



ITMO UNIVERSITY

Saint Petersburg, Russia

ANNUAL

REPORT

2018

#ITMO

scientists

students

graduates

art

professors!

our team

partners

St. Petersburg





*Welcome to
St. Petersburg!*

THE HOME OF ITMO UNIVERSITY

8

Strategic development

Introduction

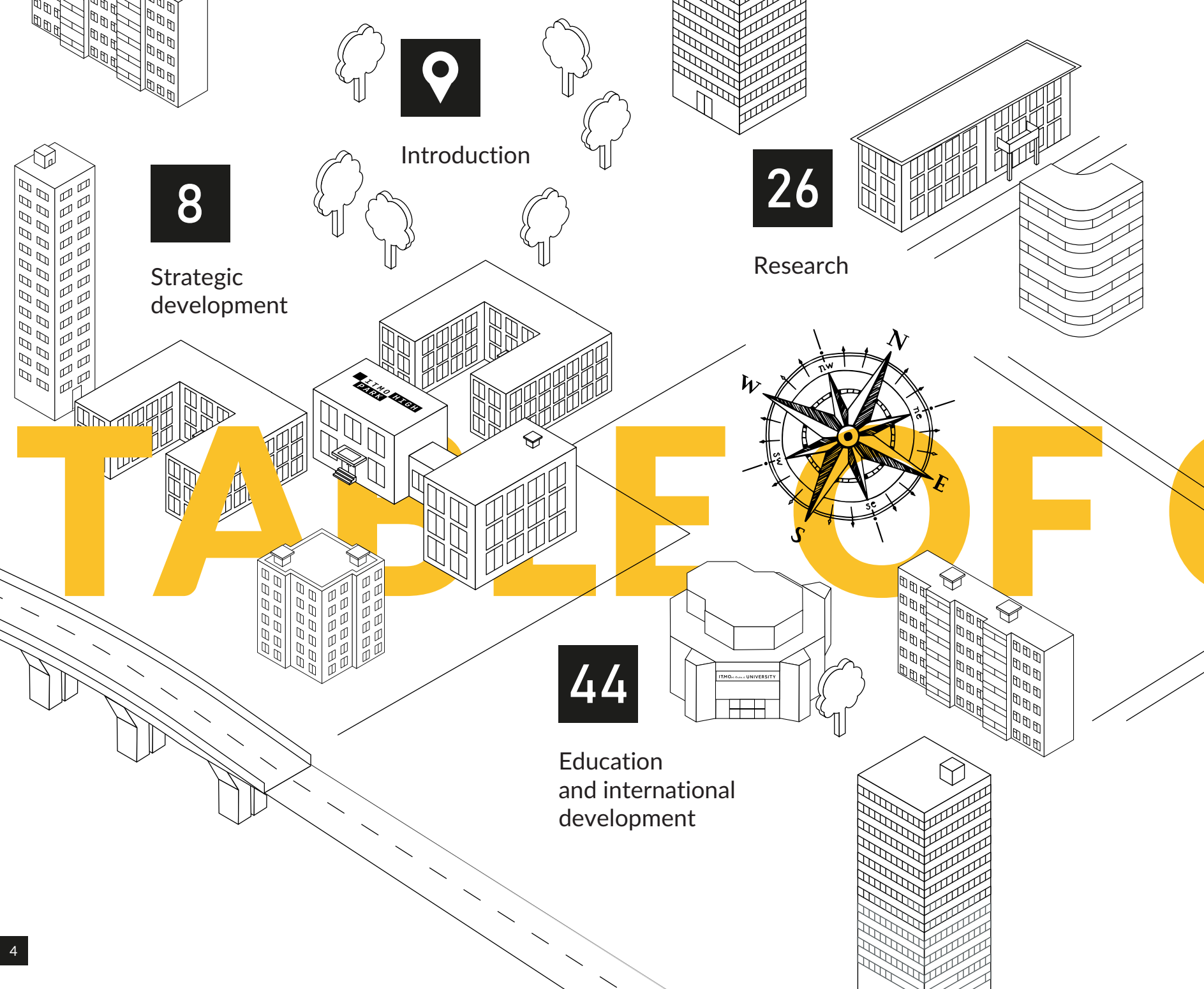
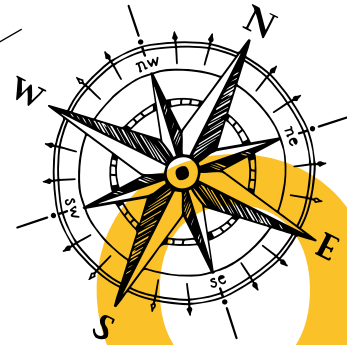
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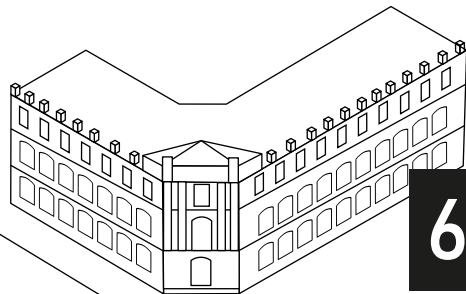
Research

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Education and international development

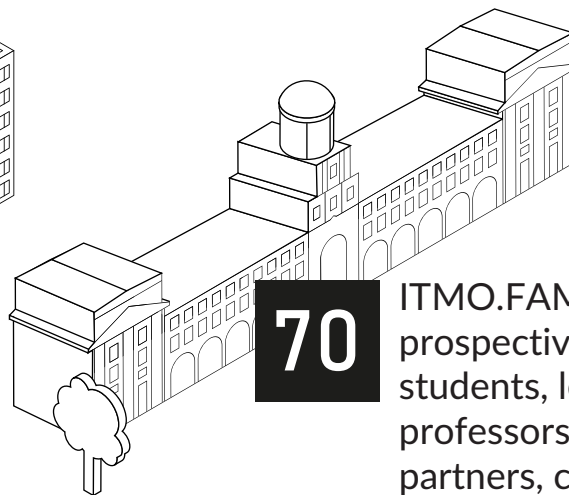
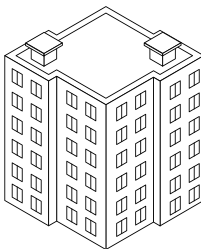
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ITMO.TECH:
entrepreneurship
and innovation



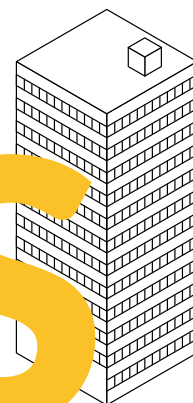
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ITMO.FAMILY:
prospective and current
students, lecturers,
professors, alumni, staff,
partners, citizens of
St. Petersburg



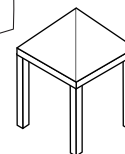
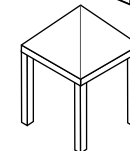
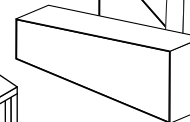
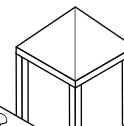
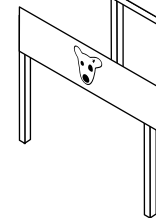
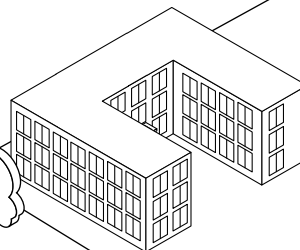
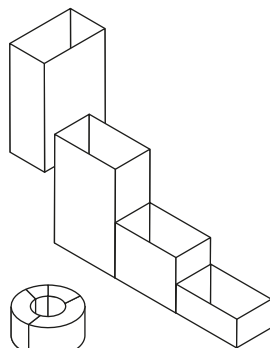
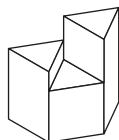
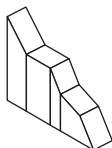
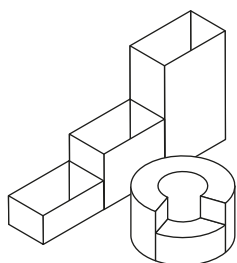
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ITMO University –
the "First Non-Classical"



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Financial
report

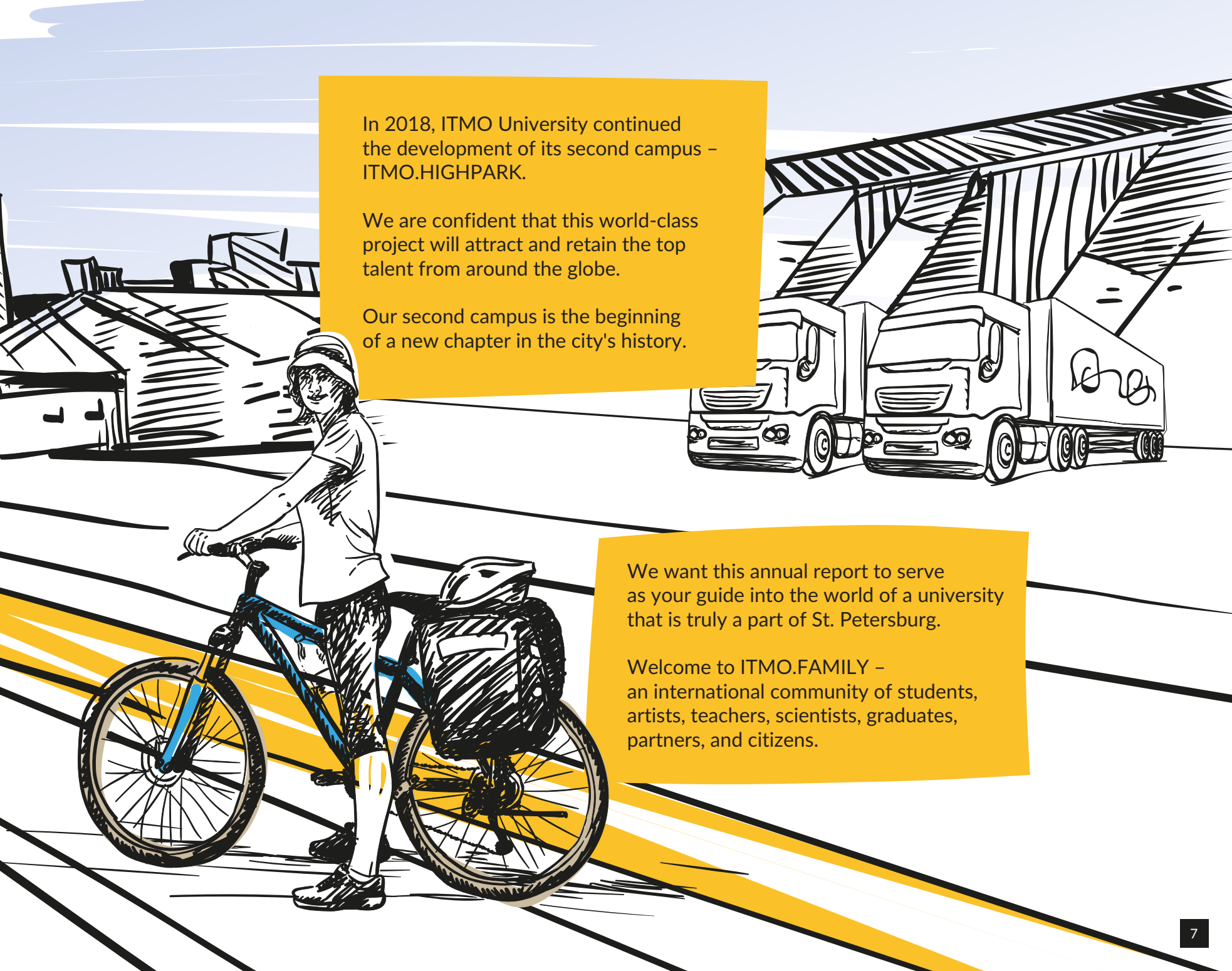




Our university is inseparable from the history of St. Petersburg, its spirit, destiny, and achievements.

Our many buildings and facilities are located in central St. Petersburg; our events, research projects, and social initiatives are designed not only for ITMO students and staff, but for all citizens and guests of the city.

We are part of St. Petersburg's cultural code.

A stylized illustration of a city street. In the foreground, a person wearing a white hoodie and shorts is riding a blue bicycle with a large black backpack. The background shows buildings and two white trucks with trailers. The scene is rendered in a sketchy, line-art style with some yellow highlights on the ground and text boxes.

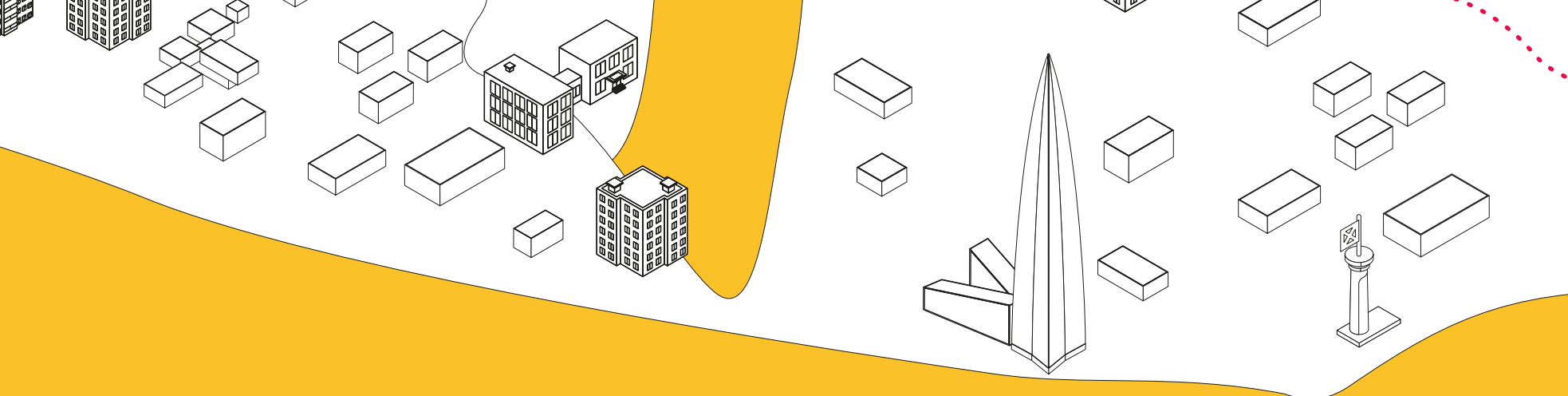
In 2018, ITMO University continued the development of its second campus – ITMO.HIGHPARK.

We are confident that this world-class project will attract and retain the top talent from around the globe.

Our second campus is the beginning of a new chapter in the city's history.

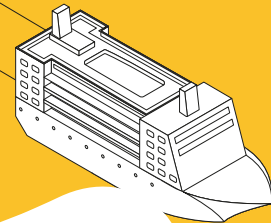
We want this annual report to serve as your guide into the world of a university that is truly a part of St. Petersburg.

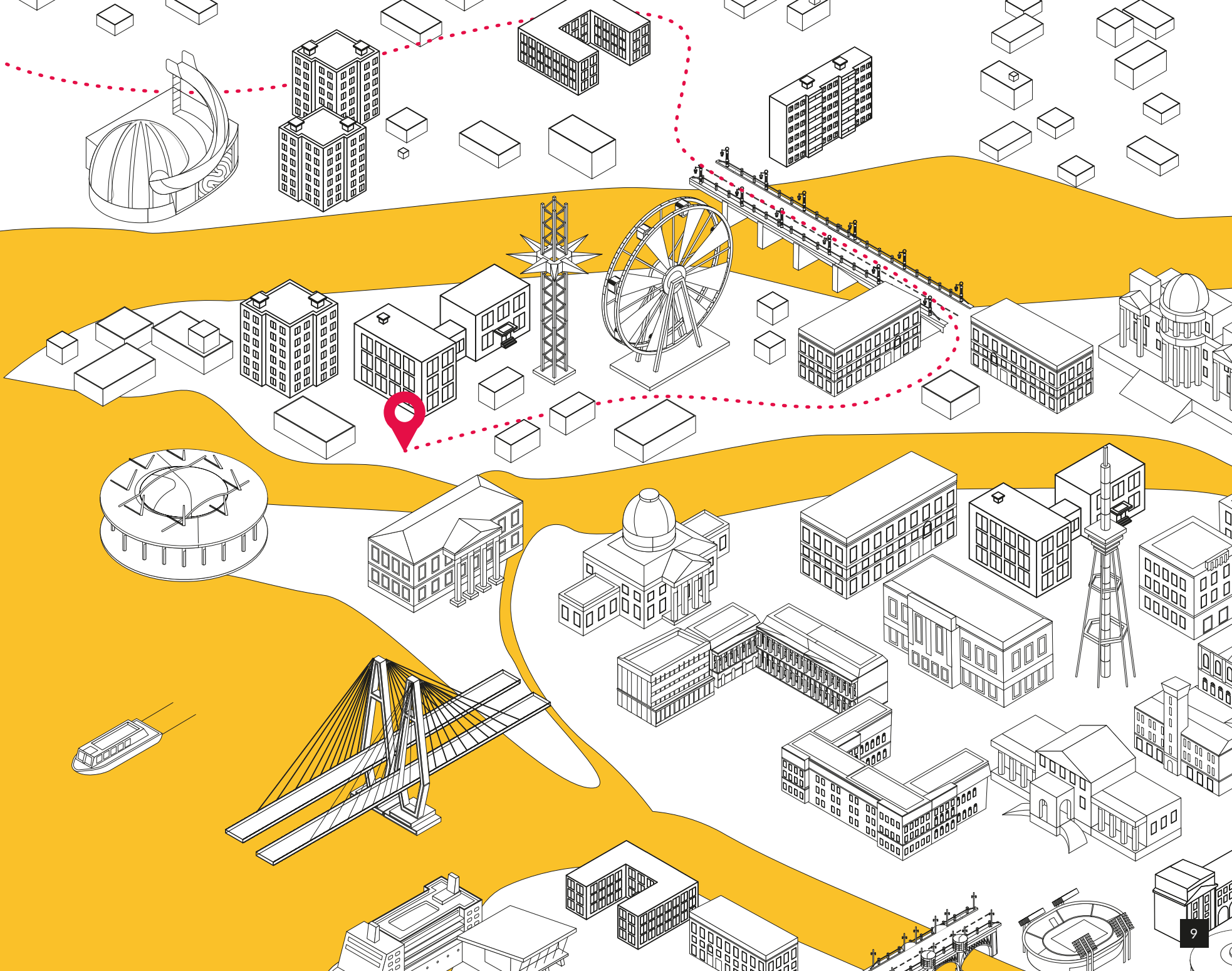
Welcome to ITMO.FAMILY – an international community of students, artists, teachers, scientists, graduates, partners, and citizens.



01

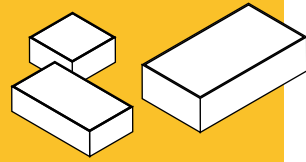
*Strategic
development*





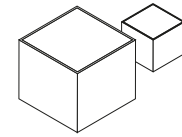
OUR MISSION:

to provide opportunities for the holistic development of individuals and to inspire them to tackle global challenges.

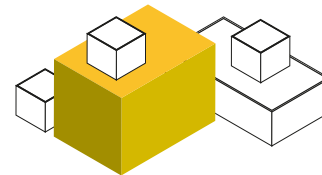


OUR STRATEGIC GOAL:

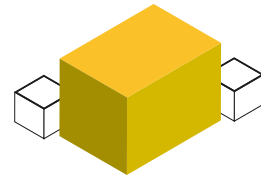
to generate new knowledge, markets and businesses, to navigate individuals in the world of information while preserving the balance between the physical and virtual realities.



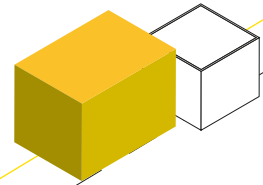
In 2018, ITMO University adopted the Development Strategy 2027, setting new priorities for working "hand-in-hand with AI":



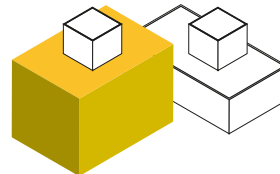
a new model of the university for a digital world: transparent, progressive, quick to adapt;



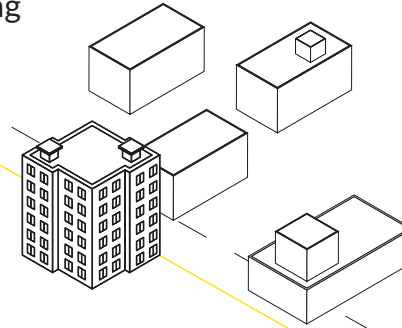
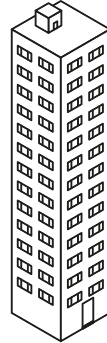
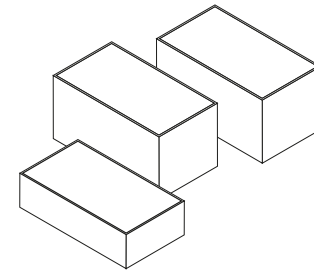
global education on par with the world's top universities in ITMO's areas of expertise;

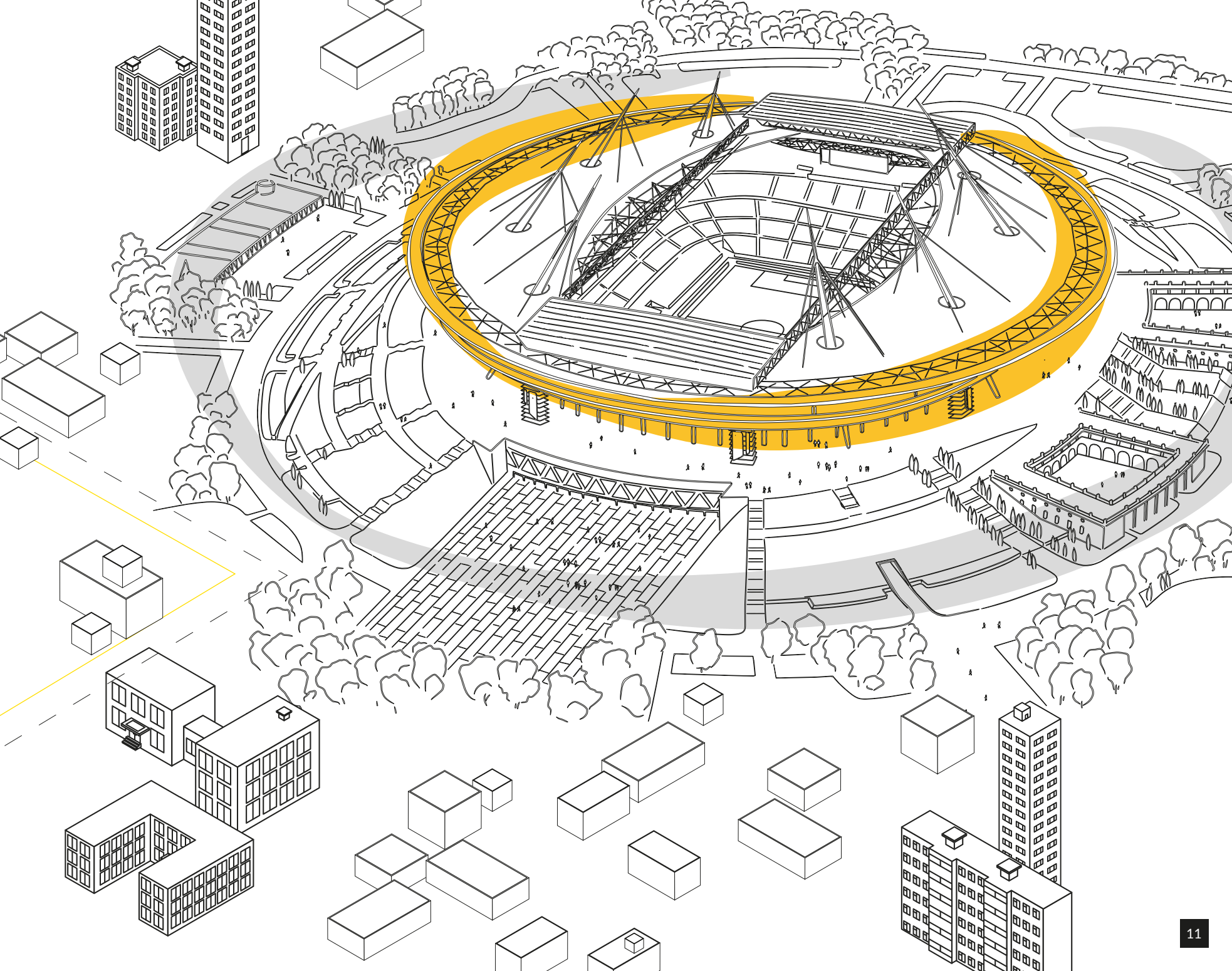


leadership in the University's scientific and technological areas of expertise; active work in the markets of top geographical priority;



the creation of a global ecosystem that facilitates educational, research, and innovative functions using a network partnership model.





