## Weapons and weapon systems engineering

It teaches the field of production of weapons and weapon systems, basic and auxiliary materials for the production of special purpose products, development and automation, operation and reconstruction of the military industry.

## Military composition materials engineering

It teaches the production of military composite materials, the development and practical assimilation of systems and means of production of special purpose materials, the use of new techniques and technologies, the development and application of optimal technologies in the production of weapons and weapons systems products.

## Military communications engineering

It covers the classification of signals, their mathematical models, spectral analysis, types of modulation, pulse, transition and frequency characteristics, filtering, issues of radio reception immunity, organization of work in the design of military communication tools, issues of drawing up electrical schematics, structural and electrical installation calculation, basics of television and video technology, television broadcast systems, reception and formation of signals in the DVB-T system, applied television systems.

## Optotechnical engineering

It teaches engineering knowledge related to designing optical-electronic devices and complexes, installation and sustainable operation of devices and device complexes used in various fields of engineering and technology, development and application of additive technologies based on rapid prototyping and 3D modeling in the production of optical equipment.

## Pyrotechnic and explosive engineering

This sphere teaches the characteristics of explosives used in pyrotechnic and explosive devices, pyrotechnic and explosive devices used in artillery, aviation, armored vehicles, firearms, mines and grenades, anti-tank mines; to carry out scientific-research works in the field of modern development, operation, reconstruction and automation of the military industry, knowledge based on scientific-technical data.

## Aerospace engineering

It deals with the field of aviation and rocket-space equipment, the design, construction and production of aviation and rocket-space equipment, physical and numerical experiments on determining the aerodynamic and ballistic characteristics of aviation and rocket-space objects, the details of the aggregates and systems of aviation and rocket-space flight devices construction of equipment.