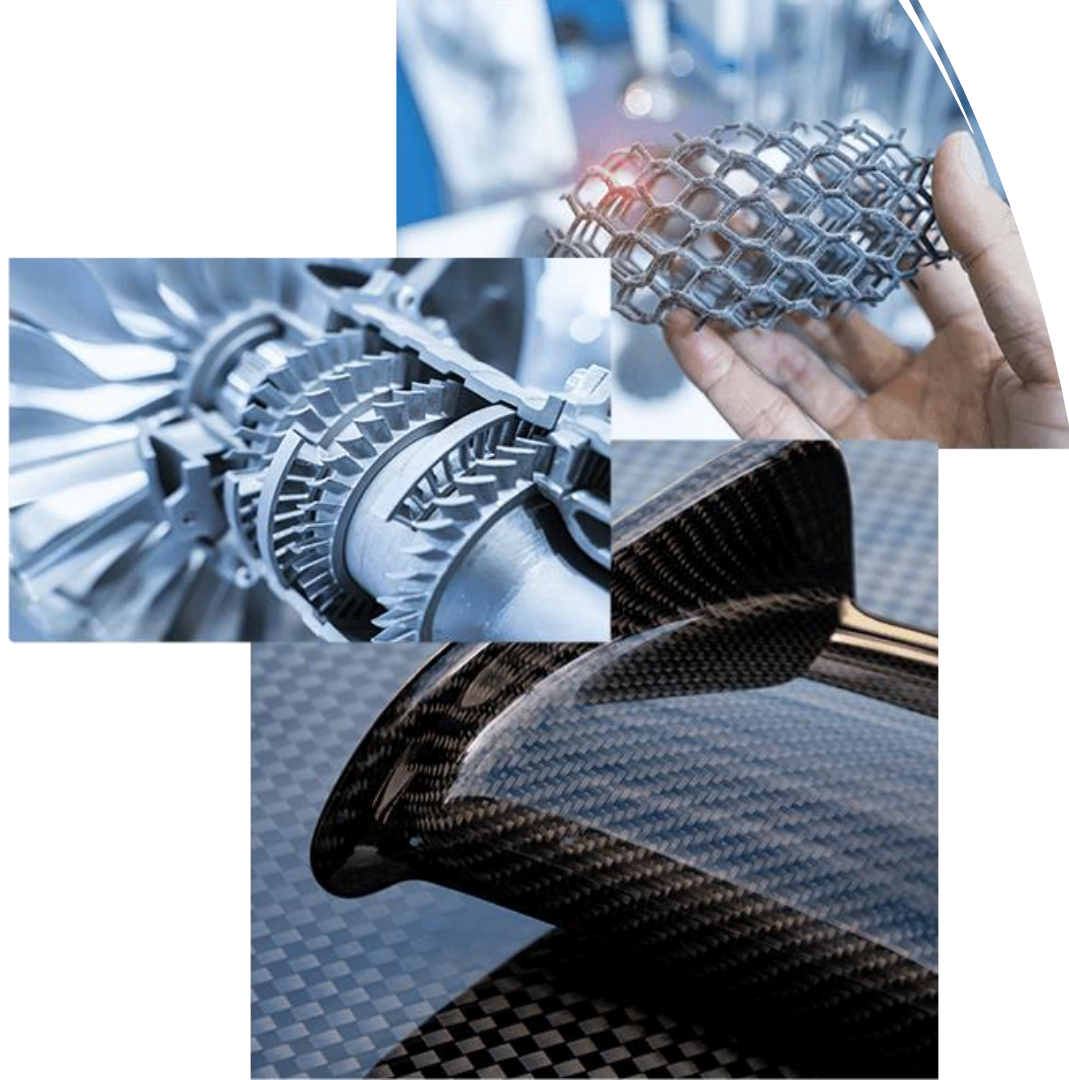
- theory, concept, construction, diagnostics, testing, maintenance of vehicles and combustion engines;
- computer modeling, simulations - analyzes of vehicles and engines;
- quality assessment and testing of transport technology;
- legislative requirements placed on the production and operation of means of transport and their subsystems



# Modern teaching spaces

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- **Modern classrooms, laboratories and test rooms for computer-aided design, modeling, simulation engineering calculations, experimental testing;**
- **Analysis of the characteristics of vehicles, engines and their parts;**
- **Diagnostics and maintenance of vehicles;**
- **Testing combustion engines;**
- **Lectures by experts from practice;**
- **Excursions to production enterprises.**

