

The Master's program has the following innovative elements for Central Asia:

- -Interdisciplinary Master's program
  "Mathematical Engineering in cooperation
  with industry;
- -Promoting the implementation of the principles of the Bologna Process (including the use of ECTS) and creating opportunities for academic mobility;
- -Creating professional network in mathematical engineering with participation of industry and university - partners of Central Asia;
- -Creating database of research in this field;
- -Improving the quality of the developed program through video lectures for graduate students, organized by universities of Europe and Central Asia;
- -Opportunities for academic and scientific cooperation between EU and CA universities.















In the framework of the project the educational platform has been developed where jointly developed training materials will be placed by the consortium members. The training materials include video lectures of foreign professors, materials of scientific researches etc. Lectures of invited professors from the universities of Santiago de Compostela (Spain), the Polytechnic University in Turin (Italy) and the University of Primorska (Slovenia) are also being practiced.

THE PROGRAM WAS SUCCESSFULLY LAUNCHED IN 2016 - 2017 ACADEMIC YEAR AT INTERNATIONAL INFORMATION TECHNOLOGY UNIVERSITY (13 MASTER STUDENTS WWW.IITU.KZ/MASTERS), AND KOSTANAY STATE UNIVERSITY NAMED AFTER A. BAYTURSYNOV (1 STUDENT). KAZAKHSTAN



## MATHEMATICAL ENGINEERING MASTER PROGRAM





The Master Program "Mathematical Engineering" based on the Erasmus+ project "Establishment of Computing Centers and Curriculum Development in the Mathematical Engineering Master Program / ECCUM", was developed in a consortium of eight universities from Europe and Central Asia.

The ECCUM project aims are to increase the academic potential of mathematical engineering specialists in Central Asia. The focus of project activities is to increase the scientific potential of specialists in the field of "Mathematical Engineering", to train MA students in accordance with international requirements, based on the enhancement of professional skills and competences. Using the experience of the European Union partner-universities to enhance the quality in teaching mathematical engineering, developing an interdisciplinary program, promote the desire of higher education institutions to further develop the international cooperation. This improves the quality and relevance of the program, and will facilitate the implementation of Bologna process requirements in the educational process. The broad impact of the project contributes to the industrial-innovative development of partner countries, since engineering is the art of creating and improving the environment.

APPLICANTS WISHING TO STUDY IN THE MASTER'S PROGRAM OF MATHEMATICAL ENGINEERING CAN APPLY TO 5 UNIVERSITIES OF CENTRAL ASIA.

## In Uzbekistan:

Bukhara Engineering and Technology Institute, UZ Uzbekistan Turin Polytechnic University in Tashkent Urgench State University

In Kazakhstan:

International University of Information Technologies,

KZ Kazakhstan

Kostanay State University named after A. Baytursynov

Partner universities in the European Union University of Santiago De Compostela, ES Spain;

Turin Polytechnic University, IT Italy; University of Primorsk, SL Slovenia.







Today, all CA partneruniversities opened Computer Centers with the appropriate hardware and software equipment including licensed programs COMSOL Multiphysics and MatLAB