#10 YEAR CHALLENGE

2008

Percentage of international students ● **1.9%**

Percentage of international researchers ● **1.14%**

Income from R&D projects ● **328 million rubles**

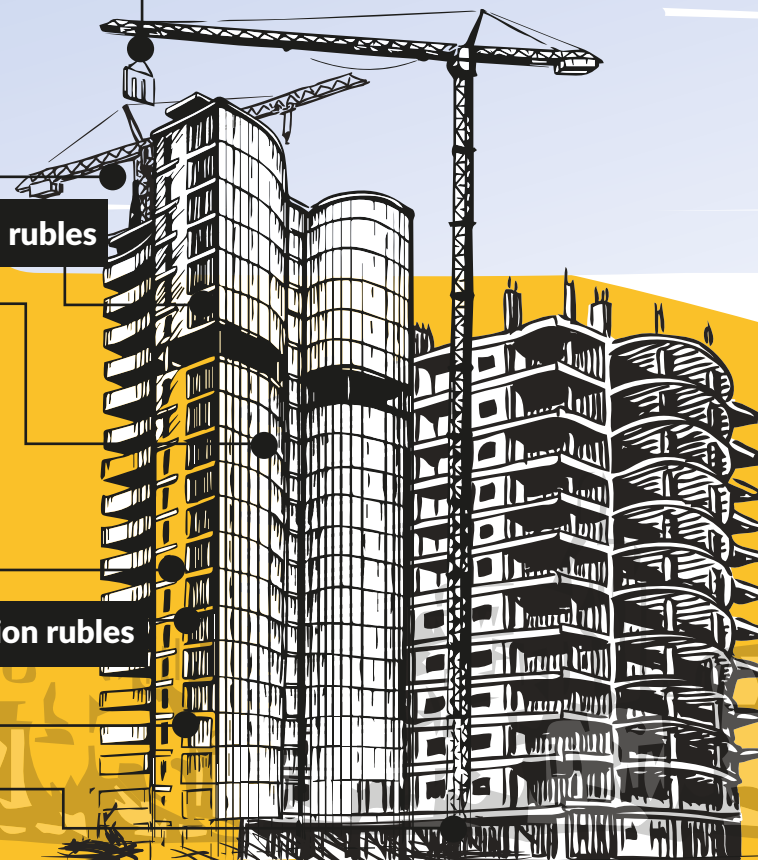
Volume of R&D per one researcher ● **0.461 million rubles**

Publications in Scopus ● **152**

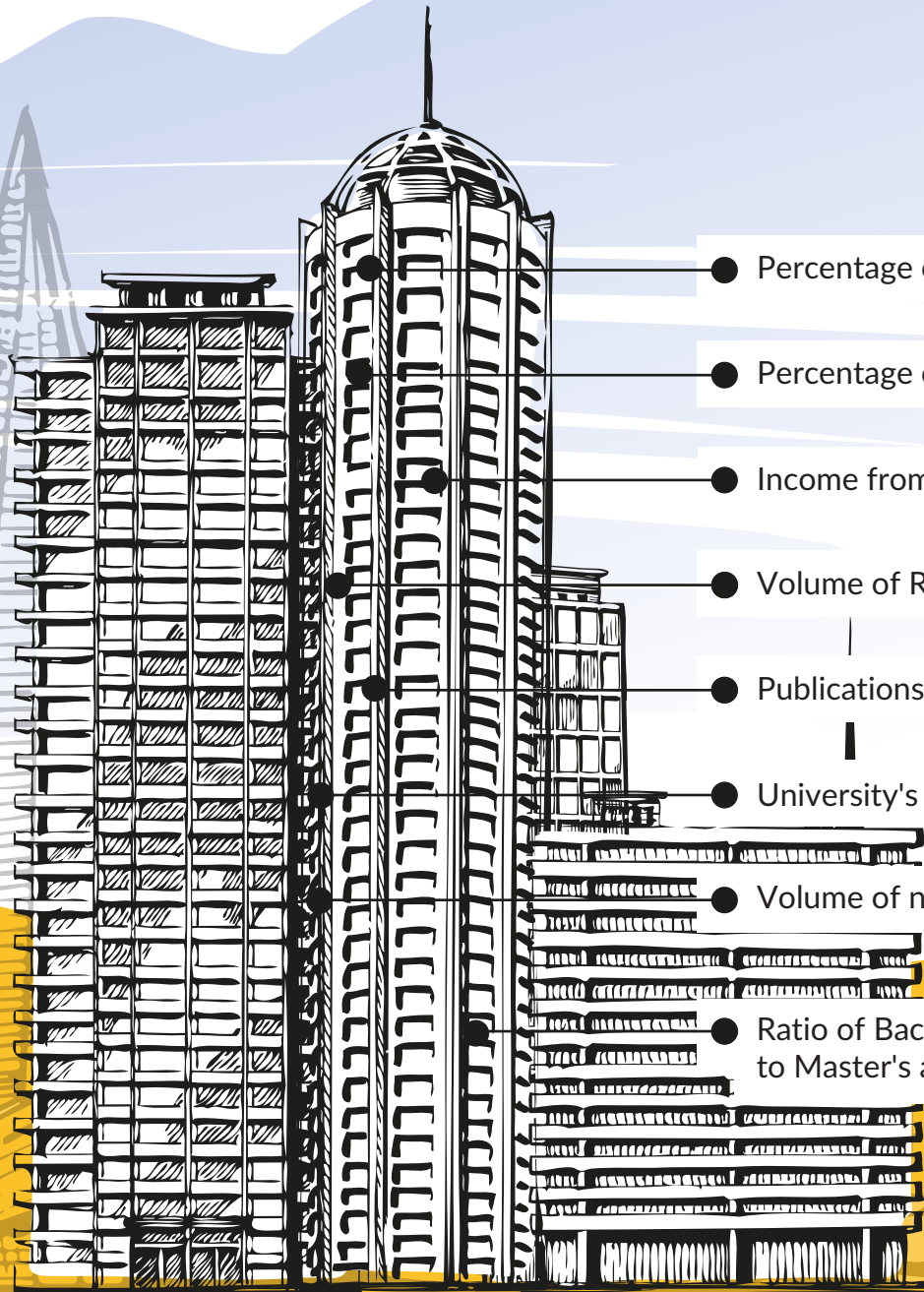
University's total budget ● **1.56 billion rubles**

Volume of non-government contracts ● **107.5 million rubles**

Ratio of Bachelor's and Specialist students
to Master's and PhD students ● **6:1**



2018



● Percentage of international students **17.2%**

● Percentage of international researchers **7.68%**

● Income from R&D projects **2.9 billion rubles**

● Volume of R&D per one researcher **3.5+ million rubles**

● Publications in Scopus **2,400+**

● University's total budget **6.56 billion rubles**

● Volume of non-government contracts **628 million rubles**

● Ratio of Bachelor's and Specialist students to Master's and PhD students **1:1**

Developing in line with global educational trends

Use of international educational practices:

- prestigious educational programs of increased difficulty (Honors program);
- support for open and online- education;
- Learning Analytics.

Research management:

- team-based approach to research;
- use of the Principal Investigator (PI) format;
- support for initiatives of the Open Science project;
- Principal Investigators as "scientific entrepreneurs";
- Academic Analytics.

Development and organization of modern campuses for research and education:

- university campus as a "live lab";
- decentralized campus management system;
- flipped classrooms;
- open-access student labs;
- areas for individual and group work.

Key areas of focus for research and education

Photonics:

- quantum technologies and quantum-based infrastructure;
- biophotonics;
- space photonics;
- Horizon Europe (2021 - 2027).

High-tech entrepreneurship:

training programs for entrepreneurs, managers, and investors in the high-tech industry.

Biotechnologies and life and health sciences:

- digital tech in food biotechnologies, chemistry, medicine, and pharmaceutical industry;
- biotechnologies and information security (including personal data security);
- increased venture investment in biotechnologies;
- cyberattack resistance;
- synthetic biology.

Artificial intelligence:

- active increase in number of AI-focused educational programs at the world's top universities;
- new soft skills based on trust in technology and machine-made solutions;
- AI-ready culture;
- data curation;
- data storytelling.

Key technological and research challenges faced by the university

Intelligent technologies

The growing complexity of economic and social processes; obsolescence of traditional management and data processing methods.

Cyber-physical systems

A reduced level of security in modern information and cyber-physical systems amid a growing number of mobile devices and "smart" devices that exchange massive amounts of data without human involvement.

Photonics and quantum technologies

A growing crisis of the communication and energy infrastructures signifies a need for new materials and new hardware.

Biotechnology and life and health sciences

The demographic shift caused by increased human lifespans and lifestyle changes calls for new approaches to ensuring a high quality of life.

FORESIGHT AND STRATEGIC MANAGEMENT

71st

Times Higher Education World University
Rankings by Subject: Computer Science

301–400

Times Higher Education World University
Rankings by Subject: Engineering and Technology

301–400

Times Higher Education World University
Rankings by Subject: Physical Sciences

201–300

ARWU Global Ranking of Academic Subjects:
Nanoscience & Nanotechnology

301–400

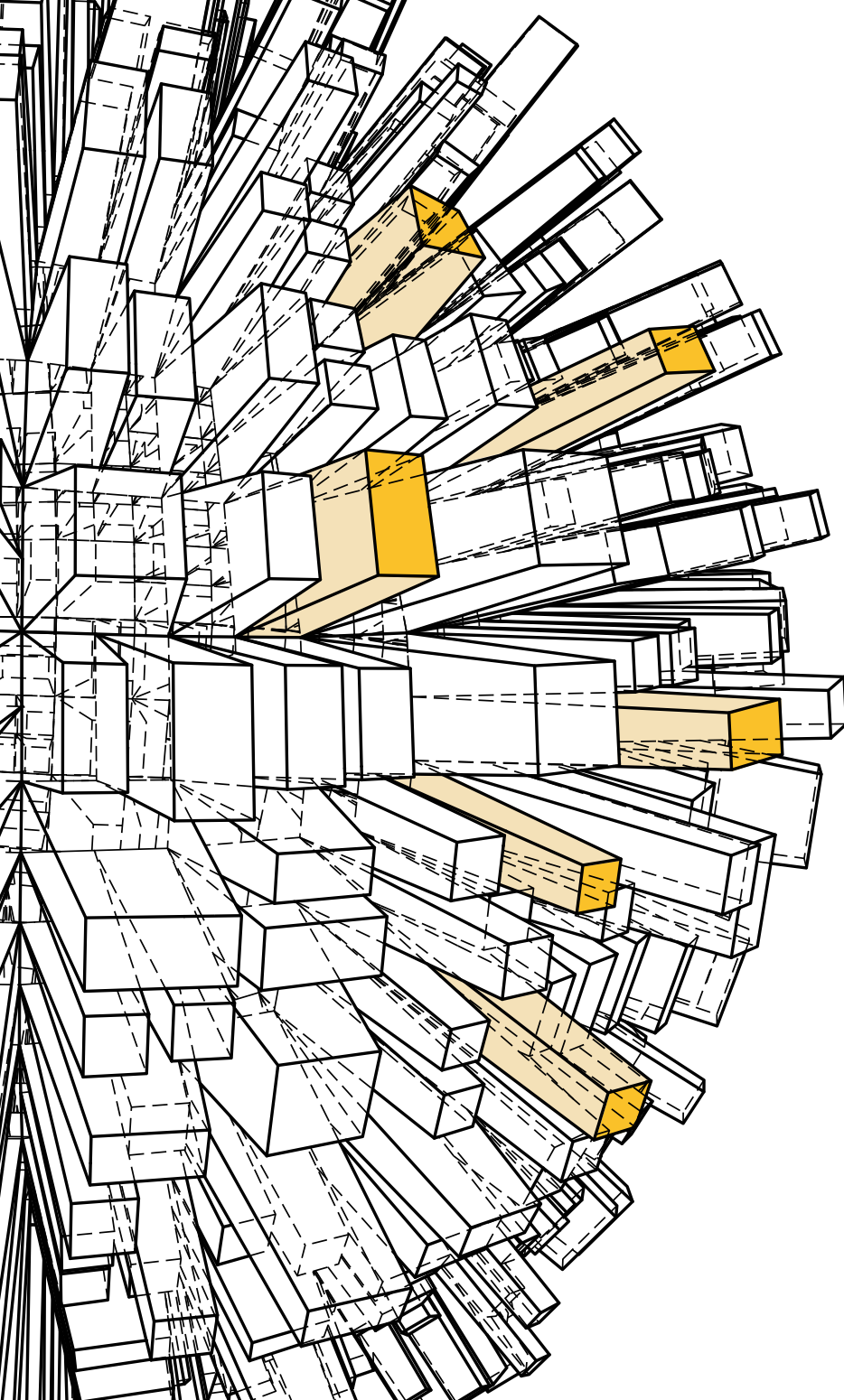
ARWU Global Ranking of Academic Subjects:
Materials Science & Engineering

401–500

ARWU Global Ranking of Academic Subjects:
Electrical & Electronic Engineering



RANKINGS



251–300

QS World University Rankings by Subject:
Computer Science & Information Systems

351–400

QS World University Rankings by Subject:
Engineering – Electrical & Electronic

351–400

QS World University Rankings by Subject:
Physics & Astronomy

56th

QS EECA University Rankings

64th

QS BRICS University Rankings

15th

RAEX National Ranking of Universities

9th

National University Ranking by Interfax

GLOBAL PROJECTS FOR STRATEGIC DEVELOPMENT

ITMO.HIGHPARK

ITMO.HIGHPARK is ITMO University's second campus: a major research, education, and innovative production cluster with a total area of over 100 hectares.

This territory will be home to business incubators, research centers, student dorms, and staff housing.

ITMO University's Master's and PhD students will move here to study and conduct applied research in a variety of fields.

ITMO.HIGHPARK will support the technological, economic, and social development of St. Petersburg.

In particular, the following infrastructure development projects will receive active support:

- Renovation of the Kievskoe Freeway, the access roads to Pulkovo Airport, the town of Pushkin, and the Expoforum Convention Center;
- Introduction of new international flights at Pulkovo Airport;
- Infrastructure development for campuses of other top universities: St. Petersburg State University and Saint-Petersburg State Agrarian University;
- A new technopark in the town of Gatchina;
- A special economic zone in the Strelna settlement;
- Construction of the Pulkovo Aeropolis and more.

Location: Yuzhny satellite-city (Pushkinsky district of St. Petersburg)

Online: highpark.pro

The purpose of ITMO.HIGHPARK is not only to develop the Russian IT industry, but to train a new generation of practice-oriented specialists for Russia and the world. Our focus will be on the following areas:

- intelligent technologies and cyber-physical systems;
- photonics and quantum technologies, smart materials;
- life and health sciences.

By 2027

3,600
Master's students

12,000
jobs

5
innovative
production
facilities

50
international
laboratories

Market focus for ITMO.HIGHPARK:

- urban science (smart and safe city);
- virtual reality and the exploration of new environments, including ones of extreme nature;
- creative industries.

Numbers and forecasts

**30.2
billion rubles**

paid in taxes into the federal
budget over a 10-year period

**5.3
billion rubles**

direct tax revenue

**24.9
billion rubles**

indirect tax revenue: integration of tech
developed by residents, income from
the creation and development of new
markets

**18.3
billion rubles**

paid in taxes into the regional
budget over a 10-year period

**3.3
billion rubles**

direct tax revenue

**15
billion rubles**

indirect tax revenue

SMART ST. PETERSBURG

Since 2017, St. Petersburg has been undergoing a process of digitization. The Smart City project office was established as part of that initiative, headed by ITMO University's Rector Vladimir Vasilyev.

In 2018, the Government of St. Petersburg gave its approval to "Smart St. Petersburg", an urban development program based on smart-city technologies. The program aims to raise the quality of life for all citizens of the city, improve urban management, and to form a new economic system via the introduction and propagation of digital, information, and intelligent technologies.

ITMO University's main guiding point for the Smart St. Petersburg project is the focus on individuals living in a big city. Everything that's done is done for the people and with respect for their needs.

The Smart City work group is headed by Alexander Boukhanovsky, PhD, the head of ITMO's School of Translational Information Technologies, with Sergei Drozhzhin, an analyst for the Institute of Design & Urban Studies, as the concept designer.

The online portal Smart St. Petersburg was developed and launched in 2018 with the goal of collecting relevant, authentic information about the urban environment through contributions made by the citizens. This online service brings together city authorities, businesses, and the citizens of St. Petersburg with a shared aim of solving the various issues related to life in a large city.

Location: St. Petersburg, Kronstadt, Leningrad Oblast.

Online: idu.ifmo.ru
petersburgsmartcity.ru
imprecity.tilda.ws

Smart St. Petersburg: Goals and projects

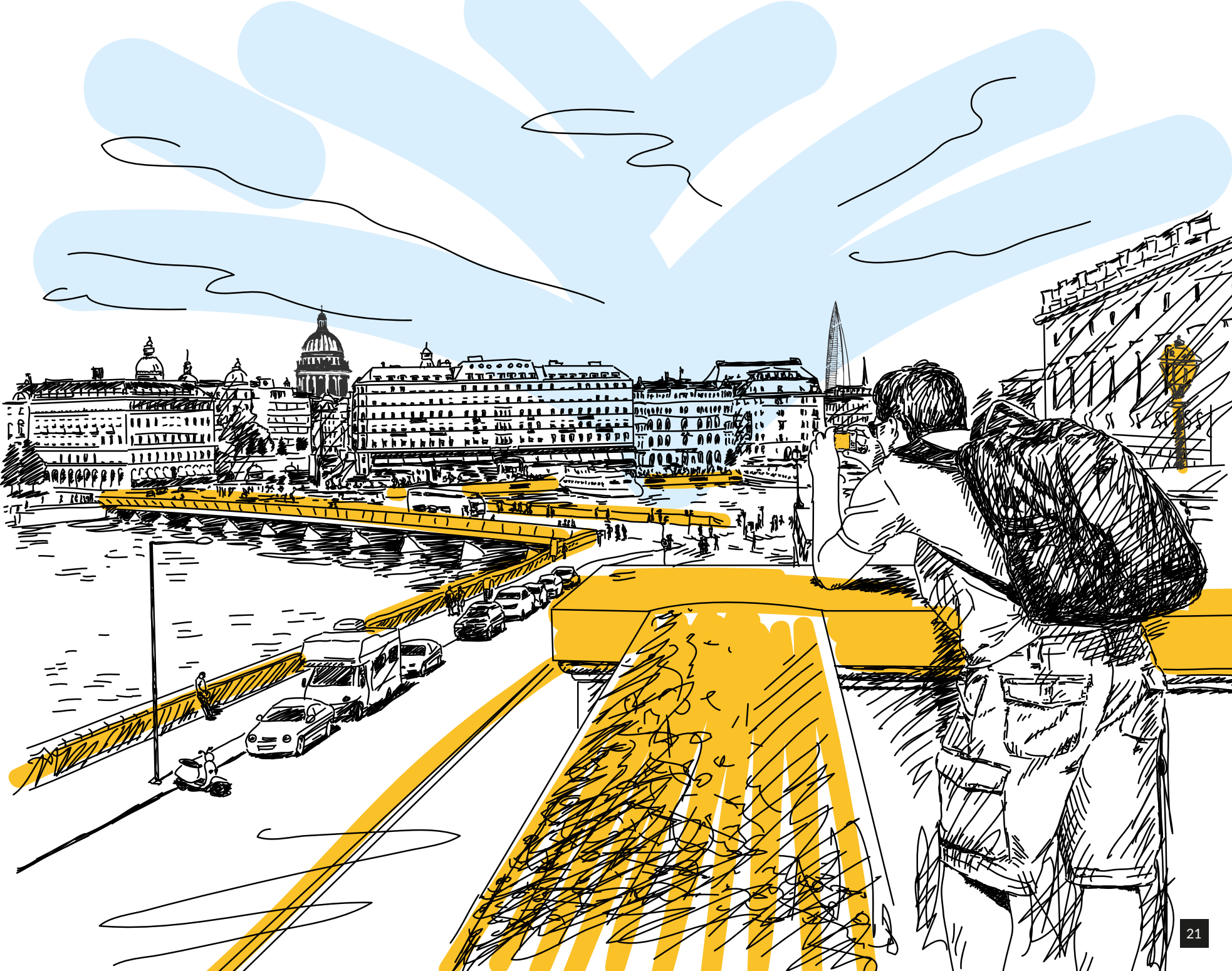
By late 2018, the project office had 60+ initiatives under consideration. All of these initiatives correspond to the principles of smart city development.

They include: a technology for thermal waste treatment (the production of heat and electric energy from waste), an e-car infrastructure, a 3D-map of St. Petersburg, and a mobile app for tourists that provides updates on nearby discounts, sales, and interesting events.

Social initiatives: the introduction of a device designed to make communicating with others easier for deafblind, visually impaired, and mute individuals.

The Smart St. Petersburg strategy will help the city undergo a digital transformation and enable new modes of communication between the government, citizens, and businesses, as well as improve the quality of services in the following areas:

- city management: the creation of a digital model of the city with the goal of supplying the public with information and supporting the development of new areas;
- healthcare: an oncological monitoring center and digital healthcare services;
- data management: implementation of the "single-window" model;
- social support: the "citizen's all-purpose card": a credit card, transit pass, discount card, and digital signature chip all in one;
- urban planning and architecture: a city-wide network of pedestrian and green areas, the development of public spaces for work, study, and leisure;
- ecology: sorting, removal, recycling, and processing of waste;
- transportation: a sophisticated, high-tech transit system;
- urban lighting: smart-tech outdoor lighting system;
- telecommunications: full 5G coverage and internet-of-things technologies.



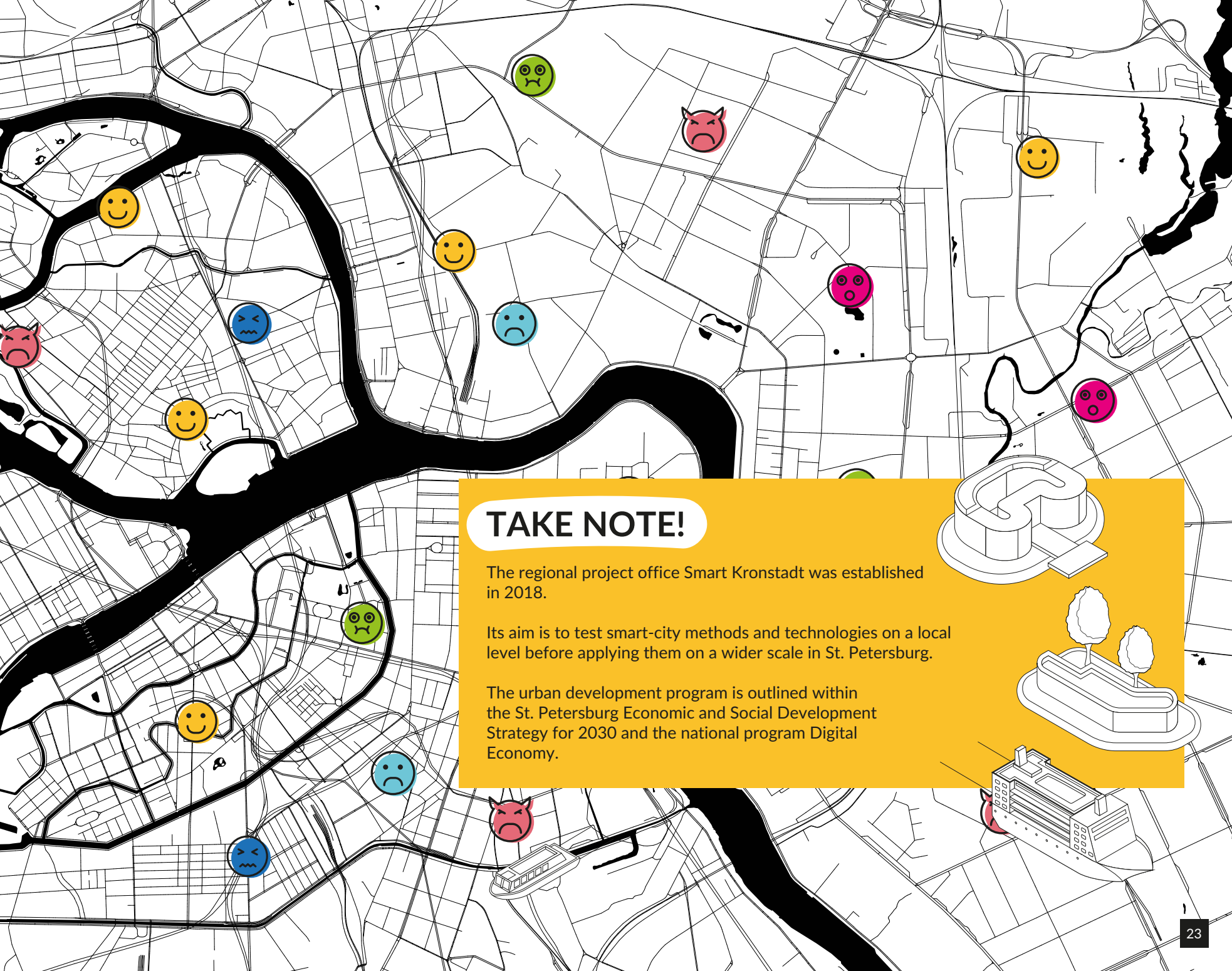
YOUR EMOTIONS, MAPPED OUT

One of ITMO University's key projects in 2018 in the field of smart city management is the IMPRECITY data platform.

Developers: a team of specialists from ITMO University's Institute of Design & Urban Studies.

Premise of the project: the emotions felt by St. Petersburg citizens toward streets, public areas, buildings, etc. are visualized on a map of the city; citizens become part of communities that are able to make suggestions on the development of urban spaces with the support of ITMO University's experts and city authorities; the project will help develop a database of urban spaces, routes, dating spots, promenades, and other spots of attraction.



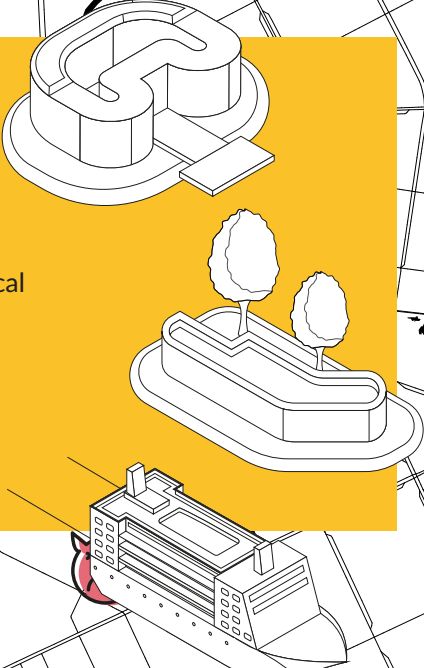


TAKE NOTE!

