



## **HUMANISTA: Exploring the Intersection of Technology, Language, and Society**

### **1. INTRODUCTION**

---

#### **1.1. HUMANISTA: Short description**

“Because what we consistently hear from employers is that the difference between an adequate employee and great one lies not in technical skills — employers always believe they can teach those — but in the so-called “soft skills” that a classical liberal arts education helps to hone.”

*Marvin Krislov*

The **HUMANISTA** network unites 15 higher education institutions from 12 Eastern, and Southeastern European countries, each with a strong foundation in STEM disciplines. While these universities are primarily focused on technical fields, they also host thriving institutes/departments in languages, psychology, pedagogy, educational and communication sciences, which constitute PPU's in the **HUMANISTA** network. The specificity of these cohorts of Humanities is that they are intentionally oriented toward STEM education and research compliant with the STEM's needs, without any reciprocity - values found within Humanities disciplines are often perceived as add-on or mere supplement to a robust field of STEM. That is why this unique interdisciplinary collaboration within the **HUMANISTA** network is committed to redefining the relationship between Humanities and STEM by stronger integrating Humanities within STEM education. This approach promotes a holistic paradigm that merges technical expertise with a profound understanding of human society, culture, and behavior, ensuring that technological advancements are deeply informed by the values and insights of the Humanities.

Crucially, **HUMANISTA** acknowledges that technological progress does not happen in a vacuum. Understanding the social and cultural contexts in which technology is developed and deployed is vital to creating meaningful, ethical, and sustainable innovations. The immersive environment provided by hosting institutions allows participants to experience these cultural nuances first-hand, further enriching their academic and professional development.

One of the network's main objectives is to create shared environments that support the bidirectional exchange of knowledge and methodologies between its member institutions. By fostering cooperation across disciplinary boundaries,

**HUMANISTA** enables students and lecturers to explore new perspectives, combining technical skills with insights from the humanities. This interdisciplinary approach not only enhances the academic experience but also prepares participants for leadership roles in fields that require both scientific expertise and human-centered thinking.

In sum, **HUMANISTA** seeks to bridge the gap between STEM and the humanities, recognizing that a comprehensive education must equip students not only with technical expertise but also with the cultural and communicative competencies necessary for success in an interconnected world. Through its interdisciplinary efforts, the network aims to shape a new generation of professionals who are capable of driving innovation that is both scientifically sound and socially responsible.

### **HUMANISTA Acronym Explanation**

**H** - *Humanities Integration for Holistic Education*: Bridging STEM fields with the humanities for a comprehensive educational experience and scientific results.

**U** - *Understanding Society*: Developing understanding of social, cultural, and ethical implications of technology and innovations.

**M** - *Mobility Programs and Exchange*: Encouraging student and lecturer exchanges to share best practices, cultural insights, and pedagogical innovations.

**A** - *Applied Communication*: Enhancing language skills and communication sciences as tools for global collaboration.

**N** - *New Research Initiatives*: Supporting joint projects that explore the intersection of STEM and humanities, such as the ethics of technology, the social impact of innovation, and the integration of human-centered approaches in technological advancements.

**I** - *Interdisciplinarity and Inclusivity*: Integrating diverse disciplines and fostering equitable access to education and collaboration for innovative and inclusive scientific advancements.

**S** - *Societal Impact*: Emphasizing the societal relevance and responsibility in STEM innovation and education.

**T** - *Teaching Excellence*: Using micro-teaching and other methods to improve pedagogy across disciplines. Creating a network of shared resources and expertise, allowing a transfer of knowledge in interdisciplinary methodologies and breakthrough ideas.

**A** - *Academic Publications*: Disseminating interdisciplinary findings to further integrate humanities within technical education.

## 1.2. Participating units (PPUs)

### **Coordinating institution:**

**University of Kragujevac, Faculty of Technical Sciences Čačak, Department of Social Sciences and Humanities, Serbia**

Contact persons: Ivana Krsmanović, Lena Tica

**Faculty of Technical Sciences Čačak, Serbia** is a member of the University of Kragujevac, offering 12 accredited degrees in electrical engineering, mechatronics, computer and software engineering, information technology, mechanical engineering, management and printing technology. The Faculty also offers Information technology degrees in the English language (Bachelor's and PhD), so there is a significant cohort of international students. The Faculty offers two degrees of higher education studies: academic and professional studies. Currently, there are about 2.500 active students which makes this Faculty the largest in number within the University. The Faculty is one of the founders of Science-Technology Park Čačak, which allows further investment in the know-how and practical skills of our students, giving them the opportunity to set up their own start-ups. For the past 4 decades, the Faculty of Technical Sciences Čačak has developed into one of the largest scientific and educational institutions in this part of Serbia. In this way, FTS represents an important center of knowledge transfer, research and development, innovation and application of modern technical achievements. The multidisciplinary profile of the educational activities has influenced the development of scientific research work in several fields at the Faculty. So far, almost 200 scientific and developmental projects have been realized at the Faculty. Currently, the Faculty is leading two international Erasmus+ projects and a dozen other projects financed from other funds. Every year, the Faculty organizes or co-organizes at least 5 scientific conferences. FTS is also a publisher of 2 renowned high-impact scientific journals. The Faculty cooperates with more than 150 companies, which provide education, training, and transfer of knowledge to the students.

The Faculty has 10 departments, one of which is the **Department of Social Sciences and Humanities**, which will act as a major unit in charge of the proposed CEEPUS network. Through its activities at the FTS, the Department plays a significant role in education, research, and the promotion of social and humanistic aspects of technical sciences. The Department is responsible for courses that support the development of communication competencies, foreign language literacy, and professional skills for future engineers, providing a comprehensive education for technical science students, fostering critical thinking and transferable skills. The Department adopts a holistic approach to understanding and addressing social issues, particularly in light of the societal implications arising from modern technologies and their appropriate application in contemporary society. It also offers psychological and pedagogical support to students and facilitates international mobility activities for both students and staff.

Web: <http://www.ftn.kg.ac.rs/>

## **University of Rijeka, Faculty of Engineering, Croatia**

Contact person: Damir Purković

**The Faculty of Engineering** in Rijeka, which is a part of the University of Rijeka, offers Bachelor's and Master's degree programs in mechanical engineering, shipbuilding, electrical engineering and computer science, as well as part-time Bachelor's degree programs in mechanical engineering, shipbuilding and electrical engineering and a three-year third cycle leading to a doctorate in technical sciences in the fields of mechanical engineering, shipbuilding, electrical engineering, computer science, basic technical sciences and interdisciplinary technical sciences. The Faculty also participates in the provision of graduate programs for the training of technology teachers. The Faculty has 11 departments, including the **Department of Mathematics, Physics and Foreign Languages**, which also employs researchers from the social sciences who will participate in this CEEPUS network. The Faculty of Engineering employs a large number of researchers whose research is mainly focused on four scientific fields: Mechanical Engineering, Naval Architecture, Electrical Engineering and Computer Science, but also on fundamental and interdisciplinary engineering and on educational sciences. This structure enables interdisciplinary research and the achievement of significant results through mutual connections and links with the wider academic community.

The Department of Mathematics, Physics and Foreign Languages brings together experts working in scientific fields that are the basis of engineering education. It consists of two sections: the Section of Applied Mathematics and Physics, which offers courses in mathematics and physics and the Section of Foreign Languages and Kinesiology, which provides students with the opportunity to use the foreign language in their profession. Within the Section of Foreign Languages and Kinesiology, courses in the English and German language are performed, focusing on their usage in the profession. Thus, the curricula follow current language trends in all four study programs offered at the Faculty. In accordance with their affinities and prior knowledge, the students can choose the foreign language that suits them best.

Web: <http://www.riteh.uniri.hr/>

## **Slovak University of Technology in Bratislava, Faculty of Electrical Engineering and Information Technology, Slovakia**

Contact person: Eva Karasova

The Slovak University of Technology in Bratislava (STU), the largest and most significant university of technology in the Slovak Republic, is a modern European educational and research institution. It offers university education mainly in technical, technological, technical-economic, technical-information and technical-artistic fields of study. Its activities reach back to the rich old tradition of the Mining Academy in Banská Štiavnica, established by the Empress Maria Theresa in 1762. The STU provides a comprehensive and modern system of university education, research, and cooperation with the world of work through the transfer of knowledge. STU disposes of the widest spectrum of study branches. Since its establishment in 1937, more than 159,000 graduates have completed their

education at the university, with the average number of students attending annually being 12,000.

