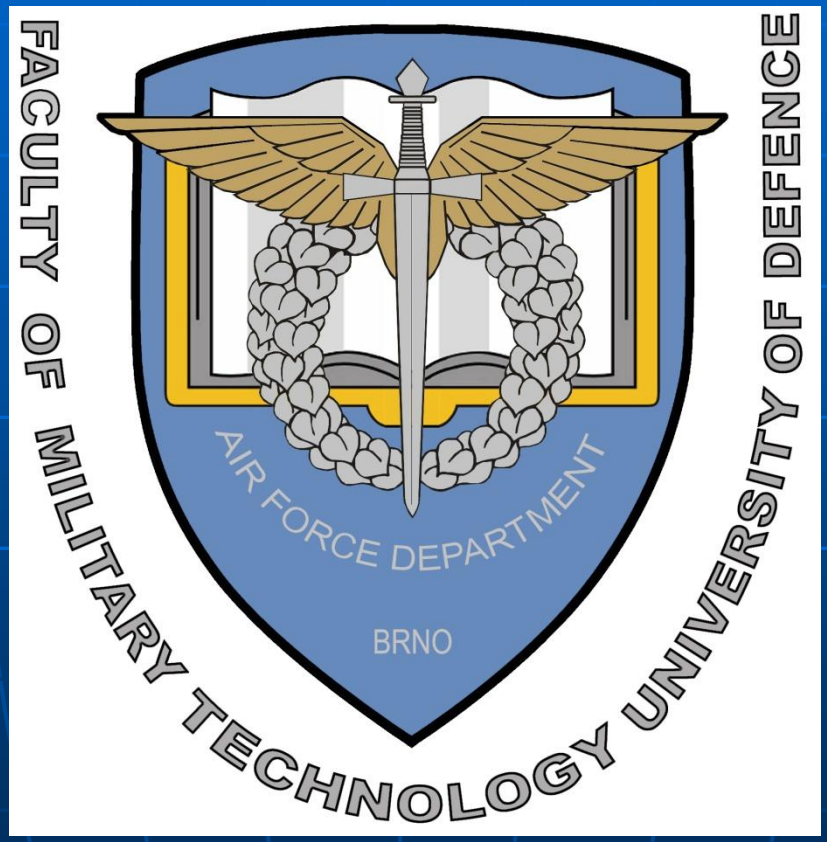
AIR FORCE DEPARTMENT



Faculty of Military Technology

Dean: Col. Prof. Zdeněk VINTR, CSc.

Vice Dean for Concept. and Dev.: Col. Assoc.Prof. Libor DRAŽAN, CSc.

Vice Dean for Study: Col. Assoc. Prof. Miloš ANDRLE, CSc.

Vice Dean for Sc. and Res.: Prof. Jan Kohout, CSc.

K 201 Weapons and Ammunition

K 202 Combat and Special Vehicles

K 203 Engineer Technology

K 204 Aircraft and Rocket Techniques

K 205 Air Force

K 206 Airspace Electrical Systems

K 207 Radar Systems

K 208 Air Def. Systems and Mechatronics

K 209 Commun. and Inform. Systems

K 210 Milit. Geography and Meteorology

Faculty Dean Office

K 215 Mathematics and Physics

K 216 Mechanical Engeneering

K 217 Electro Engeneering

K 219 Physical Training

School batalion

Military Technology Degree Program

The study is oriented towards obtaining military and technical education of military professionals of the Army of the Czech Republic in the following study branches:

- Weapons and Ammunition
- Combat and Special Vehicles
- Engineer Technology
- Rocket and Aviation Equipment
- **Air Traffic**
- Aviation Electrotechnical Systems
- Radar Systems
- Air Defence Systems
- Communication and Information Systems
- Military Geography and Meteorology

Faculty of Military Technology – Goals and Missions

Education of Military Proffessionals in Technical branches of study – Military Technology:

- Bachelor Study
- Master Study
- Ph.D. Study
- Proffessional Military Courses
- Special Technical Courses

Scientific Research in Technical Sciences for Military and National Defence:

- Defence Research Projects
- Specific Research Projects
- International NATO/ RTO/EU Scientific Projects
- National Grant Agency Projects
- Czech Acacemy of Science Projects

Air Force Department

Situation – all airman are OFFICERS

Academic degree is required – University of Defence

Branch – Air Traffic (Mechanical Engineering)
Bachelor studies for 3 years fully accredited

Branch – Military Pilot (Mechanical Engineering)
Bachelor studies for 4 years fully accredited

- Master studies for 2 year fully accredited
- Ph.D. study in accredited study program

Structure of the Air Force Department

Air Force Department

Studies are fully comparable with civil requirements (JAR; Eurocontrol FCL-1)

Getting license for FTO (CAA) for theoretical education – in progress

Extension to the rotary wing theory studies

Research on simulation technologies

Air Traffic Control Branch

The Graduate is military professional.

