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# **BIP - CREATIVE DIGITAL TOOLS / DATA VISUALIZATION #2**

**Date: 05/05/25 – 09/05/25**

**Location: Košice, Slovakia**

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**BIP TITLE:****Creative Digital Tools / Data Visualization****(Course #2)**

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**General Course Information**

- Course Description: **This BIP event, Creative Digital Tools – Data Visualization #2, is a continuation of the successful BIP Part #1, which focused on understanding the meaning and use of data, as well as exploring creative possibilities for working with data sets. This new edition emphasizes enhancing and expanding skills in digital tools for data visualization, with a focus on both artistic and scientific applications. Creative Digital Tools – Data Visualization #2 is organized by TUKE in cooperation with Ulysseus universities.**
- **Ulysseus Priority topics:**
  - ☒ Digital transformation of industry
- Target group:
  - ☒ Students
  - ☐ Non-academic staff
  - ☐ Academic staff
- Level (for students):
  - ☒ Bachelor
  - ☒ Master
  - ☒ PhD
- Field of study: Data visualization and digital interaction

- Course dates from  
**28/04/25 to 02/05/25** (virtual part)  
**05/05/25 to 09/05/25** (physical part)
- Registration dates are open from **10/03/25 to 07/04/25** (online)

## Course Content

- Course Outline:
  - This BIP event, Creative Digital Tools – Data Visualization #2, is a continuation of the successful BIP Part #1, which focused on understanding the meaning and use of data, as well as exploring creative possibilities for working with data sets. This new edition emphasizes enhancing and expanding skills in digital tools for data visualization, with a focus on both artistic and scientific applications. Within the selected areas, groups of participants will solve different real-life situations using real-time simulations. During the course we will use various digital software tools which can be used both in arts and technical fields. The aim of the course is to improve the multidisciplinary thinking and approach and also skills in digital and virtual space. Since the aim of the course is to CONNECT seemingly disparate things, the topics will have an interdisciplinary basis. A special feature of this course is the implementation of its part in the form of in-field exploration and interventions in a real environment during the physical part of the mobility. Creative Digital Tools – Data Visualization #2 is organized by TUKE in cooperation with Ulysseus universities and also supporting the Ulysseus European Alliance concept.
- Course content:
  - Define Objectives
  - Collect and Prepare Data
  - Explore and Analyze Data
  - Select the Right Visualization Type

- Design of the Visualization
- Deploy and Share the Visualization
- Evaluate and Iterate
- Learning Outcomes:
  - Following this course students are expected to achieve several key learning outcomes. These outcomes ensure that students are equipped with the skills and knowledge needed to effectively create, interpret, and utilize data visualizations in various contexts. Here are the learning outcomes: Understanding of Data Visualization Principles, Technical Skills in Visualization Tools, Use Visualization Software, Create Visualizations, Design and Aesthetics, Design Principles, Effective Use of Color and Layout, Storytelling with Data, Narrative Techniques, Contextual Communication, Interactive and Dynamic Visualizations, Create Interactive Dashboards, Real-time Data Visualization, Ethical Considerations and Data Integrity, Ethical Use of Data, Avoiding Misleading Visualizations, Communication and Presentation Skills, Presenting Visualizations etc.

## Course Practical Details

- Practical Details
  - Start date virtual part: **April 28th, 2025**
  - Start date of the physical part: **May 5th, 2025**
  - Teaching language: English
  - Location: Kosice, Slovakia
  - ECTS: BIP full participants (online + physical participation): **3 ECTS**;  
BIP partial participants (only physical participation): **2 ECTS**
  - Workload: approx. **75 hours**
  - The maximum number of participants for the BIP:
    - BIP participants: **minimum 20 – maximum 30**
    - Only Erasmus+ Mobility participants: maximum 5
    - Self-payer participants: maximum 5

- Contact: [richard.kitta@tuke.sk](mailto:richard.kitta@tuke.sk); [manuela.raisova@tuke.sk](mailto:manuela.raisova@tuke.sk)

## Physical Mobility

- The physical mobility part will be running from 5th to 9th May 2025 in Kosice, TUKE.
  - The focus of the seminar is the

	Morning	Afternoon
Day 1 05/05	<b>Welcome Venue: UVP TECHNICOM / TUKE</b>  <b>AM (9:00 – 13:00)</b> <b>Registrations</b> <b>Welcome drink!</b>  <b>Plenary Talks: Creative Digital Tools for Data Visualization</b>  <b>Coffee &amp; Fruit Break (11:00 – 11:30)</b>	<b>PM (14:00 – 16:00)</b> <b>Round table on specific topics</b> <b>Q &amp; A / Expert Talks</b> <b>Creating groups</b>  <b>Lunch Break (13:00 – 14:00)</b>
Day 2 06/05	<b>Venue: UVP TECHNICOM / TUKE</b>  <b>AM (9:00 – 13:00)</b> <b>Expert lectures</b>  <b>Coffee &amp; Fruit Break (11:00 – 11:30)</b>	<b>PM (14:00 – 16:00)</b> <b>Workshop #1</b>  <b>Lunch Break (13:00 – 14:00)</b>
Day 3 07/05	<b>Venue: Visiting / selected outdoor regional spots</b>  <b>AM (9:00 – 13:00)</b>	<b>PM (14:00 – 16:00)</b> <b>Workshop #2</b>  <b>Lunch Break (13:00 – 14:00)</b>
Day 4 08/05	<b>Venue: UVP TECHNICOM / TUKE</b>  <b>AM (9:00 – 13:00)</b> <b>Expert lectures</b>  <b>Coffee &amp; Fruit Break (11:00 – 11:30)</b>	<b>PM (14:00 – 16:00)</b> <b>Workshop #3</b>  <b>Lunch Break (13:00 – 14:00)</b>

Day 5 09/05	<b>Venue:</b> <b>UVP TECHNICOM / TUKE</b>  <b>AM (9:00 – 13:00)</b> <b>Final projects presentations and discussion</b>  <b>Coffee &amp; Fruit Break (11:00 – 11:30)</b>	<b>Lunch Break (13:00 – 14:00)</b>  <b>Farewell drink</b>
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- All times above are in CET time zone.

## Virtual Component/Part

- Webinars will run on selected online platform tool (to be specified later by e-mail)
- **1st ONLINE WEEK SESSIONS – 28/04/25 to 02/05/25**
  - Set of Webinars 01 – [Creative Exploring and Analyzing Data]
  - Set of Webinars 02 – [Using the Interactive Digital Environments]

## Requirements

Basic Requirements:

- Students – Bachelor level (minimum 3rd year of study) + Master level
- Equipment: personal laptops
- Deadline for accepting applications - **07th April 2025** (*Please be aware that your home university may set a different application deadline depending on their internal selection process*).
- Required documents: CV and short bio, personal contact details
- BIP part #2 is open for participants who did not attend part #1 but only in case their knowledge about the project's topic is more advanced.

## Professors

Team of lecturers and experts consist of those selected from different TUKE departments and CORE Labs (Faculty of Arts, Faculty of Economics and others) as well as from various partner Ulysseus universities.