



**EFFICIENT
MANAGERIAL DECISION
MAKING
(BIG DATA ECONOMICS)**

MASTER'S DEGREE PROGRAMME



PROGRAM ADVANTAGES

- ✔ Program trains a new format of highly qualified professionals able to use big data processing technologies for managerial decision making.
- ✔ Graduates of this program are sought after by both Russian and foreign companies.
- ✔ There are possibilities for employer-sponsored training and coordination of the courses and curriculum with the partner company.
- ✔ Every master student receives a corporate mentor.
- ✔ Subjects of graduation thesis and course papers are determined by the goals and needs of the commissioner, while the students' progress is guided by highly competent industry experts.
- ✔ Internships and research activity take place at enterprises in need of high-skilled personnel with relevant qualifications.
- ✔ The most talented individuals through a competition get the opportunity to find employment with the partnering companies, with the candidates selected for the jobs subject to the competencies obtained by them over the course of study.
- ✔ It is possible to design an individual academic schedule. Master's degree classes take place in the evenings, which allows to have work-study integration.



STUDYING PROCESS

120 credits.

Lectures, practicums and self-study, research activity on the master level (1st and 2nd years of tuition) and pre-graduate practice (2nd year)



DIGITAL ECONOMY

- Global industrial development trends.
- Innovations in business management.
- Marketing in digital economy.



DATA MINING AND DECISION-MAKING

- Practical application of online analytical processing.
- Data mining systems.
- Data mining models.



MACHINE LEARNING FOR APPLIED ECONOMICS

- Mathematical economics.
- Evolutionary optimization methods.
- Genetic algorithms.
- Swarm intelligence.
- Kohonen network.
- Clustering goals.
- Decision trees.
- Binary trees.
- Red/black trees.
- Expert systems.
- Reinforcement learning.
- Game theory in Economics.
- Artificial intelligence in lean production.



THEORY AND PRACTICE OF MANAGERIAL DECISION-MAKING

- Theoretical and methodological approaches to developing managerial decision making and implementation.
- Managerial decision-making methodology.
- Metrics for stepwise assessment of managerial decisions efficiency.
- Methodological approaches to managerial decision making and implementation improvement.
- Managerial decision-making models



BIG DATA ANALYTICS IN MARKETING

- Principles of building marketing analytical systems.
- Principles of building databases for marketing research.
- Monitoring system and its composition.
- Marketing research organization.
- Quantitate analysis methods.



CLOUD-BASED TECHNOLOGIES IN DIGITAL ECONOMY

- Basic concepts of cloud-based computing.
- Theoretical aspects of cloud-based computing.
- Cloud-based computing practical applications.



BIG DATA IN RISK ANALYSIS

- Basic concepts and nature of risk occurrence.
- Organizing a risk management system based on big data.
- Risk analysis, assessment and prediction methods.
- Big data in risk management.



STUDENTS FEEDBACK



 **EKATERINA KAPLUN**

“ My name is Ekaterina Kaplun, I obtained my bachelor’s degree in Management in 2019 at the Center for Industries Management of the Faculty of Economics, RUDN, pursuing the Management of High-Tech Industries track. My teachers guided me toward my decision to enroll in a Master’s program and opting for this program track. I chose the Big Data in Economics program within the Efficient Decision-Making in Management major and continued my studies at the Center for Industries Management because I really liked the academic and administrative staff of the Center. An individual approach and attentive attitude towards students are coupled here with an aspiration to give the most relevant and applicable knowledge in the most engaging way.

The ability to deliver lectures and submit assignments remotely through RUDN’s Telecommunications educational and information system enables an efficient study for those who cannot attend classes on a regular basis. The absolute transparency at the Center for Industries Management allows the academic staff to evaluate students objectively and motivates them to give study their best effort.