The regional project office Smart Kronstadt was established in 2018.

Its aim is to test smart-city methods and technologies on a local level before applying them on a wider scale in St. Petersburg.

The urban development program is outlined within the St. Petersburg Economic and Social Development Strategy for 2030 and the national program Digital Economy.



NATIONAL TECHNOLOGY INITIATIVE: THE NATIONAL CENTER FOR COGNITIVE TECHNOLOGIES

ITMO University is actively involved in the development of cutting-edge technologies for the Russian digital economy.

In 2018, the National Center for Cognitive Technologies (NCCT) was established at ITMO University as part of the government support program for centers of the National Technology Initiative. The NCCT focuses on machine learning and cognitive technologies: "cross-cutting" technologies that are vital to the development of the nation's digital economy.

NCCT's goal:

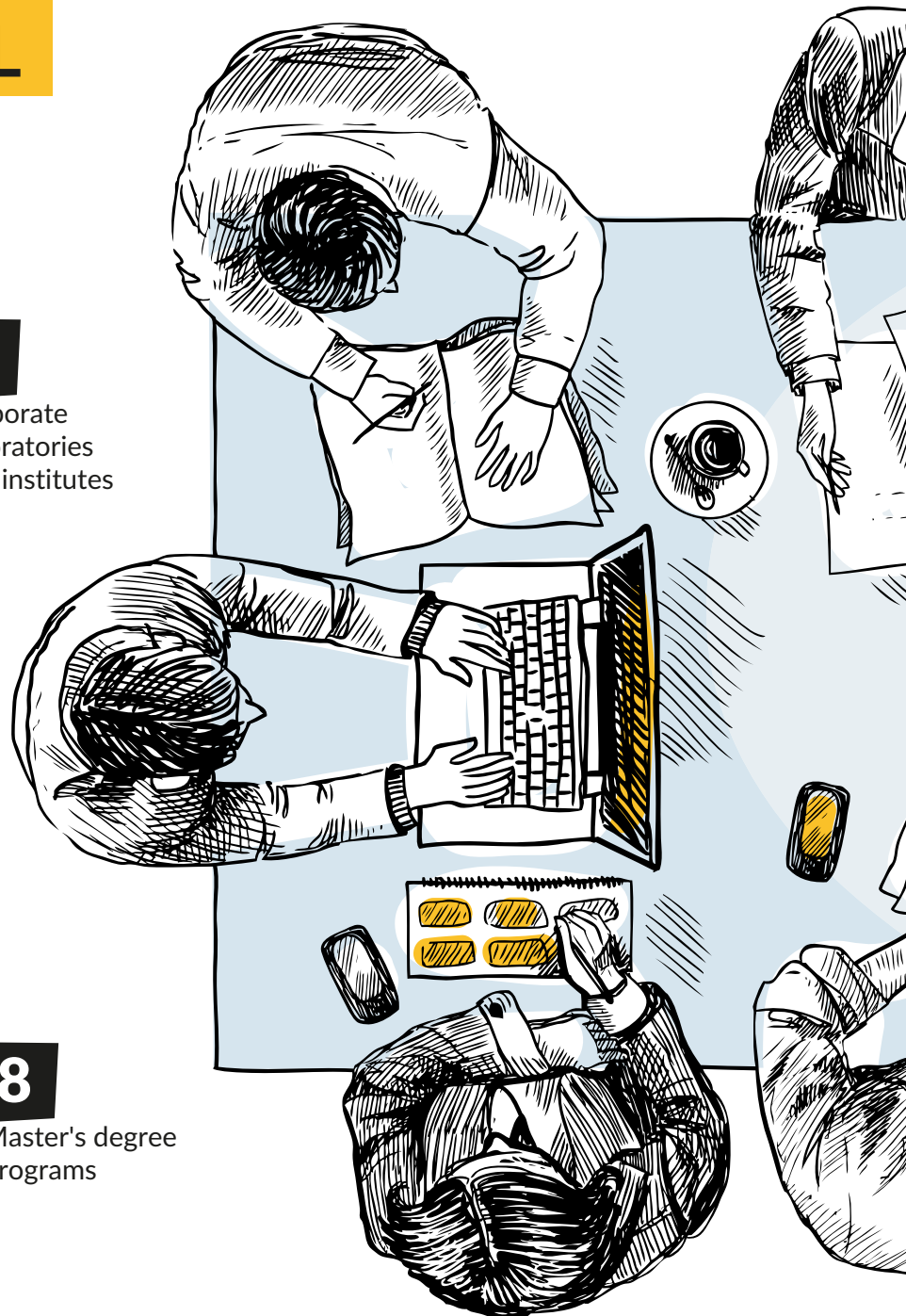
to establish a domestic ecosystem for the development and integration of machine learning and cognitive technologies for the purpose of producing high-tech products and services for the digital economy.

6

corporate laboratories and institutes

8

Master's degree programs





11

continued education programs

Research areas:

- intelligent technologies for P4 medicine and biometrics;
- intelligent technologies of virtual reality;
- quantum cognitive technologies, including cognitive educational technologies;
- natural language processing.

800

students

232
million rubles

raised in non-budgetary funding

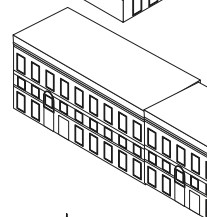
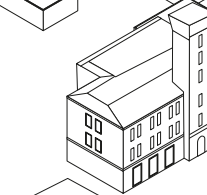
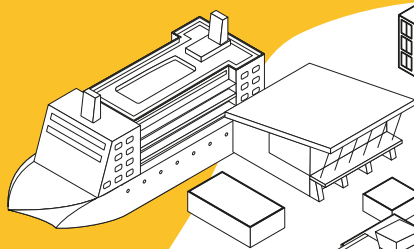
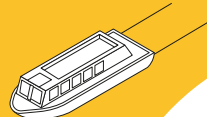
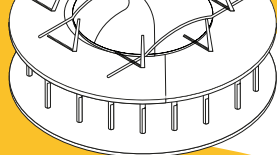
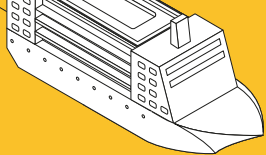
105
million rubles

government funding

The Center's consortium is made up of 20+ leading organizations in the industry:

- Mobile Telecom Systems
- Speech Technology Center
- Gazpromneft Science & Technology Center
- Mail.ru Group
- ER-Telecom Holding
- Sberbank
- Almazov National Medical Research Center and others.

In 2018, ITMO University received a 100.6 million rubles subsidy from ROSATOM for the coverage of expenses related to the implementation of pilot research projects in the field of cutting-edge digital economy technologies, sourced from the Russian Government Reserve Fund.

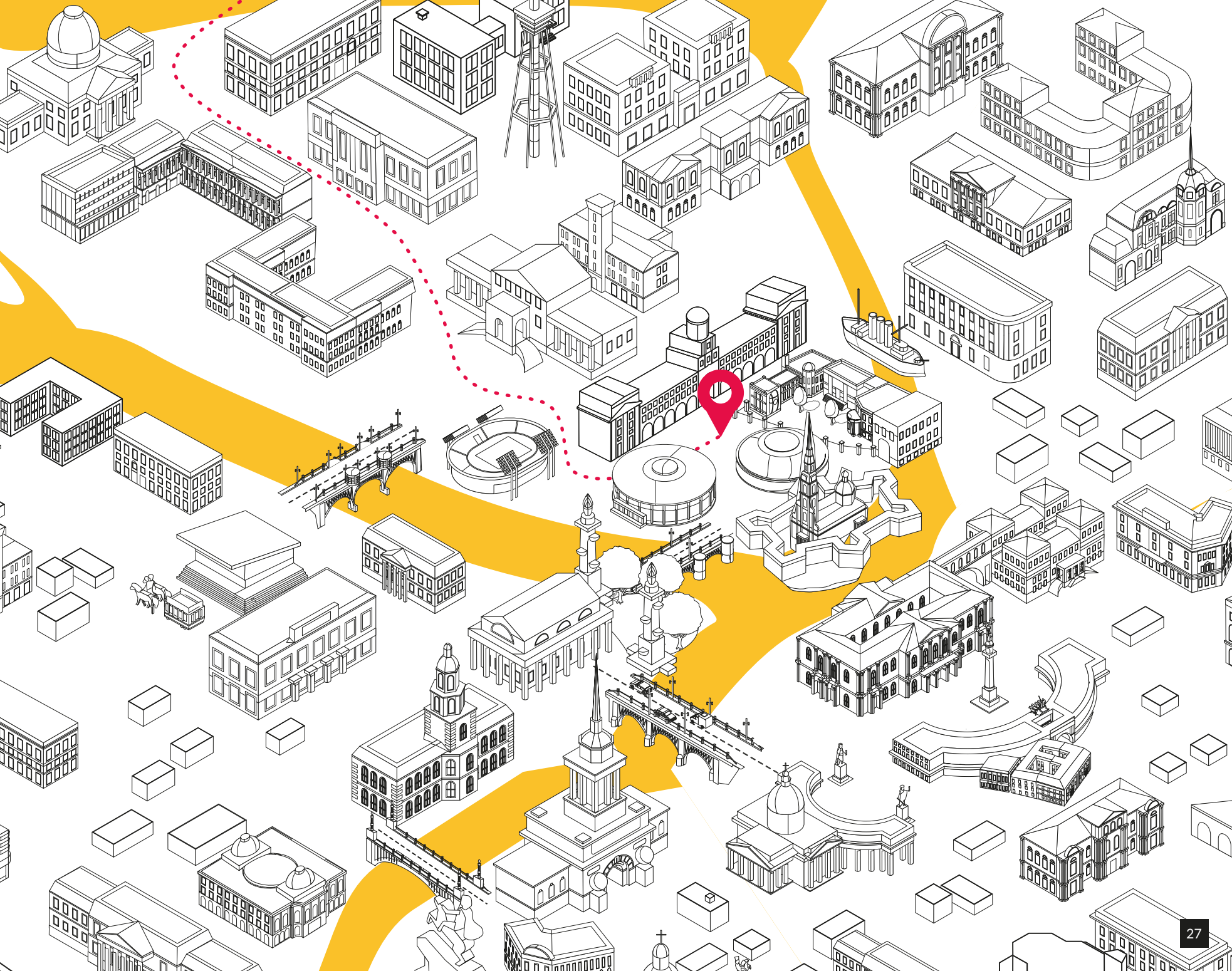


- Locations:**
- Kronverksky Pr. 49
 - Lomonosova St. 9
 - Kadetskaya Line 3
 - Gritsova Ln. 14-16
 - Birzhevaya Line, building 4 and 14-16

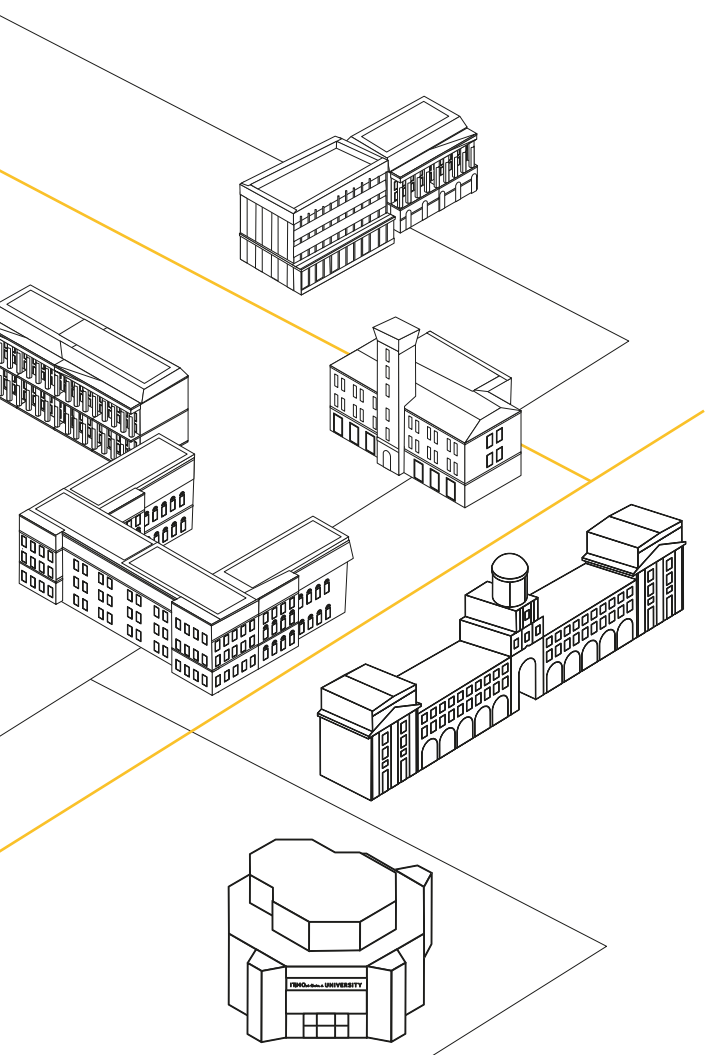
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Research

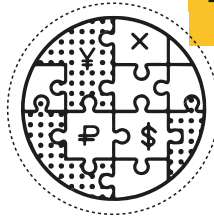
- research.itmo.ru
- aspirantura.ifmo.ru



KEY AREAS OF RESEARCH



School of Translational Information Technologies



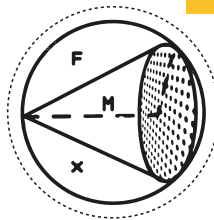
- artificial intelligence;
- big data;
- high-performance computing;
- decision support systems;
- translational medicine.

School of Computer Technologies and Control



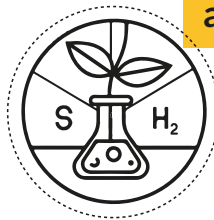
- cyber-physical systems;
- robotics and adaptive control;
- cyber- and data security.

School of Photonics



- quantum communications;
- optical technologies and laser systems;
- metamaterials and new functional materials.

School of Biotechnology and Cryogenic Systems



- biotechnologies;
- nanopharmaceutics and nanoengineering;
- chemical engineering.

RESEARCH SPENDING AND PUBLICATION ACTIVITY

2.9
billion rubles

total volume of funding
for R&D in 2018.

Including:

239+
million rubles

of university funds

274+
million rubles

from the Russian Science
Foundation

34+
million rubles

on international research

86.6
million rubles

megagrant funding

2,400+

Scopus-indexed
publications

48.6%

of publications
are co-authored
with international
researchers

2.9

citation index per 1 publication
in Scopus over 5-year period





543
million rubles

total amount of funding

In 2018, ITMO University collaborated with its partners on more than 20 projects as part of the federal targeted program "Research and Development in Priority Areas of Advancement of the Russian Scientific and Technological Complex."

RESEARCH PROJECTS AT ITMO UNIVERSITY

In collaboration with partners

1 Development of new technological components for management systems of geographically-distributed data centers

Partner: JSC Smarts
Head: Sergei Khoruzhnikov, PhD, Assoc. Prof.

2 Development and production of digital intelligent systems of superresolution computer vision for application in medicine, biology, and industry

Partner: LOMO PLC
Head: Nikolai Belashenkov, PhD

3 Development of a Li-Fi wireless data transmission suite for application in the Internet of Things and intelligent lighting environments in urban spaces

Partner: JSC Svyaz Engineering
Head: Vladislav Bougrov, PhD, Assoc. Prof.

4 Metal oxides-based thin-film composite functional materials for application in photovoltaic devices

Partner: Special Materials Corp
Head: Alexey Romanov, PhD, Assoc. Prof.

5 Development of functional food product technologies based on nanoencapsulated complex bio-active ingredients with scientifically proven prophylactic effects

Partner: Nordena Group
Head: Denis Baranenko, PhD, Assoc. Prof.

6 Research on sensorless force-torque sensing in robotic manipulators and the development of adaptive tooling

Partner: TRA Robotics
Heads: Anton Pyrkin, PhD, Prof.; Sergey Kolyubin, PhD

7 Computer modeling-based research on the requirements for infrastructure management of toll roads

Partner: Russian Highways state company
Head: Sergey Mityagin, PhD

8 Methods and devices for the registration of acoustic signals and deformations in polymer composite aviation materials

Partner: NIC IRT
Head: Igor Meshkovsky, DSc, Prof.

9 Production and delivery of 300 diffraction gratings

Partner: Hitachi High-Tech
Head: Nikolay Nikonorov, PhD, Prof.

Students' practice-oriented R&D

10 Development of a robotic multisensor 3D-vision suite

Head: Sergey Bykovsky, PhD, Assoc. Prof.
Result: experimental prototype of an on-board computer

11 Development of a prototype mobile platform equipped with computer vision, navigation, and augmented reality systems

Head: Aleksei Shchekoldin, PhD student
Result: the mobile robotic platform SMARR (smart manufacturer augmented reality robot)

12 Development of a star tracker lens

Head: Dmitry Sazonenko, PhD student
Result: surface forms of lenses inspected with the Zygo interferometer; blueprints of the lens and lens housing

13 Automated spherical scanner for the study of spatial properties of antennas

Head: Pavel Zolov, PhD student
Result: design documentation and a prototype of the scanner

14 Development of an anthropomorphic electromechanical gripper with a force-sensing system

Head: Denis Bazylev, engineer
Result: gripper mockup, 3D-printed using the Picaso 3D Designer PRO printer; printed circuit; assembly drawing for a prototype gripper

The development of experiment models on the visualization of lattice dynamics and stress fields in semiconductor nanowhiskers using superfast coherent X-ray diffraction at XFEL

Heads: V.G. Dubrovskii, S.L. Molodtsov, A.E. Romanov, V.E. Bougrov, G.E. Tsyrlin, P.N. Brunkov, R.R. Reznik (ITMO University), J.-C. Yarmand (Centre for Nanoscience and Nanotechnology C2N, Université Paris Saclay)

The first Russian project to receive approval to be conducted at the European XFEL in Hamburg. The facility is used to measure X-ray diffraction in conditions of laser-pumping by ultrashort pulses from binary and heterostructure nanocrystal assemblies of varied geometry.

In the course of the research, semiconductor filamentary nanocrystals are considered for the role of "construction elements" with potential applications in the development of optoelectronic and nanomechanical devices of the next generation.

Robust and adaptive systems of management, communication, and computation

Heads: Romeo Ortega, PhD, IEEE fellow; Alexey Bobtsov, PhD, Prof.

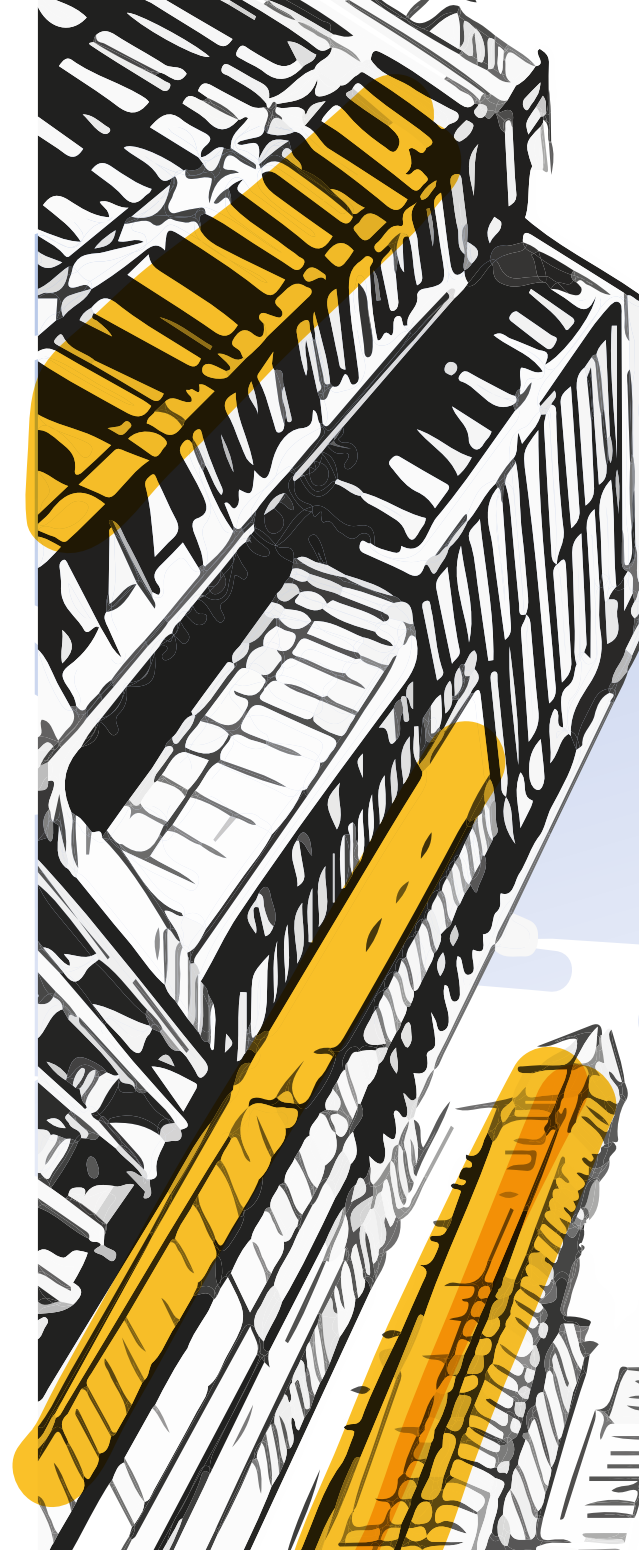
Goal: to develop approaches and methods of non-linear, adaptive and robust control over complex technical systems in the conditions of uncertainties, lag, and external disturbances.

Result: a world-class laboratory of analysis and synthesis of automated control systems has been established.

Development and improvement of perovskite-based nanophotonic and optoelectronic devices

Heads: Anvar Zakhidov, PhD, Prof.; Sergey Makarov, PhD

Result: the creation of Perolab, a world-class laboratory of hybrid nanophotonics and optoelectronics. General research focus: organic-inorganic perovskite-based optoelectronic devices with integrated nanostructures.





PEROLAB: KEY RESEARCH AREAS

Photovoltaics

Perovskite solar elements with integrated silicon particles (efficiency above 19%).

Safety Printing (UV ID)

Perovskite luminescent ink for inkjet printing. "Clean" colors in a wide waveband.

Perovskite nanophotonics

Perovskite microlasers and nanoscale photon sources for production of optical chips.

Light diodes:

- light-emitting solar elements;
- transparent flexible light diodes (transmission rate of up to 40%)

4

megagrant projects

Megagrant project: "Mode of strong light-matter coupling and quantum nonlinear effects in low-size nanostructures"

Research goals: to fine-tune the technology for integration of two-dimensional materials into photonic nanostructures and the creation of a laboratory for the study of optical properties of two-dimensional materials.

Heads: Maurice Skolnick, PhD; Ivan Shelykh, Cand.Sc.

Results: a fully-equipped laboratory of low-size quantum materials has been established, making it possible to carry out the entire lifecycle of sample production and experimentation. Researchers have produced the first samples, in which they observed a strong coupling mode. 30 articles have been published. A model of a quantum filter based on a quantum dot integrated into a nanostructure was built, followed by a prototype model.

CHEMBIO CLUSTER

SCAMT Lab: results of 2018

Established in 2018, SCAMT consists of a network of world-class research labs, a Master's and PhD education department, a scientific education center of chemistry and biotechnology, and the SIE Innocolloids.

Head: Vladimir Vinogradov, PhD, Assoc. Prof.

Key research trends:

- a shift towards nanopharmaceuticals and "smart" medical products;
- genome editing technologies;
- implantable biosensor systems;
- programming of living systems.

TAKE NOTE!

As of 2018, ITMO University is home to **29** international research centers and laboratories.

There are a total of **750** employees involved in the operation of these departments.

Among them are **150** international staff.

Financial metrics

5 million rubles

SIE revenue

27.5 million rubles

R&D

52.5 million rubles

in grants

Students' research performance

52 articles

6.3 average IF

1.9 average SJR



SCIENTIFIC EVENTS AT ITMO UNIVERSITY

Congress of Young Scientists

2,325 participants

The goal of CYS is to help young scientists take part in research and engineering work, acquire public speaking experience, improve their Master's theses, and gain feedback on the results of their Bachelor's theses.

Training highly qualified specialists

18 subject areas **38** majors

1,025 PhD students **170** from abroad **35** countries

94 candidate of sciences (PhD) theses defended **15** D.Sc. students

4 doctor of science theses defended

METANANO 2018 in Sochi

ITMO University was a co-organizer and a participant of the international conference.

320 participants from **28** countries

58% from Russia **42%** from other countries

38

Science and Education Conference at ITMO University

1,227 articles submitted
by conference participants

"Lasers and Photonics" Second International Congress

6 events as part of the congress

355 international participants

1,784 participants, including:

784 young scientists

1,235 presentations and articles



INTERNATIONAL POSTGRADUATE STUDIES

36

joint educational
programs

In 2018, postgraduate students of ITMO University have successfully defended their theses at leading international universities:

- Aalto University, University of Eastern Finland (Finland);
- The University of Bonn (Germany);
- Lille University (France).



The University has also formed its in-house system for the awarding of PhD degrees.

The stages and methods of postgraduate training at ITMO University have been outlined and approved.

YOUNG SCIENCE: RESULTS OF RESEARCH BY YOUNG SCIENTISTS

45%

of young researchers
in 2018

Dozens of the university's young scientists
work as heads of major laboratories
and centers.

