| | |
|---|---|
| Project Title | **Boosting Smart Specialization and Encouraging Spin-offs in IT across Danube Region** |
| Call | **Danube Region Programme** |
| Project number | **DRP0200277** |
| Coordinator | **ZEDA** |
| Project duration | **30 months 0 days** |
| Project website | (to be filled) |
| Specific objective | **Creating a framework outlining the obligatory elements of each curriculum/methodology to be developed. This framework should align with the project goals and the developed LAP.** |
| Activity | **Activity 2.2 Next-gen Pilot Projects for Smart Specialization and IT** |

# SpinIT

| **Reporting Template for Deliverable D.2.2.3 Development / Selection of appropriate methodology / curriculum for pilot project implementation** | | | |
|---|---|---|---|
| Due date: | DD.MM.YYYY (to be filled) | Actual submission date: | DD.MM.YYYY (to be filled) |
| Organization: | University of Pannonia (UP) | Authors: | Tibor Holczinger, Dániel Kulcsár, Péter Balogh |
| Status:<br><br>Final (F)<br>Draft (D)<br>Revised draft (RV) | D | Dissemination level:<br>Public (PU)<br>Confidential, only for members of the consortium (CO) | (to be filled) |

Interreg Danube Region

Co-funded by the European Union

SpinIT

# Table of Contents

Interreg Danube Region

Co-funded by the European Union

SpinIT

## 1. TP and pilot project identification

Please provide information about yourself and your selected pilot project.
*Use the following table as a template.*

| Territorial Partner (TP) | |
|---|---|
| Name of the organization in original language | Evropská rozvojová agentura, s. r. o. |
| Name of the organization in English | European Development Agency |
| Organization abbreviation | EUDA |
| **Pilot project** | |
| Name of the pilot project | ICT Cross-Sector Traineeship and Mentorship Program |
| Name of the lead organization in original language | Evropská rozvojová agentura, s. r. o. |
| Name of the lead organization in English | European Development Agency |

Interreg Danube Region | Co-funded by the European Union

SpinIT

## 2. Introduction of the selected pilot project

This pilot project—**ICT Cross-Sector Traineeship and Mentorship Program**—is designed to bridge the gap between academic knowledge and real-world ICT industry needs by connecting university students with professionals from the private sector, academic institutions, and non-governmental organizations. Through a blend of traineeships and mentorships, students are immersed in environments where they can apply theoretical knowledge to practical challenges in digital transformation, artificial intelligence (AI), smart manufacturing, and emerging technologies.

A core strength of the program lies in its collaboration with **host organizations and mentors who are actively involved in EU-funded projects**. By integrating students into these real, ongoing initiatives, the program ensures that participants are **immersed in professional environments** where they can apply their theoretical knowledge to concrete challenges in areas such as smart manufacturing, AI-driven business processes, and digital transformation in public services and SMEs.

In addition to technical training, the pilot incorporates a **structured introduction to EU project management and funding**, equipping students with practical knowledge of grant mechanisms, proposal writing, budgeting, and transnational cooperation. This dual focus—technical and project-based—helps participants understand both the "what" and the "how" of innovation in the EU context.

The pilot places a strong emphasis on **cross-sector collaboration**, encouraging knowledge exchange between industries and sectors. Students work directly on live projects with host organizations, gaining exposure to real-time challenges and innovation practices within the Danube Region. This fosters critical thinking, adaptability, and technical proficiency.

In alignment with **Smart Specialization Strategies (S3)** and the broader goals of the **EU Strategy for the Danube Region (EUSDR)**, the program supports regional innovation ecosystems by upskilling future ICT professionals, encouraging entrepreneurial mindsets, and reinforcing partnerships between academia, industry, and civil society. The expected long-term impact includes increased employability of young talent, enhanced institutional capacity for digital innovation, and the creation of scalable training models for use in other regions.