Since 1993, the **Faculty of Electrical Engineering and Information Technology** has implemented a new university study system, designed in line with European trends in the development of higher education. It is a three-tier study system, fully compatible with the conclusions of the Bologna Declaration, as well as other relevant international documents. The mission of the Faculty is primarily to provide quality university education at all levels based on free scientific research and creative research work. As a faculty with a technical focus, aware of a certain co-responsibility for the development of the economy in Slovakia, it actively participates in the transfer of scientific results into practice.

**Institute of Communication and Applied Linguistics** is one of the 10 Institutes within the Faculty of Electrical Engineering and Informatics. The Institute offers courses in Communication skills in both Slovak and English, English for Specific Purposes, and General English courses.

Web: [https://www.fei.stuba.sk/english.html?page\\_id=793](https://www.fei.stuba.sk/english.html?page_id=793)

### **University of Montenegro, Maritime Faculty of Kotor, Montenegro**

Contact person: Milena Dževerdanović Pejović, Zorica Đurović

**Faculty of Maritime Studies Kotor, Montenegro**, is a part of the University of Montenegro (UoM), the oldest and the largest higher education, scientific and research institution in Montenegro, which was founded in 1974 in Podgorica. Today, University of Montenegro comprises 19 faculties and 4 scientific institutes, with more than 20,000 students. It is an integrated public university, organized according to the principles of the Bologna Declaration, with curricula harmonized with those at the most respectable European universities. **The Faculty of Maritime Studies Kotor** was founded in 1959 and therefore has 65 years of tradition in educating students in different maritime fields, as well as in training of professional seafarers. The education process is organized in three cycles: I - BSc studies at the departments of Navigation and Sea Transport, Marine Engineering, Marine Electrical Engineering and Maritime Management and Logistics; II - MSc and III - PhD studies are organized at departments of Maritime Sciences and Maritime Management and Logistics. At the Faculty, due attention is given to the education of future and training of active seafarers according to international standards set by International Maritime Organization (IMO) and its STCW Convention, since they seek opportunities in the international labour market. The Faculty has modern marine simulators (nautical and marine (electrical) engineering) for the education and training of seafarers, as well as several highly-equipped laboratories for air quality monitoring, marine environmental protection and management, marine fuel testing, marine electrical engineering, offshore operations and technologies, and underwater archaeology. The Faculty has extensive experience of participating in and coordinating EU co-financed projects including programs such as TEMPUS and ERASMUS + capacity building. Since 2013, more than 2.5 million € has been granted to the Faculty of Maritime Studies through different international projects.

In October 2020, after an external evaluation by the Croatian Register of Shipping, Faculty of Maritime Studies Kotor received a Certificate related to the scope of activities: University education activity in the field of maritime sciences and management in maritime and logistics, and seafarers' training activities in accordance with the STCW Convention 78/95/10 in accordance with the requirements of the standard: EN ISO 9001:2015. In 2023, Faculty of Maritime Studies Kotor became a member of the International Association of Maritime Universities (IAMU). The Faculty of Maritime Studies Kotor is also the host of the Kotor International Maritime Conference (KIMC), which is held annually dating back to 2021.

Web: <http://www.pfkotor.ucg.ac.me/en>

**Polytechnic University of Tirana, Faculty of Mathematics and Physics Engineering, Center for Foreign Languages, Tirana, Albania**

Contact person: Fatmir Vrapı

The Higher Polytechnic Institute (HPI), established in 1951, marked the start of higher education in Albania with programs in Civil, Mechanical, and Electrical Engineering. In 1957, these and other faculties merged to form the State University of Tirana. In 1991, the engineering faculties were reorganized into the **Polytechnic University of Tirana (PUoT)**. PUoT's mission is to advance knowledge through teaching, research, and services while training specialists in mathematical and physical engineering for successful integration into both domestic and international labor markets.

The **Faculty of Mathematics and Physics Engineering** is a modern institution offering comprehensive education in engineering sciences, including Computer Science, Photonics, Electronics, Optics, Automation, and Telecommunications. Its diploma programs align with those of the Polytechnic University of Milan, ensuring high standards of education. Graduates earn a Second Level Diploma (SLD) in Mathematical or Physical Engineering upon completing their studies.

The **Center for Foreign Languages**, formerly the Department of Foreign Languages, was established in 2007. The Center aligns its programs with European standards, following the 2001 Common European Framework of Reference for Languages (CEFR). In response to evolving trends in higher education in Albania and increasing student demand for advanced language proficiency, the Center offers tailored programs for undergraduate, graduate, and postgraduate levels. Its mission includes standardizing teaching programs across faculties and engineering disciplines to streamline credit allocation and program duration while achieving linguistic goals. The Center emphasizes modern, communicative teaching methods, supported by computerized labs, digital resources, and the development of terminological dictionaries. These efforts promote professional, multilingual education and foster student engagement in foreign language learning.

The academic staff at the Center for Foreign Languages specializes in the following areas: Applied Linguistics, Comparative and Methodological Linguistics in Foreign Languages, Terminology and the Specifics of Term Equivalence, Communication

and Translation in Foreign Languages, Standards, Development, and the European Framework for Foreign Languages.

Web: <https://fimif.edu.al/en/>

### **Kazimierz Wielki University Bydgoszcz, Department of Psychology, Poland**

Contact person: Aleksandra Blachnio

**Kazimierz Wielki University in Bydgoszcz** is today the largest public wide profile institution of higher education in the city and the second largest in the Kujawsko-Pomorskie Voivodeship, both for the number of professors, number of majors, educational forms offered and the number of students and graduates. Kazimierz Wielki University came into existence on 1 September 2005. However, the history of the University dates back to 1969 when the Teachers' Training College was founded. Nowadays, following the example of the outstanding European universities, Kazimierz Wielki University aims at developing into a modern, competitive and mobility-oriented institution. Our rich variety of educational programs covers 40 major and about 100 specializations at three levels: Bachelor's, Master's and PhD studies. The university also provides many postgraduate courses.

Over 700 academic staff members share their knowledge, including about 150 professors, with over 60 titular professors. Great importance is attached to the development of the staff potential. Thus the staff participate in training schemes, projects, research programs and cooperate with Polish and foreign educational centers.

The university is organized around 19 departments/faculties, among others: Humanities; Pedagogy and Psychology; Music Education; Administration and Social Sciences; Physical Education; Health and Tourism, Natural Sciences; Mathematics, Physics and Technical Science etc. The University's main objective is to increase its competitiveness on the European market through supporting students and teaching staff mobility.

Academic staff conducts research and actively take part in conferences, symposia and courses in Poland and abroad. University can boast rich program of scientific research, laying the foundations of commercial cooperation with institutions and companies. The **Faculty of Psychology** will participate in this CEEPUS network. The Faculty offers following specialization modules to be selected after the third year of studies: clinical psychology, health and rehabilitation psychology, social psychology, and developmental support psychology.

Web: <https://www.ukw.edu.pl/>

### **University of Belgrade, Faculty of Organizational Sciences, Department of Human Resources, Serbia**

Contact person: Marija Meršnik

**Faculty of Organizational Sciences (FON)**, as part of University of Belgrade, was established in 1969 as a school with an engineering approach to management, modelled after the Sloan School of Management from the Massachusetts Institute

of Technology (MIT) in the United States. All study programs implemented at FON have a strong quantitative and IT background combined with organizational and study program-specific knowledge. Today, FON covers the academic fields of management and organization, and information systems and technologies with over 16,000 graduates, 7,000 students with a master's degree, and over 450 PhD degree holders. In addition to undergraduate and graduate study programs, FON awards a dual degree master studies program in International Business and Management – with Middlesex University, United Kingdom.

FON is active in both research and knowledge dissemination. The Faculty organizes several long-standing international conferences across its areas of expertise, including SYMORG, SPIN, SYM-OP-IS, etc., and is also the publisher of reputable international and national academic journals Management, YUJOR, ComSIS, and InfoM. The Faculty has implemented a range of scientific projects funded by the Science Fund of Serbia and the EU (Horizon Europe, etc.) and has participated in various exchange programs, such as Erasmus+, Cepus, DAAD, EUROWEB, for the mobility of students, teaching, and administrative staff. Also, FON has obtained national and international accreditation – the ASIIN International Accreditation, ISO 9001:2015 certificated, and NEAQA National Accreditation.

The Faculty of Organizational Sciences recognizes the Importance of connecting academia and practice and was the first at the University to introduce a student internship program. Many of its students are actively involved in different student organizations and take part in numerous extracurricular activities within 14 active student organizations. In 2016, the Faculty of Organizational Sciences established its R&D Hub, a place of gathering and extracurricular engagement of students and mentors in entrepreneurial initiatives.

The Faculty has 19 departments, one of them being the **Human Resources Department**, which offers courses in areas covered by the proposed HUMANISTA network. Fields covered by the Department include Psychology, Sociology, Human Resources Management, and English for Specific and Academic Purposes.