Thanks to my undergraduate studies, I was able to find a decent employment with a good salary and a friendly team. My work enriches me daily, while studying for the master’s degree gives me new knowledge for efficient professional growth. I can recommend studying at the RUDN’s Center for Industries Management to those who want to have relevant knowledge, friendly and professional academic staff and attentive administrative team. This Master’s program of RUDN’s Center for Industries Management is relevant for those who strive to succeed in their work, as well as for those who would like to find a job after graduation. Students of the Center for Industries Management participate in scientific activities, publish academic articles in journals reviewed by Scopus and VAK (the RF Higher Attestation Commission).

As for me, the Center for Industries Management is a place where everyone can get theoretical knowledge, as well as practical skills. While most of my friends from other universities complain about weariness from study and are looking forward to graduating, I really enjoy my training here. I am so grateful for the opportunity to study at RUDN and am immensely proud of my choice. ”



STUDENTS FEEDBACK



ANASTASIYA BILETSKAYA

“ I got my bachelor’s degree in Management in 2019 going for the Management of High-technology Industries track of the Center for Industries Management of the Faculty of Economics, RUDN. The same year I enrolled with the Economics master program in Efficient Decision-Making in Management with the focus on Big Data Economics. Instruction in those areas allows me to apply knowledge in my daily work. Thanks to the faculty members, all of whom are practitioners, students get the theoretical fundamentals of Economics and Management, as well as learn about real situations one might face in the modern-day economy.

The Center for Industries Management prepares professionals who meet the requirements of the modern competitive environment. ”



HEAD OF THE PROGRAMME

ALEKSANDR CHURSIN



Doctor of Economics, Professor, Head of the Applied Economics Department, Scientific Director of the Center for Industries Management at RUDN Faculty of Economics, Scientific Adviser to the RUDN Rectorate. Adviser to the CEO of United Rocket and Space Corporation JSC, Advisor to the CEO of Russian Space Systems JSC.

Doctoral Thesis: The State Concept and Framework of Managing the Scientific and Technical Progress in the Defense Industry in the New Economic and Production Conversion Environment. Author of 35 monographs and study guides (16 of them with no co-authors), 170+ scientific papers, 24 patented inventions in tool engineering and rocket engineering. Of note and distinction are foreign publications - four monographs published by Springer International Publishing Switzerland (Heidelberg, Germany), which were added to the Scopus database, and 30 + Scopus / Web of Science academic articles.

AREAS OF RESEARCH CONCENTRATION:

Competitive Capacity of Enterprises, Economics of Space Industry, Innovations Management, Developing Competencies of a Company, Competitive Advantage, Digital Economy.

Over 1,500 indexed publications in the Russian Science Citation Index (h-index = 15, Scopus h-index = 7).



HEAD OF THE PROGRAMME

Seven-times grantee of the Russian Foundation for Fundamental Research (Russian Foundation for the Humanities) competitions, including an international grant supported by the Belarusian Foundation for Fundamental Research, conducted in collaboration with the scientists and experts at the Academy of Management under the President of Belarus. Acted as a supervisor and performer of multiple fundamental scientific and research activities and rendering services to industrial enterprises, ministries and agencies of the Russian Federation.

Acted as thesis supervisor to 14 Candidates and 4 Doctors of Economy.

Academician of the Russian Academy of Military Sciences, expert in the scientific and technical field, member of Russia-Kazakhstan Intergovernmental Commission on Space Activities, as well as of a number of councils, including the Russian Academy of Science Scientific Council on systemic problems of the Eurasian economic integration, modernization, competitiveness and sustainable development. Chairman of the Joint D 999.058.03 Dissertation Council of RUDN, the Rostec State Corporation and CRI Electronics. Member of the Register of Russian Academy of Science experts since 2016.

Holder of the Council of the USSR Council of Ministers Award in Science and Engineering; a Tsiolkovsky prize for personal creative contribution to the implementation of space programs and projects; Order of the Badge of Honour; a number of USSR medals of Honour and intergovernmental awards of the Russian Federation and Ukraine. Following the Presidential Decree Aleksandr Chursin was awarded the second-class medal of the Order of Merit for the Motherland for the professional achievements and long-standing productive activity.