# Newsletter #6



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# WELCOME TO THE SIXTH REBUS PROJECT NEWSLETTER

We are happy to announce that the sixth Rebus Project Newsletter is now available! In this issue, you will find all recent updates about our project "REady for BUSiness – REBUS; Integrating and validating practical entrepreneurship skills in engineering and ICT studies"!

REBUS project partners have had many activities and results in last six months. Click below to find more information regarding the project's progress and outcomes.

# AWARDING CERTIFICATES

#### TO THE SECOND GENERATIONS OF REBUS STUDENTS

As part of the REBUS project at the Faculty of Mechanical Engineering, University of East Sarajevo, a second generation of REBUS students was awarded certificates. Students have successfully completed a course in Entrepreneurship where they have acquired the necessary competencies, knowledge, skills and attitudes. Students expressed satisfaction with their participation in the project and hope that certificates will be of great importance in their employment.



The attendees were greeted by the Dean of the Faculty, dr Milija Kraišnik, assistant professor, who emphasized the importance of this project for both the Faculty and the University. The project coordinator in front of the University of East Sarajevo, dr. Goran Orašanin, assistant professor, presented the project and the results achieved during its implementation.





# **REBUS COMPETENCE-BASED**

# ENTREPRENEURSHIP LEARNING APPROACH IN THE INTERNATIONAL MASTER PROGRAM IN RUSSIA

First September 2019, the third group of 12 students was admitted to the international master program "International Cooperation in the Forestry and Nature Management" (in Russian) at the Institute of "Forestry and Nature Management" of Volga Tech. The curriculum of the program is designed to train students for the international relations and companies, including three E-learning courses developed within the REBUS project. Important part of their master study is going to be the REBUS Competence-based entrepreneurship learning approach:

contribute to development of entrepreneurship learning activities, contribute to entrepreneurship competence inventory, reference systems and framework, as well to creation of learning objects and modules using the MAHARA platform. The magistrates are citizens of the Russian Federation and the Republic of Uzbekistan. The master students will take training in the countries of the European Union in a project oriented way. The program is based on teaching methods for a comprehensive analysis of the development of international cooperation in the field of forestry and nature management.



# THE REBUS PROJECT

# INFO DAY AT THE VOLGA STATE UNIVERSITY OF TECHNOLOGY

The Volga State University of Technology is successfully completing the implementation of the international educational project "REBUS"(Ready for BUSinees) of the European Union Erasmus+. One of its goals is to give graduates the opportunity to find themselves in the profession and start their own business. The REBUS project info day was carried out 5-7 June 2019 at the Volga State University of Technology during the international conference "Environmental and Technological Aspects of Monitoring and Reforestation in the Conditions of Climate Change".



The conference was attended by 155 people - representatives of relevant ministries and departments, national parks, SMEs, forest enterprises of the Republics of Mari El, Tatarstan and Chuvashia, scientists from universities of Yoshkar-Ola, Kazan, Penza, Ufa, St. Petersburg, Yekaterinburg and Vologda, staff and students of the Volga State University of Technology and Mari State University. Scientists from Greece, Finland and Austria remotely delivered online presentations on problematic issues. During the Info day, the project participants presented to the audience main info about the outcomes and deliverables of the REBUS project, as well as about new developed E-learnign courses, entrepreneurial and intercultural competences and Mahara portal. Students participating in the REBUS trainings also delivered their perception on the gained knowledge and experience. The REBUS project makes a great contribution to improving the quality of education at the university, as well promotes its national and international recognition.

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# **ENSURING THE**

#### SUSTAINABILITY OF REBUS-DEVELOPING CROSS DEPARTMENT COURSES

Universum College organized a training on Integrated Curriculum Development, with an emphasis on encouraging further collaboration between departments within the institution. The foremost objective of the training was to introduce the new faculty to REBUS Project and its application, as well as to encourage cross-departmental collaboration between the staff. Mr. Uran Rraci, who is the Universum College coordinator of REBUS Project conducted a training on Integrated Curriculum Development, encouraging the faculty to identify XXI century skills that students will need and currently could not be obtained by one department only.



