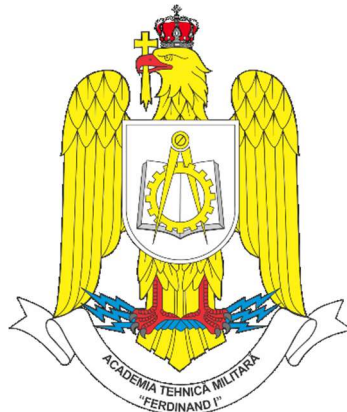


**ROMANIA**  
**MINISTRY OF NATIONAL DEFENCE**  
**MILITARY TECHNICAL ACADEMY**  
**“FERDINAND I”**



**FACULTY B**  
**Faculty of Aircraft and Military Vehicles**



Department of Aircraft Integrated Systems and  
Mechanics (B2)

## Programme of study - 1st cycle - License AIRCRAFTS AND AIRCRAFT ENGINES

### 1<sup>st</sup> Year:

**Fundamental Disciplines:** *Mathematical Analysis; Algebra, Analytic and Differential Geometry; Physics; Chemistry of Combustibles and Lubricants; Technical Drawing and Engineering Graphics; Computer-Aided Graphics; Techniques and Computer Programming Languages*

**Disciplines in the Field of Study:** *Science of Materials; Electrotechnics and Electric Machines; Technology of Aviation Materials; Mechanics I; Internship I*

**Complementary and Military Disciplines:** *Communication, Public Relations and Negotiation Techniques; English; French; Politology; Psychology and Sociology; Topography; History; Sport*



### 2<sup>nd</sup> Year:

**Fundamental Disciplines:** *Special Mathematics; General Management; Numerical Methods in Aviation*

**Disciplines in the Field of Study:** *Mechanics II; Strength of Materials; Machinery Parts and Aviation Mechanisms; Fluid Mechanics; Aerospatiale Propulsion Systems; Automatic Systems Theory; Internship II*

**Specialty Disciplines:** *Construction of Military Aircrafts; Thermogasodynamics; Flight devices for High Altitude*

**Complementary and Military Disciplines:** *English; French; Sport*



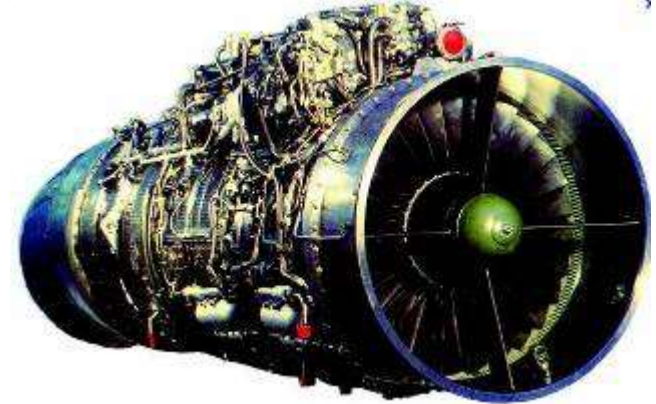
### 3<sup>rd</sup> Year:

**Fundamental Disciplines:** *Basic Logistics*

**Disciplines in the Field of Study:** *Aerodynamic of Aircrafts and Helicopters; Aircraft Weapons and Ejection Seats; Airborne and Air Navigation Equipments; Digital Systems, Airborne Computers and Aviation Simulators; Management of Military Technical and Economic Activities; Management of Quality Assurance in the Aviation Field*

**Specialty Disciplines:** *Aircraft Structures, Constructive Solutions and Calculus Methods; Mechanic of Aircraft Flight; Theory of Aviation Engines; Airborne Hydraulic and Pneumatic Installations; Internship III*

**Complementary and Military Disciplines:** *Economy and Accountancy; English; French; Sport*



### 4<sup>th</sup> Year:

**Disciplines in the Field of Study:** *Communication and Support Electronic Systems for Aircrafts; Airborne Radar and Optoelectronic Systems; Logistic of Aviation Systems; Military Tactics*

**Specialty Disciplines:** *Computing and Construction of Military Aircrafts; Flight Dynamic of Aircrafts; Computing and Construction of Aviation Engines; Maintenance, Repairing and Airport Infrastructures; Experimental and Computational Aerodynamics; Unmanned Aerial Vehicles; Internship IV*

**Complementary and Military Disciplines:** *Geography; Management of Projects; Sport*

## Programme of study - 1st cycle - License AVIATION EQUIPMENTS AND INSTALLATIONS

### 1<sup>st</sup> Year:

**Fundamental Disciplines:** *Mathematical Analysis; Algebra, Analytic and Differential Geometry; Physics; Chemistry of Combustibles and Lubricants; Technical Drawing and Engineering Graphics; Computer-Aided Graphics; Techniques and Computer Programming Languages*

**Disciplines in the Field of Study:** *Science of Materials; Technology of Electrotechnic Materials; Basis of Electrotehnics I; Mechanics and Mechanisms Theory; Internship I*

**Complementary and Military Disciplines:** *Communication, Public Relations and Negotiation Techniques; English; French; Politology; Psychology and Sociology; Topography; History; Sport*



### 2<sup>nd</sup> Year:

**Fundamental Disciplines:** *Special Mathematics; General Management; Numerical Methods in Aviation*

**Disciplines in the Field of Study:** *Basis of Electrotehnics II; Signals, Devices and Electrical Circuits; Aviation Machines and Electrical Acting Systems; Electrical and Electronic Measurements; Aerospatiale Propulsion Systems; Automatic Systems Theory; Internship II*

**Specialty Disciplines:** *Construction of Military Aircrafts; Sensors and Automatic Elements; Flight devices for High Altitude*

**Complementary and Military Disciplines:** *English; French; Sport*



### 3<sup>rd</sup> Year:

**Fundamental Disciplines:** *Basic Logistics*

**Disciplines in the Field of Study:** *Aerodynamic of Aircrafts and Helicopters; Aircraft Weapons and Ejection Seats; Airborne and Air Navigation Equipments; Digital Systems, Airborne Computers and Aviation Simulators; Management of Military Technical and Economic Activities; Management of Quality Assurance in the Aviation Field*

**Specialty Disciplines:** *Electronic Systems for Aircraft Guiding and Control; Airborne and Air Navigation Equipments; Computing and Construction of Airborne Devices; Aviation Gyroscopic Devices; Testing and Evaluating of Airborne Equipments; Internship III*

**Complementary and Military Disciplines:** *Economy and Accountancy; English; French; Sport*

### 4<sup>th</sup> Year:

**Disciplines in the Field of Study:** *Communication and Support Electronic Systems for Aircrafts; Airborne Radar and Optoelectronic Systems; Flight Dynamic of Aircrafts; Logistic of Aviation Systems; Military Tactics*

**Specialty Disciplines:** *Automatic Command of Aircraft; Aerial Navigation Systems; Equipments for Recording, Decodification and Interpretation of Flight Parameters; Avionic and Weapon Integrated Systems; Maintenance of Airborne Equipments and Electrical Installations; Internship IV*

**Complementary and Military Disciplines:** *NBC Protection; Geography; Management of Projects; Sport*