Students' scientific and research activity in 2018:

658

students, including Master's and PhD students,
received funding from the university

128

participants in a contest of practice-oriented
university-funded R&D projects

2,438

applications submitted for ITMO University's
Congress of Young Scientists

3,000+

student presentations delivered at events,
competitions, and contests carried out
at ITMO University

Publication of collections and articles based
on results of conferences and competitions

11

collections of papers by postgraduate
and graduate students of ITMO University
and winners of competitions and grants
were published in 2018

Student participation in R&D

178.9
million rubles

in funding

13%
of total volume

1,312

participants

2,600+

publications by students
in scientific journals
and collections

The Government of St. Petersburg Grant Competition 2018

305

applications
submitted

65

grants
awarded

Representatives
of ITMO University
took first place
among St. Petersburg's
young scientists.

Student Thesis Competition

194

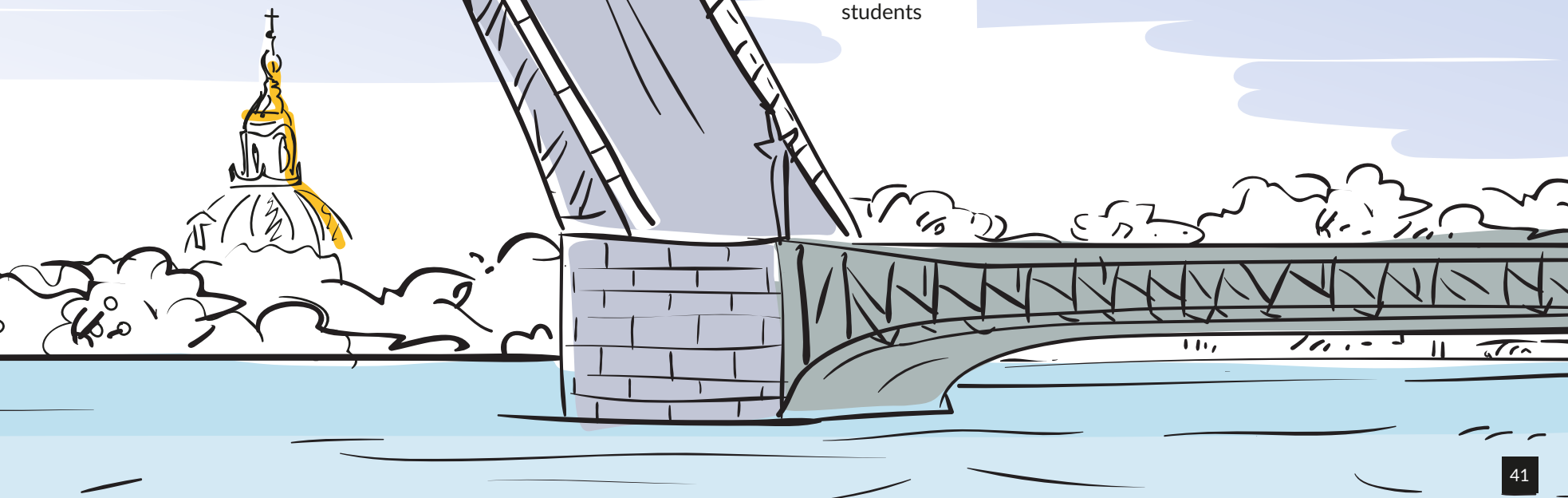
Bachelor's
and Master's
students

52

laureates

21

winners



Government of St. Petersburg Awards

This award competition, organized by the Government of St. Petersburg, recognizes students whose thesis projects aim to provide solutions to tasks outlined by departments of St. Petersburg's executive branch of government.

Alina Bebyakina

Application of data analysis technologies in the monitoring of St. Petersburg's consumer market.

Ekaterina Ilyina

Development of a methodology for the assessment of sufficiency at schools of St. Petersburg.

Maria Pilishkina

The Eurasian Economic Union as a prospective market for export-oriented small and mid-level businesses of St. Petersburg.

Natalya Chalaya

Assessment of the indirect economic effects stemming from the provision of targeted subsidies for the development of innovative activities in St. Petersburg.

Anna Pomogaeva

Development of a model of a modernized transit pass system for St. Petersburg.

Government of St. Petersburg Prize in the Field of Science Education

18

participants from ITMO University

6

winners



Student Research Project Competition at ITMO University

25

students

21

research supervisors

The 2018 competition featured 4 winners, fourth-year student Nikita Teplyakov being the 1st place winner with a project titled "Study of the optical effects caused by the spatial limitation of elementary excitations in semiconductor nanostructures."

Nikita is the author of 21 scientific publications co-authored with his research supervisor Ivan Rukhlenko, PhD (19 articles were published in Russian peer-reviewed journals and indexed by Web of Science and Scopus).



ICPC-2018

ITMO University's team won the bronze during the final stage of the international contest in collegiate programming.

In 2018, the University was represented by first-year Master's students Ilya Zban and Ivan Belonogov and second-year Bachelor's student Mikhail Putilin.

Team coach: Andrey Stankevich, PhD.

TAKE NOTE!

2018 marked the first time that the participants of the international contest in collegiate programming were able to use the programming language Kotlin, which was developed by ITMO University's partner company JetBrains under the management of Andrey Breslav, an ITMO University graduate.





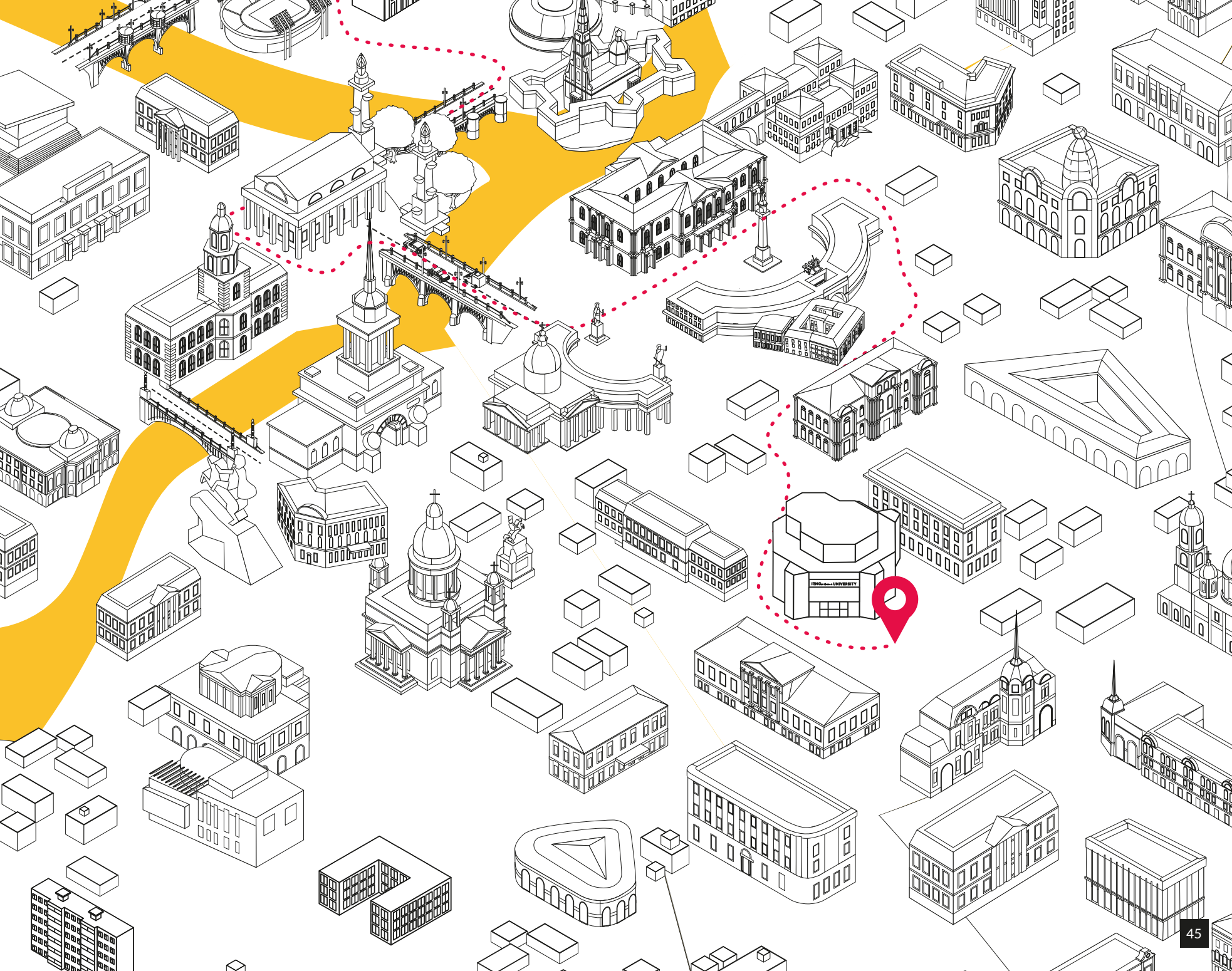
03

Education and international development

Locations:

- Kronverksky Pr. 49,
- Lomonosova St. 9.

- expert.ifmo.ru
- en.itmo.ru
- int.itmo.ru



EDUCATIONAL ENVIRONMENT AT ITMO UNIVERSITY:

- freedom of utilizing a variety of educational opportunities;
- development of personal skills, creative potential, and professional competence;
- educational paths based on individual tracks;
- use of top global practices in training high-quality specialists.

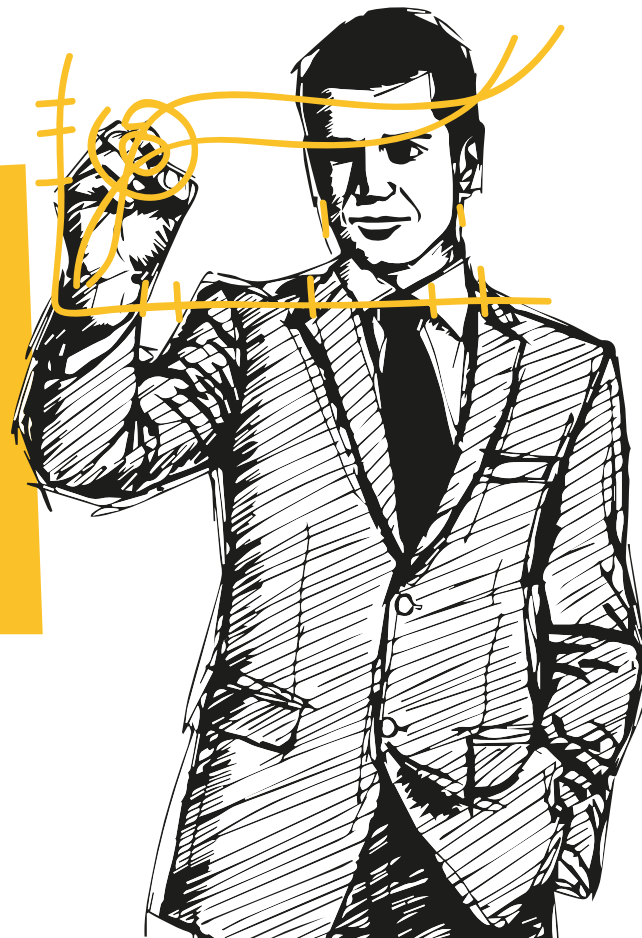
In 2018, we began developing and operating educational programs based on our own educational standards (ES-2018).

Five university-wide educational modules for the development of soft and digital skills have been launched for the students of Bachelor's and Master's programs.

At ITMO University, educational programs are unique projects that aim to foster a student's competencies, limited in time by the student's journey through the University's educational environment along a personalized track, all while documenting their digital footprint.

We've launched new courses aimed at the development of students' soft skills. These include:

- Negotiations, influence and conflict management;
- Emotional intelligence;
- Management of scientific research;
- Personal efficiency and time-management;
- Internationalization of research;
- Efficient team-management.





EDUCATIONAL MODULES

Digital Culture

Goal: the development of students' abilities to apply digital technologies in solving professional challenges and achieving personal comfort in a digital environment.

Taken by:

1,237

Bachelor's students

2,720

Master's students

Teaching methods and approaches:

- online courses at courses.ifmo.ru;
- MOOCs at [coursera.org](https://www.coursera.org);
- exams and tests feature automated assessment systems.

Organizational features:

- students can attend consultations to resolve questions that arise during studies;
- newsletter system helps support and motivate students throughout the learning process;
- courses are taught in Russian and English;
- students learn about the curriculum and learning procedure during orientation lectures given in Russian and English.

Soft Skills

Goal: the development of students' soft skills with the aim of improving their personal qualities in a professional environment.

Taken by:

2,720

Master's students

Teaching methods and approaches:

- modular education (short-term two-week courses);
- project-based learning;
- students work in small teams;
- experts are brought in for experience-based learning.

Organizational features:

- students study alongside the students of other programs and faculties;
- classes can be taken as semester-long courses or short intensive modules;
- taught in Russian and English.

Entrepreneurial Culture

Goal: to cultivate students' professional ability to create and manage innovative business projects, and to contribute to the digital economy.

Teaching methods and approaches:

- team-based approach;
- case-method teaching;
- experts are brought in for experience-based learning;
- online EdX course;
- project learning.

Key element: students are immersed into a well-developed entrepreneurial environment.

Organizational features:

- traditional class format (lectures, seminars);
- taught in Russian and English.

Critical Thinking

Goal: to develop the students' critical and design thinking skills and their ability to generate ideas and provide reasoning.

Taken by:

569

Bachelor's students

268

Master's students

Organizational features:

- traditional class format (lectures, seminars);
- taught in Russian and English (for Master's students).

Teaching methods and approaches:

- debates;
- problem-based learning;
- individual approach to students;
- project work.

Disciplines:

- Critical Reasoning and Design Thinking;
- Modern Culture of Thought.

Creative Technologies

Goal: to develop the students' ability to apply their creative potential in their professional life.

Taken by:

434

Master's students

Teaching methods and approaches:

- online course at courses.ifmo.ru;
- group work in online classrooms;
- students choose cases to work on and present final projects;
- voting, rankings (team and individual).

Organizational features:

- newsletter system helps support and motivate students throughout the learning process;
- course taught in Russian;
- students learn about the curriculum and learning procedure during orientation lectures.

New educational features in 2018:

- elective and extracurricular disciplines, modules, and specializations, including disciplines taught at leading Russian and/or international universities; courses, modules, and programs of continuing professional education;
- together with some of the world's leading universities, we offer 17 international and 18 joint educational programs taught in English - either fully or as a separate specialization track;
- networked corporate Master's programs developed and operated together with leading research and educational centers and corporate partners.

Key areas:

- applied mathematics and computer science;
- computer science and computing systems;
- information systems and technologies;
- software engineering;
- data security;
- design and technology of electronic devices;
- instrumentation;
- optical engineering;
- mechatronics and robotics;
- technical physics;
- biotechnology;
- technosphere safety;
- movement control and navigation systems;
- standardization and metrology.

Our corporate partners' resources are integrated into the educational process via open networking, exchange of knowledge and material, prioritization of key scientific and technological development areas, and the assurance of the parties' leadership position in the tech and economical markets of the future.

Education in a network format:

60+

Master's degree programs

40

with partner universities

25

with business partners

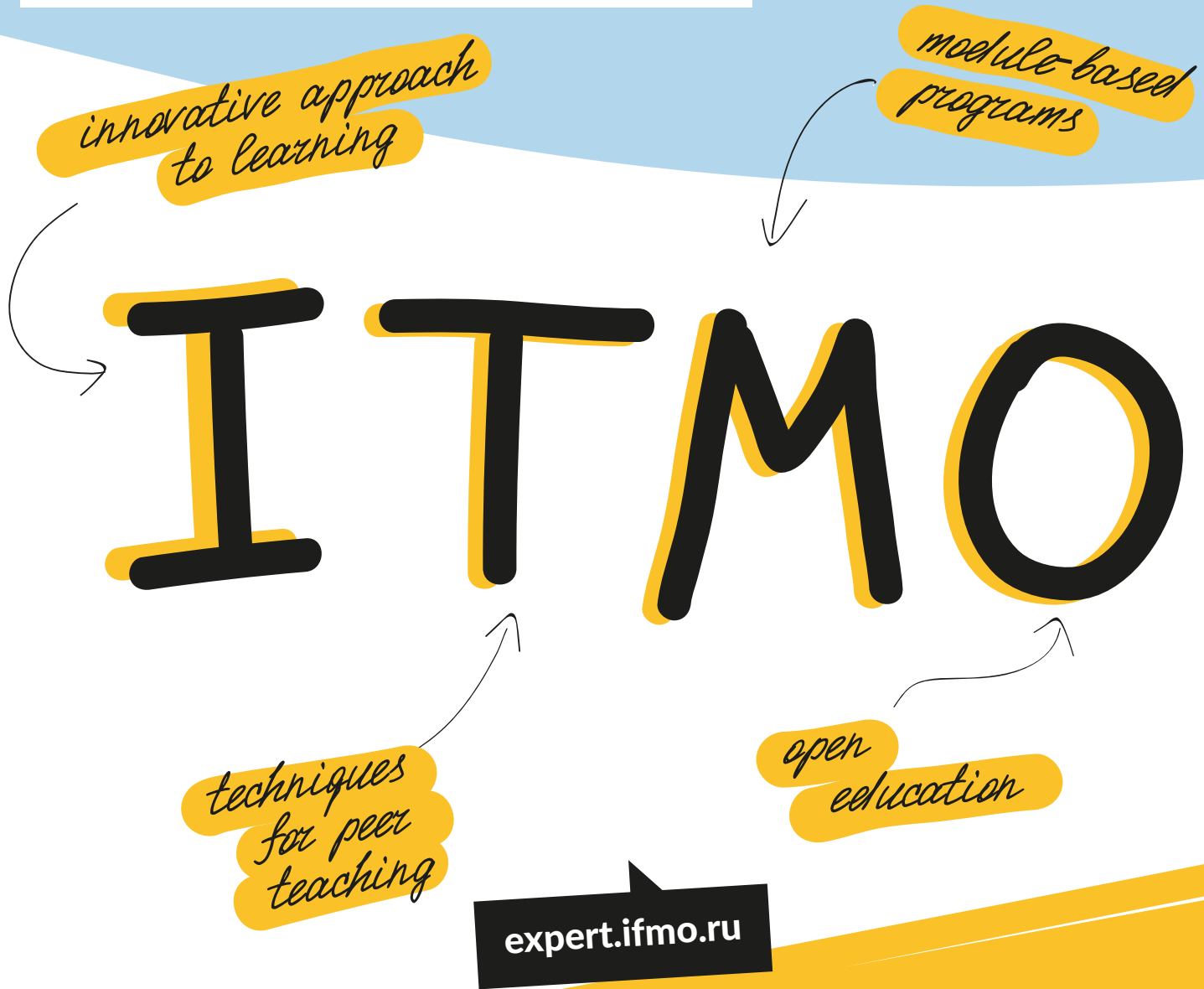
8

research institutes and laboratories operate in collaboration with corporate partners:

- Institute of Information and Navigation Systems – CSRI Elektropribor, JSC;
- Institute of Intelligent Industrial Technologies – Diakont JSC;
- Institute of Optical and Digital Systems – LOMO JSC;
- Laboratory of Digital Production Technologies – TEKHPRIBOR PAO;
- Laboratory of Industrial Robotics – Teplovoe Oborudovanie (Thermex) LLC;
- Corporate Laboratory of Human-Machine Interaction Technologies – Speech Technology Center LLC;
- Corporate Laboratory of Complex Digital Solutions – Open Code LLC;
- Laboratory of Ecology, Technosphere Safety and Metrological Support – D.I. Mendeleev Institute for Metrology.

ITMO.EXPERT

Launched in 2018, ITMO.EXPERT is a professional development program for ITMO University's teaching staff, researchers, and postgraduate students.



2018

We introduced:

10

modules

We carried out:

40

workshops

ITMO.EXPERT modules:

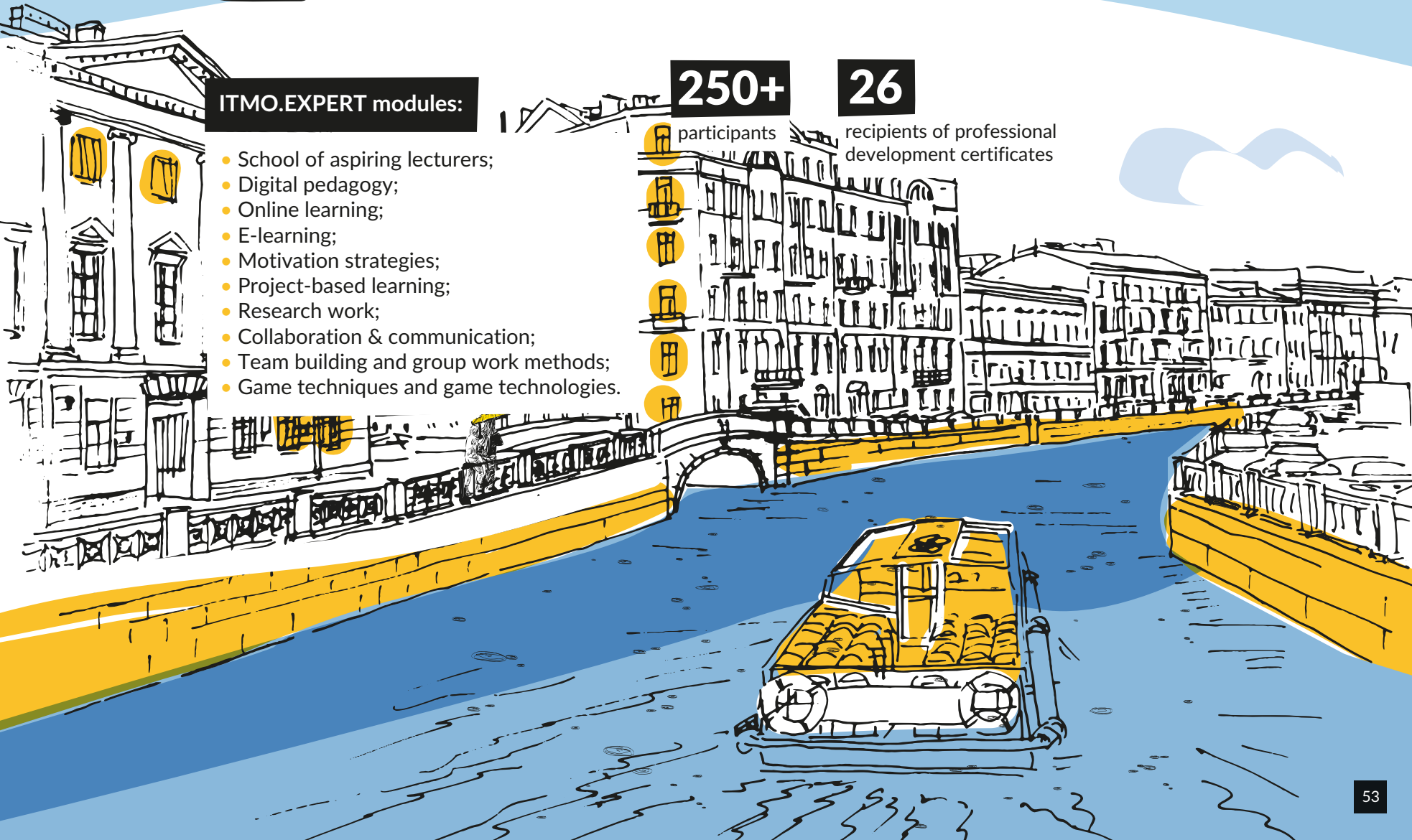
- School of aspiring lecturers;
- Digital pedagogy;
- Online learning;
- E-learning;
- Motivation strategies;
- Project-based learning;
- Research work;
- Collaboration & communication;
- Team building and group work methods;
- Game techniques and game technologies.

250+

participants

26

recipients of professional development certificates



ITMO. ONLINE

Intra-university competition for financial support of students of online courses.

214

applicants

53

winners

*Online service
"Educational Literature"*

A new, digital way for ITMO University staff to submit and print their manuscripts of educational literature. Introduced as part of the University's intranet system ISU.



Global talent search

Competitions for prospective Bachelor's students:

31

countries

1,600+

participants

12

countries of origin of winners and runners-up

Open Doors

International competition for prospective Master's students:

8,600+

participants

70+

countries

17%

international students

Updated foundation program: elective specializations with in-depth focus on computer science or physics.

Academic mobility – new destinations and new successes

Incoming mobility:

836

students

Outgoing mobility:

942

students

327

postgraduate students

19

lecturers

Academic staff mobility as part of ITMO.EXPERT:

185

participants of professional development programs abroad

183

participants in Russia

*Attracting staff
from around the world:*

4
rounds

209
applicants

25
winners

200+

international members
of academic and research
staff in 2018

*International
educational
programs:*

19

new educational
programs in 2018

ITMO FELLOWSHIP AND PROFESSORSHIP

Top programs:

- Machine Learning and Data Analysis;
- Mechatronics;
- Bioinformatics and Systems Biology;
- Art&Science.

New program for international
students - Humanities and IT.

New joint educational programs with:

- McMaster University (Canada);
- University of Eastern Finland (Finland);
- Université Toulouse III (France).