## 3. Learning objectives

Please explain what the expected results of the pilot project are.
*Use the following table as a template.*

| | |
|---|---|
| Field to be developed<br>Select one or more. | • Smart Specialization<br>• Industrial Transformation<br>• Industry 4.0 Transition |
| Skills and key competences to be developed | - Digital innovation and transformation skills<br>- Application of AI and smart technologies in practical settings<br>- Hands-on experience with 3D printing, smart manufacturing, and digital tools<br>- EU project management and funding knowledge (e.g., Horizon Europe, Erasmus+)<br>- Communication, teamwork, and cross-sector collaboration<br>- Entrepreneurial thinking and adaptability |
| Specific learning outcomes and results | - Students will gain first-hand experience by contributing to real EU-funded projects hosted by businesses, universities, and NGOs.<br>- Participants will understand the end-to-end lifecycle of EU projects, including funding applications, partner cooperation, and implementation.<br>- Trainees will develop the ability to translate theoretical ICT concepts into real-world solutions, especially in digitalization and AI.<br>- The program will enhance students' employability and readiness to join the ICT workforce or pursue entrepreneurial paths.<br>- Mentorship will foster soft skills development (communication, time management, initiative), while workshops and applied tasks will reinforce technical proficiency.<br>- Organizations involved will benefit from fresh perspectives and potential future talent, strengthening regional innovation capacity. |

## 4. Teaching and Learning Methods

Please explain the methodology for conducting the pilot project.
*Use the following table as a template.*

| Pilot project implementation and knowledge transfer | |
|---|---|
| Way<br>Select one or more. | In person<br>Hybrid<br>Online (e.g. digital platform, e-learning)<br>Other (such as): |
| Description | The pilot will be delivered through a blended model combining in-person or online traineeships and mentorship, and in-person workshops. Students will be placed in host organizations actively engaged in EU-funded ICT projects, allowing them to work on real-time digital transformation initiatives. Online components include preparatory training, resource sharing, and follow-up sessions. |
| Instructional approaches | |
| Instructional approach<br>Select one or more. | Lectures<br>Workshops<br>Other (such as): Mentorship, Practical Internships, Project-based learning |
| Description | Students will participate in interactive workshops focused on EU project funding, ICT trends, and soft skills. These are supplemented by structured mentorship sessions and traineeships, where students contribute to actual tasks within host organizations (e.g., proposal drafting, research, implementation). Learning is experiential, contextual, and personalized. |
| Methodologies | |
| Assessments<br>Select one or more. | Preliminary-pilot knowledge test<br>Post-pilot knowledge test<br>Mid-term exam<br>Final exam<br>Other (such as): Reflective feedback session |
| Description | Students will be assessed based on their participation in traineeships, contribution to assigned tasks, and completion of a post-program self-assessment and feedback survey (satisfaction survey). Host mentors will |

| | |
|---|---|
| | also provide an evaluation of performance and engagement during the traineeship. |
| Feedback<br>Select one or more. | Preliminary-pilot knowledge test<br>Post-pilot knowledge test<br>Mid-term exam<br>Final exam<br>Other (such as): Mentors/Hosts evaluations, Students' feedback (satisfaction survey) |
| Description | Feedback will be collected from students, mentors, and participating organizations to evaluate learning outcomes, the relevance of the content, and overall satisfaction. A feedback loop will be established to refine future iterations of the program. Group debriefs and one-on-one reflection meetings will also be held - if requested - to support personalized development. |

Interreg Danube Region | Co-funded by the European Union

SpinIT

## 5. Structure and content

Please draft the planned curriculum and schedule of the chosen pilot project. This must include:

- theoretical and practical parts
- training framework (units/timeframes): full list of modules with name and duration

*Use the following table as a template.*

| | |
|---|---|
| Duration | 3 Months (March – June 2025)<br>March: Curriculum preparation & stakeholder engagement<br>April: Program implementation starts<br>May: Active traineeships, workshops, mentoring<br>June: Evaluation and final reporting |
| Teaching topics<br>Please provide a list of topic titles. | • ICT & Digital Transformation<br>• EU Project Management & Funding<br>• Cross-Sector Collaboration & Soft Skills |
| Learning aims | • Understand and apply key digital technologies (AI, smart manufacturing, 3D printing)<br>• Develop basic EU project management skills<br>• Gain insight into cross-sector collaboration<br>• Improve practical problem-solving and workplace readiness<br>• Strengthen communication and teamwork skills through real-world tasks |
| Methodologies<br>e.g. learning video of 5 minutes, quiz, word cloud via Mentimeter | • Mentorship meetings and check-ins<br>• Interactive workshops (on-site and virtual)<br>• Real-world project participation<br>• Peer discussions and reflection groups |

Please provide information about each teaching topic.