Web: <https://fon.bg.ac.rs/>

### **West University of Timisoara, Faculty of Mathematics and Computer Science, Romania**

Contact person: Oana Ivan-Horobet

**West University of Timișoara (WUT)**, the largest higher education and research institution in Western Romania, serves approximately 15,000 students, including 6% international students. As a comprehensive university, WUT fosters an interdisciplinary and international environment supported by nearly 700 academic and 400 administrative staff. Its programs at Bachelor, Master, and PhD levels feature unique initiatives such as foreign language courses, internships, and the option to pursue a "minor" specialization. The university also hosts international lecturers, cultural centers, and training opportunities for academic and administrative staff.

The Faculty of Mathematics was established in 1948 as a component of the Pedagogical Institute in Timișoara, under the name of the Faculty of Mathematics and Physics. An important moment is the establishment of the section in Computer Science in 1971. Starting from 2004, the Faculty of Mathematics changed its name to the **Faculty of Mathematics and Computer Science**, since the two are priority fields of study that have led to the extraordinary technical development of our civilization. The faculty offers a diverse range of study programs across undergraduate and master's levels.

At the undergraduate level, the Mathematics program has been offered since 1948, followed by the Computer Science program, introduced in 1971. The Mathematics-Computer Science program was launched in 1998, and a Computer Science program taught in English has been available since 2004. More recent additions include Applied Computer Science, which ran from 2007 to 2024, and two new programs starting in 2023: Artificial Intelligence taught in English and a Computer Science program available via distance education.

At the master's level, the faculty provides specialized programs such as Artificial Intelligence and Distributed Computing, Big Data – Data Science, Analytics and Technologies, Bioinformatics, Software Engineering, and Cybersecurity. Other long-standing programs include Analytical and Geometric Modeling of Systems, introduced in 2008, and Financial Mathematics, offered since 2012. The faculty also launched an innovative program in Intelligent Software Robotics in 2023, further broadening its advanced educational offerings.

Web: <https://info.uvt.ro/en/>

## **University of Novi Sad, Faculty of Philosophy, Serbia**

Contact person: Selka Sadiković

**The Faculty of Philosophy (FFUNS)** is one of the two oldest faculties of the University of Novi Sad, offering more than 45 accredited study programs on all three study levels. It gathers both social sciences and humanities, educating future experts in philology, history, psychology, pedagogy, philosophy, sociology, social work, culturology as well as future journalists and communication scholars. The Faculty and its staff have been involved in many research and educational projects implemented under the frameworks of HORIZON 2020, Interreg-IPA, COST, ERASMUS+, TEMPUS etc. Publishing activities of the FFUNS include twelve journals, numerous edited volumes, and scientific monographs (web presentation: <https://prezi.com/view/timIL6SmzmtBKUm3MqZT/>). One of the Faculty's centers, the STAR Center of Excellence in Behavioral Research in Psychology, is primarily focused on research in behavioral genetics, psychological, genetic and behavioral foundations of various adaptations in children, youth and adults, as well as professional and educational activities for students, researchers and scholars. STAR Center is the founder and maintainer of the Advanced Serbian Twin Registry, an important open source of data for research on genetic and environmental influences on behavior. STAR Registry is the only twin registry in the Western Balkan countries that contains information on a dozen registered adult volunteers (<http://www.blizanci.rs>), including a couple of thousands twins and family members who participated in the research.

Web: <https://www.ff.uns.ac.rs/en>

**Adam Mickiewicz University, Poznan, Faculty of Modern Languages and Literatures, School of Languages and Literatures, Poland**

Contact person: Joanna Kic-Drgas

The Adam Mickiewicz University (AMU) in Poznań offers a wide range of study options, covering all ISCED areas in first- and second-cycle programs. It provides 285 study programs (including 19 in English), 180 professional specializations, 9 joint programs, and 60 postgraduate non-degree courses. At the doctoral level, candidates can choose from 18 programs. With nearly 40,000 students, including over 1,000 international students, AMU is one of Poland's largest universities. The institution actively strengthens ties with EU countries and has participated in 31 EU projects since 2017, including 14 Horizon 2020 and 2 FP7 projects. Between 2004 and 2018, it contributed to over 124 EU projects, such as 32 FP7, 25 FP6, and 15 Horizon 2020 grants.

**The Faculty of Modern Languages and Literature** at AMU is a key institution for education and research, employing 420 university teachers and researchers, many of whom are language experts. Its mission is to train critically minded professionals in the humanities and social sciences, including future educators in these fields. **The Institute of Applied Linguistics**, an independent unit within the Faculty, focuses on educating translators, linguists, and foreign language teachers. It integrates research and teaching across specializations such as teacher training, translation studies, and communication. Current research at the Institute emphasizes modern technologies in foreign language learning and teaching. Key topics include language acquisition, bilingual education, specialist language instruction, the interplay of language and culture, intercultural communication, and innovative teacher training practices like micro-teaching. At the research level, the experience of the researchers involved in the HUMANISTA network can significantly contribute to enhancing the scientific value of the project and integrating important theoretical knowledge with high-quality skills and competences of future and existing language teachers (i.e., educators) and promote the use of innovative solutions, especially in the face of new media in language teaching. The participating researchers also have hands-on experience in teaching and provide workshops for active teachers which will support the identification of the skills gaps and tackle the existing mismatches in the field of teaching language for specific purposes based on the synergic experience and good practices of the participants. Moreover, they have experience in international projects, are already involved in TRAILS (2018-1-FR01-KA203-048085) concerning LSP teachers training and SUCTI (2016-1-ES01-KA203-025646) project concerning internationalization of administrative staff, both financed by the EU.

AMU web: [www.amu.edu.pl](http://www.amu.edu.pl)

**University American College Skopje, School of Foreign Languages (UACS),  
North Macedonia**

Contact person: Marija Andonova

**The UACS School of Foreign Languages**, within the University American College Skopje, offers an exceptional academic curriculum that enables the students to acquire unique knowledge, develop outstanding language and literacy skills, and gain valuable experience. Designed to meet the needs of the language professionals, students at our School are introduced to modern methodology in teaching English language and literature. They learn to use the well-proven teaching techniques and methods and adapt the less-favored ones to their own needs, while being trained to successfully manage various classroom experiences in their future career. The students are also taught the most contemporary techniques for translating written documents. As the translation courses are designed to provide both theoretical knowledge and practical ability to analyze language, text, discourse and culture, the business communication part prepares them for the challenges of business dealings in the era of globalization.

The Faculty believes in teaching a foreign language in diverse multicultural environments, with different groups and at different levels in a socially responsible manner. The teaching staff is accustomed to using and teaching computer assisting tools, as well as translation software with greater speed and efficiency. UACS SFL teaches the students to collect, analyze, compare and evaluate data for making different types of translation. The Faculty is dedicated to developing the ability for business communication, effective communication in teams, as well as gaining skills for presenting and communicating in English language in a multicultural environment.

The School of Foreign Languages has substantial experience in international projects and initiatives. Since 2014, it has been a partner in the CEEPUS network Transcultural Communication and Translation. It has carried out several Erasmus + K107 projects and has been a partner in the international initiative Global Partners in Education led by University of East Carolina (USA) since 2009.

Web: [www.uacs.edu.mk](http://www.uacs.edu.mk)

**University of Ljubljana, Faculty of Maritime Affairs and Transport, Portorož,  
Slovenia**

Contact person: Violeta Jurković

The University of Ljubljana, **Faculty of Maritime Studies and Transport**, is Slovenia's leading educational and research institution in the fields of maritime studies, transport, and logistics. Its mission is to develop top-level professionals and contribute to the sustainable development of the transport system through innovative solutions, research, and international collaboration.

The faculty offers programs at all three levels (undergraduate, master's, and doctoral studies) focused on maritime studies and transport. UL FPP is actively involved in research projects on sustainable mobility, digitalization in marine and transport sectors, development of green technologies, and transport safety. The faculty also participates in several international networks and programs, such as

Erasmus+, and aims to strengthen student and staff exchange through international collaboration and develop joint research programs and programs focusing on maritime studies, logistics, and sustainable mobility.

UL is very active in international research; in 2022, it was involved in 639 ongoing European projects. In the programming period 2007-2013, the UL cooperated in 745 European projects, including 163 FP7 projects, which ranked UL first among the research organizations in the EU-13 countries (source MIRRIS report).

