Ulysseus R&I Conference 2025

Navigating Pathways: Digital Transformation of Industry

20 October 2025
Technical University of Košice, Slovakia

Conference Topics

Ulysseus
EUROPEAN UNIVERSITY

Conference Description

Ulysseus European University aims to foster joint research and innovation activities across the alliance by creating an integrated and inclusive innovation ecosystem rooted in its eight Ulysseus Innovation Hubs.

One of the key instruments supporting this goal is the organization of regular Ulysseus Research & Innovation (R&I) Conferences. These conferences serve as a dynamic platform for knowledge exchange and community building— bringing together researchers, innovators, start-ups, students, and regional stakeholders to present results, share expertise, and explore collaborative opportunities. With a focus on applied research, young researchers, and talent matchmaking, the conferences play a vital role in strengthening internal networks, supporting innovation-driven territorial transformation, and showcasing Ulysseus as a driver of excellence in European R&I cooperation.

The Ulysseus R&I Conference 2025, hosted by the Technical University of Košice (TUKE), encourages researchers, innovators, startups and young researchers to converge and share insights under three focused tracks:

Track 1	Track 2	Track 3
Digital Transformation of Industry	**Universities as a Driving Force of Digital Innovations**	**Sustainability of Digitalisation**

The conference focuses on discussing current trends in the digital transformation of industry in various fields of research and technology. Importance for the development of science, technology, and innovation and for the connection of academia and industry.

Event Highlights

- Inspiring keynote talks
- Parallel speaker sessions
- Technical workshops on European Digital Innovation Hubs, Ulysseus Living Labs and Ulysseus satellite projects
- Art&Tech session
- Dynamic poster session
- Young Researcher Award ceremony spotlighting emerging talent within our European University.

Conference Topics

Track 1: **Digital Transformation of Industry**

Digital transformation is the process through which companies and industries leverage digital technologies to enhance, streamline, and modernize their operations, products, and services. It represents a profound shift impacting all areas of an organization — including production, logistics, sales, maintenance, management, and customer service. Key components of industrial digital transformation include:

- **Internet of Things (IoT)** – connecting devices and systems for smarter operations.
- **Industrial Internet of Things (IIoT)** – specialized IoT applications for industrial environments.
- **Digital twins** – creating virtual replicas of physical systems for simulation and analysis.
- **Automation and robotics** – including collaborative robots (cobots) for flexible production.
- **Smart manufacturing** – integrating digital tools into the entire production process.

- **Big data** – collecting and analysing vast amounts of information for informed decision-making.
- **Artificial intelligence (AI)** – enabling intelligent decision-making and process optimization.
- **Machine learning (ML)** – allowing systems to learn and improve over time.
- **Cybersecurity** – protecting digital assets and infrastructure.
- **High-performance computing (HPC)** – providing the power to process complex industrial data.

Track 2: **Universities as a Driving Force of Digital Innovations**

Universities play a crucial role in driving digital transformation — not only as education providers but also as hubs of innovation, research, and collaboration with industry and public institutions.

The conference track 2 focus areas include:

- **Research centres** – fostering cutting-edge digital innovation.
- **Industry collaboration** – building strong partnerships with the private sector.
- **Education of digital leaders and coaches** – preparing skilled professionals for the digital age.

- **Innovation ecosystems and start-ups** – supporting entrepreneurship and knowledge transfer.
- **Sharing best practices** – promoting successful models and strategies across institutions.

Track 3: **Sustainability of Digitalisation**

The sustainability of digitalisation means that digital development and technologies should be not only innovative and efficient but also environmentally friendly, socially responsible, and economically viable in the long term. While digital technologies can reduce resource consumption, they may also introduce new environmental and social challenges.

Key aspects of the conference track 3 include:

- **Smart energy optimisation** – using intelligent systems (e.g., smart grids) to improve energy efficiency.
- **Efficient logistics** – enabled by data analytics and artificial intelligence.
- **Circular economy approaches** – integrating economic and environmental perspectives.
- **Digital education** – to build skills for a sustainable and digital future.

- **Green digital technologies** – promoting energy-efficient and low-impact digital infrastructure.
- **Digital inclusion** – ensuring equal access to digital tools and opportunities for all.
- **Cybersecurity and online well-being** – addressing risks such as cyberbullying and digital abuse.
- **Reduced need for physical travel** – thanks to online meetings, remote work, and digital collaboration.

Your Contribution to the Program

We encourage researchers, innovators, start-ups and partners to participate in the programme in several ways:

- **Presentation in a parallel session** – please, see more information in the Call for Speakers.
- **Presentation in technical sessions on living labs, Ulysseus satellite projects, Ulysseus joint R&I groups or Art&Tech session** – please, see mor information in the Call for Speakers.
- **Presentation in a poster session** – please, see mor information in the Call for Posters.

If you have suggestions for potential researchers, innovators or start-ups who might be relevant to the conference, please reach out to us.

Event Organiser and Venue

The event is organised by the [Technical University of Košice](#) in Slovakia, as an activity of Ulysseus European University and part of the Ulysseus Košice Week.

The Technical University of Košice (TUKE), established in 1952, is Slovakia's flagship technical university, offering more than 100 study programmes to nearly 10,000 students across nine faculties. Nestled in the vibrant, student-friendly city of Košice, TUKE blends research-led teaching with an entrepreneurial spirit. TUKE blends research and teaching with an entrepreneurial spirit.

The conference will be held in the [University Science Park TECHNICOM](#). The science park anchors a dynamic ecosystem for technology transfer, start-ups entrepreneurship, and many innovation initiatives (European Digital Innovation Hub CASSOVIUM included), making Košice a hotspot for sustainable, digital innovation.

Ulysseus Košice Week

The Conference is a part of the Ulysseus Košice Week.

Running **20 – 24 October 2025** at the Technical University of Košice, **Ulysseus Košice Week** is set to be the alliance's flagship multi-event of the year, packaging twenty back-to-back activities into one vibrant programme. Alongside high-level governance meetings such as the Ulysseus Summit and Governing Council, the week weaves in ten internal project sessions, specialised workshops and student assemblies while opening its doors to the wider community through four headline public events: the Ulysseus R&I Conference on Digital Transformation of Industry, the presentation of Ulysseus Innovation Hub at TUKE, an Equality–Diversity–Community Engagement forum and the art-and-science session Creative Playgrounds. By blending strategic project work with outward-facing forums on digitalisation, entrepreneurship, inclusion and the arts, Ulysseus Košice Week will transform [Košice](#) into a living laboratory of Ulysseus research, innovation and civic engagement, showcasing the alliance's impact across Europe.
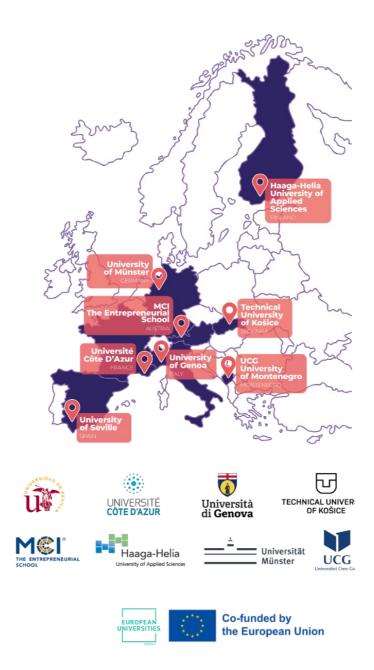
Registration and More Information

Registration open: 15 August 2025 – 30 September 2025

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                                  Conference website