During the training, it was unanimously agreed that it is profoundly important for students to develop hard-skills, as well as the necessary soft-skills that are required in different working environments. Moreover, the faculty agreed to encourage students to continue to use Level 5 to validate their skills, therefore, providing them with an opportunity to gain a competitive advantage within the workforce. In order to ensure the sustainability of the project, the faculty will undertake the necessary measures to inform potential employers about Level 5 and how it could be used when recruiting students from Universum College.

# SIBSUTIS'S COURSE ON BUILDING

#### ENTREPRENEURIAL COMPETENCIES "ANDROID APPLICATION PROGRAMMING"

From 8 to 12 July as part of the international European project Erasmus+REBUS in SibSUTIS the coursework for students of Innovative University of Eurasia (InEU) from Pavlodar city (Kazakhstan) was arranged on the course of building entrepreneurial competencies "Android application programming". Students who successfully completed the competitive stage at their university took part in the mobility. "Blended learning" methodology was used in the framework of the course in order to successfully implement the mobility and subject mastery.



The workload of the course contained 180 hours (5 ECTS credits). The building entrepreneurial competencies course "Android application programming" was developed by the Senior Lecturer of the Applied Mathematics and Cybernetics Department I.V. Nechta. The student's coursework consisted of two learning stages: the first learning stage of education was distance and it was held from 15 April to 28 June. 48 InEU students studied educational learning material in the online information educational environment MOODLE, did laboratory researches concerning 'Calculator application' 'Game application Bug' 'Unity 3D' and passed tests, worked with databases, created game applications, got opinions on webinars. The second learning stage was faceto- face and it was held from 8 to 12 July. Students from InEU arrived in Novosibirsk to complete the face-to-face stage. During the second stage students attended lecture course consisted of "Lightning in OPEN GL" and "Shader processor" themes, did learning activities, defenced their course papers and successfully passed the final exam. All students were given SibSUTIS's certificates at the end of the course. According to lecturer I.V. Nechta, students had showed not only the extreme level of interest and hard-working, but top results during their studying and course paper defence.

InEU students noticed that participation in such kind of project left an unforgettable impression and gave an important experience. Therefore, student Nurligali Baikenov said that participation in such kind of course was an extremely important part of his life, as for new knowledge and skills, they would be used on further education and professional self-development. Daniyar Daniyarov, while sharing his impression, noticed that the course was fascinating and cognitive for the whole group of students. Boys plan to use and active develop all new skills and experience in the future. Kazakh students mentioned the high level of the Senior Lecturer I.V. Nechta competence, excellent quality of educational material and expressed gratitude for the organization and conduction of the course.



While staying in Novosibirsk students from Pavlodar had time not only for studying, receiving new knowledge and skills, but also have had a chance to see our city. Our guests visited the zoo, Aquapark, Novosibirsk State Art Museum, Academic Town, Novosibirsk Reservoir, malls and parks of our city. Students didn't hide their impression of staying in Novosibirsk, while they were interviewing. They were impressed not only by the immensity and architecture, but the pleasant atmosphere. Munira Bakaeva, the head of the group, admitted that boys had a real culture shock. Our Kazakh guests expressed readiness and willingness for the further deeping of cooperation, assistance in programmes development and active dialogue for the purpose of setting and achieving new goals.



# THE UNIVERSITY OF

# MONTENEGRO HAS INITIATED ACTIVITIES ON PROMOTION ALL ERASMUS PROJECTS WHERE IS PARTICIPANT



The University of Montenegro has initiated activities on promotion all Erasmus projects where is participant. The promotion is reflected in the presentation of the projects by official website and Facebook page of the University of Montenegro. In accordance with that, prof. Jelena Sakovic Jovanovic has an interview with PR of the University of Montenegro about results of the Rebus project. She spoke about trainings students in the field of entrepreneurship with special emphasis on training students at the University of Palermo. She pointed out that the curricula of come teaching courses is adapted in order to enable sustainability of the project and develop entrepreneurial competences of students of University of Montenegro and their competitiveness on the labor market.