INTERNATIONAL PROJECTS

Erasmus+: **25** programs

Horizon-2020: **9** programs

34 recipients of professional development certificates among staff

New educational modules for the University's teaching staff

English-Medium Instruction (EMI)

DEVELOPING THE ENGLISH-LANGUAGE ENVIRONMENT AT ITMO UNIVERSITY

EMI Teacher Training Courses

1 group in the spring semester of the 2017/2018 academic year

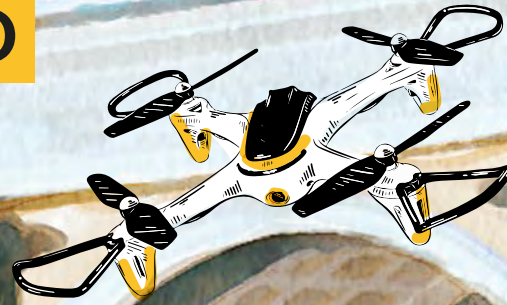
3 groups in the fall semester of the 2018/2019 academic year

Online resources:

150,000+ unique users

330,000+ visits to ITMO University's English-language news portal

WORLD'S TOP ITMO UNIVERSITY-RELATED ONLINE SEARCH QUERIES



- ITMO University
- computer science
- entrance competition
- machine learning and data analysis
- ITMO summer schools
- big data



- fellowship and professorship programs
- foreign language training center
- international and double degree programs
- urban supercomputing
- art & science
- foundation program

• itmotech.ifmo.ru

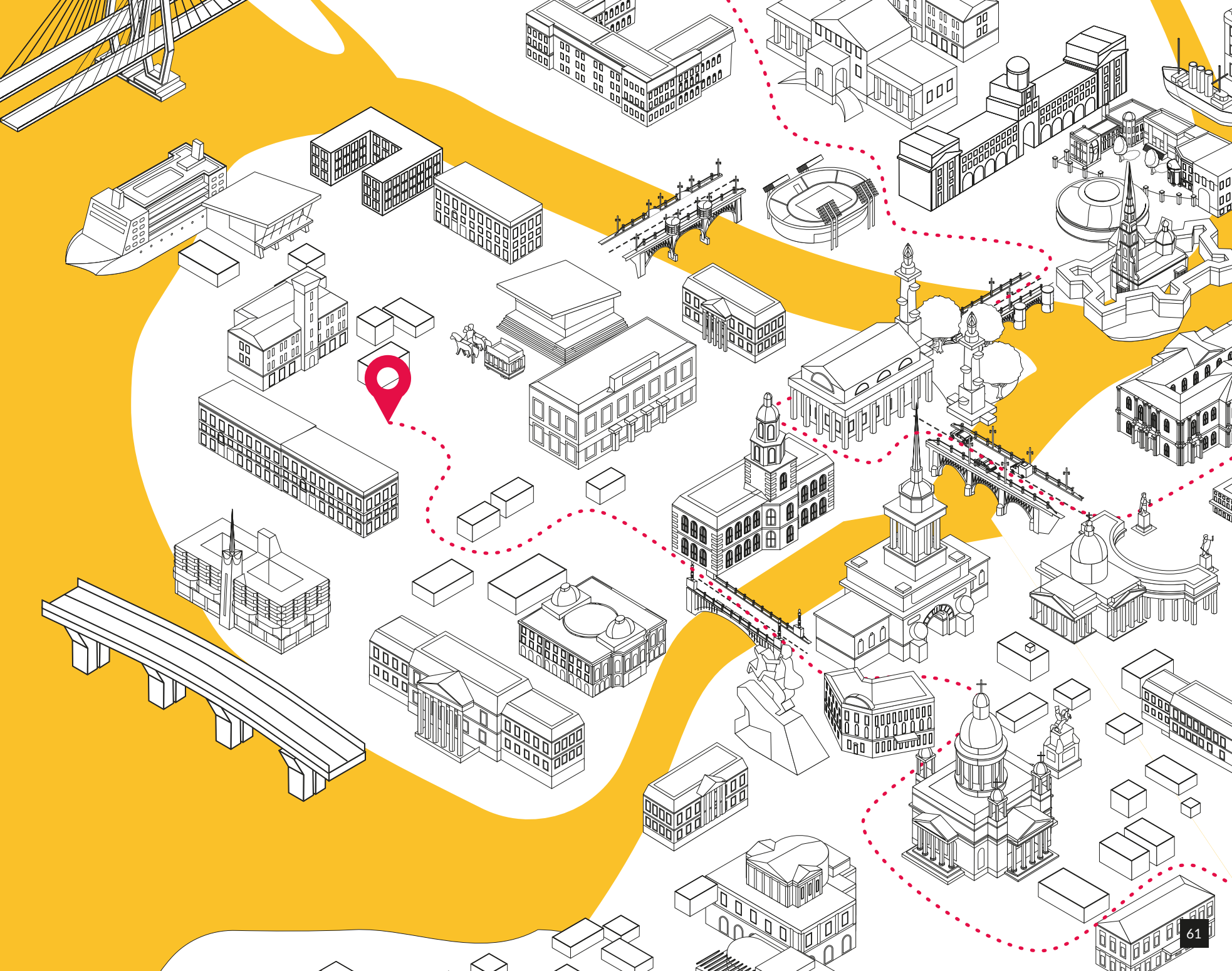
04

ITMO.TECH

*Entrepreneurship
and innovation*

Locations:

- Birzhevaya Liniya 14,
- Chaikovskogo St. 11/2.



DEVELOPING ENTREPRENEURIAL CULTURE

Entrepreneurial Culture module

A university-wide educational module aimed at developing entrepreneurial culture.

Taken by:

1,800+

students
stats for the Project
Management discipline

200+

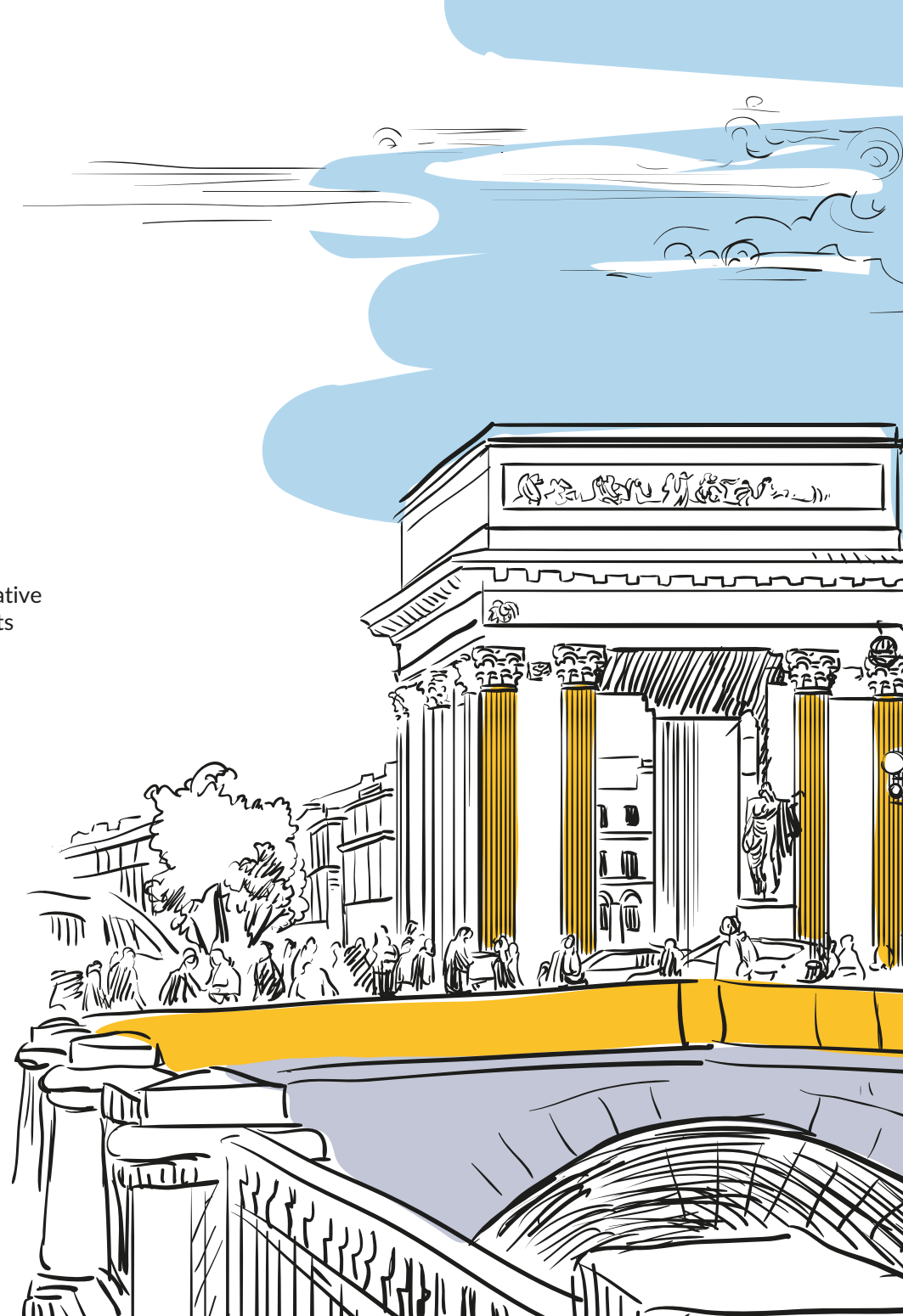
interdisciplinary innovative
entrepreneurial projects

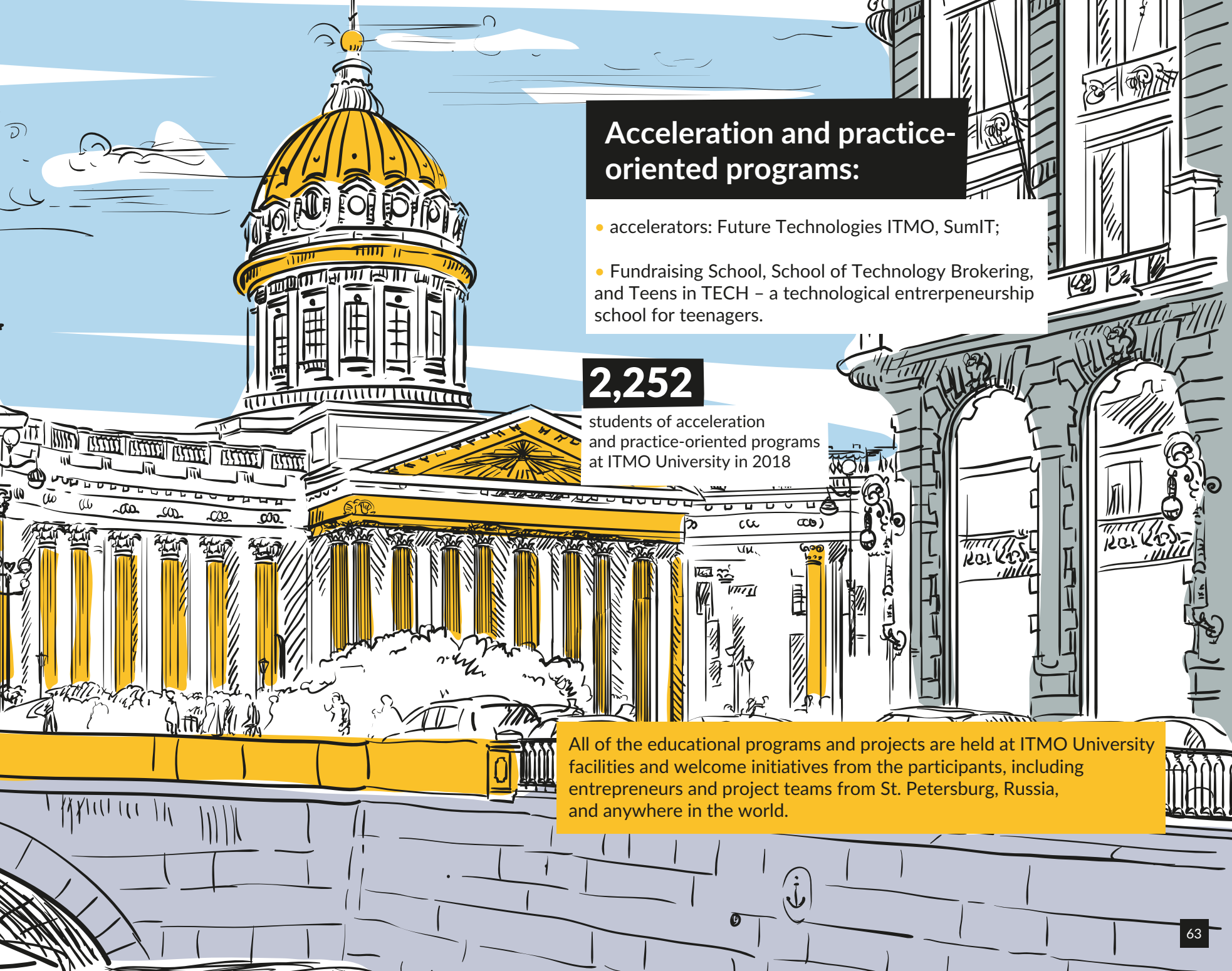
Thesis Startup initiative

This new format of Master's degree thesis defence was initiated by students of the Entrepreneurship and Innovation subject area in collaboration with the Schools of ITMO University.

20

interdisciplinary startups
and projects defended





Acceleration and practice-oriented programs:

- accelerators: Future Technologies ITMO, SumIT;
- Fundraising School, School of Technology Brokering, and Teens in TECH – a technological entrepreneurship school for teenagers.

2,252

students of acceleration and practice-oriented programs at ITMO University in 2018

All of the educational programs and projects are held at ITMO University facilities and welcome initiatives from the participants, including entrepreneurs and project teams from St. Petersburg, Russia, and anywhere in the world.

ATTRACTING NEW PARTNERS TO THE UNIVERSITY'S ENTREPRENEURIAL ECOSYSTEM

ITMO University's key partner in 2018 is PJSC Rostelecom.

Projects with our partners:

- startup acceleration as part of the Window to Innovations program (with Rostelecom);
- methodology and expertise for the TechNet track of GenerationS, the largest accelerator program in Russia and Eastern Europe;
- participation in National Technology Initiative's University 20.35 project and the Island 10-21 intensive training program;
- participation in a series of consortiums organized by the National Technology Initiative and the workgroups and project offices of the Digital Economy national program.

Together with its partners, ITMO University develops its own networked educational programs, project labs, and centers designed to encourage the development of innovative business.

5

joint student
project labs

3

new centers

+

we continue to attract new
residents to ITMO University's
second campus ITMO.HIGHPARK.

ENTERING THE INTERNATIONAL MARKET: INCREASED QUALITY OF STARTUPS

In 2018, we achieved our goals of entering the international R&D and engineering markets by way of establishing equal partnerships with foreign companies and research centers.

10+

new network projects aimed at overcoming the technological barriers of future industries and markets

15

partners in the European Union

20+

events and research and engineering projects aimed at overcoming technological barriers

13

partnership agreements with top industry players

6

research, technological, and engineering projects

€ 9 million

in project funding

Partnership through continued education programs:

+

we've implemented several continued education programs for our partners: the "Supplier's School" for the St. Petersburg Center for Entrepreneurship Development and Support, and the program "Innovative Management: Leadership and Corporate Governance" for the Siberian Coal Energy Company.

116

continued education partner programs

50+

partner companies

5,857

graduates of ITMO University's continued education programs

Our new partners in professional education:

- GazInformServis,
- Heineken Russia,
- Gazpromneft-Centre,
- Losevo Dairy Plant and others.

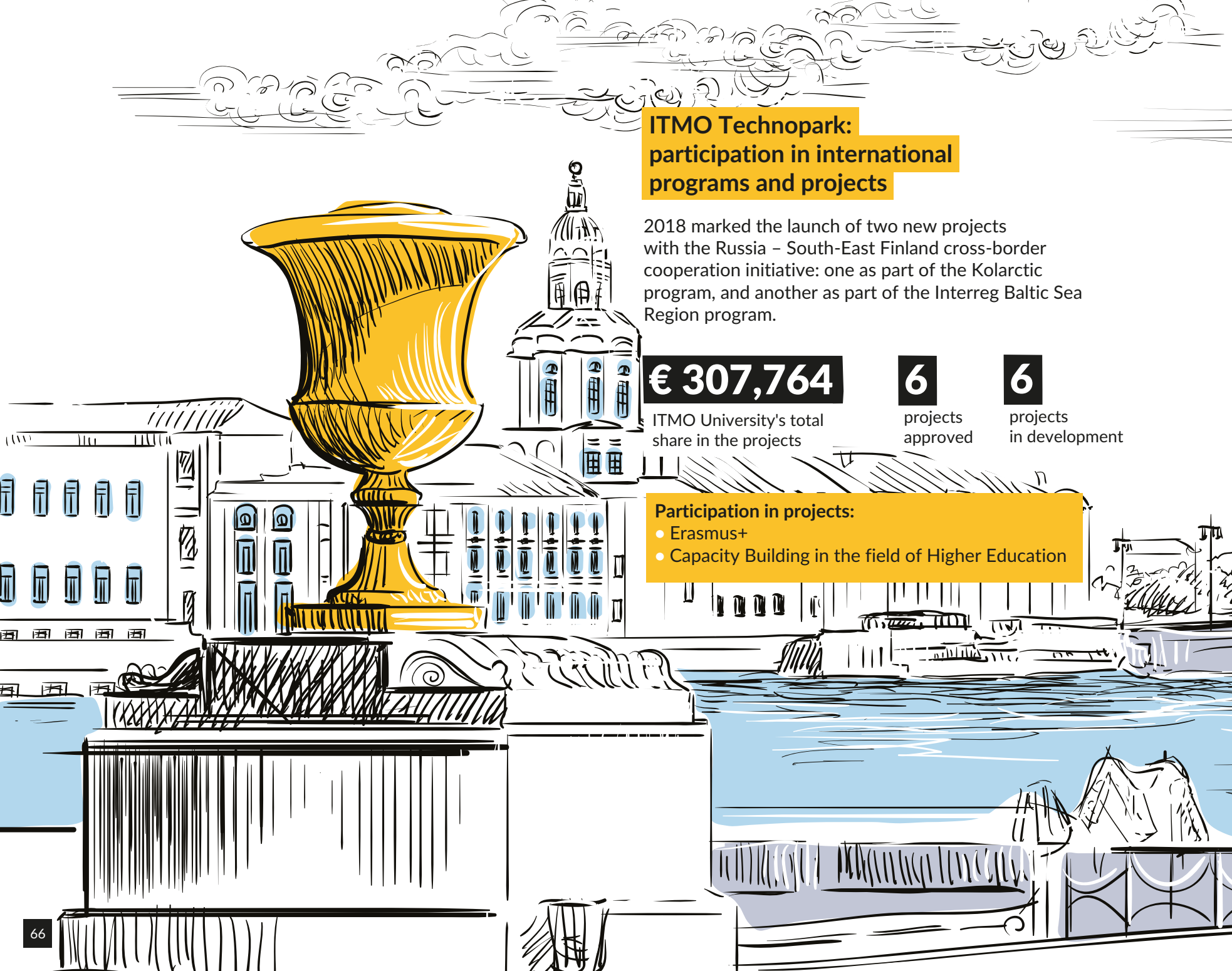
In 2018, we've also tested new ways of establishing interaction between university students and our industrial partners, including hackathons and project development sessions.

10+

events

HACKATHON 2025, HELSINKI DIGITAL HUMANITIES HACKATHON 2018, SAP InnoJam SmartSpaces and others.





ITMO Technopark: participation in international programs and projects

2018 marked the launch of two new projects with the Russia - South-East Finland cross-border cooperation initiative: one as part of the Kolarctic program, and another as part of the Interreg Baltic Sea Region program.

€ 307,764

ITMO University's total
share in the projects

6

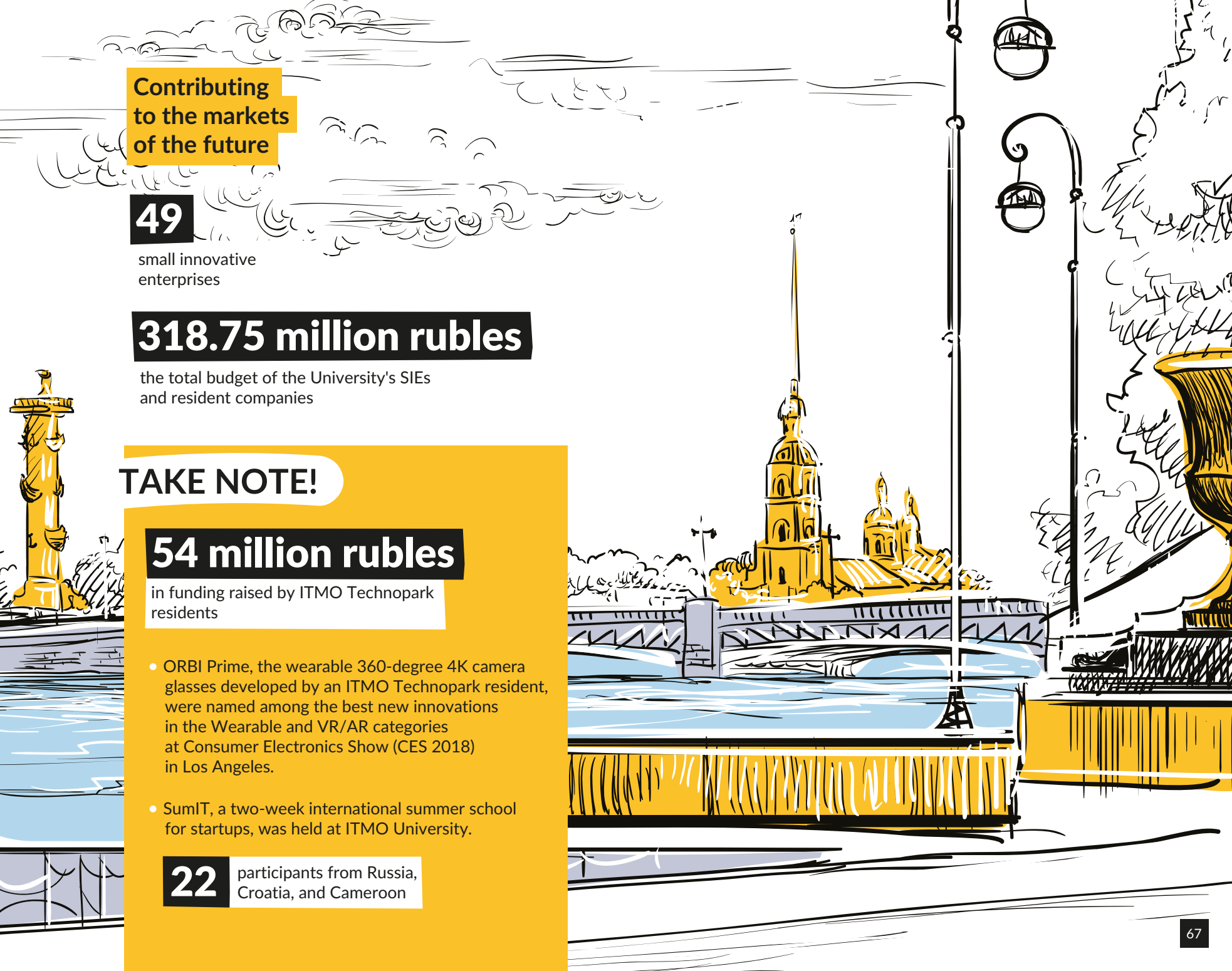
projects
approved

6

projects
in development

Participation in projects:

- Erasmus+
- Capacity Building in the field of Higher Education



**Contributing
to the markets
of the future**

49

small innovative
enterprises

318.75 million rubles

the total budget of the University's SIEs
and resident companies

TAKE NOTE!

54 million rubles

in funding raised by ITMO Technopark
residents

- ORBI Prime, the wearable 360-degree 4K camera glasses developed by an ITMO Technopark resident, were named among the best new innovations in the Wearable and VR/AR categories at Consumer Electronics Show (CES 2018) in Los Angeles.
- SumIT, a two-week international summer school for startups, was held at ITMO University.

22

participants from Russia,
Croatia, and Cameroon

FabLab

ITMO Technopark's workshop-laboratory where students can work on their individual projects.

30

research projects

1,500+

hours of lab equipment usage accumulated by students

OLIMP: Open Lab of Ideas, Methods, and Practices

OLIMP provides students with an environment where they can learn and express their scientific creativity.

300+

regular members

20+

courses and workshops

40+

projects in development

60+

tours given, attended annually by 500 young researchers

School of Technology Brokering

A practical course for specialists who wish to become proficient in the commercialization of scientific projects and establishment of science-industry relations.

