Knowledge Innovation Center Strategy and Action Plan

October, 2022

Content

Based on Article 63 paragraph 1 point 14 of the Law on Higher Education (Official Gazette of the RS" 88/2017 et seq.), Article 36 paragraph 1 point 20 of the Statute of the Faculty of Technical Sciences in Kosovska Mitrovica (hereinafter: the Faculty), proposed by the Teaching and Scientific Council of the Faculty Decision No. ---/1 of --.--.2022. and in accordance with paragraph 2 of the Decision of the Faculty Council No. 786/3-1 dated 04 July 2022. year, the Faculty Council, at the electronic session held on --.--.2022. year he brought

Knowledge Innovation Center Strategy and Action Plan

1. Introduction

УНИВЕРЗИТЕТ У ПРИШТИНИ
КОСОВСКА МИТРОВИЦА

History of the University of Priština

The development of higher and higher education in Kosovo and Metohija began with the establishment of the first Higher Pedagogical School in Priština, in the academic year 1958/59. years. The first faculty that started working was the Faculty of Philosophy - founded in the academic year 1960/61. year, from which two faculties were born 20 years later: Philosophical and Natural-Mathematical, and in 1989, Philosophical branched into: Philosophical and Philological. The Faculty of Law and Economics was founded in 1961/62. and two faculties will also be developed from it: Law and Economics. The Technical Faculty in Priština began its work in the 1965/66 school year. years. The Faculty of Medicine was founded in 1969 in order to create conditions for better health care and the improvement of scientific and research work. The aforementioned faculties were part of the University of Belgrade until 1970, and classes were conducted in the Serbian language.

The University of Priština was founded by the Law on the Foundation of the University of Priština on November 18, 1969. Faculties based in Priština, and later other faculties, as well as seven higher schools, became part of the University of Priština. In accordance with the Law on the establishment of this institution, the University of Priština organized the teaching process in Serbian and Albanian languages.

Following the adoption of the University Law in 1992, the University of Priština had fourteen faculties, twelve of which were based in Priština: Economics, Medicine, Law, Science and Mathematics, Agriculture, Philosophy, Philology, Faculty of Physical Education, Faculty of Arts, Civil Engineering, Electrical Engineering and Mechanical Engineering. college; one based in Kosovska Mitrovica - Mining and Metallurgy and one based in Prizren - Faculty of Teachers. At all faculties, the new curricula are coordinated with the faculties of the same kind in the Republic. By creating appropriate conditions for the admission of students to basic, specialist and master's studies, along with the continuous admission of teaching staff, the University of Priština has become one of the most open universities in Serbia. In addition to educational and scientific activities, the University also carried out publishing activities. With the quality of teaching and scientific research work, the establishment of inter-university and international cooperation, the University of Priština has become an equal member of the family of universities in Serbia.

The successful work and development of the University of Priština, within the framework of generally accepted university norms, was hindered by the bombing of our country in 1999. During the NATO aggression against our country, about 1,500 teachers, teaching Assistants and non-teaching staff at the University of Priština, together with about 17,000 students, who attended classes in the Serbian language, were expelled from the faculty, their property was usurped and they were never given the opportunity to return.

After the brutal persecution from Priština, the University of Priština was temporarily relocated to Kruševac by the decision of the Serbian state, with several other faculties, while some faculties performed their activities in: Kosovska Mitrovica, Leposavić, Vranje, Blace, Varvarin. By the decision of the Government of the Republic of Serbia ("Sl. glasnik RS" No. 60/01) at the end of 2001, the University of Priština moved to Kosovska Mitrovica, which was designated as the temporary seat of the University. Little by little, all the faculties that were part of the University are returning to the territory of Kosovo and Metohija.