Information about it can be found on the website of the University as well as on the official Facebook page of the University.



https://www.ucg.ac.me/objava/blog/10/objava/50064-projekat-rebus-razvoj-preduzetnickih-vjestina-kod-studenata-tehnickih-i-ict-studija-nephodan-za-trziste-rada

https://www.facebook.com/211216505684171/posts/1361583787314098/

# **ERASMUS+ PROJECTS**

#### AT THE UNIVERSITY OF MONTENEGRO

The Faculty of Mechanical Engineering, University of Montenegro gave exposure to their activities, in the period before and during the enrollment of students for their first year of studies. The faculty did it in order to gain as many quality students as possible. In accordance with that, the faculty also gave exposure to their involvement in 3 Erasmus + projects.

#### These projects are:

- REBUS REady for BUSiness Integrating and validating practical entrepreneurship skills in engineering and ICT studies
- eVIVA Enhancing and Validating service related competences in Versatile learning environments in Western BAlkan Universities
- TrafSaf Improving the Traffic Safety in the Western Balkan Countries through Curriculum Innovation and Development of Undergraduate and Master Studies

Information about the involvement of Faculty of Mechanical Engineering, University of Montenegro, in Erasmus projects can be found on the portal "Naučne novosti" (eng. Science News), and on the web site of the Faculty of Mechanical Engineering. You can find it on following links:

https://naucnenovosti.me/informacija-o-erasmus-projektima-masinskog-fakulteta/

https://www.ucg.ac.me/objava/blog/1291/objava/49119-erasmus-projekti-masinskog-fakulteta

Same information is also published in a very popular daily newspaper called Pobjeda, together with information about enrollment of students at the University of Montenegro. Here, you can find the link about the information in daily newspaper Pobjeda:

https://www.ucg.ac.me/skladiste/blog\_1291/objava\_49119/fajlovi/Pobjeda,%2027.%20jun%202019

# NATIONAL ERASMUS+ INFO DAY

#### AT "KADRI ZEKA" UNIVERSITY

On May 30th, 2019, "Kadri Zeka" University in Gjilan organized the ERASMUS + National Info Day. In this case, the students, the academic and administrative staff and representatives of the institutions and enterprises cooperating with the UKZ were informed about the projects of the ERAMSUS + Program that are being implemented at the University "Kadri Zeka", with special emphasis on the Ready for Business - REBUS project.

In this occasion, the Rector of "Kadri Zeka" University, Bajram Kosumi, after welcoming the participants, emphasized that the Erasmus + projects are welcomed for the University, students, academic and administrative staff and community as they are a good opportunity creation and improvement of learning and teaching, deepening of knowledge on different issues, harmonizing with those of developed EU countries.



In addition, the Director of the National Erasmus Office for Kosovo, Jehona Lushaku, talked about the opportunities offered by ERASMUS + for higher education, providing significant figures for student and teacher exchanges, joint study programs, and so on. She cheered that the UKZ as a new university has achieved good results in the framework of Erasmus + projects, and encouraged students and teachers to engage further in the realization of new projects.



Even Vice-Rector for International Cooperation at UKZ Dukagjin Leka, presented a description of the separate international projects that are being implemented at "Kadri Zeka" University such as GreenTech, EUFORIA, REBUS, SMAHPC, E-Viva.

At the end of the session, REBUS project coordinator, prof. Xhevdet Thaqi, made a presentation of successful study visits of 14 UKZ students at Joanneum University of Applied Sciences in Graz, Austria, in the framework of the REBUS project, and issued ERASMUS + Rebus Project Certificates for all the 14 students.