UL FPP has particular knowledge and experience in preparing procedures for response to marine pollution incidents with special attention to simulation exercises. Their expertise and equipment are of valuable benefit. They will be especially relevant in risk assessment, mapping sensitive areas, and training in their oil spill and during the exercise phase. Fields of research cover different areas, including environmental issues, oil pollution, maritime safety, industrial systems such as port facilities and LNG terminals, and complex simulations. Their activity is also directed toward simulation and safety analyses of marine and transportation systems. It was involved in more than 25 national and international projects in marine protection. UL FPP has important references for research and applicative projects related to safety assessments.

Web: [https://www.fpp.uni-lj.si/en/the\\_faculty\\_of\\_maritime\\_studies\\_and\\_transport/](https://www.fpp.uni-lj.si/en/the_faculty_of_maritime_studies_and_transport/)

**University of Pécs, Faculty of Engineering and Information Technology, Department of Architecture and Urban Planning, Centre for Foreign Languages for Technical Purposes, Hungary**

Contact persons: Peter Uvardi, Katalin Dudas Koszo

Today with its 3,200 students, its several decades of experience, its renovated and extended campus, the **Faculty of Engineering and Information Technology** is one the most colourful institutions of Hungary's tertiary technical education and one of the prominent centres of the country's engineering life. The 8 basic training programmes cover technical, artistic and information technology related fields of study in the following branches: architecture, civil engineering, environmental engineering, electrical engineering, information technology and architectural design. Our higher level vocational training for producing television programmes is also popular. The students can choose from 10 Master Degree programmes mainly in the fields of architecture, architectural design, civil engineering and information technology. Since September 2014 students could opt for undivided training in architecture, Architect Designer DLA and Architectural Engineering PhD, and from September 2015, IT Engineering BSc and MSc programmes, and a Civil Engineering BSc, Structural Engineering MSc programme will be available as English language programmes.

The Faculty of Engineering and Information technology has a **Centre for Foreign Languages for Technical Purposes** with a cohort of lecturers, lectors and language teachers engaged in teaching and research.

Web: [mik.pte.hu](http://mik.pte.hu)

**University of East Sarajevo, Production and Management Faculty, Trebinje, Bosnia and Herzegovina**

Contact person: Mirjana Jokanović Đajić

The **Faculty of Production and Management Trebinje**, University of East Sarajevo, Bosnia and Herzegovina, was established in 1995. The teaching process is conducted in two study programs in the first and second cycles. The teaching process's contemporary theoretical and practical forms are aligned with the Bologna model and the University of East Sarajevo quality assurance system. The competence of graduates of the Faculty has been confirmed in practice in engineering, energy, Management and other fields. The faculty has a modern research laboratory that is unique in the region. The Faculty of Production and Management Trebinje realizes intensive scientific research through national and international projects, mainly through bilateral mobility projects for teachers and students. Excellent cooperation with similar faculties in the region within the inter-university cooperation agreements has been developed.

Educational activity of the faculty necessarily includes scientific research activities that are assumed to be part of the professional advancement of the teaching staff. By accessing KoBRSON (Consortium of Libraries of the Republic of Srpska for the Unified Procurement), the Faculty provided its teaching staff and the library with better availability and the use of scientific data. Also, all teachers of the Faculty are members of the Current Research Information System in the Republic of Srpska, i.e. E-CRIS.RS which includes databases of the research organisations, researchers and projects. During 2013, within the scope of the project "Support to Technological Culture and Innovation" Ministry of Civil Affairs of Bosnia and Herzegovina co-financed the realisation of the project "Preparing the Project Documents and the Prototype of Eyeglasses Lens Support". The project owner is the Faculty in partnership with several institutions and associations from East Herzegovina. The Faculty has 4 departments, one of which is the **Department for Humanities** which offers courses in English, Communication sciences, Human Resources, etc.

Web: [www.ues.rs.ba](http://www.ues.rs.ba)

**Mendel University in Brno (MENDELU), Faculty of regional development and International Studies**

Contact persons: Lenka Zouhar Ludvikova, Bohdana Čechova, Vendula Tvrdonova

**Mendel University in Brno (MENDELU)** is a public institution with a long tradition of excellence in teaching and research that has driven new ways of thinking since 1919 and proudly bears the name of Gregor Johann Mendel, the founder of modern genetics. **MENDELU** offers more than 100 graduate degree programs in the Czech and English languages. **MENDELU** comprises one university institute and five faculties. Modern university campus is located in Brno, the second-largest city in the Czech Republic, the heart of Europe. Brno is one of the best student cities in the world; in 2018 it was ranked among the Top 10 QS Best Student Cities rated by students.

Established in 2008 as the fifth faculty of Mendel University in Brno, the **Faculty of Regional Development and International Studies** was founded to address the growing significance of regions in social and economic contexts. The faculty integrates economics, political science, sociology, and environmental studies to provide a comprehensive approach to regional issues. Its focus includes regional policy financing, municipal development, revitalization of underused areas, rural stabilization, corporate performance, farm management systems, ecosystem services, landscape management, and socio-demographic and psychological aspects of quality of life.

Within the faculty, the **Institute of Language and Cultural Studies** offers courses in four world languages: English, German, French, and Spanish. These languages are valuable for careers in the Czech Republic, neighboring countries, EU institutions in Brussels, or developing countries worldwide. The Institute provides both traditional language courses and specialized subjects such as Academic Writing in English and Presentation Skills in English, alongside broader topics in language and cultural studies. Its research and publications focus on applied linguistics, cultural studies, and foreign language didactics.

Web: <https://frrms.mendelu.cz/en/>

## **2. PROGRAM DESCRIPTION**

---

### **2.1. Rationale for the HUMANISTA network**

Nothing has recently shaken the world as profoundly as the emergence of Artificial Intelligence and the effort to make it accessible to the general audience. Only at that moment did we truly grasp how disruptive and dangerous technology can be, while still holding the sparkling promise of new, revolutionary possibilities. With AI's rapid rise, labor market trends have drastically shifted in favor of engineers. However, new dilemmas have arisen: can we apply the technology responsibly, ensuring that these innovations serve for a greater good, for humanity's benefit?

It is reported that STEM occupations have significantly grown over the past 30 years, going from 9.7 million employees to 17.3 millions, thus outpacing overall US job growth [1]. The statistics say that whereas the overall employment grew only 34% in the USA, STEM employment has grown 79% since the early 2000s. This rapid expansion has created a labor market imbalance, forcing businesses to hire not only STEM-educated workers but also those from other fields, such as the humanities, to fill critical roles. Interestingly, this necessity has led many organizations to recognize the valuable skills and perspectives that non-STEM workers bring, contributing to a more diverse and dynamic labor market.

Nowadays, employers are looking for more than just an engineer with a STEM background - they are looking for critical thinking, communication skills, problem-solving abilities [2]. A survey conducted by The Association of American Universities revealed that 73% of employers in the USA rejected the trend towards narrow technical training, asking colleges and universities to emphasize critical thinking and analytical reasoning more [3]. The same study informs us that 78% of employers look for intercultural competence in job applicants, whereas 80%

thought written and oral communication are key skills [3]. New qualification requirements for Industry 4.0 include cultural and intercultural competence, life-long learning, interdisciplinary thinking, decision-making, digital and media literacy [4], [5]. Many employers identified the greatest skills gap in the labor market as skills in communication, problem-solving and critical thinking [6], [7]. Some of those are labeled “soft skills” or “essential skills” - observation, empathy, logical thinking, social perceptiveness are the skills of leadership, the most wanted ones in corporations and at workplaces worldwide [8].

Transferable skills, broadly defined as non-technical skills such as Teamwork, Communication, Problem-solving, Innovation and Emotional Judgment [6], have become widely acknowledged as essential in successful leadership and business. These skills are becoming more important than ever – it is anticipated that the share of the workforce with “transferable skills” is going to increase from 53% in 2000 to 63% in 2030 [6]. Similarly, the Canadian job market is expected to employ 2.4 million people in the next 3 years all of which will have to prove they possess the set of skills to thrive in the age of disruption [8]. The projected skills demand for all occupations, based on the Royal Bank of Canada Report, tops active listening, critical thinking and reading comprehension, with persuasion and negotiation skills being of medium importance, whereas equipment maintenance, repairing and installation are at the bottom of the list [8].

These skills are easily found in Humanities graduates who are well-rounded and exhibit persuasive written and oral skills, being thinkers with superior critical thinking skills along with a sense of empathy [6]. A 2013 research at the University of Oxford confirmed that “transferable skills,” characteristic of Humanities graduates, are the key factors in determining outcomes in hiring and advancement [9]. As many as 11,000 Humanities graduates are reported to have contributed an increased share of the national economic growth, and accordingly they emphasized the value of their Humanities-based education as a key to their success [9].