Participants:

250+

ITMO University graduates

40+

companies

50+

Russian universities

2

projects have found investors and gone into business thanks to the School

1,000+

applications received in 2018

FUTURE TECHNOLOGIES

56

startups became residents of the acceleration program

14.5 million rubles

raised by resident startups


11

companies have released their products


+

took part in international events: POLAR BEAR PITCHING, FT STARTUP DRIVE


Startup contribution by NITED Schools:


37%

School of Computer Technologies and Control


30%


School of Photonics


16%

School of Biotechnology and Cryogenic Systems


14%

Institute of Entrepreneurship


3%

School of Translational Information Technologies



0

Locations:

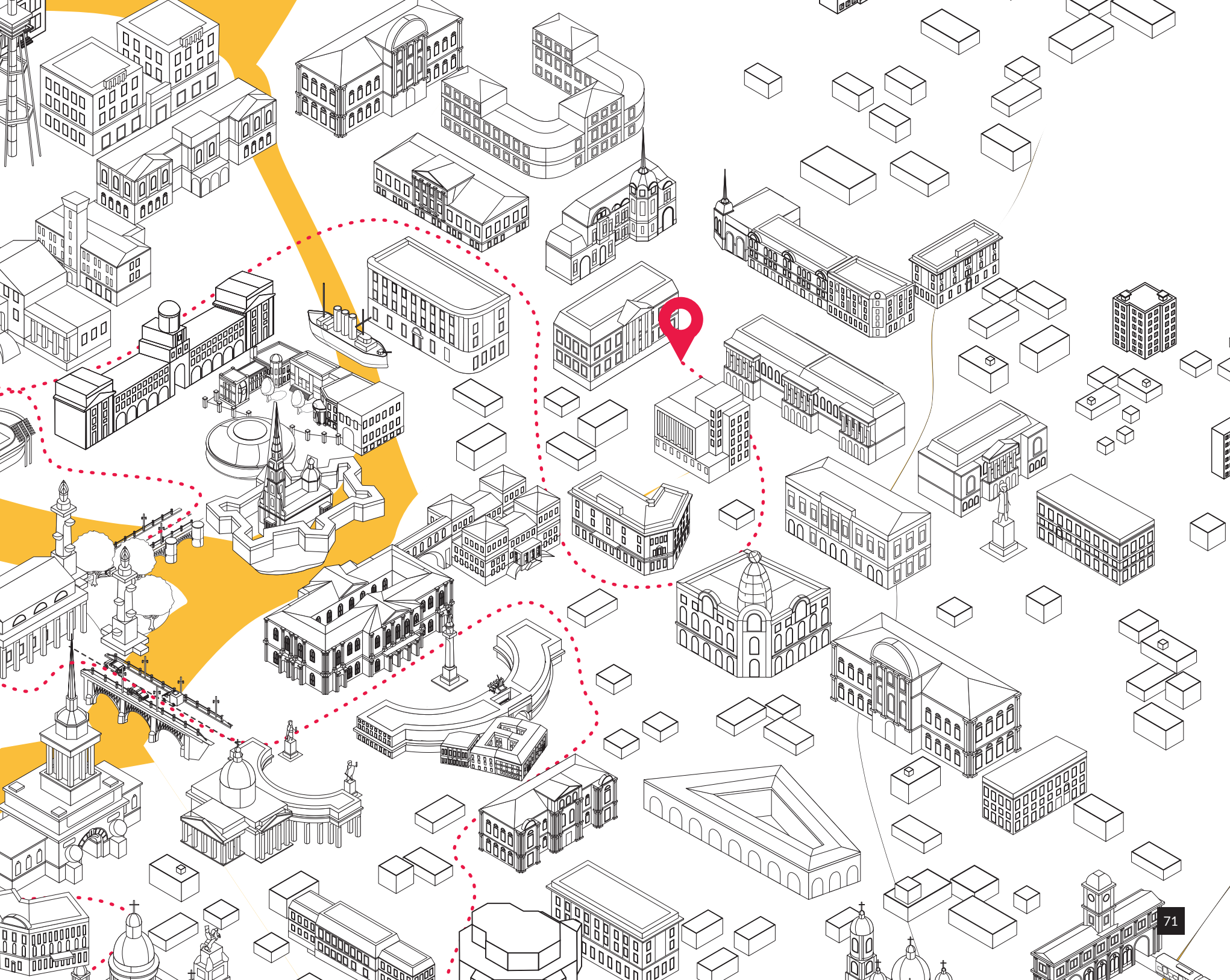
- Kronverksky Pr. 49,
- Lomonosova St. 9,
- Planetarium №1
- Peter and Paul Fortress.

- en.itmo.ru
- news.itmo.ru/en

05

ITMO.FAMILY

prospective and current students, lecturers, professors, alumni, staff, partners, citizens of St. Petersburg.







ITMO University team
ITMO.FAMILY

ITMO.FAMILY
is all the people who help create
ITMO University's unique
environment and atmosphere.

ITMO. START

Dream big!

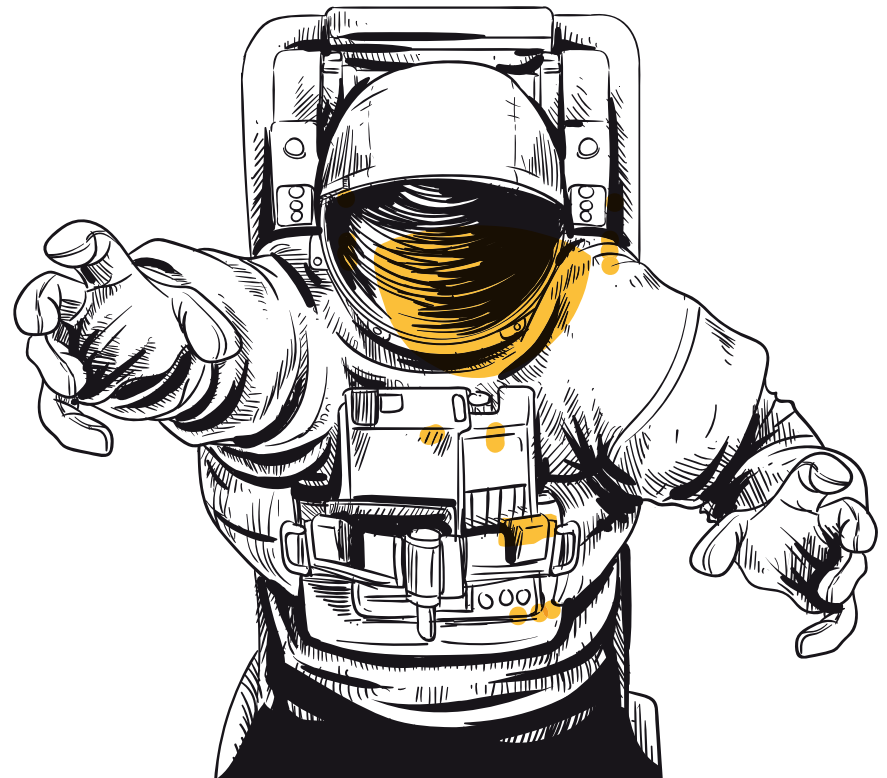
ITMO.START is a project for talented school students of grades 1-11. It combines all pre-university activities available to them on the web-portal start.ifmo.ru

Goals:

- to get school students involved in university life;
- to interest them in research and education at ITMO University;
- to provide career guidance;
- to familiarize them with ITMO University's values, principles, goals, and tasks.

Features of the project:

- employs a track-based approach to provide career guidance. Five educational tracks: Engineer, Scientist, Programmer, Entrepreneur, Leader;
- gives students the ability to form their own educational path;
- helps them choose a career, an education, and a university;
- serves as a one-stop-shop for all relevant information on pre-university training at ITMO;
- coordinates the work of various pre-university training units;
- interaction with the target audience helps to collect analytical and statistical data in order to solve global education-related challenges.



Results of 2018

41,000+

visitors

4,800+

signed up users

250+

activities offered
by ITMO University
and its partners

300+

questions submitted
by students and parents

900+

educational
activities taken
part in

130+

leadership
activities taken
part in

15

free seasonal career
guidance schools

150+

individual and group
career guidance
sessions

40+

guided tours
for Russian high
school students



ITMO. STARS



Enroll differently!

A competition that lets uniquely distinguished applicants enroll regardless of exam grades.

The main goal of ITMO.STARS:

to help talented and motivated youth by giving them yet another opportunity to become ITMO students.

Features of the project:

- helps the University select and evaluate students with notable individual skills, abilities, and knowledge who are proficient in the University's subject areas;
- provides entrants with the opportunity to study tuition-free in a chosen Bachelor's or Specialist program up to graduation (4 and 5.5 years, respectively).

TAKE NOTE!

14

applicants were chosen as ITMO.STARS winners in 2018



Winners include:



Alexander Blashenkov

Developer of Straylight, a corporate intranet web service.



Alexander Dupak

Developer of an all-purpose mobile robotic reconnaissance platform.



Ignatij Ponomarenko

Developer of a self-written graphics editor.



Ekaterina Mashina

Developer of a data support and coordination system for hi-tech pre-hospital medical care.



Evgeny Dolgosheev

Game developer working with C++ and JavaScript.



Daniil Nechaev

Member of ITMO's School Robotics Team, RoboCup winner.



Sergey Fedorov

Winner of the 28th Sakharov Readings International Conference, finalist of Sberbank's AI Hackathon (27th of 8,500).



Alexander Lider

Winner of the First Tech Challenge Asia Pacific robotics competition.



Daniil Shakhbanov

Won a first-tier diploma from the Baltic Research Contest for his work on a high-level search algorithm.



Danil Zmievisky

Created a bilingual electronic dictionary of proper names based on the Spotlight 10 textbook text corpus.



Elizaveta Punchenko

Author of two Higher Attestation Commission-indexed publications, participant of ITMO's Congress of Young Scientists.



Nadezhda Maksimenko

Author of the research project "Verification of a microplastic contamination assessment method in natural water systems"



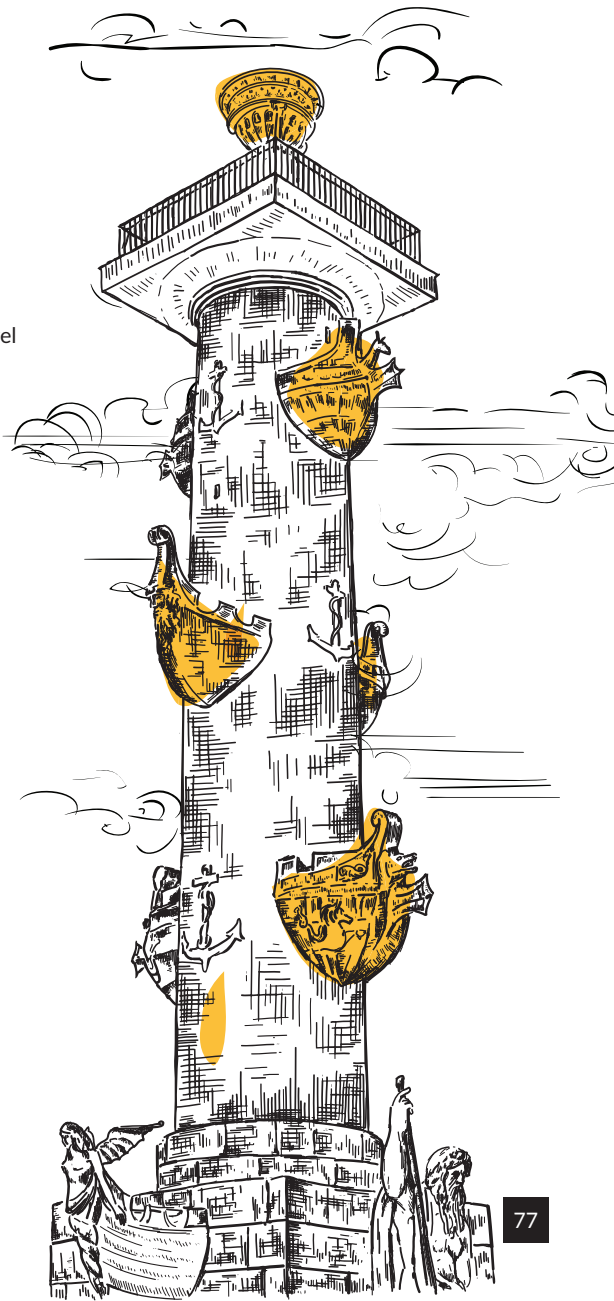
Alexandra Klebleeva

Won a business project competition with a project for a Viking-themed tourist spot.



Anton Akimkin

Developer of a regulation compliance system for school students.



ADMISSIONS CAMPAIGN 2018

In 2018, ITMO University expanded its global admissions campaign, further improving on a complex system of scouting, guidance, and selection of talented and motivated students from around the world interested in enrolling in Specialist, Bachelor's, Master's, or PhD programs at ITMO University.



Working with school students:

- Project- and research-based pre-university training for students of grades 1 to 11;
- ITMO.KIDS;
- the development and implementation of continuous project work initiatives for school students;
- career guidance for school students of grades 8 to 11;
- a special research competition for school students at the Congress of Young Scientists;
- a summer school in computer science at the Sirius Educational Center in Sochi.

5,000+

participants

300+

students of five programs

6

subject areas

Nanotechnologies, Chemistry & Biology, AR/VR, Robotics, Photonics, Prototyping

Offline:

10,000+

students

140+

have taken individual career guidance sessions

Online:

100,000+

students

4,800+

unique visitors to the ITMO.START website

9

research areas for school students

116

participants

90

research presentations or articles by school students

49

participants

Bachelor's programs:

3.9 applicants per position (tuition-free)

90.2 average Unified State Exam score of applicants accepted to tuition-free positions as of 2018

75.1 average Unified State Exam score of applicants accepted to fee-based positions as of 2018

9,000+ applications submitted

341 winners and runners-up of national and major competitions among enrolled students

327 of whom enrolled without taking entrance exams

83.6 average Unified State Exam score (state-supported specialist training program)

1,600+ participants of international competitions in mathematics and computer science

427 recipients of ITMO University's special scholarships (more than 270 Unified State Exam points total without individual bonuses)

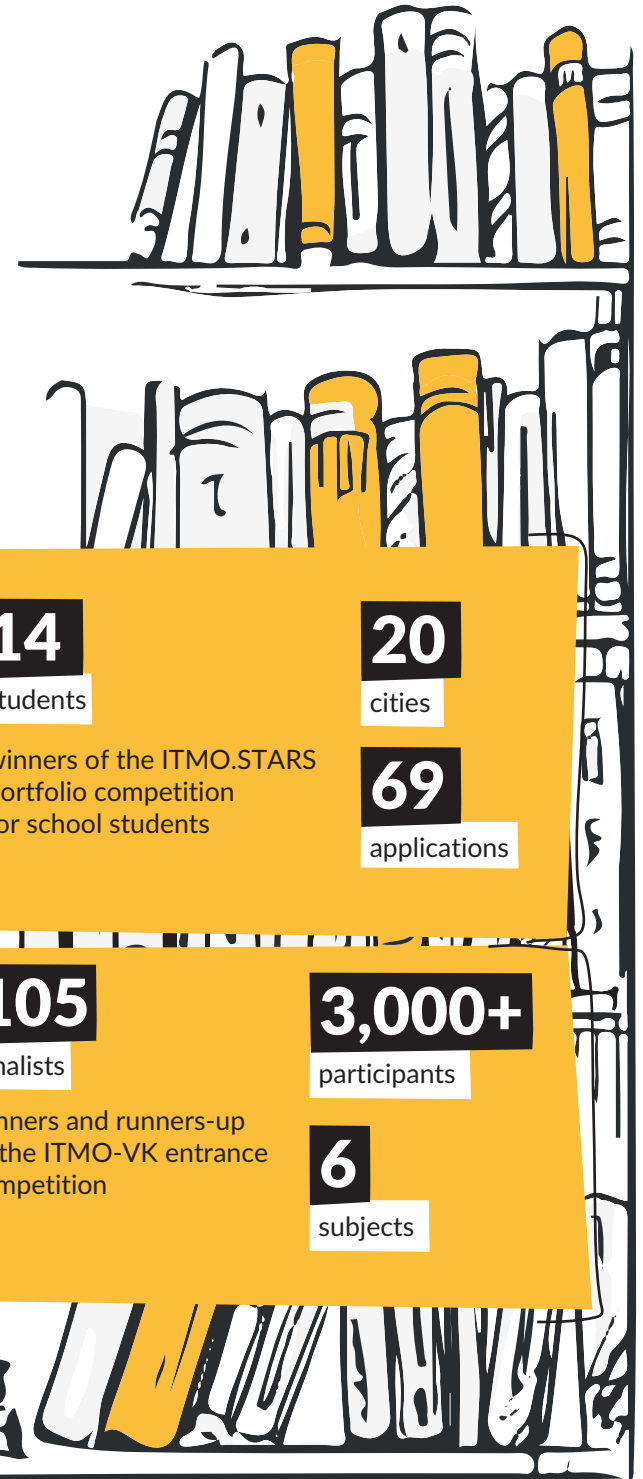
40.8% of the admissions target figure

14 students
winners of the ITMO.STARS portfolio competition for school students

20 cities
69 applications

105 finalists
winners and runners-up of the ITMO-VK entrance competition

3,000+ participants
6 subjects



Master's programs:

no less than

2.5

applications per position (tuition-free)

3,784

applications submitted in total

National competition "I Am a Professional"

12,000+

participants

3

subjects

Winter school "It's Your Call!"

120+

participants

Open Doors

8,600+

participants

4

subjects

PhD programs:

2.75

applications per position (tuition-free)

750

applications received

>4.5

entrance grade in all subject areas

274

enrolled tuition-free

20+

enrolled in state-sponsored positions for international students

20+

enrolled in fee-based positions

12%

of international students among first-year PhD students



ITMO.FAMILY: SIGNATURE EVENTS

*It's not magic.
It's ITMO!*

Independent, global, fashionable, true to the spirit of St. Petersburg, and traditionally unorthodox: that's ITMO University's new digital masterpiece, available on our official YouTube channel.

350,000+

users have seen the magic of ITMO University

ITMO at the movies

ITMO Rector Vladimir Vasilyev brings the whole family to the movies.

On a memorable night at the Planetarium №1, we watched the acclaimed sci-fi movie Ex Machina, discussed artificial intelligence, and snacked on popcorn and cotton candy.



ITMO.Live 2018

On July 7, ITMO University hosted its traditional ITMO.Live graduation party, the year's biggest university event, by the walls of the historic Peter and Paul Fortress.

In 2018, Bachelor's students joined Master's and Specialist students for the first time in the event's history.

4,000+

guests

ITMO.FAMILY: ALUMNI

Alumni relations at ITMO University



ITMO Ambassadors Program

This project aims to promote ITMO University's brand abroad and develop business and cordial relationships between ITMO graduates all over the world.

35+

ambassadors in various countries, including Germany, the USA, and the UK

+

An ITMO alumni reunion in Berlin took place in March 2018

ITMO Mentors Program

Co-organized with the Recursion charity fund, the program gives ITMO graduates a chance to become mentors to students and share their professional experience.

For students, this is a great opportunity to meet experts in various fields, find new friends, and hone their skills.

18

applications from prospective mentors

10

applications approved

Our graduates



Irina Martynenko

ITMO ambassador in Germany and winner of two grant programs. Currently works as a postdoc researcher on the development of a quantum dot-based system for the detection of pathogenic bacteria in drinking water at the Federal Institute for Materials Research and Testing in Berlin as part of the European Union's ERA.Net RUS Plus program.



Daniel Galper

Founder of the breakout project Grow Food.

Today, the startup can boast 1,500+ clients, a monthly sales volume of 25 million rubles, 200 employees, in-house logistics and production, and offices in St. Petersburg and Moscow. A Miami office is in the plans.



Mikhail and Alexey Leontiev

Founders of New Wallet, a brand of wallets and accessories made of Tyvek, an innovative construction material that combines the properties of paper, plastic film, and textile. The material is tear-proof, waterproof, and lightweight.

Today, their products can be found in some 150 stores around the nation. The company has already done collaborations with the trendy artist Pokras Lampas, the band Louna, and its founders' alma mater.



Vitaly Aksenov

A staff member of ITMO's Information Technologies and Programming Faculty, he graduated from school at the age of 15 and got his PhD in France at 24. In recent years, he's been working in the field of concurrent computing and solving fundamental problems related to the optimization of data structures.



Vitaly Sotnikov

Branding agency Chernika and the startup NativeOS. The latter is a technology that automates native video advertising: the algorithm suggests videos in which the client's advertisements will perform best and will resonate with the viewers. The project is in full swing and has offices in St. Petersburg and New York.



ITMO.FAMILY: COMMUNICATIONS

ITMO.RU is ours!

ITMO alumnus Yuri Luzhkov gave his alma mater the best 118th birthday gift by presenting it with the rights to the domain name befitting the University's modern name: itmo.ru

The transfer occurred thanks to the assistance of the ITMO Alumni Association and the Endowment Fund, which contributed money to the return of the itmo.ru domain name.

As part of ITMO University's Development Strategy, all of the University's online resources will be transitioned from ifmo.ru to itmo.ru by 2020.

ITMO University in mass media

17,000+

mentions in Russian and international news outlets in 2018

Achievements

In 2018, ITMO University's science communication team won the Grand Prix of Russia's first professional award in the field of science communication "Communication Laboratory".

The award is presented by the Association of Communicators in Education and Science for the popularization of science and education among the public.

ITMO University's press service has, for the second year in a row, taken first place in the Indicator ranking, which assesses the performance of press services of the universities participating in the 5-100 Russian Academic Excellence Project. ITMO University scored 193 points out of 195.

Throughout the year, ITMO University was featured 6 times in the top-20 of Medialogia analytics company's monthly ranking of universities' representation in mass media. The University was placed in positions ranging from 13 to 20.

JOB.ITMO

In 2018, ITMO University continued to improve its talent scouting system.

After undergoing a major rehaul, the job.itmo.ru website now features extensive information on job openings at ITMO University. Visitors to the website can learn about vacancies for research, teaching, or administrative work, IT-related jobs, and open calls – including open calls for professor and lecturer positions.

315,000+

potential employees have considered at least one of our job listings

300+

were invited to work at ITMO University

250+

job vacancies for academic staff

200,000+

potential employees sent in their applications

Academic Staff Contest 2018

A key instrument in attracting new talented teaching and research staff to ITMO University.

Medical Insurance at ITMO

As part of the University's HR-brand development strategy, a supplemental health insurance program for ITMO staff and their families was launched in late 2018 in order to provide University employees and their close ones with high-quality medical care.

More than 2,000 ITMO employees acquired their medical insurance policy in 2018.

16,000+

CVs submitted and processed



ITMO.FAMILY FUND

The University's own endowment fund was established for the purpose of developing its infrastructure and supporting research, teaching staff, students, and employees at ITMO University through alternative funding sources, following the example set by various international universities.

The ITMO.FAMILY FUND was established in 2015.

Managing company:
Gazprombank Asset Management

ITMO.FAMILY FUND is eager to support creative and interesting initiatives and projects put forth by students and staff.

5 million rubles

raised for the endowment fund in 2018

11.86 million rubles

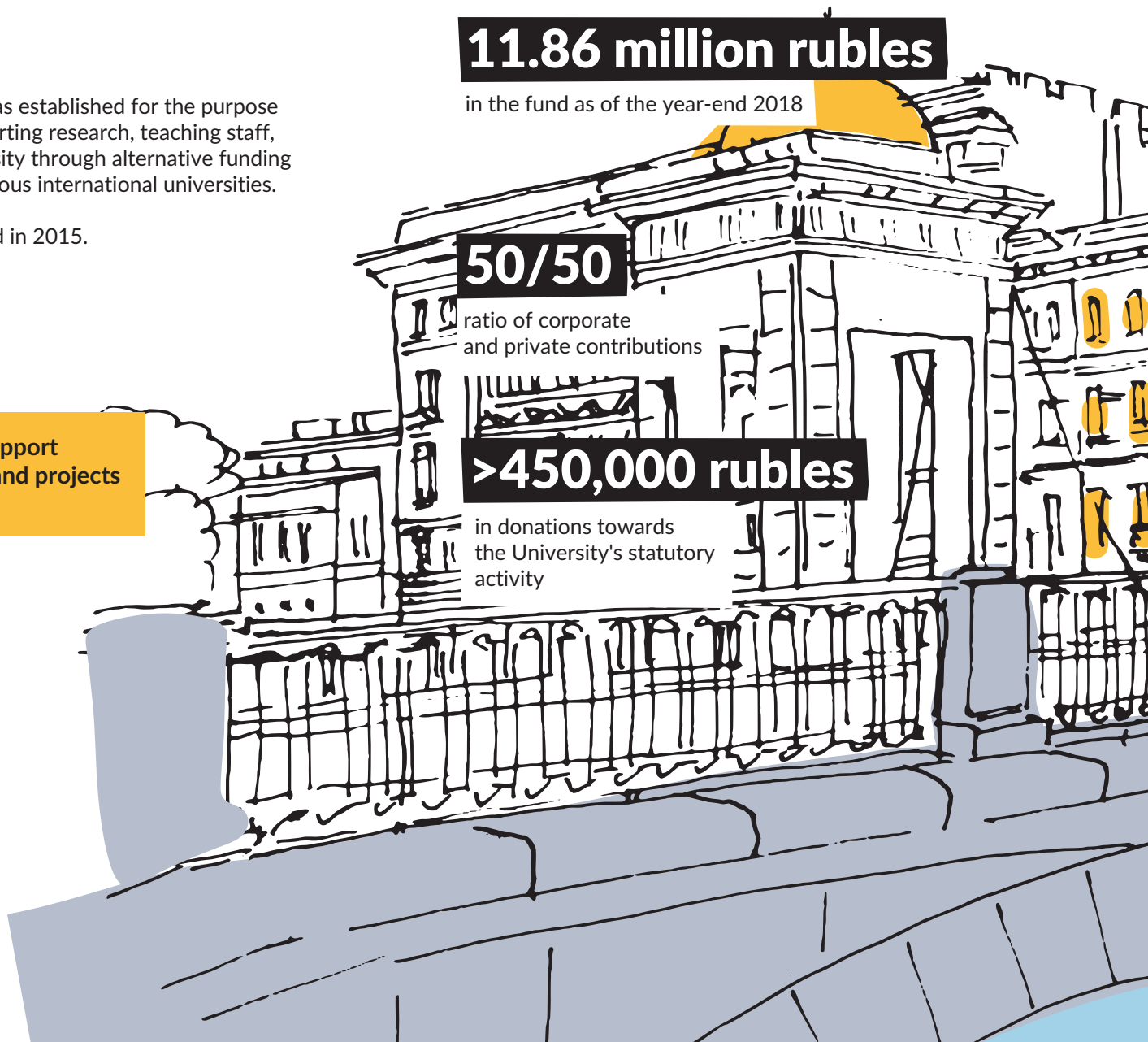
in the fund as of the year-end 2018

50/50

ratio of corporate and private contributions

>450,000 rubles

in donations towards the University's statutory activity





Projects and initiatives by ITMO.FAMILY FUND:

- ITMO.DoBro challenge;
- the #ЩедрыйКофе (GenerousCoffee) flashmob on the occasion of the International Charity Day "Generous Tuesday";
- a series of joint campaigns with the online portal meetforcharity.today;
- the establishment and development of the online portal fund.itmo.family.

ITMO.STORE



ITMO University's very own gift and souvenir shop is always open to students, staff, and friends of the University.