In the period from 2001 until today, the development of the University went in two directions. The first is the consolidation and creation of basic conditions for work: preservation of students and teachers, provision of necessary teaching staff from the side, establishment of regularity in holding classes and exams, construction of infrastructure capacities (faculty building, laboratories, teaching bases, student dormitories, etc.) and technical equipment of buildings (computers, teaching aids, laboratory equipment, libraries, various installations, etc.). The second direction was towards the redefinition of study programs and their accreditation, the accreditation of faculties and universities, which was completed in 2009. Both of these processes led to the institutional consolidation and strengthening of the University, as well as its strengthening in the system of higher education in the Republic of Serbia.

University today

The University of Priština with its temporary headquarters in Kosovska Mitrovica is a state university, where about 9,000 students study at all levels of study. The University employs 721 teachers and teaching Assistants, as well as 336 administrative and professional Associates. The university functions as part of the education system of the Republic of Serbia and is a member of the Conference of Universities of Serbia.

The University of Priština with its temporary seat in Kosovska Mitrovica is an independent higher education institution, which in performing its activities combines educational, scientific research, professional, artistic and innovative activities as components of a unique process of higher education. Within the scope of higher education activities, the University performs scientific research, artistic, expert-consulting and publishing activities, and may also perform other activities that commercialize the results of scientific, artistic and research work, provided that these activities do not jeopardize the quality of teaching and scientific, artistic, i.e. professional work (Article 5 of the Statute of the University of Priština with temporary headquarters in Kosovska Mitrovica).

The university, as the highest educational and scientific institution, whose main role is to carry out activities in the field of higher education, scientific research, that is, artistic and research work, has clearly defined tasks and goals.

The organization of the University is regulated in accordance with the Law on Higher Education of the Republic of Serbia and the Statute of the University, as well as with other relevant normative acts. The governing body of the University is the University Council. The work of the Council is managed by the President of the Council, who is elected from among the faculty representatives.

The governing body of the University is the Rector. The Rector is assisted in his work by the vice-chancellors, the manager and the general secretary of the University.

The professional bodies of the University are: Senate and expert councils. Professional bodies decide on issues of interest for the realization of teaching, scientific, artistic and research work. The Senate consists of the Rector, vice-rectors, faculty deans and one regular Professor from each faculty within the University. The Rector is the president of the Senate.

ФАКУЛТЕТ ТЕХНИЧКИХ НАУКА
КОСОВСКА МИТРОВИЦА

Faculty of Technical Sciences in Kosovska Mitrovica

The Faculty of Technical Sciences in Kosovska Mitrovica was founded by the Government of the Republic of Serbia by the Decision on the establishment of the Faculty of Technical Sciences in Kosovska Mitrovica and on the abolition of the Faculty of Electrical Engineering in Priština, the

Faculty of Mechanical Engineering in Priština, the Faculty of Civil Engineering and Architecture in Priština and the Faculty of Mining and Metallurgy in Kosovska Mitrovica, on 19 October 2001 ("Official Gazette of RS" No. 60/2001).

The Faculty of Technical Sciences is a higher education institution and higher education unit of the University of Priština with the status of a legal entity. The name of the Faculty is: University of Priština, Faculty of Technical Sciences. The seat of the Faculty is in Kosovska Mitrovica, ul. Knjaza Miloša no. 7. The abbreviated name of the Faculty is FTN. In business correspondence, the Faculty also uses the name in English: University of Priština, Faculty of Technical Sciences. The Faculty is registered in the court register of the Commercial Court in Priština with headquarters in Kraljevo, no. registration cartridge FN. 252/01 of 11.12.2001. years. Faculty Day is October 19, marking the day the Faculty was founded.

The Faculty of Technical Sciences, in accordance with the work permit, realizes academic and professional study programs, conducts educational courses aimed at lifelong education and other forms of studies for innovation of knowledge and professional education and training, realizes and develops scientific research and professional work in within the scientific areas for which it is accredited. Prominent teachers from other universities of the Republic of Serbia are engaged in the teaching process at the Faculty of Technical Sciences.

The Faculty has a Computer Center, a Design Center, laboratories, a Library and a TV studio.

The Computer Center was formed with the intention of providing support for the modernization of teaching and scientific research work at FTN and is located on the first floor of the teaching block in the FTN building.

