

# MASTER'S PROGRAM | AERODYNAMICS

## 1ST SEMESTER

- Russian as a Foreign Language
- Physics. Laws of Conservation in Mechanics and Aerodynamics
- Program Orientation Course
- Essentials of Fluid Mechanics
- High-speed Aerodynamics
- Basics and Applications of CFD
- Analytical Methods in Aeromechanics
- Numerical Methods of Aerodynamics for Multi-disciplinary Design

## 2ND SEMESTER

- Russian as a Foreign Language
- Physics. Laws of Conservation in Mechanics and Aerodynamics
- Gas Dynamics of Combustion
- Analytical Methods in Aeromechanics
- Computational Aerodynamics
- Unsteady Aeromechanics
- Typical CFD Problems

## 3RD SEMESTER

- Russian as a Foreign Language
- History, Philosophy and Methodology of Natural Science
- Physical Foundations of the Industrial Wind Tunnel Test
- Turbulence
- Aeroacoustics of Aircrafts
- Environmental Issues for Aviation (Aviation Ecology)

## 4TH SEMESTER

- Personal Research Project
- Pre-graduation Practice