



# **SPACE MISSION AND SYSTEM DESIGN**

**ENGLISH LANGUAGE**

**MASTER'S PROGRAMME DEGREE**



## PROGRAM ADVANTAGES

- ✓ Gaining unique learning experience in a transnational environment at EPF Graduate School of Engineering, Paris, France for 1-3 semesters (4<sup>th</sup> semester at RUDN University, Moscow, Russia).
- ✓ Obtaining after completion of training a diploma of an engineer of the European standard (diplôme d'Ingénieur) and a master's diploma at RUDN University.
- ✓ Gaining a broad profile with knowledge of European industry, system analysis skills and a substantial knowledge base in the field of space technology applications in various fields.
- ✓ The interdisciplinary approach into the base of the program allows students of classical engineering specialties – construction, engineering mechanics, geology, mining and petroleum, ecology, agriculture – to apply the knowledge gained at the previous level of education and expand them with the possibilities of practical application of satellite technologies in these areas.
- ✓ Classes are conducted using modern educational technologies, including the use of transnational distance education platforms.
- ✓ Graduates acquire skills for a successful career in Russian and European state and commercial companies in various industries.



# STUDYING PROCCCESS

**120** educational credits.

Lectures, practical classes, self-study work.

We pay special attention to the development of research skills,  
the implementation of international scientific projects.



## AERONAUTICS AND SPACE INDUSTRY ECONOMY AND MARKET

- Modern Trends in Aerospace Industry Development.
- Competitiveness of the Aerospace Product.
- Analysis of the Current Aerospace Industry in the Global Economy.



## SYSTEM DESIGN

- Principles of Designing Complex Technical Systems.
- System Analysis and Optimization.
- Elements and Methodology of Software Design.



## SATELLITE SYSTEMS FOR EARTH REMOTE SENSING

- Fundamentals of Design and control of Satellite Systems for Earth Remote Sensing.
- Earth Remote Sensing and Geoinformation Systems.
- Technology of Geoinformation System Development for Industries, Agriculture and Efficient Nature Management.
- Design Applications and User Interfaces.





# STUDENTS FEEDBACK



**ALEKSEY LOZOVY, RUSSIA**



I got the idea to get an education abroad when I was at school, but I did not have such opportunity at the bachelor's program of the Moscow Aviation Institute. But I didn't forget this idea, I have seriously started studying English and as a result I entered the RUDN University double diploma program together with EPF Graduate School of Engineering, which implied a year and a half of study in France and half a year in Russia. Having chosen this program, I tried to refresh my knowledge and learn more about the space sector and the possibilities of using geoinformation systems in various areas of the economy. In general, the impressions are excellent, you have to learn a lot, mostly on your own, but the classes are always conducted dynamically, with great enthusiasm by the teachers, so you have to comply. In France, I met a huge number of interesting people, found like-minded people and, in addition to the English language, I improved my French, so this master program is very effective for me.



**LUBOV AVDANINA, RUSSIA**



Many people think that entering a foreign university is an irreplaceable experience, a prestigious diploma and a chance to build an international career, but not everyone knows about such an interesting opportunity as a double diploma program, when you can study at two different universities and get two diplomas! Many of my friends, by the way, did not understand how I would get a higher education at a university called a "school". The thing is that in France all engineering universities are called engineering schools. Students who want to acquire an engineering specialty seek this special category of universities. Unlike classical European universities, engineering schools in France are focused on quality rather than on the number of students, and the education received in them is considered to be much more prestigious. Recalling the first school days, I should note the importance of a confident knowledge of the English language. It is one thing to know how to ask the right terminal at the airport, but to understand complex lectures, participate in discussions, make presentations and write essays is completely different. I want to wish future students not to be afraid and go towards their dreams. Aspiration and perseverance should become an integral tool in achieving your goal!





# HEAD OF THE PROGRAMME

**RAZOUMNY YURY NIKOLAEVICH**



Director of the Academy of Engineering of RUDN University.

Director of the Department of Mechanics and Mechatronics.

Doctor of Technical Sciences, Professor.

Academician of the Russian Cosmonautics Academy Named after K.E. Tsiolkovsky, Academician of the International Academy of Astronautics, full member of the American Institute of Aeronautics and Astronautics.

Co-Editor of Acta Astronautica (UK) and REACH (Germany).

## **RESEARCH INTERESTS:**

Systems Analysis and Synthesis of Complex Technical Systems, Mechanics and Control Processes, Satellite System Design