FUNDING PROGRAMME: Erasmus+

SUBPROGRAM: Higher Education

PROJECT TITLE /ACRONYM:
Software tools for textile creatives – OptimTex

CONTRACT NO.: 2020-1-RO01-KA203-079823

TOTAL PROJECT BUDGET: 196.724 Euro **INCDTP'S BUDGET:** 33.431 Euro

PROJECT STARTING DATA: 01.12.2020 **PROJECT ENDING DATA:** 30.11.2022

PAGINA WEB: https://optimtex.eu/

PARTNERS:

CO: INCDTP - Bucharest

P1: TecMinho / University of Minho - Portugal

P2: Ghent University – Belgium

P3: University Maribor – Slovenia

P4: Technical University "Gh. Asachi" – Iasi

P5: University of West Bohemia – Czech Republic

GENERAL OBJECTIVE:
Improving knowledge and skills for software applications in textiles (https://optimtex.eu/instrument.php).

EXECUTION PHASES:
O1. Course of textile software applications.
O2. Instruments for applying software solutions within textile enterprises.
O3. Tools for multi-lingual support and organization of intensive study programs.

SCIENTIFIC CONCEPT:
Strategic goal of Industry 4.0 is to promote manufacturing to become more digital, customized and green. In order to support adaptation of textile creatives towards this goal, OptimTex offers educational modules on textile design software focused on:
- Design and modelling phase of textile structures;
- Modern textile end-products, such as electronic textiles (e-textiles);
- Concept from practice to theory – practical examples based on theory (Design Based Learning);
- Content linked by e-learning instrument with navigation button .

EXPECTED EXPLOITABLE RESULTS:
Improved knowledge and skills in the European textile and clothing industry.

OBTAINED RESULTS:
5 educational modules on textile software in complementary fields:
• Design and modelling of woven structures

• Design and modelling of knitted structures
• Design and modelling of garments by 3D scanning software and CAD/PDS software
• Design and modelling of embroidered structures
• Software for research experimental design
3 guides for TechTransfer:
• One Guide regarding technology transfer of textile software solutions into the industry
• One SWOT analysis
• Survey results of textile enterprises
E-learning resources:
• Moodle E-learning platform with 6 courses in national languages (www.advan2tex.eu/portal/) .
• One e-learning instrument with direct access in English on project website www.optimtex.eu TAB Instrument
• One multimedia page on project website TAB Multimedia
• Multilingual Glossary with 120 modern textile terms and definitions on project website TAB Glossary
Organizing LTT and Multiplier events:
- 60 HEI students trained in 3 Intensive Study Programs and 178 young professionals involved in 10 Multiplier events and a total number of 140 dissemination activities.

DISSEMINATION, PATENT APPLICATIONS, AWARDS:

- **WoS published papers: 1**

1. Catalin Grosu, Ion Razvan Radulescu, Emilia Visileanu, Razvan Scarlat, The design of experiments in the field of technical textiles as an educational module, Industria Textila, 2023, 74, 2, 217–222, http://doi.org/10.35530/IT.074.02.202266

- **Scopus published papers: 3**

1. Ion Răzvan Rădulescu, Carmen Ghițuleasa, Emilia Visileanu, Luis Almeida, Benny Malengier, Zoran Stjepanovic, Mirela Blaga, Petra Dufkova, E-Learning Instruments For Design Based Learning In Textiles, Proceedings of the 17th International Scientific Conference eLearning and Software for Education Bucharest, April 22-23, 2021, 10.12753/2066-026X-21-162

2. Ion Razvan Radulescu, Catalin Grosu, Razvan Scarlat, Ana Dias, Benny Malengier, Zoran Stjepanovic, Mirela Blaga, Radek Polansky, E-learning instrument and glossary of terms for design and modelling of textiles, Proceedings of the 18th International Scientific Conference eLearning and Software for Education Bucharest, April 2022, 10.12753/2066-026X-22-000

3. Ion Razvan Radulescu, Emilia Visileanu, Razvan Scarlat, Marian Catalin Grosu, Ana Dias, Benny Malengier, Zoran Stjepanovic, Mirela Blaga, Radek Polansky, Impact of intensive study programs on higher education students in the field of design and modelling of textile materials, Proceedings of the ICAMS 2022 international conference on advanced materials.

- **BDI published papers: 2**

1. Ion Răzvan Rădulescu, Raluca Maria Aileni, Adrian Săliștean, Emilia Visileanu, Carmen Ghițuleasa, Formarea specialiștilor in domeniul aplicațiilor software pentru proiectarea materialelor textile, Buletinul AGIR 4/2021, https://www.buletinulagir.agir.ro/articol.php?id=3237

2. Ion Razvan Radulescu, Raluca Maria Aileni, Adrian Salistean, Sabina Olaru, Catalin Grosu, Razvan Scarlat, Irina Sandulache, Training of textile creatives in the field of e-textiles design software, Proceedings of the TEXTEH10 international conference.

- **Scientific communications: 1**

1. Ion Razvan Radulescu, Raluca Maria Aileni, Adrian Salistean, Emilia Visileanu, Carmen Ghituleasa, E-learning pentru proiectarea materialelor textile prin aplicatii software, Workshop Nucleus project AkSuTex, May 2021

CONTACT PERSON:

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