| | ICT & Digital Transformation |
|---|---|
| Duration | Depending on the duration of the traineeship, based on student availability and the needs of the host organization. |
| Content | **3D printing basics:** Introduction to additive manufacturing technologies; examples from industry; |

| | |
|---|---|
| | how 3D printing supports digital innovation<br><br>**Smart manufacturing**: Overview of Industry 4.0 principles; IoT integration in manufacturing; benefits and challenges<br><br>**AI in business:** Real-world applications of AI in decision-making, automation, and optimization in business services. |
| Methodology<br>e.g. watching a video, answering quiz questions via Kahoot | Live demonstration, visual case studies, group discussion<br>Video explainer, practical examples from host organizations<br>Interactive presentation |

| EU Project Management | |
|---|---|
| Duration | Depending on the duration of the traineeship, based on student availability and the needs of the host organization.<br>2 hours per workshop / 2-3 workshops |
| Content | **EU grant structures:** Introduction to key EU funding programs (e.g., Horizon Europe, Erasmus+, Interreg); comparison of national vs. international grants<br><br>**Project lifecycle:** Overview of the full lifecycle of an EU project: from call analysis to proposal, implementation, reporting, and evaluation<br><br>**EU portals and partner finding:** Hands-on session navigating the EU Funding & Tender Portal; tips for identifying suitable calls and finding cross-border partners |
| Methodology<br>e.g. watching a video, answering quiz questions via Kahoot | Workshops provided by EUDA.<br>Presentation + discussion, visual mapping of funding programs, Q&A<br>Interactive timeline walkthrough, real-world project |

| | |
|---|---|
| | example, guided discussion<br>Live tutorial, participant walkthrough, simulation activity |

| Cross-Sector Collaboration | |
|---|---|
| Duration | Depending on the duration of the traineeship, based on student availability and the needs of the host organization. |
| Content | **Case studies:** Review of successful cross-sector EU projects (e.g., academia-business-public partnerships); lessons learned and key takeaways<br><br>**Practical teamwork:** Principles of effective teamwork in digital projects; roles, responsibilities, and collaboration tools<br><br>**Communication skills:** Best practices in professional communication; intercultural awareness; remote collaboration |
| Methodology<br>e.g. watching a video, answering quiz questions via Kahoot | Presentation of 2–3 brief case studies followed by group discussion and reflection<br>Scenario-based roleplay, team challenge activity, debriefing session<br>Interactive workshop, peer feedback, short simulation exercises |

## ➢ Resources

Please provide a list of resources (books, journal articles, surveys, softwares etc.) used during the pilot project implementation below.

**Online Platform:**

- EU Funding & Tender Portal: for live demonstrations and navigation exercises

-Models provided by EUDA:

- ➢ Digital Upgrade skilling of SMEs and self-enterprises project; E-Learning platform & Serious game for SME's managers and self-entrepreneurs: https://campusgeinnovaikigai.com/login/index.php?c=_digitup
- ➢ 3DPrintED project - Enhancing Education with 3D Printing: https://3dprinted.euda.eu/

**Documents & Guides:**

- EUDA's internal guides on project writing and EU calls
- Sample proposals and evaluation forms from Interreg and Erasmus+

**Software Tools:**

**ICT / Digital Innovation Tools**

- AI Tools:
  - *ChatGPT* – for content generation, idea development, and drafting
  - *Runway ML*, *Teachable Machine* – for experimenting with machine learning
  - *Notion AI* – for planning and automation insights
- 3D Printing Tools:
  - *TinkerCAD* – for basic 3D modeling
  - *Ultimaker Cura*, *PrusaSlicer* – for slicing and preparing print jobs
- Interactive Tools:
  - *Genially* – for multimedia training materials
  - *Miro* – for visual collaboration and design thinking

**EU Project Management & Funding Tools**

- Funding Platforms:
  - *EU Funding & Tenders Portal*, *Interreg*, *Erasmus+* – for grant discovery and simulation
- Workshop & Training Tools:
  - *Mentimeter* – for interactive knowledge testing and live polls

- Project Coordination:
    - *Trello*, *Asana*, *Google Drive / OneDrive* – for managing project activities and document sharing

**Technology** **Access:**

- Host organizations provided access to tools related to 3D printing, automation systems, or AI platforms, depending on the traineeship setting

Additionally, please provide any resources that may be needed or could be useful moving forward.