



POLYTECH

Peter the Great
St. Petersburg Polytechnic
University



POLYTECH

Institute of Metallurgy,
Mechanical Engineering and Transport

Kawasaki Robotics Technology Center at Peter the Great St. Petersburg Polytechnic University

Oleg PANCHENKO

Introduction

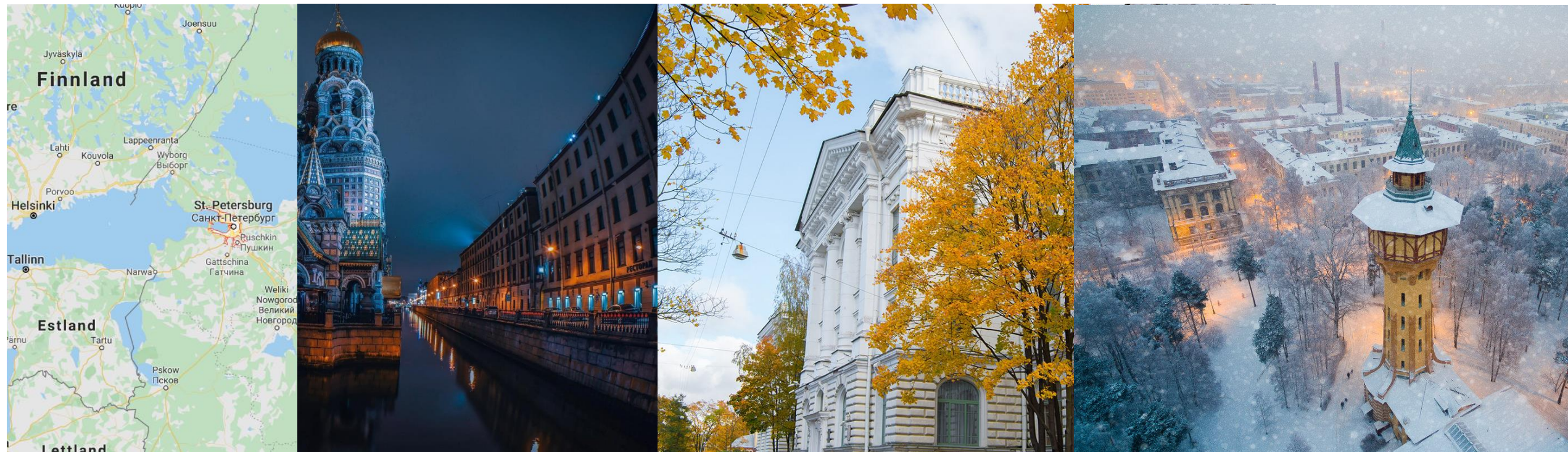
We are situated in the city of St. Petersburg.

Peter the Great St. Petersburg Polytechnic University (SPbPU) has about 30 thousands of students and about 1 thousand staff members.

SPbPU divided in to Institutes (14).

Institutes are divided in to departments and high schools.

Kawasaki Robotics Technology Center is a part of Institute of Mechanical Engineering, Materials and Transport.



Kawasaki Robotics Technology Center (KRTC) goals and tasks

- Mission is developing robotics technologies through education, research and development.
- Main goal is increase of literacy in robotics.
- Secondary goal is increase of sales.
- Instruments: Education process, PR activities, R&D works.

