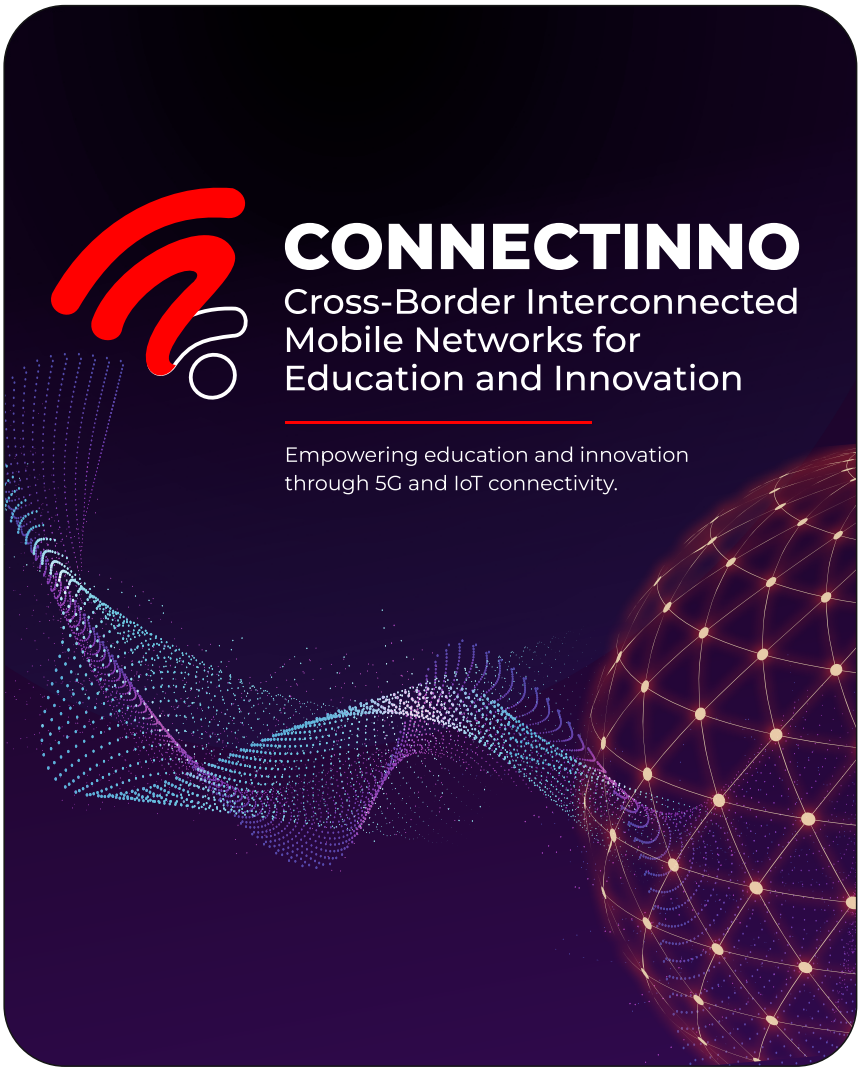
Interreg NEXT Romania - Republic of Moldova

Co-funded by the European Union

"GHEORGHE ASACHI" TECHNICAL UNIVERSITY OF IAȘI

TECHNICAL UNIVERSITY OF MOLDOVA (TUM)



Programme: Interreg VI-A NEXT Romania–Republic of Moldova

connectinno.tuiasi.ro

PROJECT DESCRIPTION

Education and innovation are deeply interlinked engines of sustainable regional development. In an era of digital transformation, **CONNECTINNO** addresses the need to modernize higher education and research through advanced 5G and Internet of Things (IoT) infrastructures.

The project brings together two major technical universities - **TUIASI** and **TUM** - to create a connected educational and innovation ecosystem across the Romania–Moldova border. It aims to enhance teaching, research, and collaboration capacities in emerging technologies, ensuring that students, academics, and local businesses gain access to the tools and skills defining the digital age.

CONNECTINNO establishes modern interconnected laboratories, develops virtual experimentation spaces, and renews academic curricula to reflect the rapid evolution of telecommunications and digital systems. The project also promotes a culture of creativity and innovation by organizing a Summer School, Innovation Days, and professional training sessions for academic staff.

Through this initiative, **CONNECTINNO** supports the EU's vision of an inclusive, green, and digitally empowered society. It represents a strategic investment in the human capital of the cross-border region, ensuring that universities remain catalysts for smart specialization, research excellence, and entrepreneurial growth.