Specialist of air traffic control services working on the special positions:

- TWR
- APP
- ACC
- CRC-IC

Technical Support of Airfield + Staff Officers Branch

The group prepares:

- staff officers for airbase headquarters
- specialists for maintaining airports, its facilities and staff operating special support equipment for aircraft operation

Technical Support of Airfield + Staff Officers Branch

All these accredited studies last for three years in Bc. program in two modules

- Airport Service
- Airport Headquarter Staff

Afterwards, the study can be extended by additional two years by Ms study program, study subject “Special Air Force Services”.

Air Force Pilot

four-year bachelor degree

two step preparation of the pilot:

1) theoretical – on the University of Defence in Brno

2) practical – screening on the Training Base Pardubice

Air Force Pilot

- theory of an air preparation is in harmony mostly with air regulations JAR
- flying test training is realized within 3th year of study
- this training is hold on piston-engine airplanes Z 142 CAF (about 50 hours per person)

Air Force Pilot

within the second phase of elementary training in Z-142, it is evaluated whether the pilot-student is able to perform air training for:
- Tactical
- Helicopter
- Transport Air Force

basic & Advance Flying Taining Center CLV – civilian company, founded by MoD

specific Advance and Combat Trining provided at Operational Bases

Training

Z -142 50 hrs

L - 39
200 hrs

Mi – 2 100 hrs
Mi-17 30 -110 hrs

L - 410
100 hrs

Tactical AF

Helicopter AF

Transport AF

Z-142 C-AF

Single-engined, two seat piston-engined training airplane designated for basic and testing training.

Flying range:	1025 km
Max. speed:	334 km/h
Take off mass:	1090 kg
Length:	7,33 m
Spread:	9,16 m

Mi-2

Two-engined, light multi-purpose helicopter designated for basic and forwarded training and transportation.

Flying range:	600 km
Max. speed:	210 km/h
Take off mass:	3 550 kg
Length:	17,42 m
Diameter of the rotor:	14,56 m

Mi-17

Two-engined, multi-purpose helicopter designated for forwarded training and transportation.

Flying range:	725 km
Max. speed:	250 km/h
Take off mass:	11 100 kg
Length:	25,35 m
Diameter of the rotor:	21,3 m

L-39C Albatros

Single-engined, two seat training airplane designated for basic and forwarded training.

Flying range:	1200 km
Max. speed:	910 km/h / 0,8 M
Take off mass:	4700 kg
Length:	12,13 m
Spread:	9,46 m

Conferences

- AIR FORCE
  - Two-day national conference on the current topics
  - Solution of the daily tasks in the Air Force
  - Patronized by Air Force Commander
  - Invited VIP guests
  - Held in Czech or Slovak

- International Conference on Military Technologies – Section Air Force
  - One-day international Conference on the actual topics
  - Held in English
  - Proceeding included into the WoS

Further teaching activities

- Erasmus
  - European Community program for higher education
  - encourages students and staff mobility throughout Europe and promotes multilateral cooperation between higher education institutions in Europe
  - 3 students in Brussels (Belgium) for one semester
  - 1 teacher in the Slovak Republic for one week
- Military students exchange
  - students from the Ecole Spéciale Militaire de Saint-Cyr and Ecole de l'Air Salon de Provence, France

Further teaching activities

- Education for competitiveness
  - program from Ministry of Education
  - preparing of the new object - Security in the air transportation
  - preparing of some objects in English

- EUAFA Course for air branches students
  - one week per year.

- FAC course for students
  - one week

Research and development activities

- Faculty supported research – one year program
  - foundation of the FTO organization – theoretical part
- Cooperation with military subjects
  - research on the night vision goggle program
  - analyzing of the machine-human interaction in the aircraft
- Cooperation with civilian subjects
  - preparing of the simulator for air traffic controllers training (VR Group; Artisys)
- Cooperation with European partners
  - universities, research centers, military bases (RMA Brussel; FAFA – Salon de Provence)