Similarly, employers have experienced manifold benefits of the humanities-based educated workforce. For example, Google hired close to 6,000 people in 2011, intentionally selecting many of them with degrees in the Humanities. Google decided to look for intelligent employees capable of interacting with others, arguing that Humanities graduates are “a desired commodity for industry” [2]. Another example is IBM’s shift in the labor force: they have reoriented their hiring policy by introducing “design researchers who are specialists with science and humanities background,” which has brought the most profound change to the company’s operations [6]. Finally, the founder of Apple Steve Jobs once said: “It is in Apple’s DNA that technology alone is not enough – it’s technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing.” [8]

The scientific and technical advances in the 21st century, apart from affecting the economy and politics, have also added to the vulnerability of humankind [3]. In the context of AI and Industry 4.0, social challenges related to privacy, ethical and security issues and growing distrust demand urgent and thoughtful attention. In order to tackle those problems, stakeholders and policymakers rely on STEM education. In today’s geo-political circumstance, “governance requires high

quality, broadly educated public servants and enlightened citizenry” [3]. Tertiary education, recognized internationally as a public good, has for centuries been established as a trusted system, functioning as accredited centers of knowledge and research, relied upon by both graduates and businesses. Now, it is higher education that needs to introduce a more holistic approach to Engineering education that might restructure the current curricula to better prepare future engineers for the complex challenges ahead [10].

In today’s complex and interconnected world, technical education cannot exist in isolation. Engineers and technologists require more than technical expertise—they must also cultivate strong communication skills, cultural sensitivity, and an understanding of human behavior. We have identified technical universities within the CEEPUS countries that host institutes, departments, or faculties dedicated to teaching humanities to STEM students, forming the HUMANISTA network. While most partners in the network are primarily STEM-oriented institutions with specialized departments for the humanities, the network also includes a few humanities faculties, such as those focused on linguistics or psychology. These faculties align with the network’s goals by preparing students for future professions closely connected to STEM contexts—such as English teachers who design ESP courses for engineers, or psychologists equipped to work with future technologists and innovators. This interdisciplinary integration further enriches the network’s vision.

By stronger integrating the Humanities into technical programs, the HUMANISTA network aims to develop professionals who are not only technically skilled but also deeply attuned to the social, cultural, and ethical dimensions of their work. This approach is intended to prepare students for leadership roles in diverse, multidisciplinary environments, where the ability to understand and collaborate across boundaries is increasingly essential. The network will enhance the mobility of students and faculty lecturers, encouraging collaboration across disciplines and promoting research that bridges the gap between STEM fields and the humanities.

## **2.2. Objectives and Expected Outcomes of HUMANISTA**

At the core of HUMANISTA is the recognition of English as the global *lingua franca* in science, education, and technology. The network places great emphasis on enhancing language skills, not only to facilitate cross-border academic collaboration but also to equip students and researchers with the communication tools necessary for global scientific discourse. In tandem with language development, HUMANISTA prioritizes the study of psychology, pedagogy, and communication sciences as essential components of STEM. These humanistic fields enrich technical education by fostering a deep understanding of societal needs, values, and cultural dynamics—elements without which true innovation and technological advancement cannot occur.

One of the network’s main objectives is to create **shared environments that support the bidirectional exchange of knowledge and methodologies between its member institutions**. By fostering cooperation across disciplinary boundaries, HUMANISTA enables students and faculty to explore new perspectives, combining their technical skills with insights from the humanities. This interdisciplinary approach not only enhances the academic experience but

also prepares participants for leadership roles in fields that require both scientific expertise and human-centered thinking.

Another goal is creating a **regional ecosystem striving for excellence in engineering and technical education** by engaging in the following:

- ✓ Capacity building of undergraduates and graduates equipping them with the skills necessary to tackle the contemporary social and industrial challenges, while ensuring equitable access to opportunities for all students.
- ✓ Capacity building of teachers in didactic competences, digital literacy, research, academic integrity and rigor,
- ✓ Mobilizing the innovative, research and scientific potential in partner institutions to develop strategic and sustainable collaboration of interdisciplinary or like-minded research teams,
- ✓ Participation in the PPU's existing conferences, summer schools, workshops, incubators, etc. to increase the visibility of the research institutions and enhance the academic profiles of contributors,
- ✓ Internationalization of education and research through the exchange of students, staff and faculty, enhancing transfer of knowledge and shared expertise, personal growth and diversification,
- ✓ Enhancing opportunities for students and teachers to exclusively access labs, libraries, didactic resources and equipment in partner PPUs,
- ✓ Fine-tuning the existing curricula within the PPUs by incorporating micro-teaching, shared learning materials, and refreshing topics to ensure relevance and adaptability,
- ✓ Increase in employment/engagement opportunities and career advancement through networking for teachers and students,
- ✓ Providing an opportunity to raise additional funding for joint projects by applying to various grants and funds in EU competitions and elsewhere,
- ✓ Publication and dissemination of research results and didactic materials, aiming at increased relevance and impact, in co-authorship,
- ✓ Exposure to different cultures and societies which would allow empowerment in intercultural awareness and communication competences of student and teacher mobilities.

These will be achieved by:

- ✓ International mobility of students and teachers,
- ✓ Joint teaching activities,
- ✓ Joint research initiatives,
- ✓ Collaborative development of teaching materials, workshops, seminars, etc.

### **2.3. Topics covered by HUMANISTA**

The topics encompass both interdisciplinary and specialized areas, emphasizing teamwork, direct communication among collaborators, and sustained research

efforts. Each partner contributes distinct expertise across diverse educational and research domains. The HUMANISTA network will offer students and lecturers a unique opportunity to engage with a truly multidisciplinary perspective in the fields where they all excel.

The network is focused on the following educational and research topics:

- **Humanities Enriching STEM Perspectives** (Sociocultural Impacts of Technological Innovation, Human-Centered Design and Engineering, Ethical and Sustainable Technology Development, Cultural Influences on Technological Adoption, Artificial Intelligence and Ethics, STEM Education Curriculum Design Incorporating Humanities, Sustainability Education: Embedding Environmental Awareness in STEM Curricula, Human Resources and Leadership in STEM and Innovation, Technical and Technological Cultures in Industry and Engineering);
- **Language and Communication in STEM** (English as a *lingua franca* in Science and Technologies, English as a Medium of Instruction (EMI), English for Specific Purposes (ESP), English for Academic Purposes (EAP), Cross-Cultural Communication in Technical Teams, Professional Development of language teachers, Computer-assisted language learning (CALL), including application of AI, Mobile-assisted language learning, MOOCs, in language acquisition, instruction and assessment);
- **Pedagogy, Psychology, Competences in STEM** (Behavioral and Sociocultural Impact of Innovation, Hybrid Pedagogy, Behavioral Economics in Technological Policy Design, Ethics in Data Science and Privacy Concerns, Psychological and Digital Resilience, Psychology of Teaching and Learning in e-education, Digital literacy, Digital divide, AI Intelligence);
- **Communication Skills in STEM and Humanities** (Corporate communication and Public relations in STEM, Verbal and non-verbal Communication in cross-cultural settings, Media Literacy and Digital Divide for Collaborative Communication in STEM, Interpersonal Dynamics in Multidisciplinary Research, Cross-Cultural Communication Skills Among STEM Professionals);
- **Holistic Education, Multidisciplinary and Innovation for Global Professionals** (Human and social aspects of E-business and Lifelong Learning, Adult Education, Educational Technologies, E-learning, Digital Humanities, Sustainable Development Goals (SDGs) in Technological Innovation and Engineering, Social Dimensions of Sustainability, Inclusion and Equity in Resource Distribution).

## **2.4. Planned activities with selection criteria**

### **2.4.1. Student Mobilities**

PPU can recruit students through mobility calls, which are continuously available on the official websites of the PPU (either the faculty or university website), as well as through direct consultations with students and dissemination events organized by the network's local coordinators.

Student mobility (for graduate students who have completed at least two semesters at their home institution and are applying for scholarships that last a

minimum of three months) is available to applicants who meet the following criteria:

- ✓ Be an undergraduate student at the home university
- ✓ Have completed at least two semesters
- ✓ Demonstrate proficiency in English (or in the language of the host country)
- ✓ Provide a plan of activities for their stay at the host PPU
- ✓ Contact professors from the host PPU in advance
- ✓ Ensure compatibility of study programs or a feasible research plan
- ✓ Demonstrate motivation.

Short-term mobility (for PhD students, lasting from six days to three months) is available to applicants who meet these criteria:

- ✓ Be enrolled in a PhD program at their home university
- ✓ Demonstrate proficiency in English (or in the language of the host country)
- ✓ Provide a plan of activities for their stay at the host PPU
- ✓ Contact professors from the host PPU in advance
- ✓ Ensure the feasibility of a research plan
- ✓ Demonstrate motivation.