The Library is also located in the Faculty building and has space that meets library standards. It has a working and storage space of 40 m2 and a reading room of 80 m2. The reading room has 50 seats.

Curriculum reform in accordance with the Bologna Process was implemented in all study programs of the Faculty of Technical Sciences in Kosovska Mitrovica. All study programs are accredited and adapted to the latest requirements and standards. In 2008, the University of Priština with its temporary headquarters in Kosovska Mitrovica was granted full membership in the European University Association (EUA). The university participates in various scientific, research and educational national and international projects, including several projects from the Tempus and Erasmus programs.

The Faculty of Technical Sciences (FTN KM) in Kosovska Mitrovica is an accredited higher education and research institution with the status of a legal entity within the University. FTN KM itself offers 21 accredited study programs at three levels in the fields of technical and technological sciences: architecture, construction, electrical and computer engineering, environmental engineering, occupational safety, mechanical engineering, mining and industrial engineering.

The Faculty of Technical Sciences (FTN KM) in Kosovska Mitrovica participates in various domestic and international projects, has the largest number of published works at the University in international journals with the Journal Citation Report list and works cited in international journals, as well as the largest number of presentations at domestic and international conferences. The Faculty's diverse research staff creates conditions for an interdisciplinary approach to scientific research.

The teaching staff of the Department of Electric Power and the Department of Electronics and Telecommunications, as well as the administrative staff of the Faculty, participate in the realization of the KALCEA project.

2. Mission and Vision of the Center for Innovation and Training

The Knowledge Innovation Center - KIC is a specialized research and consulting organizational unit within FTN KM without the status of a legal entity with a mission to transform the ways of learning and working in order to give every person the opportunity to reach their full potential. The general characteristics of KIC's mission are to improve the policy and practice of education and skills at all levels through cooperation with state institutions, international organizations, universities, the industrial sector and civil society. The KIC provides consulting and training services to clients and partners in its areas of competence.
The KIC's mission is to support functional, innovative and entrepreneurial companies and turn them into companies that rely on the application of innovations, support their development, standardization and commercialization on local and international markets and contribute to the creation of opportunities for employment of young people and the setting in motion of the wheels of the national economy.

The KIC's mission is to provide an appropriate environment for trainees, inventors, innovators and entrepreneurs to acquire new knowledge, develop their ideas and apply them in sustainable production and service enterprises in the market in order to achieve the desired income. The KIC is intended for university students, researchers, employees in the economy, innovators and entrepreneurs. The KIC's mission is to become a distribution hub for innovative ideas and their implementation. The mission is reflected in a new approach to the education of both young people and professionals in the field of engineering through systematic cooperation with industry, work on real needs, constant transfer of knowledge and technology, with the aim of achieving excellence and benefits for all participants.

The vision of the Center for Innovation and Training is to recognize local and regional opportunities in supporting companies, innovators and entrepreneurs to achieve sustainable development and promote a knowledge-based economy.

In the future, KIC will become a center for cooperation with other partners in the field of science and research, as well as with partners from the industrial sector. The Center will enable the transfer of knowledge, but it will also be a center for lifelong learning and training in various fields. A more

systematic cooperation of higher education institutions with representatives of the industrial sector, other scientific and research institutions, but also with policy makers and legislators, non-governmental organizations and others will be enabled. Users of the Center, in addition to the teaching staff of the Faculty of Technical Sciences, can be students, scientists, innovators, investors, employees of companies and others.

The vision of the Center for Innovation and Training is to achieve excellence in the transfer of knowledge and personnel, facilitating cooperation with partners from different sectors, encouraging innovation, science and research, helping young engineers in additional education, providing benefits for the University and Faculty, as well as the wider community.

3. Analysis of existing situation

The Faculty of Technical Sciences in Kosovska Mitrovica (hereinafter: the Faculty) is an accredited higher education institution that, in addition to educational activities, carries out research activities on 23 domestic scientific research projects in which 46 teachers are engaged.