# **CERTIFICATES AWARDED**

TO STUDENTS OF THE FACULTY OF MECHANICAL **ENGINEERING, UNIVERSITY OF EAST SARAJEVO** 



Within the project "Ready for Business - Integrating and validating practical entrepreneurship skills in engineering and ICT studies" students were awarded certificates on the promotion of entrepreneurial skills.













# **NEW GENERATION**

#### **REBUS STUDENTS AT** THE UNIVERSITY OF EAST SARAJEVO

Students of the Faculty of Mechanical Engineering, University of East Sarajevo, presented their business plans within Erasmus+ project Rebus on June, 11th 2019. This is result of the three-month training in the field of entrepreneurship. Elaboration of business ideas was performed according previously defined teams, where students earned new knowledges, skills and attitudes in entrepreneurship.









# NATIONAL INFO DAY – UNIVERSITY OF MONTENEGRO

The National Info Day of the Erasmus plus Rebus project was held on Friday, May 31, 2019 in the Building of Technical Faculties during the promotion of the 49th anniversary of the Faculty of Mechanical Engineering, University of Montenegro. It was an occasion for gathering more than 150 representatives of numerous institutions and companies from Montenegro and its surroundings, engineers, professors and students of the University of Montenegro. This event was also attended by leaders of the University of Montenegro, Deans of each unit of the University of Montenegro, representatives of the Erasmus Office of Montenegro, representatives of ministries and directors of companies and institutions from Montenegro.



During the promotion of the Faculty of Mechanical Engineering, a short film about the Faculty of Mechanical Engineering was presented. The film also encompassed information about the Rebus project and the training of the first generation of Rebus students at the University of Palermo. The promotion of the Faculty is an opportunity for delivering diplomas of bachelor, specialist and master studies to the graduates of the Faculty of Mechanical Engineering. It was traditionally performed by the Dean of the Faculty of Mechanical Engineering. After that, the Rebus project was presented and Rebus certificates were awarded to the first generation of Rebus students. These certificates were delivered to students by the Dean of the Faculty of Mechanical Engineering. This was also the last point of promotion of the Faculty of Mechanical Engineering, after which was organized a nice cocktail.

The Info desk of the Rebus project was organized at the entrance of the promotion hall. At the info desk, all participants could be informed, about the project by the student of the second generation of the Rebus project, Stefan Jelovac, and the project leader prof. Jelena Sakovic Jovanovic. All attendees received a gift pack that contains the Rebus project flyer and the memory stick with the Rebus project logo.





# NATIONAL INFO DAY

#### AT THE UNIVERSITY OF EAST SARAJEVO

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REBUS National Info Day was held on May 29 2019 at the Faculty of Mechanical Engineering of University of East Sarajevo. The event, among others, was attended by students and scientific teaching staff at the Faculty of Mechanical Engineering.

The activities carried out within the project during the last three years were summarized by prof. Branko Vučijak, who is also the main coordinator of the project.

Dean of the Faculty of Mechanical Engineering, prof. Milija Kraišnik, addressed the meeting as well, with compliments for the project, and expressed satisfaction with the cooperation with the Mechanical Engineering Faculty of University of Sarajevo.





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# **ERASMUS+ INFO DAYS AT**

#### THE UNIVERSITY OF ELBASAN ALEKSANDER XHUVANI

During the week of 6-10th of May 2019, which coincides with the European week, the University of Elbasan "Aleksander Xhuvani" organized the Erasmus+ info days with the participation of many universities from different EU countries, and not only, with which the University of Elbasan have agreements of cooperation and partnership in different fields. During this week, various activities were organized as well as an Erasmus + Fair where the University of Elbasan and the partner universities presented themselves to the students and invited them to apply for mobilities and short term study exchanges.