1,986

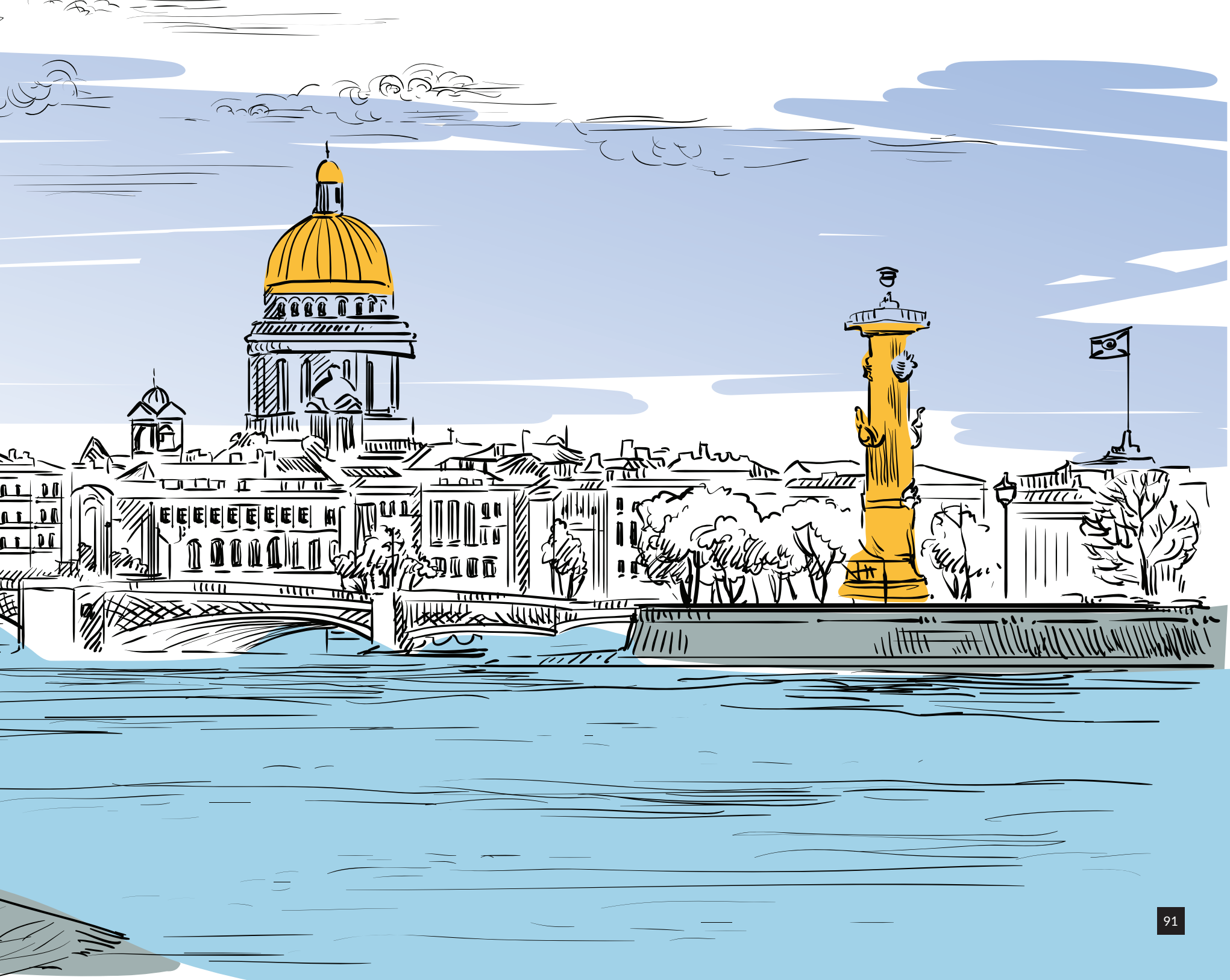
purchases made

8,570

items sold

In 2018, ITMO.STORE released the Black Collection of ITMO-themed clothing and collaborated with the Art&Science Master's program and the Day 404 event team.

With the support of ITMO University's Alumni Association, students of the Information Technologies and Programming Faculty developed and launched ITMO.PRINT, a single-click printing service hosted by the ITMO.STORE's online platform.



ITMO. STUDENTS

ITMO.STUDENTS is a way for students to implement their creative, sports, and social initiatives.

82

student clubs

1,868

members of student clubs

879

events during the academic year

Achievements:

1,316

students were awarded increased scholarships for achievements in social, research, cultural, or sports activities

41.5 million rubles

of funding allocated for scholarships

Locations: Kronverksky Pr. 49; Lomonosova St. 9.

Online:

- student.itmo.ru
- mbradio.ru
- kronbars.itmo.ru

In 2018, ITMO University was named the winner of the National Competition of University Youth Projects, conducted by the Federal Agency of Youth Affairs.

8.4 million rubles

in subsidies for the development of projects in St. Petersburg

- National Forum "From Volunteering to Social Design";
- National Forum "Issues of Development of Physical Education and Student Sports";
- National Forum of Student Sports Clubs;
- Russian-German Forum of Sports Youth Exchange Organizers;
- Soft skills development program for students of St. Petersburg.

Creative projects and participation in events:

- student teams from ITMO University took part in the city-wide graduation event for school students Scarlet Sails;
- opening of the sports & leisure center Alpine;
- "i", an experimental site-specific performance by student artists;
- organization of the open comedy tournament ITMO POINT:

15

teams

2,000+

audience members

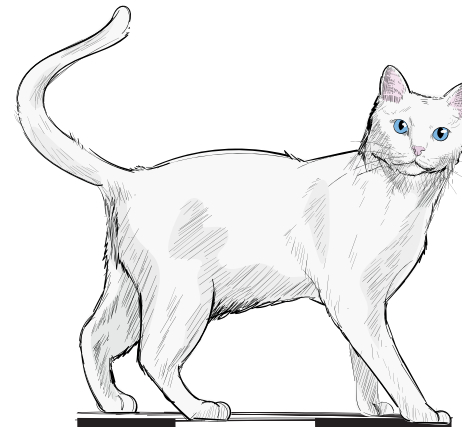
- ITMO University's select team "TT" took part in the televised semi-finals of the international KVN comedy competition in Minsk, Belarus; Team "Bridget Jones" became a winner of the Nevskaya KVN League in St. Petersburg.



Volunteer projects

ITMO University's Student Volunteer Center has been included on the Russian Volunteer Centers Association's list of most effective organizations.

During the regional stage of the national contest Russian Volunteer 2018, ITMO University's international volunteer camp Ecological Raids took 3rd place in the nomination "Around Me", while the ITMO Student Volunteer Center took 3rd place in the nomination "Volunteer Center",



17

cats found
a new home

110

kilograms
of pet food
in donations

**20,000
rubles**

donated to partner
shelters

Social projects and initiatives:

- animal shelter support;
- organization of leisure activities at children's hospitals;
- blood donation initiatives;
- wastepaper collection;
- organization of the festivals "Heart to Heart" and "Spring Week of Kindness".

44

creative
workshops

5

children's
hospitals

211

donors

2.5

tons of wastepaper
collected

60

structural units
of the university took
part

1,500

participants

20

organizations
received help

2,000

beneficiaries

Social project development program "People Need You!":

8

federal districts

61

universities

23

vocational education
institutions

35

regions

41

cities

170

applications received

117

projects approved

ITMO UNIVERSITY

717

students

108

NGO employees

have attended 72-hour educational
courses

1,500+

views of online
lectures

Educational camps outside the city

150

participants

10

experts

50

projects

8,000

beneficiaries

KRONBARS SPORTS CLUB

*Our student sports club's
achievements*

75

sports clubs of basic, intermediate,
and professional level

4,000+

students regularly attend sports
classes at ITMO University

100+

events, sports competitions,
and tournaments



Three years in a row – winner of the ASSC
Best Russian Sports Club award.

In 2018, the club also won awards
in the "Marketing and PR of the Year"
and "Event Management of the Year"
categories.



Hall of Fame

This initiative honors athletes, managers, and coaches who have made great contributions to the development of sports at ITMO University.

In 2018, 10 individuals were inducted into the Hall of Fame.

We partnered up with the Zenit Football Club and became regulars of Russia's largest pre-game entertainment venue Fan Promenade at the Gazprom Arena stadium.

Organized an autograph session with Zenit FC midfielder and national team member Daler Kuzayev.

"Megabyte" student media group

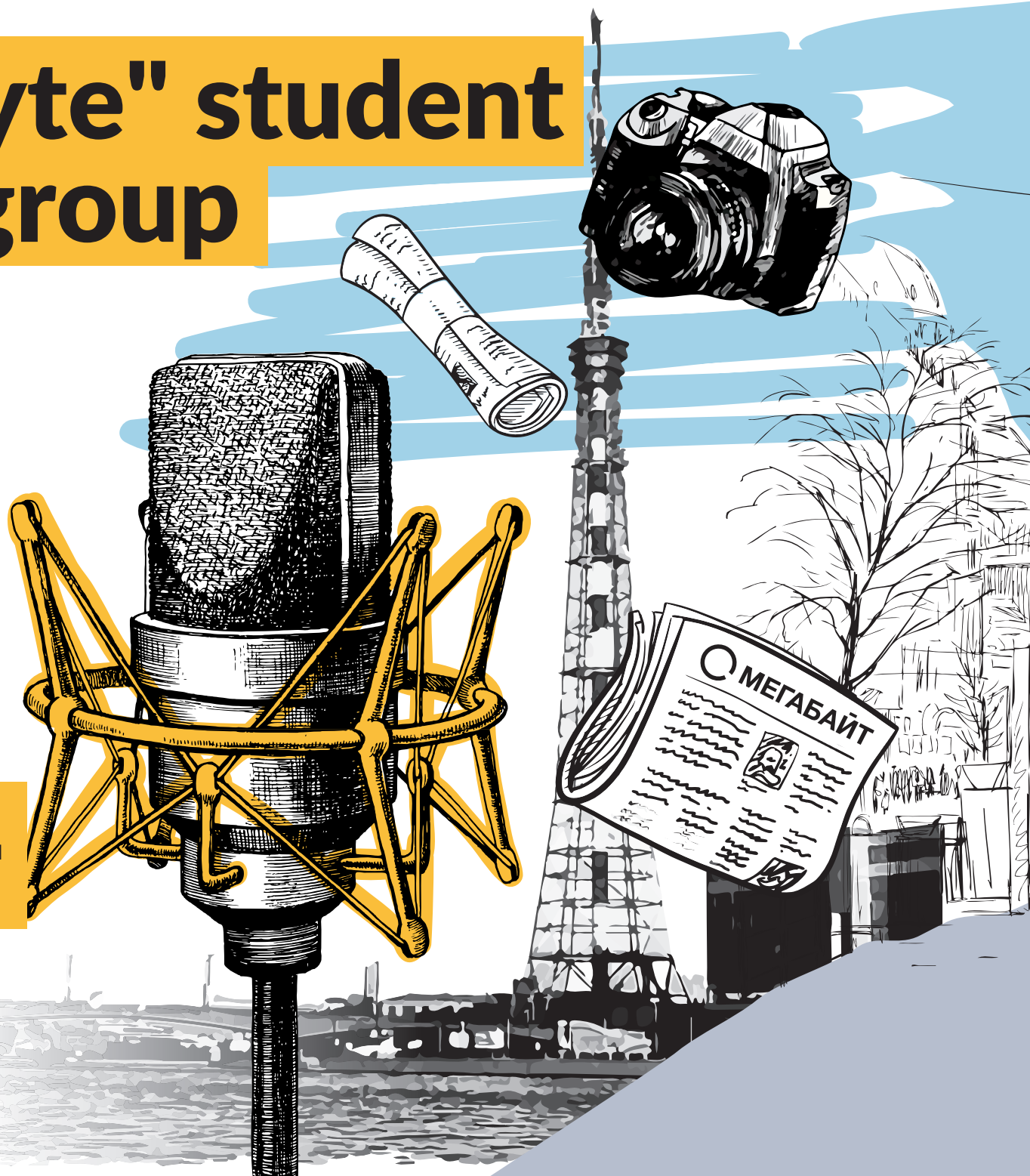
Authors of the Science for Youth project

6

workshops for student editorial offices of St. Petersburg

The 12-hour online charity stream Helpness about volunteering and social work was awarded the Special Prize from the Government of St. Petersburg.

Megabyte Media took the 1st and 3rd places at the national competition of innovative journalism TECH in MEDIA, and was awarded the National Prize for Talented Youth in the Media category.







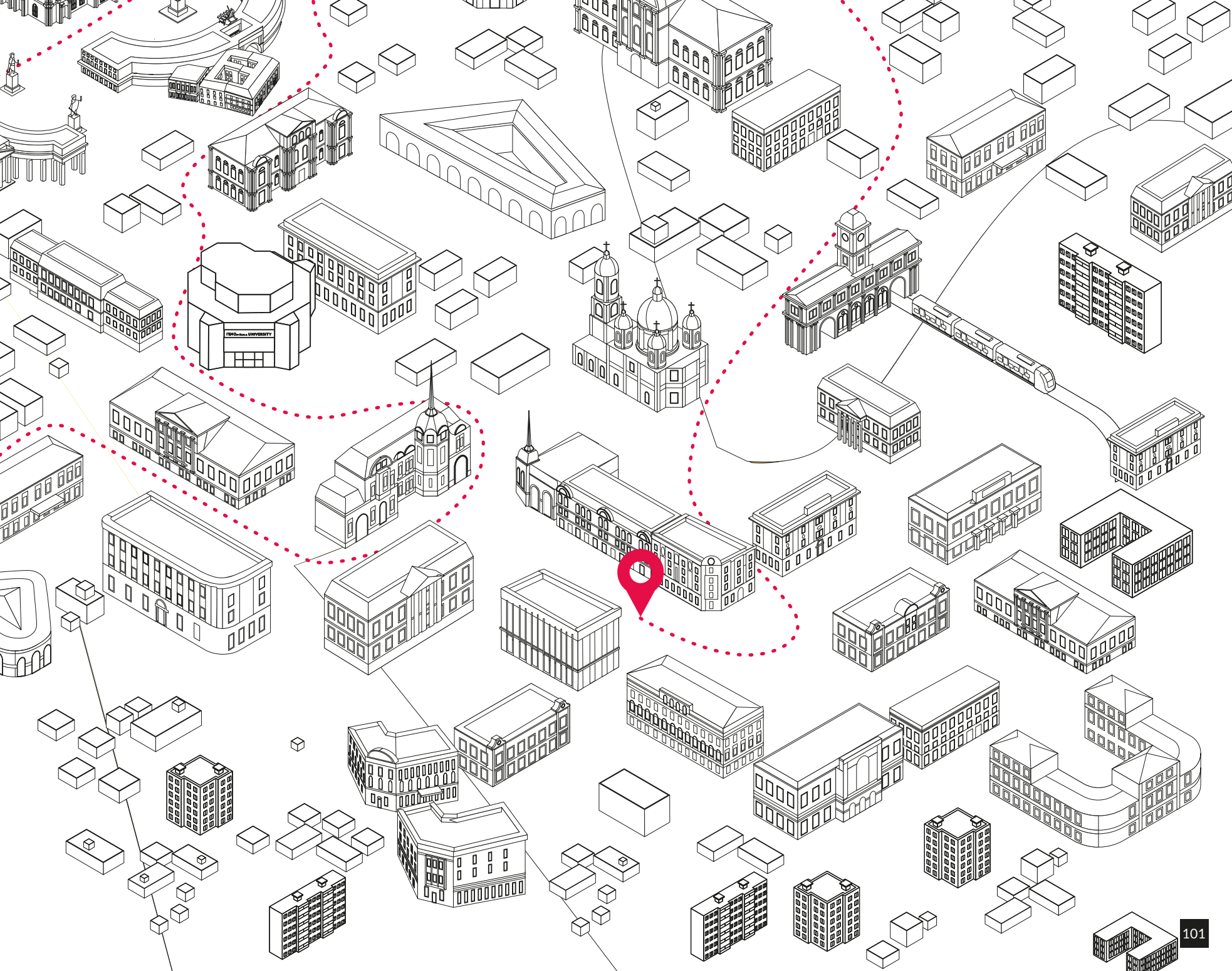
It's not magic.
IT's MORE.

06
ITMO University —
the "First Non-Classical"

Locations:

- Kronverksky Pr. 49,
- Lomonosova St. 9,
- Tantsploshchadka Club;
- Pulkovsky Park.

- smeshno.ifmo.ru,
- [tlgrm.ru/stickers/itmosh](https://t.me/tlgrm_r/stickers/itmosh)



404 DAY

International Internet Day

4.04.2018 - this day was not an error!
Our students put their worries aside and celebrated
International Internet Day at the Lomonosova 9 campus.

Let's
art&science

Spurred on by the motto of "LET'S ART&SCIENCE",
we assembled St. Petersburg's finest street artists
and provided them with ample space for self-expression.

This was a day of internet-themed art,
be it a spray-painted ode to all things digital,
or a manifesto to going offline.

The artwork was put on display not only
for ITMO students, but for all citizens
of St. Petersburg.



LET'S ART & SCIENCE

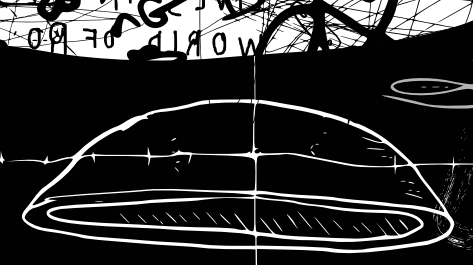


LIVES IN THE WORLD OF DO

RECORDS TAPE III



LIVES IN THE WORLD OF DO



SPORT
PEOPLE

HEAD HO KPP
AZZ RAP

CAT

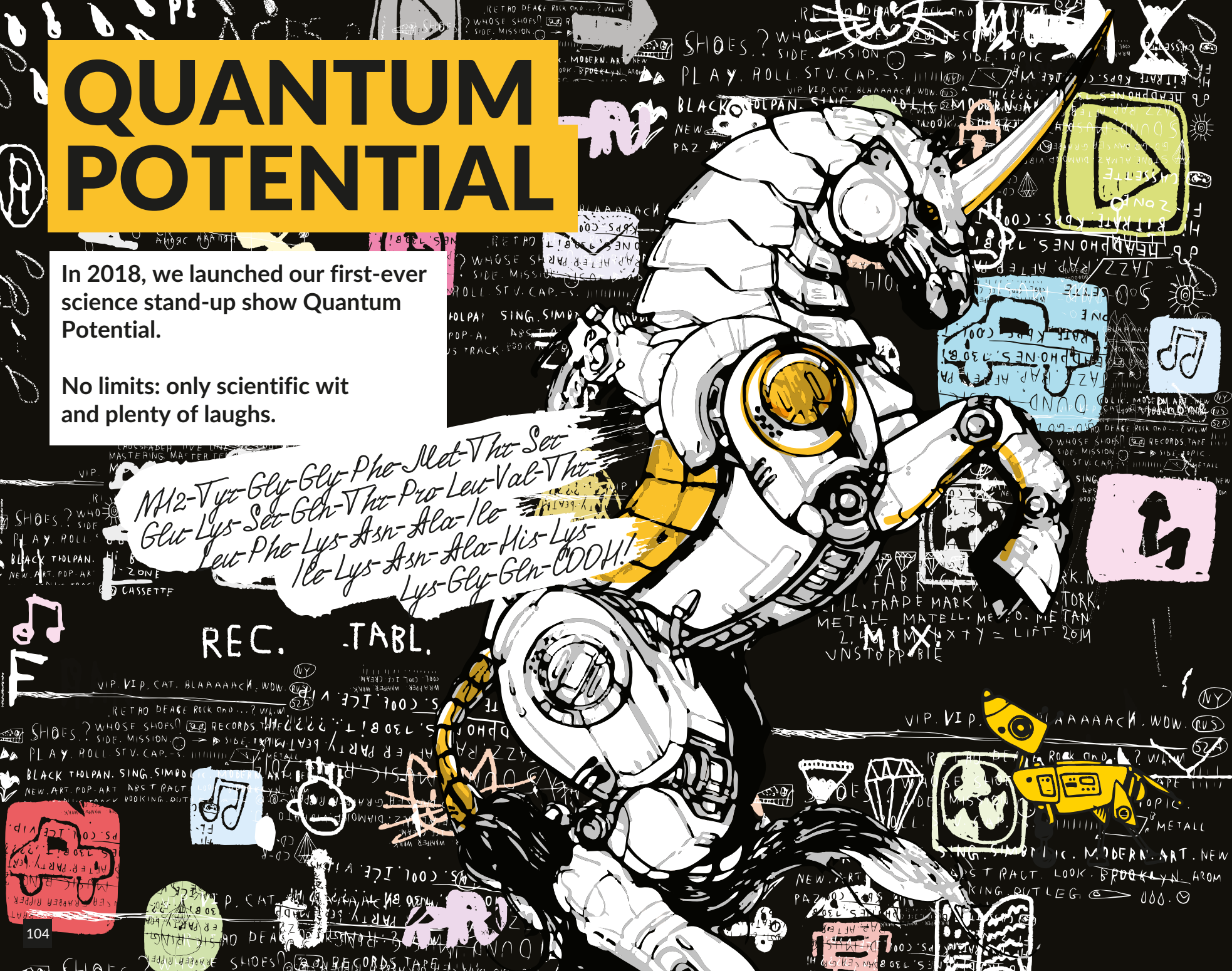
QUANTUM POTENTIAL

In 2018, we launched our first-ever science stand-up show Quantum Potential.

No limits: only scientific wit and plenty of laughs.

Met-Thr Ser
Met-Thr Ser
Glu Lys Ser Gln Thr Pro Leu Val Thr
Leu Phe Lys Asn Ala Ile
Ile Lys Asn Ala His Lys
Lys Gly Gln CDDH!

REC. TABL.



VK FEST,

or an adventure
in virtual reality



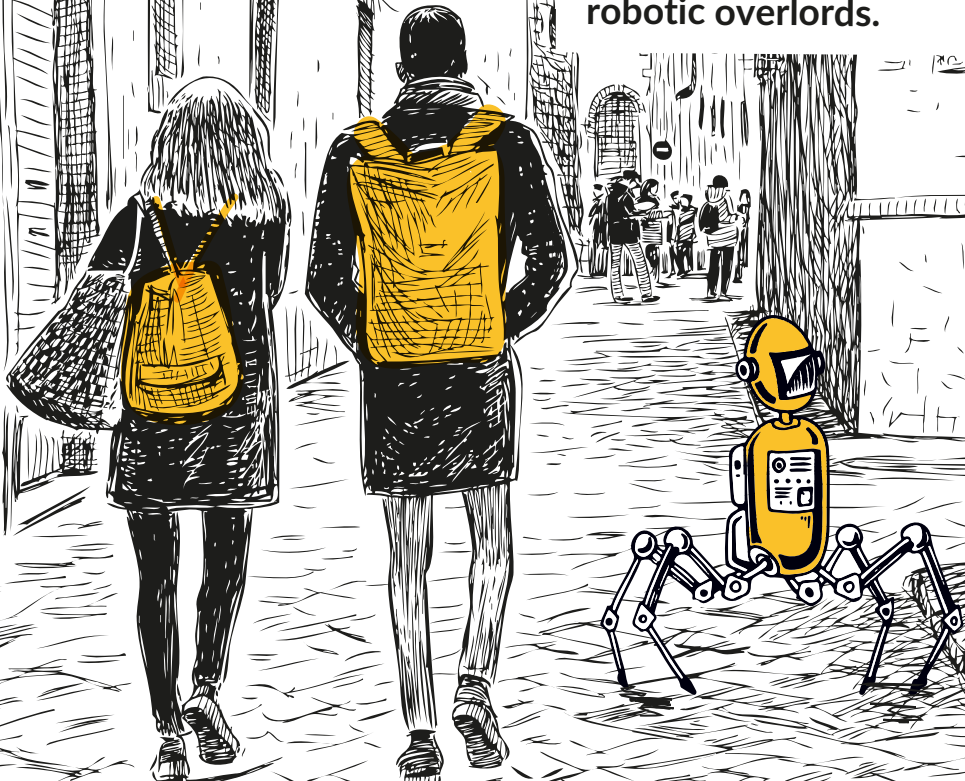
A job market of the future, a hi-tech trampoline, optical illusions, and VR games: that's just a taste of what we had on offer at our booth at VK Fest 2018!

We even managed to turn a mundane trampoline into a journey into a city of the future.

The higher you jump, the harder it gets!

CYBERPUNK RESURRECTION

To prepare for the final exams,
we gave the university a cyberpunk
makeover and welcomed our new
robotic overlords.





ITMO UNIVERSITY

FUTURE IS NOW

#ITMO

#ITMOFORCE

STICKER PACK

Our very own Telegram sticker pack is here in full FORCE.

Choose your fighter: Pig Data, Schrödinger's Catdog, or the (bit)Coin Brothers!

The pack even caught the attention of Artemy Lebedev of Art.Lebedev Studio, who shared it on his Telegram channel 😊

It was downloaded by 25,000 users in January 2018 alone!





WORLD PEACE. KKKK

YOU HAVE

HHHHH

We're just getting started!

HOME!

MUSIC

We can say with confidence:
May the ITMOFORCE be with you!

It's simple:

View, aedel and senel.