Faculty teachers and Associates carry out research activities on international projects (currently 10 international projects are active).

The Faculty has a large number of teachers engaged in scientific and research work. According to previous experience, teams of teachers and Associates who work on separate national and international projects cooperate very little or not at all with each other in their scientific and research work. The lack of exchange of experiences and mutual cooperation between members of different scientific and research teams within the Faculty itself can be considered a negative phenomenon within a micro scientific and research community that belongs organizationally and geographically to one institution, such as the Faculty of Technical Sciences.

The organization of the Faculty by study programs and departments does not envisage institutional mutual cooperation between scientific and research teams from different projects. The main cause is the institutional lack of an organizational unit through which effective cooperation would be achieved and at the same time the principles of the knowledge triangle (education, science, economy) would be applied to all national and international projects.

Bearing in mind the above, the establishment of the Center for Innovation and Training (hereinafter: the Center) at the Faculty would enable the development of institutional capacities and the strengthening of cooperation between scientific and research teams on various projects. Also, the Center will coordinate and intensify the cooperation of participants on existing projects with the economic and public sector.

Considering the current situation at the University and the current opportunities, it is optimal that the KIC is formed within the Faculty of Technical Sciences of Kosovo in Mitrovica (FTN KM). The procedure for the formation of the KIC must be fully harmonized with all the rules and regulations defined by the Statute and legal acts of the University and Faculty, considering the fact that the Faculty of Technical Sciences of Kosovo in Mitrovica (FTN KM) is a state higher education and research institution.

4. KIC working space

In the building of the Faculty of Technical Sciences, there are conditions for the functioning of the Knowledge and Innovation Center in an independent workspace that is not involved in activities related to regular teaching. For the needs of the Center, a dedicated room has been provided, which is equipped with equipment purchased from the KALCEA project, as well as equipment provided by the Faculty. The Faculty Council decided to establish the Center.

The establishment of the KIC at the Faculty of Technical Sciences in Kosovska Mitrovica will enable the additional institutional capacity building of the Faculty and the University, which will further contribute to the development of science, research, innovation, intensify cooperation with industry and other economic entities, enable participation in various scientific and commercial projects, etc. In addition, one of the planned activities of the Center is the continuous holding of courses for professionals and students on the topic of renewable energy sources and other topics in the field of power engineering.

5. KIC strategic goals

The strategic goals of the KIC are reflected in systematic cooperation, primarily with the industrial sector, in order to develop joint projects, both research and commercial.

In accordance with the defined mission and vision of the Center for Innovation and Training, the general goals are:

• improvement of the research capacities and abilities of the staff of the Faculty of Technical Sciences in Kosovska Mitrovica,

• improvement of the infrastructure for given scientific needs,

• establishment of better cooperation between the industry and the University,

• helping students and future professionals in their fields to adapt more easily to the innovative and constantly changing market.

The strategic goals of the Center, based on all of the above, are:

• establishing an operational environment for research and innovation at the Faculty of Technical Sciences in Kosovska Mitrovica,

• increasing research capacity at the University by providing additional equipment and a research environment,

• establishing cooperation and partnerships with other institutions, industry, academia and state institutions,

• encouragement of applied research among master's and doctoral students and work on specific problems in industry,

• providing additional funds for the constant improvement of the infrastructure needed for research,

• monitoring of research activities and assistance in the development of new plans and policies in the field of research and science.

The opening of the new KIC at the Faculty will enable additional intensification of cooperation with the industrial sector as well as with other scientific and research institutions through:

- use of human resources of the Faculty,
- use of new laboratories and inclusion of existing ones,
- expansion of the network for cooperation in different spheres,
- exchange of knowledge with partner institutions, etc.