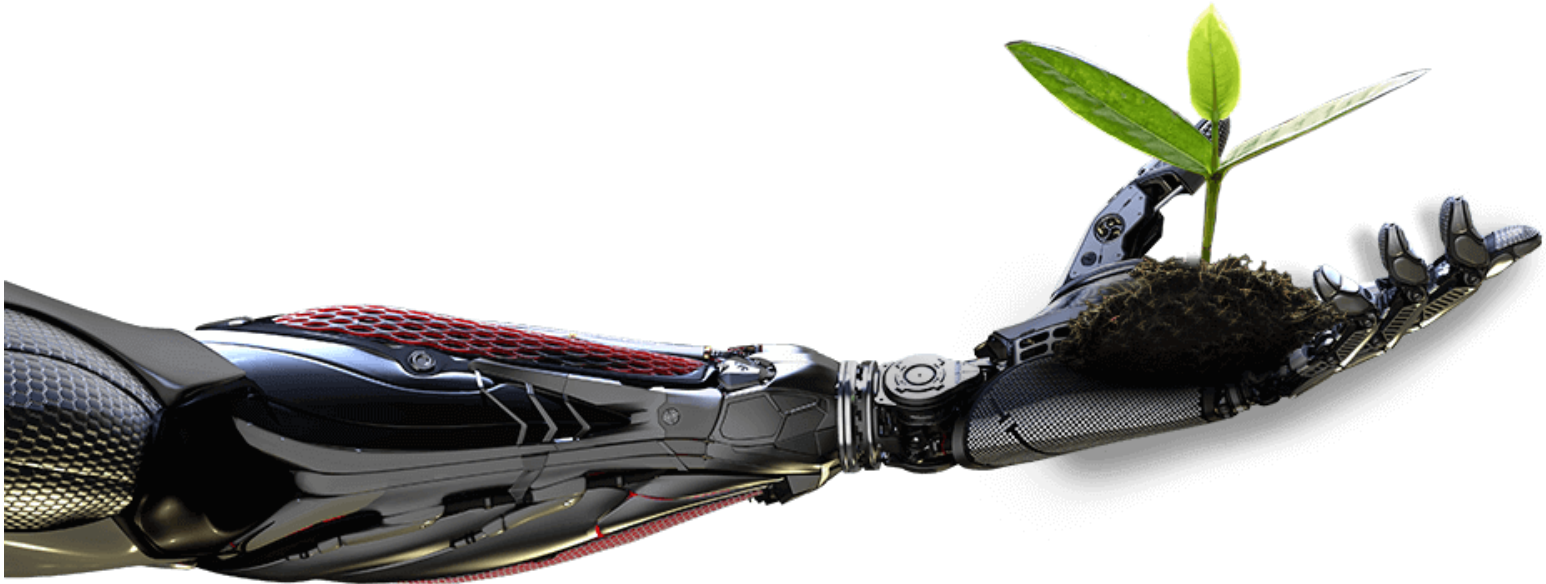




# Energy and Environmental Technology

## ... efficient use of energy resources

- fluid mechanics, thermodynamics and heat and mass transfer;
- energy sources, distribution networks of energy media;
- design and construction of machines that produce and transform energy;
- design and construction of equipment for the use of alternative energy sources and equipment for the energy recovery of waste



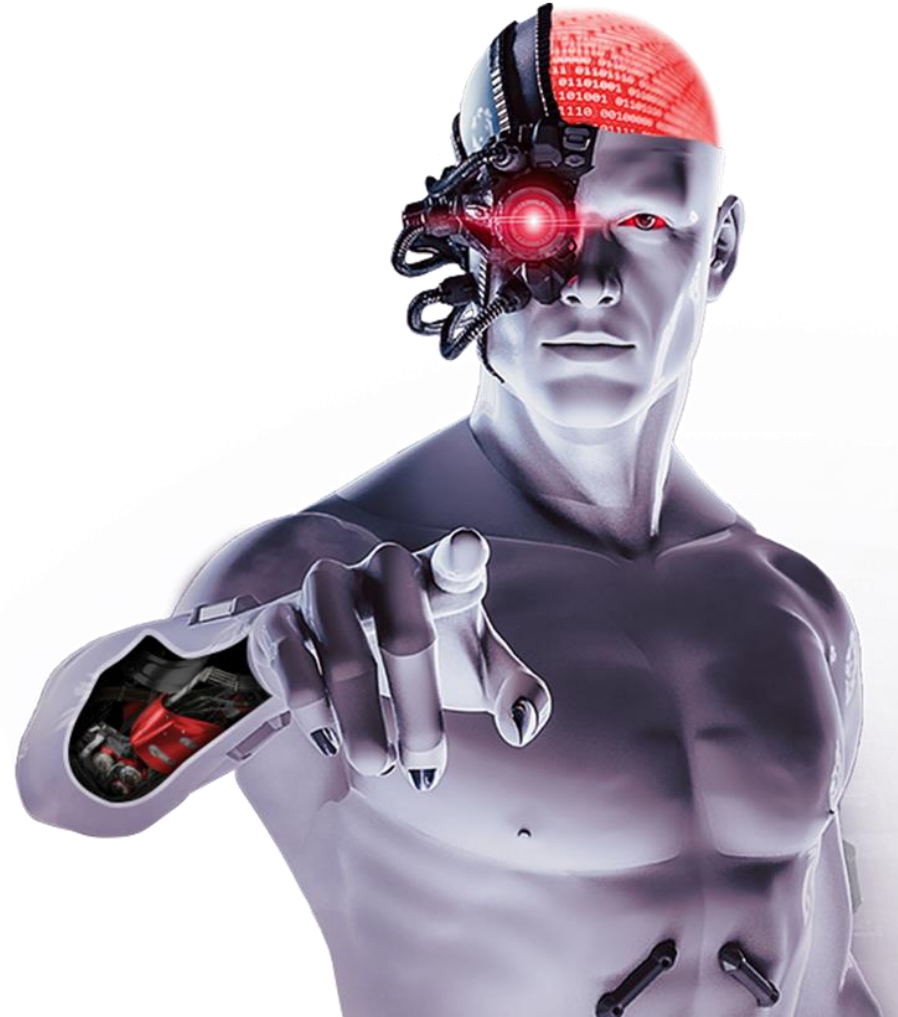
# Modern teaching spaces

- simulation of thermal phenomena;
- work with renewable energy sources;
- optimization of heat sources;
- reducing the energy demand of buildings,...



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- What else awaits you with us....



# SPORT



# CULTURE





# REST AND RELAXATION





Active cooperation with practice