Co-funded by the European Union

Erasmus+ program – Action KA210-VET

Small-scale partnerships in vocational education and training – VET

Grant agreement n° 2022-2-IT01-KA210-VET-000099946 – CUP G61B22002580006

"Sustainable Textile"

SUSTAIN TEXT

Attachment 7 - VET Curricula

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Introduction

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Introduction

Among the activities of the SUSTAIN TEXT project, during the activity "A2.2: Guideline on how to use the identified methods practically and how they can reduce the negative impact of the industry on the climate", the partners transformed the theoretical analysis done in the activity"A2.1: Research on the possible approaches for improving sustainable design" into practical ones highlighting how the methods can be used practically in the sustainable design and in which phase of the textile industry underlining also how that is helping with reducing the negative impact on the climate.

The results of this activity (R2.2) but also of the project in general is the creation of a VET Curricula aimed at teaching the Textile industry players how to achieve high levels of separate collections of textile waste and promote more sustainable production processes.

Following the VET Curricula:

Vocational Education and Training curriculum

Welcome to the innovative Vocational Education and Training (VET) curriculum developed as part of the "Sustainable Textile" project. This comprehensive curriculum is meticulously designed to equip stakeholders in the Textile industry with the knowledge and skills necessary to excel in sustainable practices, emphasizing high levels of textile waste segregation and promoting environmentally conscious production processes.

Project Focus - R2.2:
The core focus of this curriculum is in response to R2.2, aiming to create a dynamic educational framework that addresses the critical need for sustainable practices within the Textile industry. It specifically targets the achievement of elevated levels of separate collections of textile waste and the advancement of sustainable production processes.

- **Project Priorities in Alignment with Objectives:**

Adapting Vocational Education and Training to Labor Market Needs:
This curriculum strives to be at the forefront of vocational education by offering a balanced mix of skills and creating work-based learning opportunities finely tuned to economic cycles, emerging job roles, evolving work methodologies, and key competences. The qualifications provided will be regularly updated, ensuring they align with the dynamic nature of the industry.

- **Contributing to Innovation in Vocational Education and Training:**

In line with the broader project objectives, this curriculum seeks to revolutionize the practice of VET. By actively responding to the current and future needs of the economy and society, the curriculum serves as a catalyst for positive change, particularly in the context of addressing climate change challenges.

Introduction

- **Creation of New, Innovative, or Collaborative Curricula or Courses:**

The "Sustainable Textile" project goes beyond traditional approaches by accelerating the transition towards sustainability. This curriculum is not confined to a single institution but is designed to be adaptable and applicable in any VET school. It is anchored in research, highlighting various approaches for enhancing design for sustainability.

COURSE DETAILS:

Explore the details of the 300 hours VET curriculum that follows, dedicated to imparting essential knowledge, fostering acquired capacities, and promoting a holistic understanding of sustainable practices in the Textile industry. This curriculum is a gateway to a future where education aligns seamlessly with the industry's evolving landscape, making a significant impact on both professionals and the environment.

Syllabus:

Expertise	Know-how	Skills	Training Unit/Course	Hours
Defining the business quality plan of a textile industry	• Business organisation principles • Legislation on the protection of workers' health and safety • Textile manufacturing processes • Quality system • EN ISO Standard	• Use reporting tools • Apply quality control methodologies • Apply procedures for analysing critical points in the production process • Apply cost/benefit analysis techniques of a quality plan • Apply quality system improvement procedures	Strategies for Achieving High Levels of separate collections of textile waste	15
				15 LABORATORY
			Approaches for improving design for sustainability	10
				10 LABORATORY
			Understanding the complex environmental challenges faced by the Textile industry	10
				10 LABORATORY
			Principles of Sustainable Design in the Textile Industry	15
				15 LABORATORY
			Sustainable Textile Certifications	20
			Integrating 3D Printing Technology in Sustainable Fashion	10 LABORATORY

Monitoring the quality of the textile production process	• Techniques for measuring variances • Quality control methodologies for production processes • EN ISO Standard • Quality control procedures • Statistical methods for data analysis • Elements of textile processing technology and systems	• Application of process design techniques • Application of work process analysis methodologies • Application of EN ISO and IATS certification procedures • Application of production control procedures	Sustainable production processes	15
			Sustainable Textiles from Nature	15
			Non-financial reporting: sustainability reporting, ESG criteria	10
				10 LABORATORY
Environmental impact assessment and environmentally sustainable management of resources, waste and company waste	• Principles of engineering (construction technology and geotechnics) in order to analyse and understand the results of analyses and controls carried out for environmental impact assessment purposes • Quality and environmental certification regulations in order to ensure the certification (quality and/or environmental) of existing or new waste treatment and disposal systems • Waste cycle production processes in order to control the variables, related to the construction and operation of waste treatment and disposal systems, that impact on the environment • Techniques for operating and managing waste treatment and disposal systems in order to keep under control the variables, linked to the construction and management of the systems, that impact on the surrounding environment •	• Analysing and processing data sets and information, in a logic of synthesis and critical analysis of processing results • Communicate and interact with the Bodies and Authorities involved in environmental control and protection • Supervise the quality and environmental certification of interventions on existing systems or the construction of new systems • Identifying the environmental protection areas of the works to be carried out, ensuring maximum protection of the environment • Identifying solutions to critical environmental situations • Designing systematic recognition activities on the state of waste treatment and disposal systems, to guarantee restoration interventions in environmentall y critical situations • Designing and managing sampling,	Climate change, biodiversity and ecological transition	10
			Renewable Sources and Sector Incentives	10
			Environmental Impact Assessment (EIA), Strategic Impact Assessment (SEA), Impact Assessment	10
				10 LABORATORY
			The European regulatory plan on sustainable economy: needs and opportunities	10
			Principles of industrial ecology	10
			Green Economy in the textile industry: product life cycle analysis	20

		measurement and analysis campaigns for air, water and soil, ensuring continuous monitoring of environmental impact indices • Promote activities for the study and prevention of pollution risks, with a continuous improvement approach in the environmental management of waste treatment and disposal systems • Assessing the effects of waste treatment and disposal facilities, in terms of environmental balance and cost-benefit analysis	Circular Economy: waste from cost to resource	20
			Green production process technology	20
			TOTALE	300