6. Structure and rules of procedures

The organizational structure of the Faculty of Technical Sciences in Kosovska Mitrovica is defined by the Statute and other legal acts of the Faculty and the University, which are harmonized with the current legal regulations. The faculty of technical sciences is managed by the Dean of the Faculty. The Dean is assisted in his work by four vice-deans:

1. Vice Dean for Electrical and Computer Engineering.
2. Vice Dean for Mechanical Engineering.
3. Vice Dean for Architecture and Construction Engineering.
4. Vice Dean for Mining, Technological and Engineering, Environmental Protection and Occupational Safety.

The Faculty of Technical Sciences in Kosovska Mitrovica is an accredited higher education institution with the following types of studies:

1. Basic academic studies,
2. Master of academic studies,
3. Specialist academic studies i
4. Doctoral academic studies.

The structure of accredited study programs according to the type of study has the following form:

Basic academic studies

1. Architecture,
2. Construction engineering,
3. Electrical and computer engineering,
4. Environmental protection and occupational safety engineering,
5. Mechanical engineering,
6. Mining engineering,
7. Technological engineering.

Master of Academic Studies

1. Architecture,
2. Construction engineering,
3. Electrical and computer engineering,
4. Environmental protection and occupational safety engineering,
5. Mechanical engineering,
6. Mining engineering,
7. Technological engineering,
8. Management of risks from natural disasters.

Specialist academic studies

1. Sustainability and resilience of the built environment

Doctoral studies

1. Electrical and computer engineering,
2. Mechanical engineering,
3. Technological engineering.

The educational character of the study programs was realized by the current organization of the Faculty of Technical Sciences. Scientific and research work is realized through national and international projects. At the same time, there is room for significant improvement of cooperation between educational and scientific-research activities.

The work of the Center for Innovation and Training will include the staff employed at the Faculty of Technical Sciences in Kosovska Mitrovica, and if necessary, it is possible to include other experts from the University, as well as external experts.

7. Action Plan

General features of the Action Plan

The Center empowers entrepreneurs and innovators to turn their best ideas into products, services and jobs for the local community. One of the key innovation goals of the Center is to encourage innovation and create more jobs through the establishment of new companies. Therefore, the cornerstone of the Center's activities is not only the support of innovations in existing companies, but also the creation of new business opportunities.

Together with other partners from higher education institutions in the countries of the Western Balkans, the Center places a strong emphasis on the development of the next generation of entrepreneurs, encouraging and supporting innovators and companies to develop innovative ideas and bring them to the market, thus contributing to the development of innovation and market competitiveness in the countries of the Western Balkans.

The development strategy of the University was defined and the strategic goals of the Center for Innovation and Training were determined based on it. For the realization of these goals, it is necessary to develop an appropriate action plan. The action plan for the Center is defined for three periods, namely:

- short-term Action Plan,
- medium-term Action Plan,
- long-term Action Plan.

Short-term Action Plan

In order to fulfil the purpose of the KIC, the short-term plan refers to the realization of all the necessary preconditions for its functioning. It is planned that the newly formed Center will be officially opened by the end of the current year (2022).

Activities within the above consist of:

- implementation of the tender procedure and procurement of laboratory equipment,
- installation and installation of equipment,
- improvement of the existing system of renewable energy sources,
- preparation of all necessary documents for the regular functioning of the Center (making a decision on establishing the KIC as an organizational unit of the Faculty, adopting the Strategy and action plan of the KIC, adopting the program of continuous professional development and other necessary documents.

The realization of the mentioned items will enable the launch and functioning of the Innovation and Training Center. As stated in the previous chapters and defined as one of the Center's strategic goals, constant investment in new equipment, new laboratories, as well as the improvement of existing laboratories, create additional value for the Center, the Faculty of Technical Sciences and the University. Such a policy encourages staff to adopt and apply new methods and technologies in

research and science. One of the strategic directions of the Faculty of Technical Sciences is orientation towards renewable energy sources.