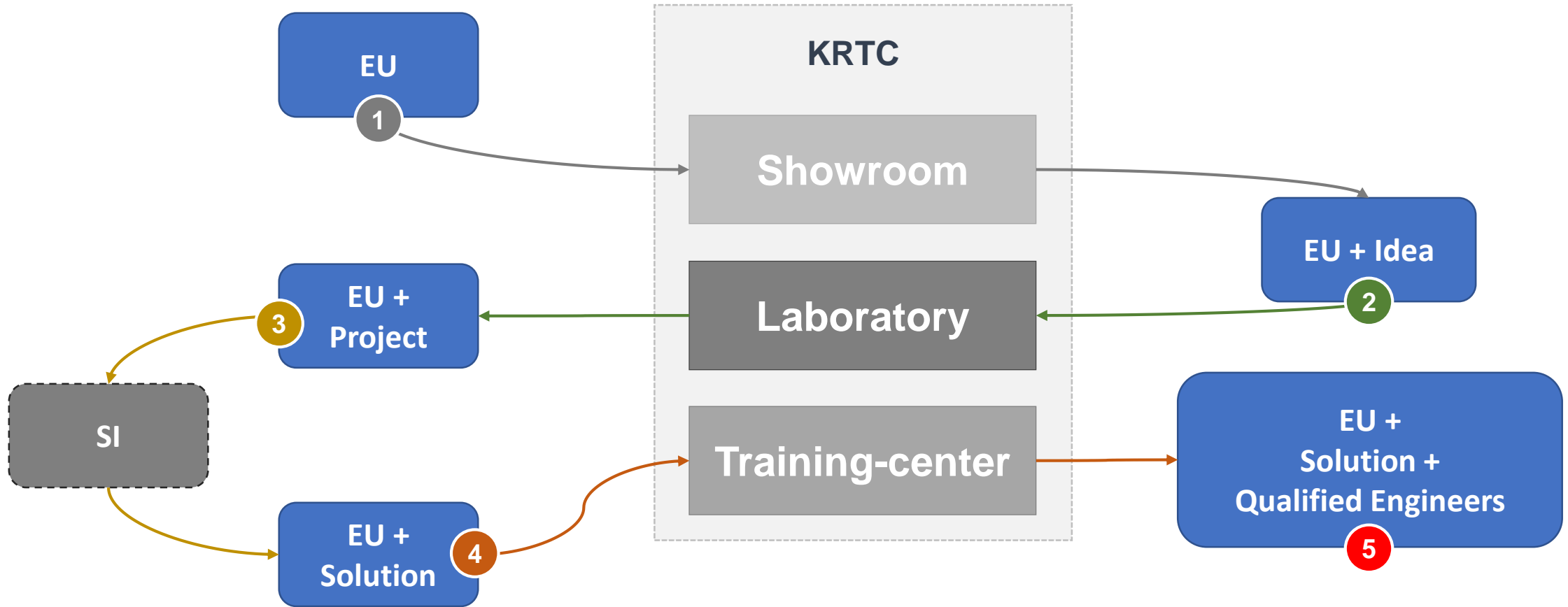
For whom:

Industry, Engineers, Students.

How goals can be achieved:

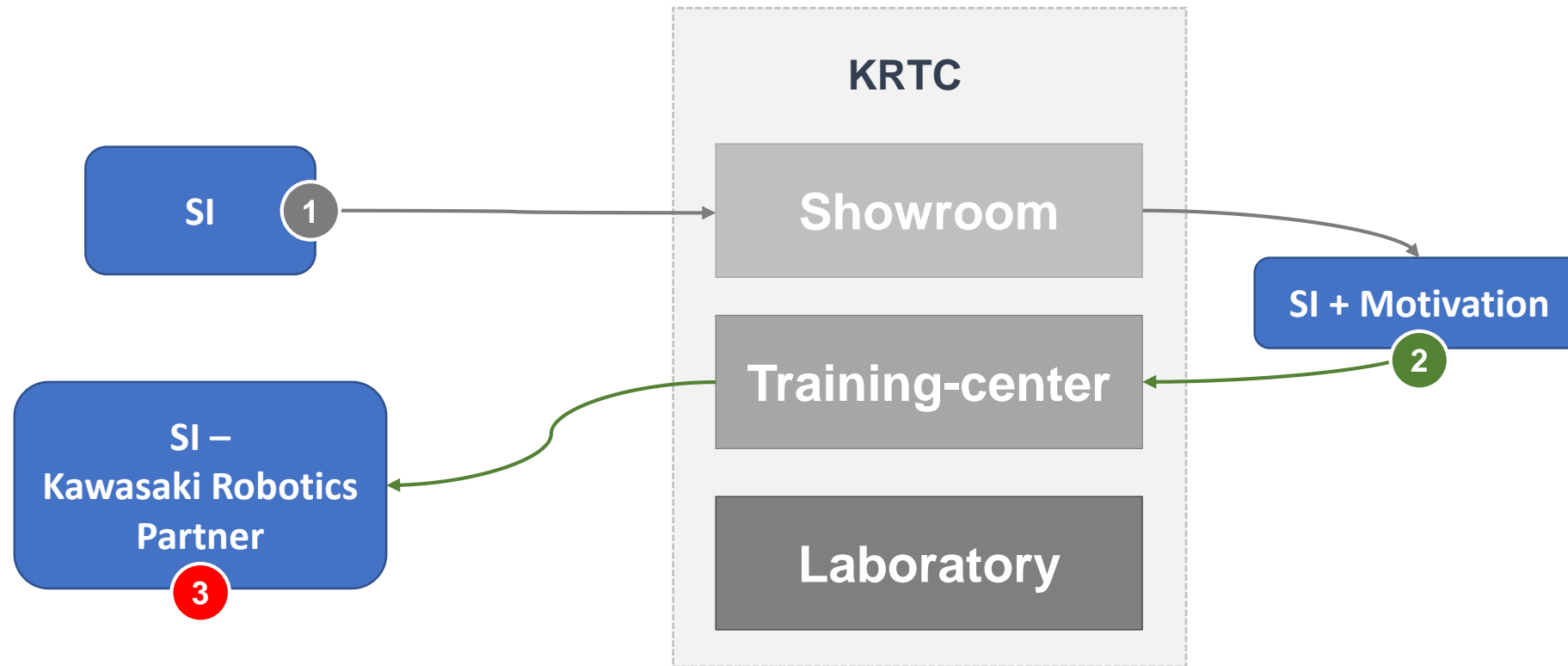
- Personnel and students training with use of lectures and practical studies in the KRTC;
- Operation of laboratory and show room in the KRTC;
- R&D work for Industry, Master and Ph.D. students in the KRTC;
- Seminars and conferences on in the SPBPU;
- Demonstration of equipment and developed technologies for personnel, industry and government in the KRTC.