K K K K K K K K
K K K K K K K K

WORLD PEACE. KKKK

0

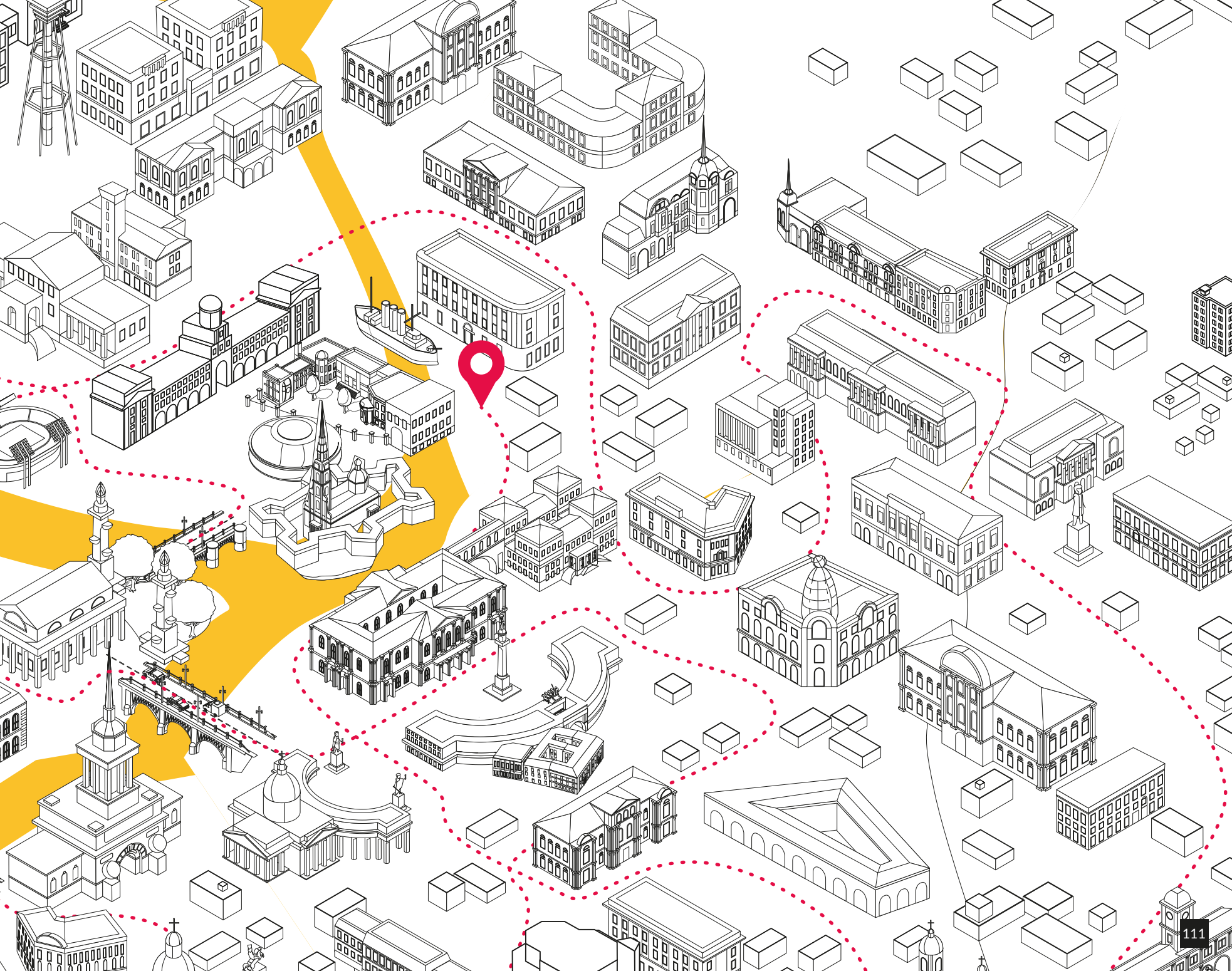


07

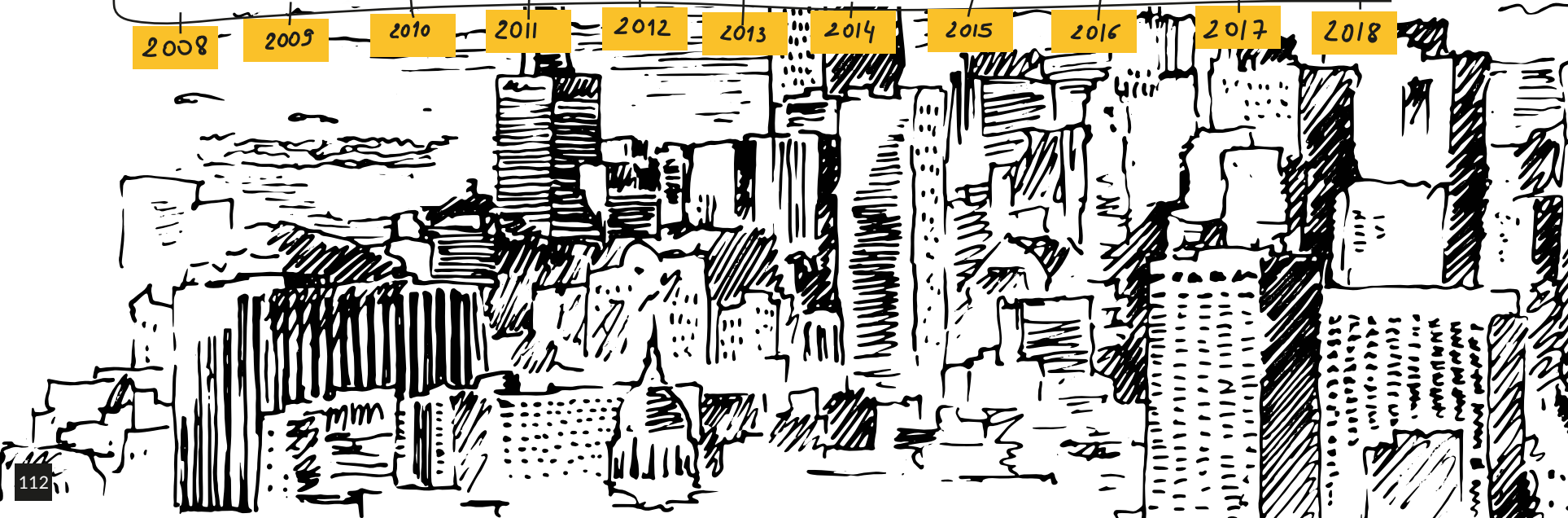
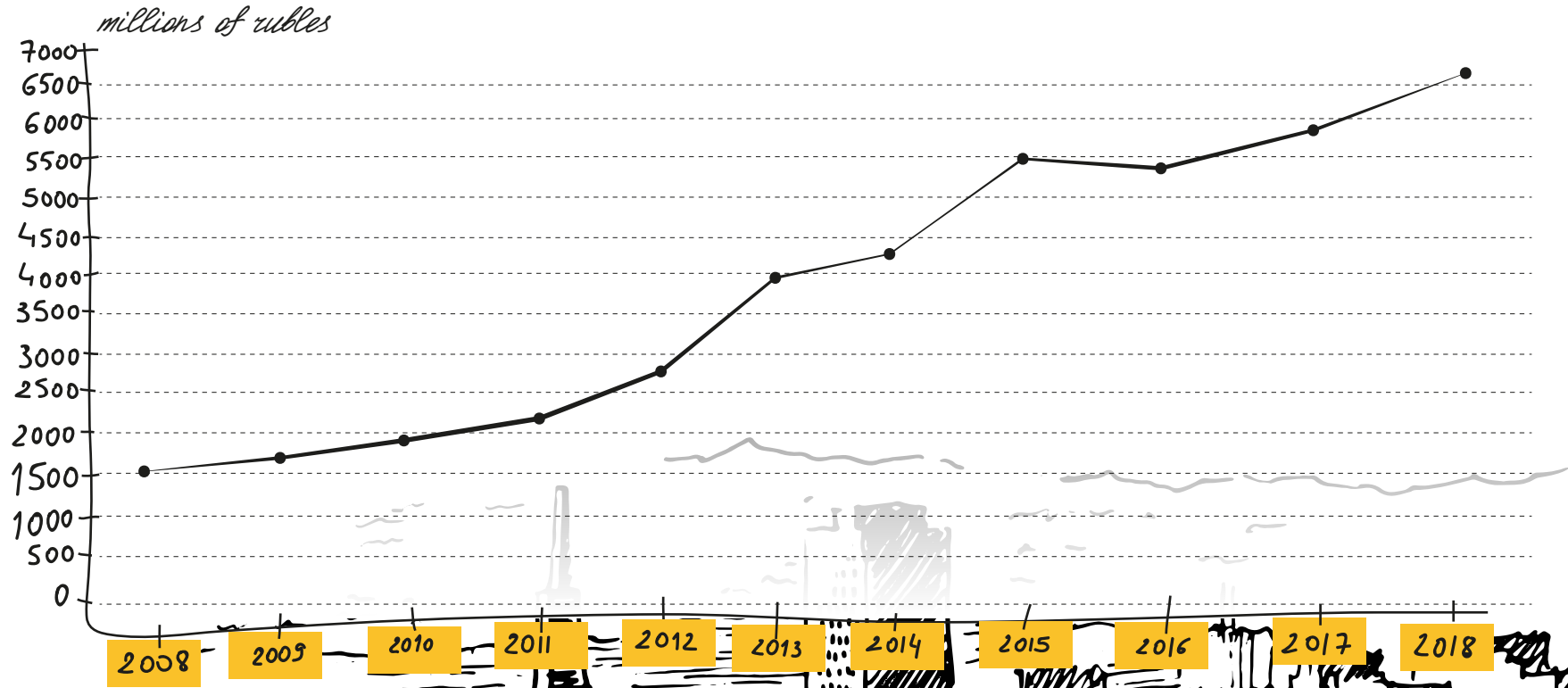
Financial report

Location:

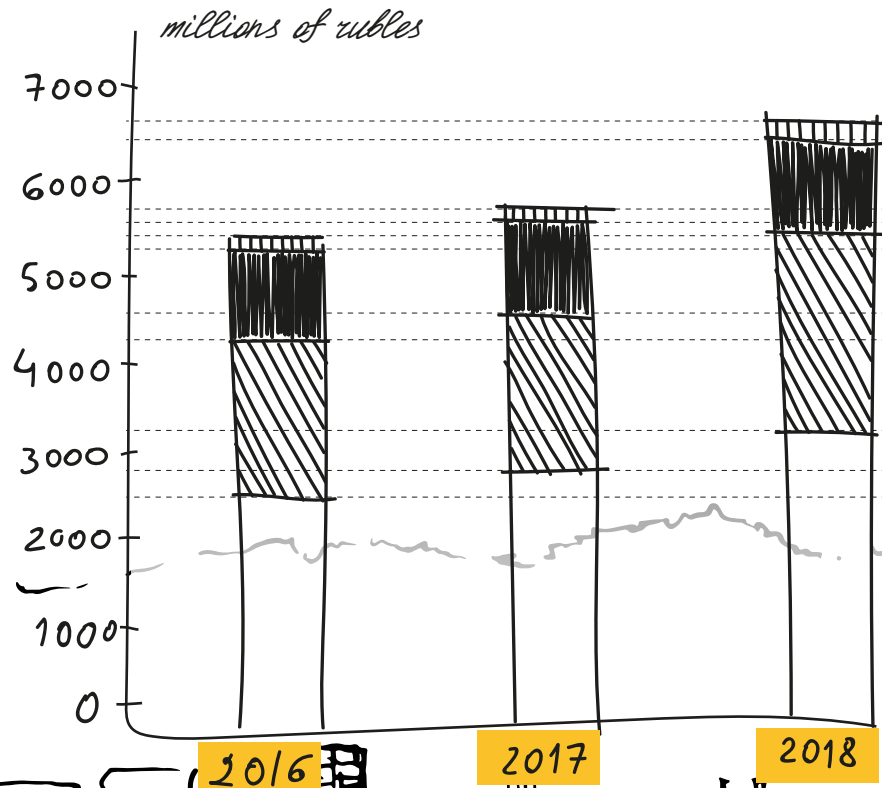
• Kronverksky Pr. 49.



Revenue dynamics of the University's overall budget



Overall earnings structure

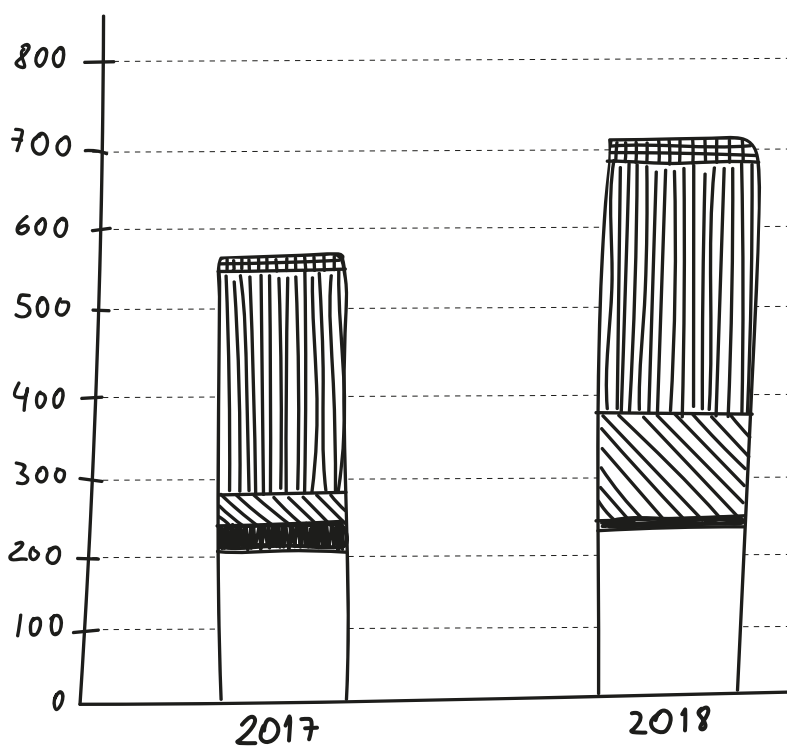







- Other activities
- Project 5-100
- Research activity
- Educational activity



Revenue from non-government contracts and research and production activities

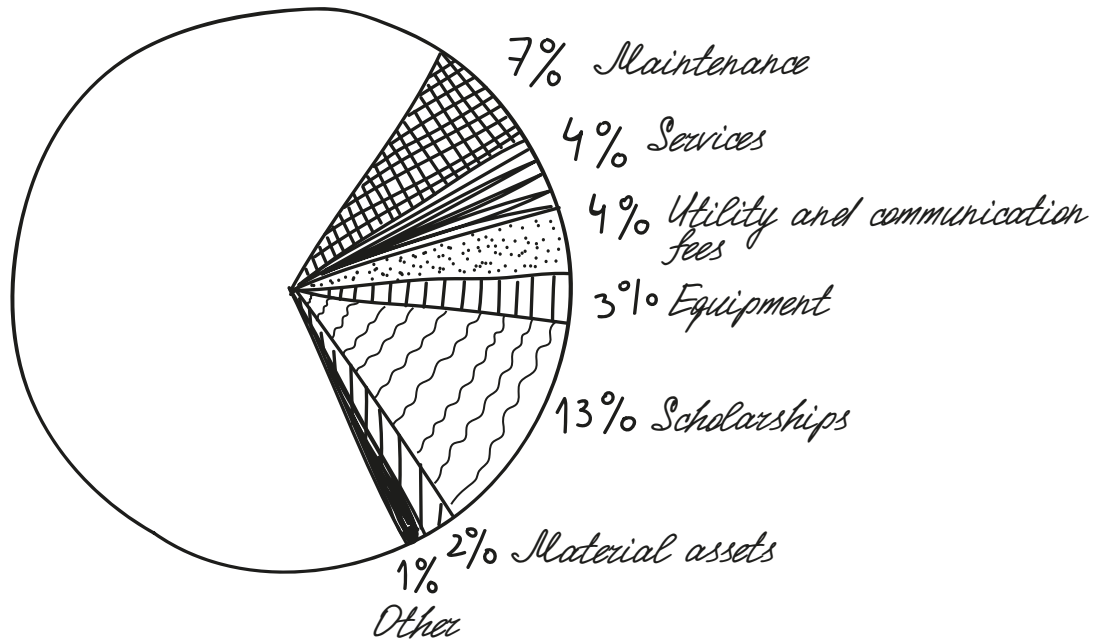
millions of rubles



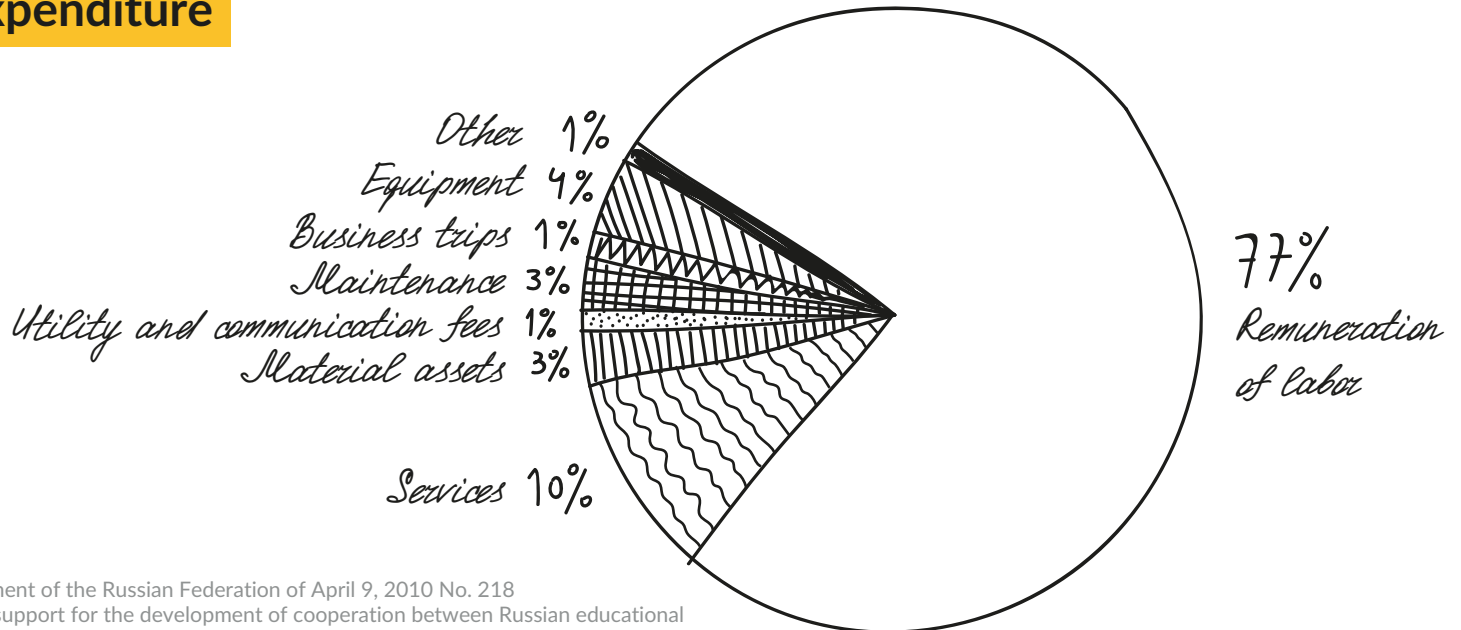
-  Overhead costs
-  R&D
-  Services and production
-  Government contracts
-  Research per Govt. Decree No. 218*



Federal budget expenditure (Project 5-100 excluded)

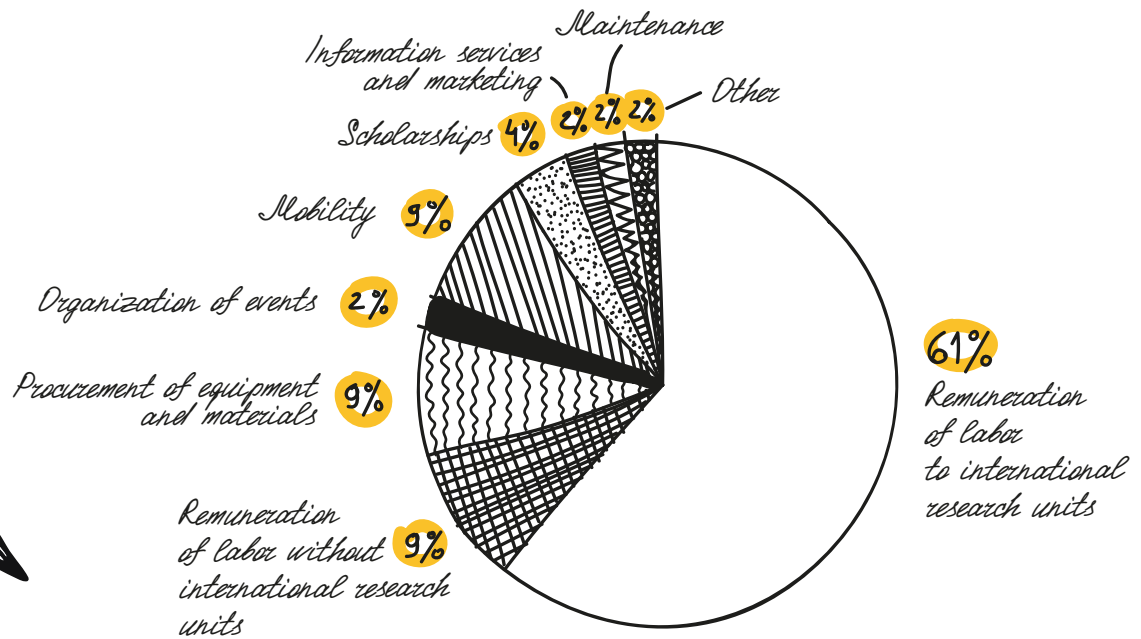
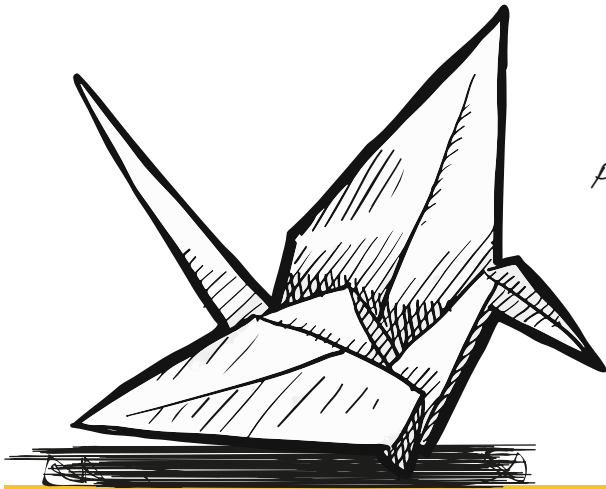


Non-government funding expenditure

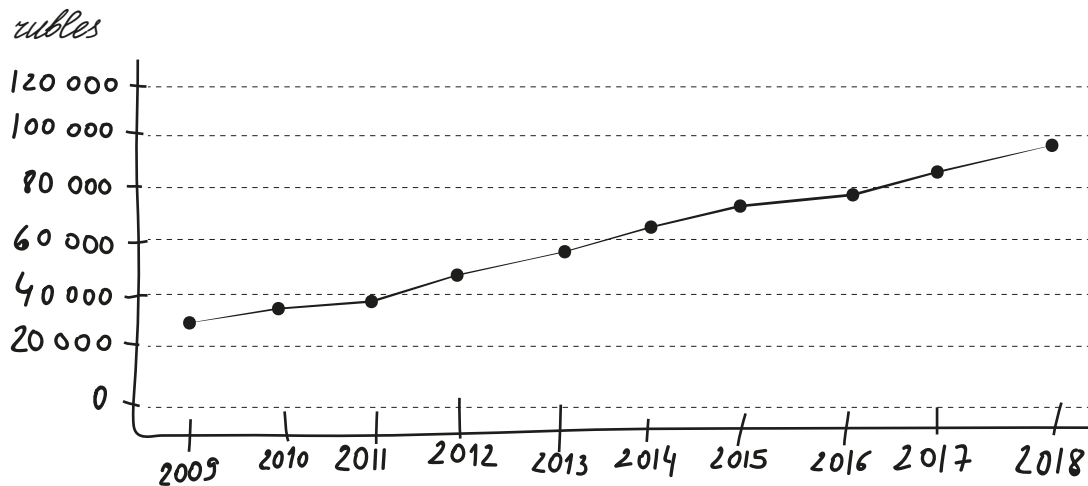


* Decree of the Government of the Russian Federation of April 9, 2010 No. 218
 "On measures of state support for the development of cooperation between Russian educational institutions of higher education, state scientific institutions and organizations implementing complex projects for the creation of high-tech production, within the framework of the subprogram "Institutional Development of the Research Sector" of the State Program of the Russian Federation "Development of Science and Technology" for 2013 - 2020."

Project 5-100 funding expenditure



Growth dynamics of employees' monthly income (including civil contracts, excluding external part-time staff)



Average monthly income:

96,140 rubles

university average

140,550 rubles

academic staff

126,481 rubles

teaching staff

Including external part-time staff, excluding civil contractors:

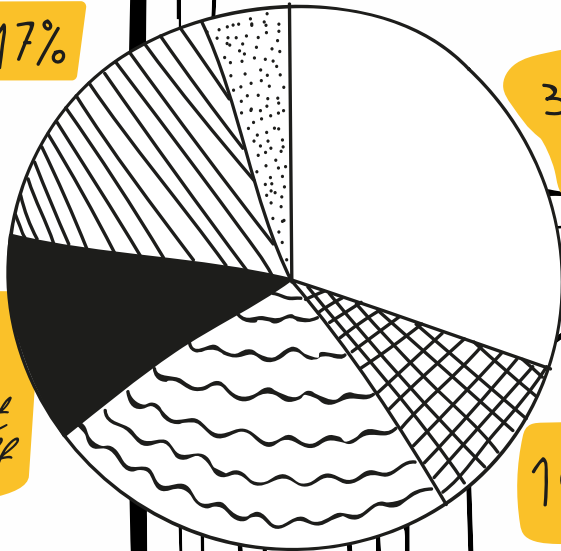
98,551 rubles

average monthly income

87,413 rubles

in 2017

**Payroll distribution
(includes civil contracts)**



5% Other staff

Administrative staff 17%

30% Professors and teaching staff

12% Educational support and medical staff

10% Research staff

26% Engineers and technicians

See you
in the next
academic year!