An important part of this fair was the National Info day of the "REBUS – Ready for Business: Integrating and validating practical entrepreneurship skills in engineering and ICT studies" – a Capacity Building in Higher Education project in which the University of Elbasan is a partner. The students and all the participants were introduced with the purpose and objectives of this project, the project partners, as well as the activities already organized and planned to be organized during the remaining period of the implementation of this project.



Invited to participate in this info day were students and academic staff of University of Elbasan, young entrepreneurs, representatives of regional businesses, representatives of the regional government, Chamber of Commerce and other NGO-s operating in the field of youth and employment.

A special part of this event was the Certificate Award Ceremony for the students, who took part in the two-weeks training session in Palermo in the frame of this project.



This event was attended by representatives of the Erasmus + Albania Office, who actively attributed to the participants the many opportunities offered by the Erasmus + program, funded by EU, not only for students but also for all the academic and administrative staff of the university.

# MONITORING OF EU ERASMUS+ PROJECTS

#### AT VOLGATECH

The monitoring visit within the framework of Erasmus+ programs conducted by Dr. Anna Muraveva – Deputy Director of National Erasmus+ Office in Russia took place on April 19, 2019 at Volga State University of Technology. This event is an important element in the program's policy on the integrated assessment of the implementation of European Union projects in universities of the Russian Federation.

The purpose of the visit was to assess the activities carried out and the results obtained, as well as to discuss issues related to the implementation of projects at Volgatech. In particular, Erasmus+ project "REady for BUSiness - Integrating and validating practical entrepreneurship skills in engineering and ICT studies" (REBUS) and Credit Mobility Projects with University of Applied Sciences Mittweida and Danubius University were reviewed in detail. In general, Volgatech carries out five international Erasmus + projects.



The meeting with the representative of Moscow office of Erasmus+ was attended by staff and students of the University, who took part in the projects and went on internships and workshops in the European partner universities of projects. Professor Branko Vucijak, REBUS project coordinator (University of Sarajevo, Bosnia and Herzegovina) also participated in the monitoring via Skype.

During the interview with employees and students of Volgatech, the progress of the implementation of all working packages of the REBUS project was considered in depth. The expert noted the high level of the achieved results, student projects in the field of entrepreneurship, as well as the software (Mahara and Level-5) on self-estimation and evaluation of entrepreneurial competencies received from the German colleagues. Credit Mobility projects have also received a positive assessment on the monitoring results. The expert also made constructive comments on the developed E-learning courses and reporting documents on quality assessment by the whole consortium of the project.



At the end of the visit, Anna Muraveva met with Viktor Shebashev, Rector of Volgatech and Igor Petukhov, Vice-rector for university complex development. During this meeting, the preliminary results of the monitoring in the Volgatech were summed up.



# NATIONAL REBUS INFO DAY AT SIBSUTIS

On 25-26 April, 2019 SibSUTIS welcomed talented young researchers, teachers, outstanding students as well as representatives of small and medium business and headhunting companies at the Science Days. The first day was entirely devoted to the REBUS project. A big report was prepared by the REBUS team and made by Professor Boris Kruk on the role of Self-assessment of Learning Outcomes in developing Entrepreneurial Competences of SibSUTIS students.



The authors told about the large-scale pedagogical experiment encompassing 9 universities and more than 500 participants from 5 countries. After the report our speaker responded to multiple questions asked by the interested public.



In the frames of the Info Day the project team designed and printed 200 copies of leaflets describing the principal goals and objectives of REBUS, its main strengths and successful implementation at international and institutional levels. They were distributed to the participants of the plenary session. Furthermore, a lot of students attracted by new entrepreneurial courses of the REBUS project also took these leaflets to get more information and learn about the project.

More than 200 guests took part in the REBUS Info Day. In particular, among those invited to attend the Science Days were members of the Novosibirsk City Chamber of Commerce and Industry, administration and ministries of the region. A large percentage of SibSUTIS alumni was constituted by people working in the fields of IT and telecommunications.