GENERAL OBJECTIVE

The general objective of the CONNECTINNO project is to **improve the quality, relevance, and innovation capacity of higher education in advanced communication technologies** across the Romania–Moldova cross-border area.

By modernizing infrastructure, aligning educational content with the digital and green transitions, and fostering stronger academic–industry collaboration, CONNECTINNO equips students and staff with **future-ready skills** and builds a sustainable bridge between education, research, and innovation.

SPECIFIC OBJECTIVE

EDUCATIONAL MODERNIZATION

The first specific objective is to enhance the academic offer of TUIASI and TUM through a comprehensive update of curricula and teaching methodologies in the fields of 5G, IoT, and smart communication systems.

This objective includes:

- Designing a common educational strategy for cross-border cooperation in digital technologies;
- Updating four academic disciplines to reflect the newest developments in 5G and IoT;
- Training at least 15 academic staff in modern teaching and innovation management methods;
- Testing the new courses with at least 40 pilot students from both universities.

By promoting interdisciplinary education and problem-based learning, CONNECTINNO ensures that graduates are better prepared for careers in technology, research, and entrepreneurship.

INFRASTRUCTURE AND DIGITAL NETWORKS

The second specific objective focuses on modernizing and interconnecting educational infrastructures to create a functional cross-border digital learning network.
Key investments include:

- A 5G Lab Network Cell at TUM, serving as a regional hub for experimentation;
- A 5G Portable Kit at TUIASI for mobile teaching and demonstrations;
- Dedicated 5G-V2X, UWB, and IoT systems enabling advanced research and testing;
- A shared Virtual Learning and Experimentation Space, connecting both universities.

These upgrades provide the technological backbone for collaboration, enabling hands-on learning experiences, research activities, and live demonstrations of connected technologies across both campuses.

INNOVATION AND COLLABORATION

The third specific objective is to foster an innovation-oriented mindset among students and educators by creating opportunities for collaboration, creativity, and entrepreneurship.
Planned actions include:

- Developing a new course on Innovation Management integrated into the academic offer;
- Organizing an international Summer School focused on 5G, IoT, and digital entrepreneurship;
- Hosting Innovation Days featuring workshops, hackathons, and networking sessions with industry partners.

These initiatives promote digital literacy, teamwork, and entrepreneurial thinking—key competences for a competitive, innovation-driven economy.

WORKPLAN

WORKPLAN OVERVIEW

CONNECTINNO is implemented over 24 months, through a series of coordinated activities grouped into thematic work packages. The structure ensures coherence between infrastructure, education, and innovation components, while maintaining transparent and efficient management practices.
Main Work Packages:

- **WP1:** Project Management and Coordination
- **WP2:** Communication and Dissemination
- **WP3:** Infrastructure Upgrade and Digital Connectivity
- **WP4:** Curriculum Modernization and Staff Training
- **Wp5:** Innovation and Cross-Border Engagement

Each package contributes to achieving long-term educational transformation and institutional cooperation in the region.

WORKPLAN DETAILS

- **Wp1 – Project Management:** Ensures smooth coordination, financial transparency, and quality control through regular meetings, progress reports, and monitoring activities.
- **WP2 – Communication:** Develops the project's website, social media presence, and visual identity. Disseminates progress via digital materials, events, and conferences.
- **WP3 – Infrastructure and Connectivity:** Covers the acquisition, installation, and testing of 5G and IoT systems at both universities. Establishes the virtual collaborative platform.
- **WP4 – Education and Training:** Designs updated curricula, organizes pedagogical training for teachers, and tests the new courses with pilot student groups.
- **WP5 – Innovation and Engagement:** Implements Innovation Days, the Summer School, and awareness campaigns promoting digital culture and cooperation between academia and industry.

EXPECTED RESULTS AND IMPACT

CONNECTINNO will deliver tangible results that extend well beyond the project's duration.

Key outputs:

- **2** universities (TUIASI & TUM) actively cooperating in a joint digital network;
- **2** upgraded laboratories and **1** virtual learning space operational;
- **4** curricula modernized with integrated 5G and IoT modules;
- **15** academic staff trained;
- **40** students involved in pilot courses and innovation activities.

Wider impact:

- A stronger cross-border educational ecosystem aligned with digital transformation;
- Increased employability of graduates with advanced technical and soft skills;
- A sustainable innovation culture, linking academia, research, and industry;
- Long-term access to shared 5G and IoT infrastructure for education and applied research.

By combining technological advancement with educational reform, **CONNECTINNO** empowers the next generation of engineers and innovators to build a smarter, more connected future.