Kawasaki Robotics Technology Center (KRTC) interactions

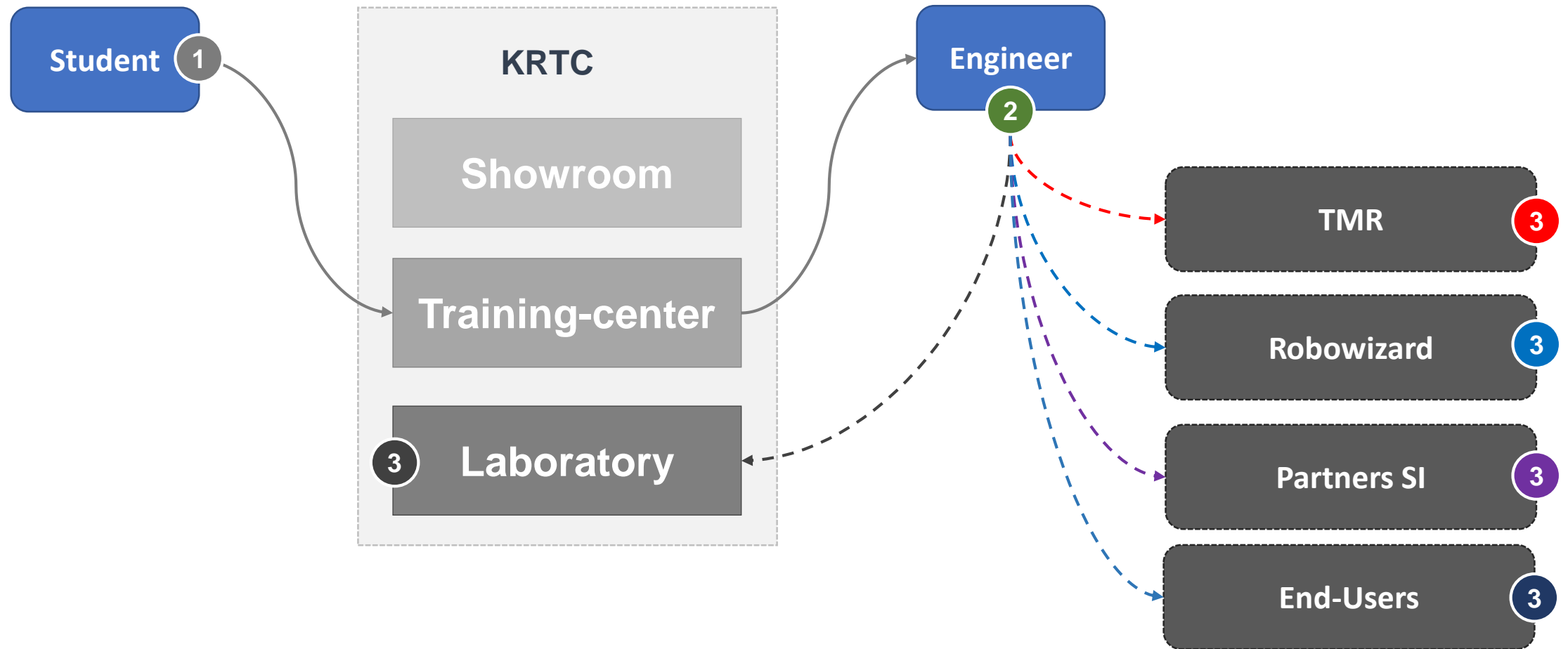


EU – End User, SI – System Integrator

Kawasaki Robotics Technology Center (KRTC) interactions



Kawasaki Robotics Technology Center (KRTC) interactions



TMR– Toyota Motor Russia

Kawasaki Robotics Technology Center (KRTC) location and equipment

KRTC was established in October 2018 and it is located in the new building which is called “Technopolis” and it has about 205 m² of square area.

