

## Why is the project necessary?

The current situation of increasing European and global competition and the resulting downward pressure on prices and forcing at Slovak companies use modern automated and robotic manufacturing systems.

After the state of the art analysis evaluation there were certain conclusions gained, showing lack of information from the field of robotics among graduates. Low level of education in the field of robotics is caused by poor material and technical facilities at secondary schools as well as by poor level of theoretical and practical experiences of teaching staff. Therefore the staffs are not able to pass on important and satisfactory level of education in the field of robotics.

This clearly demonstrates the need and necessity of education in the field of robotics that can be adequately insured by professionally trained teachers. Teachers will benefit in terms of gaining the latest information and knowledge from the field of industrial and service robotics, which is now highly popular and attractive giving them the benefit of professionalism.



Training laboratory PK8



Robot MOTOMAN SDA 10F

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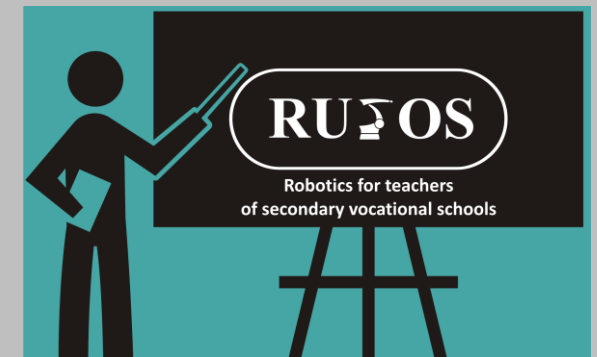


Erasmus+

Program Erasmus +  
EÚ programme for education, training, youth and sport

**Robotics for teachers of  
secondary vocational school**

*Project nr.*  
**2015-1-SK01-KA202-008970**



## Erasmus + programme

Erasmus + is the European Union programme for education, training, youth and sport. It runs for seven years, from 2014 to 2020.

The program provides an opportunity for students, pupils of vocational training, teaching staff, youth workers and volunteers to improve their knowledge and skills. The program also supports organizations that can participate in project activities and in partnerships to share innovation in education and training of young people.

## Aims of RUSOS project

The main goal of the project is to create learning materials for teachers of technical subjects at secondary vocational schools to be established at the basis and also at the latest knowledge of robotics.

- Enhance the preparedness of graduates of secondary vocational schools
- Educate teachers of secondary vocational schools in the field of robotics
- Establish educational ICT platform and virtual laboratory
- To strengthen the links between education, training and the world of work

## RUSOS project content

The content of project is to prepare study materials - lessons from field of robotics based on e-learning to be determined for teachers of schools. Thus prepared teachers will then pass on this knowledge to their students. The content project is development of educational ICT systems and virtual laboratory that enable controlled access to these materials, possibility of monitoring and evaluation of progress as well as platform users, ability to communicate and exchange ideas, knowledge and experience.

## Project partners

Technical University of Kosice, SK  
Project Coordinator



Technical University of Kosice has 9 faculties, around 9 500 full-time undergraduate students. TUKE caters for a wide range of research needs In robotics area, which is oriented to solution of actual problems as f. e. robotic systems based on modularity and reconfigurability also research at intelligent of robotic systems.

[www.sjf.tuke.sk/kr](http://www.sjf.tuke.sk/kr)



Cluster of Automation Technology and Robotics, Kosice, SK

The goal of the initiative of Cluster founders is to concentrate development capacity and deepen the home specialisation profile and participation in international groupings for AT+R. Cluster founded three research centres: centre for mechatronics, centre for automated manufacturing systems and centre for robotics and modules. Each of these centres are available to parts of Cluster during solving of common projects.

<http://www.clusteratr.sk/>



Industrial Research Institute for Automation and Measurements, PL

They has rich experience from coordination and participation in several different vocational education and research projects from robotics, artificial intelligence, IT and safety. Activities include the implementation of unique technical solutions in research and development projects funded by the European Commission, European Defence Agency and Polish Ministry of Defence and Polish Ministry of Science and Education.

[www.piap.pl](http://www.piap.pl)

Politehnica University at Bucharest, RO



Scientific research at University of Bucharest uses the latest means of automation and robotics that is defined strategic objectives and guidelines for scientific research. Trends are defined and built capacities in the form of research infrastructures, research centres, departments and laboratories.

[www.upb.ro](http://www.upb.ro)

MANEX, Košice, SK



MANEX Company deals with projection and production of complex solutions for automated production lines in the field of transport, handling, packaging and fulfilment and these solutions are on a high level with the implementation of the latest robotic systems.

[www.manex.sk](http://www.manex.sk)

Common school of Juraj Henisch Bardejov, SK



Secondary vocational school educates students in mechanical engineering, electrical engineering and construction. From past Has experience of Comenius - School Partnerships. It provides practice in various companies and also in district as well as directly at own laboratories. They collaborates with companies KAMAX Bardejov, KAMAX Holding GmbH & Co. KG Germany.

<https://ssjh.sk>

Lublin University of Technology, PL



The University maintains close partnerships with research institutions around the world according to common research projects in robotics well as basis for organizing joint lectures, conferences and fellowships in this field. Scientific and educational activities contribute significantly to the development of robotics in the region.

[www.pollub.pl](http://www.pollub.pl)