# REBUS' STUDENT TEAM FROM MONTENEGRO

#### WON THE EBEC COMPETITION

The student organization BEST Podgorica (Board of European Students of Technology) organized, for the sixth time in Montenegro, the engineering competition EBEC (European BEST Engineering Competition). During the competition, students had the opportunity to show their skills and team spirit by solving a specific problem.

The competition was held on April 21 and 22, 2019 in the Building of technical faculties.



Students were competing in two categories:

- Team design involves finding a technical and project solution for a problem with certain limited resources.
- The Case study involves finding a conceptual solution for a given problem.

There were evaluated the creativity, presentational skills, as well as the success of the implemented solution. The jury was consisted of representatives of companies, professors from faculties and distinguished engineers. Five teams participated in the competition. In both categories, the team "Perpetuum mobile" was won.

The "Perpetuum mobile" is consisted of the following students of the Faculty of Mechanical Engineering: Matija Durutović, Nikola Klincov and Nikola Čelebić, and student of the University of Donja Gorica: Luka Medojević.



Nikola Klincov and Nikola Celebic are students of the 1st generation of Rebus students of the University of Montenegro. Their competencies gained by participating in the Rebus project, have contributed to winning the first place in both categories.

The winners of the competition in Podgorica are going on the regional round EBEC Challenge Balkan, which will be held in Nis this year. Other competitors will be winners of similar competitions from Mostar, Novi Sad, Nis, Belgrade, Skopje, Maribor, Zagreb and Podgorica will compete.



# **NEW GENERATION**

# OF REBUS STUDENTS AT THE FACULTY OF MECHANICAL ENGINEERING, UNIVERSITY OF MONTENEGRO



During spring of 2019 new generation of REBUS students at the Faculty of Mechanical Engineering, University of Montenegro started their development of entrepreneurial competencies, including blended learning with mentoring provided and developing own project using Canvas model. The process will resulted with joint presentations and discussion over presented projects aiming development of new businesses during May 2019.

Students practically are using gained knowledge and skills in project management, management method and techniques, techniques of Risk management, value analyses for innovation, methods of market research. They are working in groups enabled also teamwork and communication competencies development.



They will be supervised self and peer assessment of the targeted general entrepreneurship competency, resulting with provision of the individual Level5 certificates for students.

# OPEN DOORS DAY AT

#### UNIVERSITY OF MONTENEGRO

The "Open Doors Day" is an event that UOM is organizing every year, with the aim of promoting all university units to future students. This year, "Open Doors Day" was organized on April 18, 2019. The Faculty of Mechanical Engineering, as well as all other university units, had its own marketing desk where the professors and assistants represented study programs of their faculties. They also presented all other interesting things that are in relation with their faculties.

During that promotion, Prof. Jelena Šaković Jovanović and Vidosava Vilotijevic (participant of Rebus training in Palermo), presented Rebus project and distributed brochures about Rebus project. They also presented the Faculty, as University unit, where is possible to learn about entrepreneurship through some study courses and trainings.





# **NEW COVERAGE OF THE**

#### **REBUS PROJECT BY RUSSIAN MEDIA**

In order to widen the dissemination of the REBUS project's results SibSUTIS regularly submits articles devoted to the implementation of the project in national periodicals. Thus, in the March 2019 issue of Russian news magazine "Infosfera", assigned to the Federal Service for Supervision of Communications, Information Technology, and Mass Media (Roscomnadzor), the article called "Austrian University FH JOANNEUM welcomes SibSUTIS students" was published. It presents that in the frames of the project teaching and administrating staff of the Siberian State University of Telecommunications and Information Sciences gained an invaluable experience in designing, teaching and managing the additional educational course "Digital Entrepreneurship".



Considerable attention is paid to the successful application of such form of results monitoring as self-assessment based on the use of the tool LEVEL5 developed in line with the methodology of the REBUS approach. In conclusion, the article observes that Russian students obtained the certificates allowing them to perform professional activities in the field of entrepreneurship in the EU.





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