KRTC is equipped with 12 Kawasaki robots of different types:



Kawasaki Robotics Technology Center (KRTC) activities

Teaching

- Base course with 72 hours of training has been developed. It consists of 36 hours of theoretical study and 36 hours of work with robots.
- There are 2 study departments already implemented our Base course: Department of Automation, Department of Welding.
- Excursions to Kawasaki center were organized and each month we have a group 10-30 people from different economy sectors (even schoolchildren).
- Three specific courses for companies were developed.
- Online course was developed. It is available on the COURSERA international online learning platform.

Media

- Interview for YouTube channel «Native» >11000 views.
- Links in the web about Kawasaki center in media:

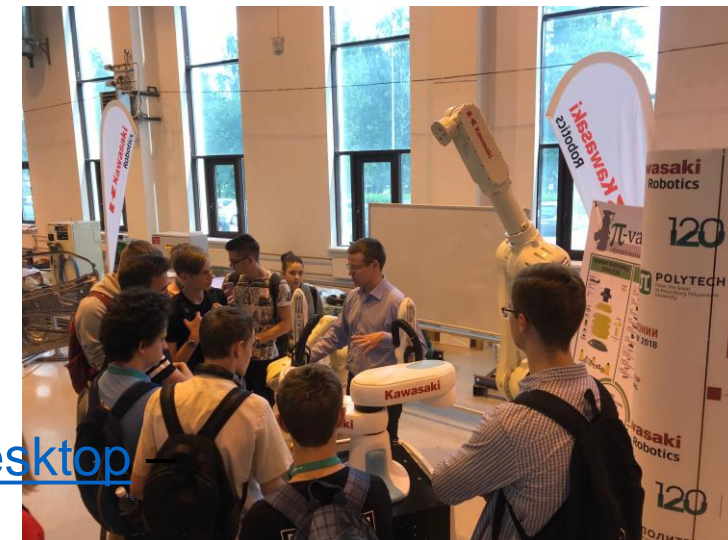
<https://vecherka-spb.ru/2019/06/28/robotov-uchat-professiyam/> -

Newspaper;

https://nevnov.ru/676383-politekh-predstavit-robotov-barista-ikhudozhnikov-na-pmef?utm_source=yxnews&utm_medium=desktop

St. Petersburg International Economy Forum;

<https://topspb.tv/programs/releases/95527/> - TV channel.



Kawasaki Robotics Technology Center (KRTC) activities

Research and development
Wire arc additive manufacturing



Double wire feeder



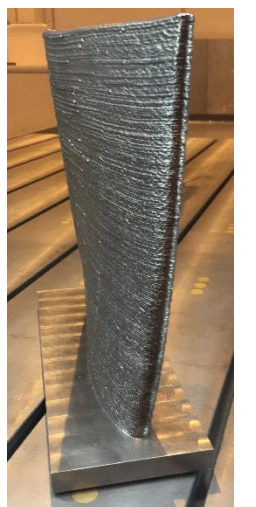
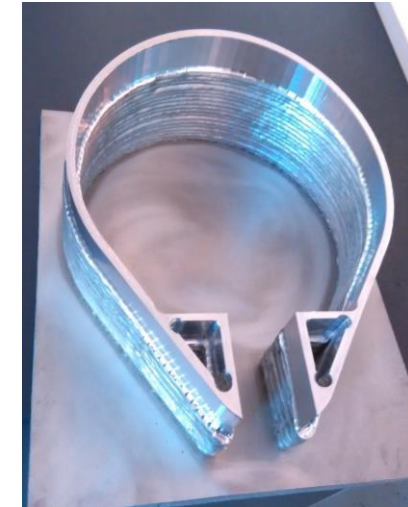
Double wire torch



Double wire feeding system for welding, deposition and additive manufacturing



Welding exhibition, the system has been shown to the President of Tatarstan Republic



Kawasaki Robotics Technology Center (KRTC) activities

Research and development
Entertainment



System for high speed video capturing

Russia

St. Petersburg

Peter the Great St. Petersburg Polytechnic University (spbstu.ru)

Institute of Mechanical Engineering, Materials and Transport (immit.spbstu.ru)

Kawasaki Robotics Technology Center (immit.spbstu.ru/department/kprtc/)

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Thank You!