For students from Montenegro, Croatia, Bosnia and Herzegovina, Serbia, and North Macedonia, it is possible to attend lectures and complete practical work in any of the national languages within the cluster.

All partners in the network use the ECTS credit system. The network's policy ensures that every student activity results in ECTS credits, which will be recognized by the student's home institution. Students are advised to consult with the ECTS coordinator before planning the courses they will enroll in at the host university. If a student's mobility focuses on laboratory work, a minimum of 3 ECTS credits will be awarded for the first month, with 4 credits per month for any additional time. Undergraduate thesis work should also be awarded ECTS credits. Furthermore, participation in the summer school will be awarded by certificates, but partners are encouraged to recognize these credits according to their curricula, where applicable.

#### **2.4.2. Teacher Mobilities**

Teacher mobilities are designed for teaching staff who will teach or mentor at the host institution. In line with the CEEPUS Work Program, the requirement for this type of mobility is a minimum of six hours of teaching or mentoring per week. The minimum duration for teacher mobility is five days, or three days for short group mobility.

Teacher mobilities are available to applicants who meet the following criteria:

- ✓ Hold a PhD

- ✓ Have a working contract with the home university at the time of mobility (are employed)
- ✓ Provide an adequate teaching plan or supervision assignment (minimum 6 hours per week)
- ✓ Demonstrate proficiency in the English language
- ✓ Have an interest in the educational or research fields covered by the network
- ✓ Lectures are conducted in English. (Exceptionally, teachers from Montenegro, Croatia, Bosnia and Herzegovina, Serbia, and North Macedonia, can use their national languages within the mentioned cluster if all the participating persons speak the same language and they agree on that.)

### **2.4.3. Summer school**

#### **THE HUM-STEM SUMMER SCHOOL (Digital and Psychological Resilience in Interdisciplinary Education)**

##### **SHORT DESCRIPTION**

The HUM-STEM Summer School is a unique educational program designed for undergraduate and PhD students to explore the integration of Humanities and STEM disciplines. Hosted by the University of Kragujevac, Faculty of Technical Sciences in Čačak, in collaboration with other partners in the HUMANISTA network, this program will take place over 6 days in June 2026. The first day will be a virtual preparatory meeting, where participants will get acquainted, review the agenda, and prepare for the onsite activities. The remaining 5 days will be held onsite in Čačak, featuring workshops, interactive classes, and cultural enrichment. The proposed summer school will focus on psychological and digital resilience, communication between STEM and Humanities, and skill development in critical thinking, design thinking, intercultural communication, and English language proficiency. With the participation of 10-20 students and 5-6 teachers, the program offers an interdisciplinary and collaborative learning environment that bridges the gap between human-centered thinking and technological innovation.

##### **LONG DESCRIPTION**

The HUM-STEM Summer School is a transformative interdisciplinary program designed for undergraduate and PhD students, aiming to bridge the gap between the Humanities and STEM fields. Hosted by the University of Kragujevac, Faculty of Technical Sciences in Čačak, and in collaboration with other partners from the HUMANISTA network, this summer school offers participants an immersive experience that explores how human-centered perspectives can enhance scientific research and innovation.

Bringing together 10-20 students and 5-6 faculty members, the program will provide a rich combination of workshops, lectures, and hands-on activities. These sessions will focus on integrating the Humanities into STEM disciplines, while also promoting essential skills such as critical thinking, design thinking, innovative problem-solving, intercultural communication, and English language proficiency.

The content of the summer school will focus on topics related to psychological and digital resilience, with resources the coordinating university developed through the Erasmus+ Strategic Partnership project DIGIPSYRES, in collaboration with Kazimierz Wielki University, Poland ([www.digipsyres.kg.ac.rs](http://www.digipsyres.kg.ac.rs)). These workshops will delve into the well-being of students, mental toughness, stress management, digital resilience, privacy and security on social media, and critical thinking for navigating the digital world.

The program will span 6 days, starting with a virtual preparatory meeting 15 days prior to the onsite sessions. This virtual session will give participants the chance to get to know each other and familiarize themselves with the program's structure. The virtual meeting will be hosted on Padlet, where participants can share their locations, introduce themselves, and access important information regarding the venue, logistics, and agenda.

The first day onsite will focus on introductions, welcome and settling in, and team-building and warm-up activities to foster collaboration. The subsequent days will cover the following themes:

- **Day 2:** Psychological resilience, with workshops on well-being, mental toughness, stress and coping mechanisms, life values, and self-recovery exercises.
- **Day 3:** Digital resilience, focusing on information security, social networks, privacy control, cyberbullying, and developing critical thinking skills in the digital age.
- **Day 4:** Communication and collaboration between STEM and Humanities, including workshops on supportive communication, assertive behaviors and listening, ethics, and the role of Humanities in the future of STEM. Interactive activities will explore how interdisciplinary approaches can lead to more holistic and innovative solutions in research and industry.

The final day will include a summary of key insights, wrap-up discussions, and the awarding of certificates to participants, recognizing their engagement and achievements throughout the summer school.

In addition to academic sessions, participants will have the opportunity to engage in cultural activities. Afternoons and evenings will be dedicated to visiting cultural sites in Čačak, where students can experience the local heritage, music, food, and traditions. Educational institutions, research facilities, and other local landmarks will be visited to give participants a broader perspective on the host country's culture and academic landscape.

At the end of the program, students will submit a reflective report on their experiences, which will help them consolidate their learning and gain valuable insights into interdisciplinary approaches to problem-solving. Each participant will receive a certificate of participation to acknowledge their involvement in the HUM-STEM Summer School.

This dynamic and hands-on learning experience will not only enhance students' academic and professional development but also inspire a deeper appreciation of the role Humanities can play in shaping the future of STEM disciplines.

### **Application Process:**

Undergraduate and PhD students interested in participating will submit a brief statement of interest containing the following:

- Name
- Affiliation
- Educational background
- Proof of English language competence
- Motivation to participate

### **Selection Criteria:**

- Educational background fit with HUMANISTA network fields of interest.
- Clear motivation to engage in the program.

The selection process will ensure gender balance and prioritize opportunities for students from underrepresented or disadvantaged backgrounds.

### **Implementation and Milestones:**

#### **Planned implementation schedule:**

- **Until February 2026:** Design and adopt the complete HUM-STEM Summer School program.
- **Until mid-March 2026:** Announce the call for HUM-STEM Summer School for students.
- **Until mid-April 2026:** Announce the selection results for HUM-STEM Summer School participants.
- **Until the end of June 2026:** Organize and implement the HUM-STEM Summer School.

#### **Milestones:**

- Finalizing the HUM-STEM Summer School program and agenda.
- Finalizing the Summer School program learning materials/resources.
- Finalizing the list of selected participants.

#### **Potential Summer School Risks and Mitigation**

The implementation plan will be adjusted if needed, including the methods leveraged to accomplish the work. In case of certain unprecedented circumstances, modifications in implementation of the summer school will be undertaken in due time by the coordinator.

#### **DATES, VENUE**

The date June 1–5, 2026 – refers to the dates for onsite sessions. The virtual preparatory day will be held 15 days prior to the onsite event.

The implementation plan will be flexible and subject to adjustment as necessary. In the case of unforeseen circumstances, the coordinator will adapt the schedule or delivery methods in a timely manner to ensure the success of the summer school. Adjustments may include virtual alternatives or rescheduling certain

activities to maintain the program's goals. An alternative location for the event, should the need arise, is Trebinje (University of East Sarajevo).

Participants from other programs, including Erasmus exchange students, will be invited to join the HUM-STEM Summer School during the period of their exchange. We will especially invite trainers who completed the training within the ERASMUS + project DigiPsyRes to participate and contribute to the summer school, as guest lecturers. This inclusion will further enhance the cultural diversity of the program, providing an opportunity for students from various backgrounds to interact, share experiences, and learn from each other.

The HUM-STEM Summer School will integrate both hybrid and virtual exchange elements into its structure. The program will begin with a virtual preparatory meeting held 15 days prior to the onsite sessions, allowing participants to familiarize themselves with the program, meet each other, and access important information such as the agenda, logistics, and venue details. This virtual day will help ensure that all participants are well-prepared and engaged before the in-person activities begin.

Additionally, virtual alternatives will be available in case of unforeseen circumstances, ensuring that the program's goals are maintained even if there are disruptions to onsite activities.