Medium-term Action Plan

The implementation of the medium-term action plan seeks to ensure continuity in the development of the KIC, primarily through the improvement of cooperation between higher education institutions and industry, through various activities such as:

• securing a greater number of joint projects with industry,
• facilitating the transfer of knowledge, people and technology,
• directing the topics of master's theses and doctoral theses to have a practical character and connection with industry, services and the public sector,
• inclusion of other departments and laboratories at the Faculty of Technical Sciences,
• developing professional programs for experts in the field of energy, energy management, etc.,
• constant improvement of existing laboratory capacities and equipment,
• establishment and expansion of both local and regional networks for cooperation with industry,
• promotion and marketing of the KIC.

The medium-term Action Plan refers to a period of five years from the day of establishment, when the KIC should be operational and at full capacity. In order to achieve the goals and purposes of KIC, the activities defined in this period are mainly related to ensuring systematic cooperation with industry through the development of joint projects on a commercial and research basis.

Through cooperation with the economy and other partners, a more intensive transfer of knowledge, people and technology will be enabled, which will benefit all parties. In addition to the possible financial benefits for the Faculty and the University, students will have the opportunity to work on real problems in the industry and have an insight into the new trends that are happening in the real industrial sector.

Long-term action plan

The long-term plan refers to the period after 5 years from the day of establishment of the Center. In this period, it is necessary to achieve self-sustainability of the Center and its constant improvement and expansion in terms of space, technology, research and personnel. In this period, special attention should be paid to the inclusion of the KIC in the network of regional cooperation, which would enable its sustainability and competitiveness.

The inclusion of centers from other institutions is one of the long-term goals that will enable the diversification of services that could be provided through the KIC. The inclusion of KIC at the regional level, in addition to increasing opportunities for cooperation, would increase the visibility of not only KIC but also FTN KM and the University, which is one of their strategic goals.

The basic tasks of forming KIC at FTN are:

- increasing the existing institutional capacities of the higher education institution,
- creating conditions for the implementation of the goals of the knowledge triangle,
- introducing the teaching staff of FTN KM to the basic objectives of the knowledge triangle and acquiring skills and knowledge,
- familiarization of graduated engineers, professionals working in the economic and public sector with the basic objectives of the knowledge triangle and improvement of skills and knowledge
- Acquaintance of the teaching staff of FTN KM with the basic objectives of the knowledge triangle and improvement of skills and knowledge

General activities of the KIC

1) Activity 01

Coordination of work between researchers (teachers and colleagues from the Faculty) who are engaged in domestic and international scientific research projects. Finding the common goals of researchers from all active projects at the Faculty and guiding them into cooperation with the economy and the public sector through the KIC.

2) Activity 02

Involvement in the work of the KIC of young researchers with FTN KM who are not engaged in national and international projects.

3) Activity 03

Involvement in the work of the KIC of researchers who are on doctoral studies of FTN KM. Teaching staff, not only mentors of doctoral students, as active participants in the work of the KIC, in coordination with mentors, would provide professional assistance and perform joint research work in the implementation of innovative solutions, then in research, measurements, use of equipment, writing papers, writing doctoral dissertations, etc.

4) Activity 04

Involvement in the work of the KIC of students in the Master's studies of the Faculty. Guidance and preparation of students for practical work in the economy (professional practice) would be coordinated through the KIC. To involve students in cooperation projects with the economy and the public sector, and in this way to connect the topics of master's theses with the needs of the economy and the public sector.

05) Activity 05

Coordination of cooperation between departments and study programs at the Faculty in terms of finding new ideas in solving ongoing problems in related fields.

06) Activity 06

Adaptation of study programs, curricula and subject programs at all levels of study according to the requirements of the market and technological development in all relevant areas in accordance with the principles of the knowledge triangle.

Defining new study programs and reforming and adapting existing study programs, in accordance with the demands of the market for professional labor and according to the interest of young generations.

07) Activity 07

International cooperation within the network of innovation and training centers (KICs) of all KALCEA project participants.

08) Activity 08

Using the experience of the work of the KIC at the Faculty after the completion of the KALCEA project in cooperation with international researchers and institutions within the framework of new international projects.