PARTNER 1

"GHEORGHE ASACHI" TECHNICAL UNIVERSITY OF IAȘI (TUIASI)

TUIASI is among the oldest and well-known institutions from Romania, having an important tradition in engineering, scientific and cultural education, with a distinguishable presence on the international level.

The university trains engineers with high qualifications, able to respond quickly and efficiently to the requirements of innovation, research and economic development. Moreover, the university caries on programs designed to continuously upgrade the engineers` professional skills imposed by the tendencies appeared at a global level.

The university is highly receptive to the embracement of the European system values, both in education in research, being fully aware of the importance of its both national and international responsibilities.

Auspiciously, the institution plans to develop the curriculum, to join the mobility schemes and the integrated programs of study, education and research.

The Technical University has managed to strengthen its standards and achieve globally certified outstanding progress. Specifically, all of the TUIASI development indicators support that assessment. These include diversification of specialization, the number of students and faculty members, research field decision-making autonomy, international cooperation opportunities and quality of education in most specialties.

The university has resources of intelligence and creativity, as well as the necessary competence for accomplishing the complex mission to generate, preserve, disseminate and apply the accumulated scientific knowledge. It is concerned with establishing a system for quality assurance and academic excellence in teaching, scientific research and education, system based on the criteria and the methodologies compatible with those from the European countries.

www.tuiasi.ro

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PARTNER 2

TECHNICAL UNIVERSITY OF MOLDOVA (TUM)

Technical University of Moldova is one of the biggest universities of Republic of Moldova, specialised in technical education and research.

The educational process is structured in three cycles/levels according to the Bologna Process: BSc, MSc and PhD, assured by more than 700 academic staff, about 70% of them holding scientific and didactic degrees.

TUM offers about 115 study programs, accredited nationally and internationally, at all three cycles in: energetic, mechanics, ITC, civil engineering, food technology, apparel, urbanism and architecture; as well in economic engineering and cadastral law, which are followed by more than 8 thousand students at the moment. TUM offers long life learning study programs through its Centre of Continuous Learning in the mentioned above fields. Scientific research is organised within six investigation centres, with results recognised nationally and internationally, being in TOP Highly Cited Researchers (WoS).

TUM is the member of university associations, as: EUA, AUF, DRC, BSUN; has relationships with more than 150 universities and research centres worldwide.

TUM has been involved as a partner in more than 50 international projects of capacity building within the framework of TEMPUS/Erasmus projects, more than 40 Erasmus+ projects of credit mobility and more than 250 international and national research projects. The University is member Alliance of Francophone Universities and has more than 12 projects implemented with them, is partner in CEEPUS project and other inter-institutional projects.

The University also assumes its own mission as a catalyst for the development of Moldovan society by creating an innovative and participatory environment for scientific research, learning and creation, transferring skills and knowledge to the community through the education, researching and consulting services, provided to economic and socio-cultural environment.

The vision of the Technical University of Moldova is to be a national leader in the field of higher technical education, in fundamental and applied scientific research and to be among the best universities nationally and regionally.

www.utm.md

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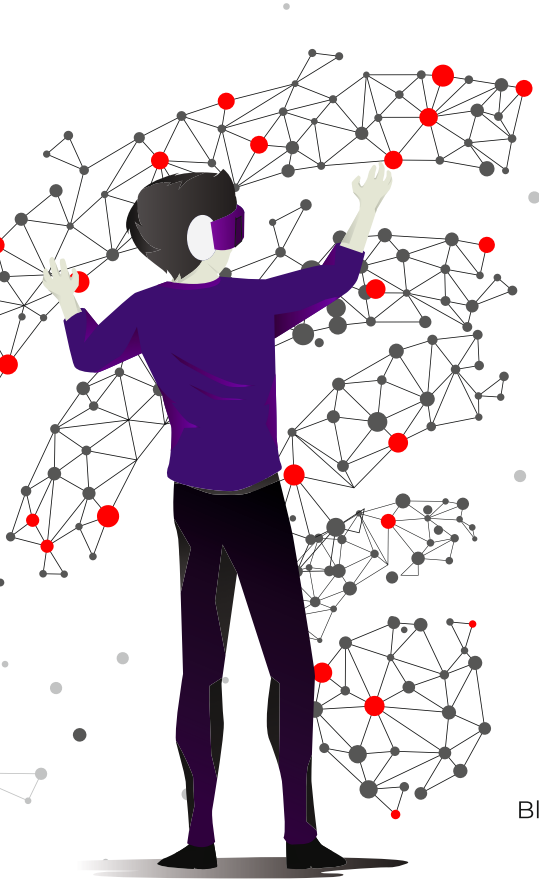

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