#### **ENGAGEMENT OF CEEPUS PARTNERS**

The University of Kragujevac, Faculty of Technical Sciences (FTS) will serve as the host institution for the HUM-STEM Summer School, coordinating the program's overall structure, logistics, and local organization. The University of Kragujevac will ensure that the program aligns with the goals of the HUMANISTA network. The university will also oversee the logistics of the onsite activities in Čačak, including accommodation, venue arrangements, and any other necessary infrastructure for the smooth execution of the program. Additionally, the University of Belgrade will assist with the logistics for incoming students coming from Belgrade to Čačak.

#### **Promotion:**

The design of promotional visuals will be assigned to one of the CEEPUS partner institutions (PPUs) based on their expertise, during the preparatory networking meeting. They will also be in charge of Facebook and official website posts writing and publishing.

#### **Application and Selection:**

All PPU's will be responsible for the promotion of the summer schools at their institutions and application of their own students. Each partner will handle the selection process for their students, with the final selection being managed by the University of Kragujevac.

#### **Content:**

The University of Bydgoszcz (Kazimierz Wielki University) (Aleksandra Blachnio), in collaboration with the University of Kragujevac (Ivana Krsmanović) and their colleagues from the departments, will develop and deliver the core content of the summer school, particularly the workshops and lectures related to psychological

and digital resilience, as well as general skill-building activities. These two institutions have already developed workshop materials as part of a joint project <https://digipsyres.kg.ac.rs/>, which will now be adapted for the summer school program.

The University of Novi Sad will contribute specifically to the psychological resilience content, focusing on well-being, stress management, and mental toughness. Additionally, University of East Sarajevo will provide expertise on management skills, communication, and the integration of Humanities and STEM disciplines. Their contribution will be key to linking these fields, emphasizing their interconnectedness in addressing contemporary challenges.

### **Virtual Component:**

The University of Belgrade (Marija Meršnik) and University of Kragujevac (Lena Tica) will host the virtual component of the summer school, including the preparatory meeting 15 days before the onsite sessions. They will manage the digital communication tools (such as Padlet) and virtual discussions, ensuring all participants are well-prepared for the in-person sessions.

### **Networking and Collaboration:**

During the preparatory networking meeting, we will discuss which CEEPUS partners can collaborate on delivering other aspects of the program, such as intercultural communication, design thinking, and the interconnection between STEM and the Humanities. The expertise of each institution will contribute to the interdisciplinary nature of the summer school. The availability of teachers for onsite activities will also be coordinated during this phase.

### **Student Volunteers:**

To support the organization and logistics, student volunteers from the University of Kragujevac will assist with various tasks throughout the program. This will include welcoming participants, managing group activities, and offering general support to ensure smooth operations.

### **Report Writing and Certificates:**

The West University of Timisoara will handle the final report writing and the issuance of certificates to participants.

## **2.5. Formats of research and teaching offered by the network**

### **2.5.1. Formats of teaching**

To support the objectives of the **HUMANISTA** network and effectively carry out its planned activities, the following forms of instruction will be utilized for students:

- ✓ **Direct instruction (in-person teaching through interactive lectures or workshops):** Teachers will engage students through dynamic, face-to-face teaching methods, such as interactive lectures, workshops and hands-on workshops, in Short-Term Intensive Courses and Summer Schools.

- ✓ **Practical work activities (experimental learning):** Hands-on tasks designed to deepen students' technical expertise and problem-solving skills in real-world scenarios.
- ✓ **Lectures based on problem-solving methods:** Interactive lectures that engage students in critical thinking, where real-world problems are explored, and innovative solutions are developed.
- ✓ **Participation in virtual synchronous activities (blended or hybrid):** Students will participate in online lectures, webinars, and virtual workshops, providing flexibility and access to global resources.
- ✓ **Supervision of research papers or undergraduate thesis (independent, supervised learning):** Teachers will guide students through their research work, offering mentorship and expertise, ensuring students' projects are on track and meet academic standards.

To following teaching methods and instructional strategies will be employed for teachers:

- ✓ **Lectures and seminars:** Faculty members will deliver in-person and virtual lectures and seminars.
- ✓ **Virtual synchronous activities:** Teachers will engage in online teaching and learning activities, such as delivering online lectures or seminars through platforms like Microsoft Teams.
- ✓ **Micro-teaching sessions:** These short, focused teaching sessions will allow educators to refine and practice new teaching methods in a low-stakes environment, enhancing their skills for larger class settings.
- ✓ **Joint teaching activities and joint teaching materials:** Teachers will design teaching materials in collaboration, including e-materials and for e-learning.
- ✓ **Bilateral meetings/discussions:** Teachers will participate in bilateral meetings to discuss network development, share insights on joint activities, and collaborate on future projects, ensuring the network's goals are being met.

### **2.5.2. Formats of research**

Planned formats for research within HUMANISTA are as follows:

1. **Joint Research Projects:** Cross-institutional research groups will engage in experiments and studies, utilizing shared resources and expertise. These groups will actively collaborate to apply for grants and funding opportunities, ensuring sustainable and impactful research outcomes.
2. **Interdisciplinary Research Teams:** Teams comprising experts from both STEM and Humanities disciplines will tackle complex, multidimensional problems. By integrating technical and humanistic perspectives, these teams aim to produce innovative, socially relevant solutions.
3. **Collaborative Publications:** Members will co-author research papers and articles, contributing to international journals and conferences, thereby enhancing the visibility of HUMANISTA and disseminating findings

globally. Where applicable, researchers will contribute to PPU's existing journals or conferences by publishing or presenting papers in co-authorship or as sole authors.

4. **Thematic Workshops and Seminars:** Workshops and seminars will be organized to share progress, exchange methodologies, and inspire new research directions within and beyond the network.
5. **Research Mobility Programs:** Faculty and students will engage in short-term research stays at partner institutions to facilitate knowledge exchange, develop joint methodologies, and strengthen research ties across the network.
6. **Reviewing:** Where applicable, participating PPU's will invite the HUMANISTA members to serve as reviewers for their conferences or journals.

### **2.5.3. The use of e-learning, e-teaching and the development and extension of digital skills and competences**

The HUMANISTA network recognizes the critical importance of e-learning and e-teaching in modern education and is committed to integrating these methods to enhance digital skills and competences among participants. Communication sciences play a significant role in our network, emphasizing the transformative potential of technology in education. E-technology and e-learning are central to our focus, supported by advancements in educational technology and science.

In the current landscape, it is hard to imagine English language instruction—or education in general—without the integration of technology and e-learning. This has become the standard across disciplines. However, it is particularly noticeable that language teachers and those in the humanities are often at a disadvantage compared to their colleagues in IT and technical sciences, or even their students at engineering faculties, when it comes to the effective use of these technologies.

One of the key objectives of our network is to ensure that partners are equipped with the necessary skills and knowledge to effectively integrate digital tools in their teaching and research. To achieve this, the network will organize a series of seminars, workshops, and talks aimed at enhancing digital literacy and related competencies among both students and educators. These activities will focus on areas such as virtual collaboration, the use of digital tools for teaching and research, and strategies for effective online communication.

Through these initiatives, partners will have the opportunity to share expertise and best practices, fostering a collaborative learning environment. Participants will gain practical knowledge and skills that can be applied in both academic and professional contexts.

To further expand our efforts, the network will organize a number of seminars, workshops, and talks specifically designed to improve digital literacy and related competencies for students and teachers. These activities will cover topics such as virtual collaboration, the use of digital tools for teaching and research, and strategies for effective online communication. Participants will gain practical

knowledge and skills applicable to both academic and professional settings. Participants who attended the seminars will receive certificates of attendance.

Additionally, our programs will leverage available e-learning platforms, including Microsoft Teams, to facilitate virtual classes, webinars, and interactive discussions. Virtual teaching and micro-teaching opportunities will also be offered to educators, enabling them to adapt their methodologies to digital environments. These efforts will not only enhance participants' technical skills but also prepare them for the demands of a digital-first academic and professional landscape. Learning/teaching materials will be shared between partners.

Further on, topics of digital literacy, digital divide, AI literacy and digital intelligence (also other borderline topics) will be included in our research scope, so we will additionally engage in conducting research and writing joint papers on these topics.

#### **2.5.4. Involvement of young researchers and women in the exchange activities**

The HUMANISTA network is dedicated to fostering the involvement of both young researchers and women in science, ensuring equitable and meaningful participation in all activities. Mobility programs, workshops, and exchange opportunities will prioritize young researchers and women, providing platforms for them to collaborate, present their work, and engage in multidisciplinary projects. The network is committed to gender balance and diversity, ensuring equal participation through calls and mobility awards, while actively encouraging women to apply for opportunities (which will be visible in our calls and mentioned in our promotional events).

Given the high representation of women in humanities fields, the network anticipates significant female participation, which will be further supported by featuring successful female scholars in live CEEPUS promotional events to inspire others.