During the duration of the project, it is necessary to establish a portfolio (offer of services, list of services) with specific services that the KIC will offer to the knowledge and innovation market. This will include three basic forms of service provision by the KIC:
1. professional courses and trainings,
2. joint projects,
3. preparation of studies and others.

8. Professional courses and trainings for professionals and students at all study levels

According to the planned activities within the KALCEA project, the Faculty will participate in the creation of a program of continuous professional development in the field of energy sustainability in cooperation with other higher education institutions (Western Balkan countries) and industry representatives. Teaching material for professional courses will also be developed. Implementation of the training program will be organized at the Faculty in the third year of the project.

Organized professional trainings will increase the capacities of higher education institutions and academic staff, as they will also be trained on defined topics. Doctoral students will also be involved

in those trainings that will further improve their knowledge and skills. Also, the professional trainings that will be organized will increase the capacities of companies from the energy sector.

Within the Action Plan of the Knowledge Innovation Center (KIC), the organization of professional training courses is foreseen. It is foreseen that the participants of the courses can be: professionals from industry, the public sector, the educational sector, as well as undergraduate, master's and doctoral students of FTN. Course topics follow modern trends in the power industry. Courses and training contain modern trends in distributed generation of electricity from renewable sources, smart distribution to consumers/producers and potential savings for consumers. In cooperation with the study program for Mechanical Engineering, training courses in programming of CNC machines and welding technology are also overlooked.

During the duration of the KALCEA project, the courses will be free of charge for all participants.

List of subjects for professional development within:

1. Optimal management of microgrids with renewable energy sources using the Microgrid Design Toolkit software - Dr. Bojan Perović, Assistant Professor (2 ESPB points)

2. Calculation of power flows using ETAP software, Miloš Milovanović, PhD, Assistant Professor (2 ESPB points)

3. Software package (EPSA) with Matlab graphical user interface for analysis of power systems, Dr. Jordan Radosavljević, Full Professor (2 ESPB points)

4. Lighting design and photometric calculations using DIALux software, Dr. Saša Štatkić, Associate Professor/Jovan Vukašinović, mast. electrical engineer, Assistant (2 ESPB points)

5. Innovative technologies in smart power grids, Dr. Saša Štatkić, Associate Professor (2 ESPB points)

6. Smart photovoltaic inverters and low-voltage distribution network, Dr. Saša Štatkić, Associate Professor (2 ESPB points)

7. Thermal processes in renewable energy sources, Dr. Dardan Klimenta, Full Professor (2 ESPB points)

8. Fundamentals of CNC programming of 3-axis milling machines using the SolidWorks software package, Dr. Dragan Lazarević, Milan Radenković (2 ESPB points)

9. Modern coordinate metrology, Dr. Dragan Lazarevic, Milan Blagojević (2 ECTS points)

10. Procedures for modeling 3D parts and 3D printing using FDM methodology, Dr. Dragan Lazarevic (2 ESPB points)

11. Welding technology, PhD Živče Šarkovcević, PhD Ivica Čamagić (3 ESPB points)

The duration of an individual subject is 15 hours.
One student can attend several subjects simultaneously during the semester. Participants choose a certain number of subjects from the list of subjects listed above, so that the total number of ESPB points is at least 15. Participants will receive a certificate upon successful completion of the training. The coordinator of the KIC organizes with the teachers the training schedule in the premises of the Center at the Faculty. The program of continuous professional development brought by the Teaching and Research Council of the Faculty more closely regulates the conditions and the way of training implementation within the KALCEA project.

All courses that will be organized within the KIC will be designed based on the following goals for the realization of the knowledge-innovation-research triangle:

- Practical applicability.
- To develop innovative creativity of students.
- Cooperation with the economy and the public sector.
  Connecting existing knowledge with innovative ideas.
- Developing research and innovative ideas and potential among professionals, teaching staff and students.
- Improving the working environment in companies through the implementation of new ideas and innovations in organization and work.

9. Joint projects and cooperation with the industry and public sector

Another form of service provided by the KIC is joint projects with the business and public sector.