For young researchers, tailored activities such as skill-building workshops, networking events, and mentoring programs will address their unique challenges and equip them for leadership roles. Similarly, through mentorship initiatives we will support women by pairing them with experienced professionals who can guide their academic and professional journeys. By promoting diversity and inclusivity across both groups, HUMANISTA aims to develop a generation of researchers who are well-equipped to drive innovation and positively impact society.

#### **Efforts for Gender Balance**

While humanities have traditionally been dominated by female scholars, the HUMANISTA network also strives for a balanced representation of male scholars and young researchers in all of its programs. This commitment reflects our dedication to fostering equal opportunities for all, regardless of gender. We actively encourage male scholars to participate in our activities, ensuring gender balance in all aspects of our work.

By promoting balanced participation across genders, we aim to bridge the gap between STEM and Humanities, which are often perceived as being at opposite ends of the gender spectrum. This effort will enhance interdisciplinary collaboration, strengthening the role of humanities in addressing complex societal challenges and reinforcing their importance in preparing scholars for a competitive, innovation-driven labor market.

Through these efforts, HUMANISTA aspires to create a research environment where diversity is celebrated and all scholars—regardless of gender—can thrive, contribute meaningfully to academic discourse, and have a positive impact on society.

### **Measures to Promote Both Young Researchers and Women:**

1. **CEEPUS calls for applications:** Our application calls, published on our websites and other designated platforms, will always include a statement encouraging women and young researchers to apply.
2. **Targeted selection for mobility programs:** Scholarships and exchange opportunities will prioritize both young researchers and women, with careful selection of applicants to ensure equal representation and participation, where applicable.
3. **CEEPUS Alumni initiatives:** We will make an effort to pair young researchers and women with experienced alumni to provide personalized guidance, career advice, and research feedback.
4. **Inspiration in promotional events:** To inspire and support female participation, at least one woman will be featured in a live CEEPUS promotional event in PPU, where she will share her experiences as a scholarship recipient, serving as a role model for potential applicants.
5. **Promotional network activities:** In digital promotional activities we will make sure that videos, reels, photos and interviews distributed publicly always contain/show at least one female.

### **2.6. Communication among partners**

Given the diverse composition of the HUMANISTA network, which includes many partners across multiple countries, we will employ a variety of e-communication methods, both synchronous and asynchronous, tailored to the specific needs of the network and its activities.

#### **Communication Tools and Platforms:**

1. **Whats-app Group:** A dedicated Whats-app group will facilitate quick and informal communication, allowing partners to share updates, reminders, and urgent information in real time.
2. **Microsoft Teams:** A Teams group will be created as the central platform for formal communication and collaboration. It will serve as a hub for document sharing, scheduling meetings, hosting virtual discussions, and maintaining task boards.

3. **Email Communication:** For official documentation, detailed reports, and formal requests, email remains a key channel to ensure proper record-keeping.
4. **Virtual Meetings:** Regular synchronous meetings will be conducted via platforms like Teams or Zoom to discuss ongoing activities, resolve issues, and make collaborative decisions. Scheduling will account for the time zones of all partners.
5. **Social Media Presence:** Dedicated Instagram and Facebook accounts will be created to promote the network's activities, share updates, and engage a broader audience, including potential participants and collaborators.
6. **Dedicated Website:** a dedicated HUMANISTA network website will be developed. This platform will contain detailed information about the network, partner profiles, mobility opportunities, success stories, promotional materials, and a calendar of events.

Communication and coordination will be conducted through emails, Teams and shared calendars (for meetings, deadlines etc.). For partners unable to join live discussions, recorded meeting sessions, shared meeting notes, and collaborative documents will be made available to facilitate their input and ensure inclusivity. Periodic one-on-one or small-group check-ins will be scheduled with local coordinators to address specific concerns and provide tailored support.

### **2.6.1. Network meetings**

To additionally enhance communication among the PPU's, and strengthen organizational capacities and planning for the HUMANISTA network, a kick-off network meeting for the year 2025 will be held in Serbia, at the Faculty of Organizational Sciences, University of Belgrade (1-3 days).

Network meetings will be held in a hybrid format, combining in-person and virtual participation to ensure inclusivity and accessibility for all partners (but ensuring that at least 50% of the partners are present onsite). The host institution is responsible for logistical arrangements, including scheduling, venue setup, and technology support for online participation via platforms such as Microsoft Teams or Zoom. Agendas are developed collaboratively and distributed well in advance, allowing all participants to contribute topics or concerns. Key elements of the organization include:

- Clear identification of objectives (e.g., evaluating project progress or planning future activities).
- Assigning roles for moderators, timekeepers, and recorders to ensure efficiency.
- Providing pre- and post-meeting materials (agendas, reports, and background documents) to allow for informed discussions.

### **2.6.2. Digital communication with stakeholders and partners - public domain**

To ensure effective dissemination of results, promotion of activities, and engagement with a broader audience, the HUMANISTA network will establish a dedicated network website and an accompanying Facebook group and Instagram profile. The website will serve as a centralized hub for all network-related information, including announcements, event schedules, research highlights, downloadable materials, and profiles of partner institutions. It will also feature updates on ongoing projects, success stories, open calls for participation, summer school reports, etc., fostering transparency and inclusivity. The Facebook group, on the other hand, will act as a dynamic platform for interactive communication, enabling real-time updates, discussions, and networking among students, faculty, and external stakeholders. Together, these digital tools will amplify the network's reach, promote its mission of integrating humanities within STEM, and strengthen collaboration among partners while engaging the global academic and professional community. The Coordinator will be in charge of website design, launch and maintenance. All PPU's will contribute to these communication channels.

## **3. CONCLUSION**

---

The **HUMANISTA** network aims to foster a rich, interdisciplinary collaboration between 15 higher education institutions, combining their strengths in both STEM and Humanities and Social sciences. By positioning the value and importance of fields such as English language studies, psychology, pedagogy, and communication sciences within traditionally STEM-oriented programs, the network emphasizes the critical role that the humanities play in shaping meaningful technological advancements, fostering a holistic approach to education and research that connects technical expertise with an understanding of human society, culture, and behavior.

### **REFERENCES:**

- [1] Funk C. & Parker K. (2018). Diversity in the STEM workforce varies widely across jobs. Pew Research Center, Washington DC, January 9, 2018. Retrieved from: <https://www.pewsocialtrends.org/2018/01/09/diversity-in-the-stem-workforce-varies-widely-across-jobs/>
- [2] Elmenhurst M. (2016). Why English? A Defense of the Humanities in the Midst of STEM Promotion. WWU Honors Program Senior Projects. 30. Retrieved from: [https://cedar.wvu.edu/wwu\\_honors/30/](https://cedar.wvu.edu/wwu_honors/30/)
- [3] Leach J. (2013). STEM and the Humanities: a false dichotomy. Graduate College Distinguished Lecture, University of Illinois at Urbana-Champaign, April 17, 2013. Retrieved from: <https://grad.illinois.edu/sites/default/files/pdfs/leach-lecture.pdf>
- [4] Coskun S., Kayikci Y., & Gencay E. (2019). Adapting Engineering Education to Industry 4.0 Vision. *Technologies* 2019, 7,10, 2-13. DOI:<https://doi.org/10.3390/technologies7010010>
- [5] Youngs G. (2019). Arts, humanities and design skill sets and Industry 4.0. Creative industries Federation. September 3, 2019. Retrieved from:

<https://www.creativeindustriesfederation.com/news/arts-humanities-and-design-skill-sets-and-industry-40>

[6] Deloitte Access Humanities (2018), The Value of Humanities. Retrieved from:

<https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-value-humanities-111018.pdf>

[7] Skorton D & Bear A.(eds), (2018). The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education: Branches from the Same Tree. The National Academies Press, Washington DC, DOI: <https://doi.org/10.17226/24988>

[8] Moro A. (2018). The Humanities are becoming more important. Here's why. World Economic Forum, June 14, 2018. Retrieved from: <https://www.weforum.org/agenda/2018/06/how-a-humanities-degree-will-serve-you-in-a-disruptive-economy>

[9] Kreager P. (2013). Humanity graduates and the British economy: the Hidden Impact. Institute of Human Sciences, University of Oxford, July 2013. Retrieved from:

<https://apo.org.au/sites/default/files/resource-files/2013/07/apo-nid69766-1160886.pdf>

[10] Krsmanović, I. (2019). 'STEMANITIES as a Future Fit Scholarship: Trends and Challenges in Engineering Education for Industry 4.0', JETIE - Journal on Emerging Trends in Industrial Engineering and related fields, Campus 02 Graz, Volume 1. DOI:10.21428/92f19a8b.594c147f, <https://jetie.pubpub.org/pub/vahr7sv5/release/1>