The strong interaction between education, research and innovation is a key driver of a knowledge-based society. This will satisfy the needs of society. Companies will gain new partners/knowledge through knowledge transfer and joint projects. This will improve their position in the market, which will further lead to new employment opportunities, and will enable them to provide innovative products and services that meet current and future societal needs.

An example of cooperation with the economic and public sector is the creation of joint projects from various fields that are of practical interest for the development of the local community. Examples of possible joint projects with the public sector:

1. Development of a mini solar power plant project on the roofs of private and public buildings and facilities.
2. Examination of the energy efficiency of the insulation, heating and air conditioning system.

10. Study Development

One type of service that the KIC can provide to all potential users is the preparation of studies by project participants with FTN KM, which can contribute to the local community. Examples of possible studies with the public sector are:

1. Development of a study on the introduction of electromobility (e.g. the introduction of electric buses into public local passenger transport).
2. Making a study of fuel consumption in traffic and the impact on air pollution.
3. Preparation of a study on small, medium and large solar power plants and the necessary investments for their connection to the low and medium voltage grid.

11. Cooperation with the National Labour Institute

The action plan envisages cooperation with the National Employment Service through holding specialist courses that would facilitate easier employment in existing firms and self-employment in new firms. The KIC would provide preparation and assistance for the opening of small firms for the realization of innovative solutions and new ideas based on the knowledge triangle and their marketing. As part of this cooperation with an important institution for employment, special types of training will be prepared, which will be adapted to the needs of the market and potential users:

- Help in the research of deficit needs of the market;
- Training and assistance in software, electric power, architectural, construction, mechanical, technological, mining and environmental engineering
- Specialized training of the unemployed of various profiles and levels of professional education;
- Preparation and training of the unemployed for the opening of new small companies in all areas covered by the study programs of the Faculty.
- Training of teaching staff and students by professionals from the production and public sector in order to acquire entrepreneurial skills and knowledge.

12. KIC Organization

The work of the Center for Knowledge and Innovation, as an organizational unit of the Faculty, is managed by the head of the Center.

The head of the Center is appointed and dismissed by the Dean of the Faculty for a period of 3 years and is responsible for his work to the Dean of the Faculty.

The task of the head of the center is to organize the work and activities of the Center in accordance with this Strategy and Action Plan, as well as the Statute and legal acts of the University and Faculty.

The Collegium of the Center for Innovation and Training of the Faculty consists of teachers and Associates who hold training within the program of continuous professional development, two representatives from the business sector and two representatives from among students, who are appointed at the proposal of the head of the Center.

The chairman of the collegium is the head of the Center who is chosen from among the teachers who give training at the Center.

The task of the Collegium is to organize activities within the Center's work, organize and hold trainings at the Center, make proposals for professional development programs and their amendments and additions, organize and carry out other activities of the Center, expand the network of cooperation with representatives of the economic, industrial sector and other institutions , holding workshops and proposing the conclusion of a cooperation agreement to the dean of the Faculty, preparing certificates, organizing the promotion of activities that take place within the work of the Center as well as performing other activities provided for in this Strategy and the Center's Action Plan.

Software and hardware support for the activities of the Center for Innovation and Training will be provided by teaching staff and non-teaching staff of the Computer Center of the Faculty of Technical Sciences.

Administrative support for the activities of the Innovation and Training Center will be provided by the administrative staff of the Faculty's professional services.

13. Conclusion

By establishing the Knowledge and Innovation Center, the existing institutional capacities of the Faculty will be increased in order to create conditions for the implementation of knowledge triangle activities.

The Innovation and Training Center will provide a space where the ideas, skills and knowledge of different energy partners can be effectively transferred to innovation. Academic staff at the Faculty will be trained on the importance and principles of the knowledge triangle, innovations, which will further improve their skills and knowledge about the knowledge triangle. The Center for Innovation and Training will be directly involved in the cooperation of higher education institutions, the industrial sector and research institutions, in the joint use of educational and research activities for the development of a society based on innovation.