

Briefing note

Bridge TechGrow project to ESCO



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TECH **GROW**
VET training on
technological watch



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What is ESCO?

ESCO is a European project on Skills, Competences, Qualifications and Occupation¹, an initiative of the DG Employment, Social Affairs and Inclusion who manages the development and updating of the ESCO classification, supported by external stakeholders and the European Centre for the Development of Vocational Training (Cedefop)²

ESCO works as a map, and provides terminology as a dictionary, describing, identifying and classifying professional occupations, skills, and qualifications relevant for the EU labour market and education and training. Those concepts and the relationships between them can be understood by electronic systems, which allows different online platforms to use ESCO for services like matching jobseekers to jobs on the basis of their skills, suggesting trainings to people who want to reskill or upskill etc.

The aim of ESCO is to support job mobility across Europe and therefore a more integrated and efficient labour market, by offering a "common language" on occupations and skills that can be used by different stakeholders on employment and education and training topics. The vision behind ESCO is the provision of a common reference language that could support transparency, translation, comparison, identification and analysis of the content of a qualification, thus helping to indicate how those relate to the skills and occupations needed across occupations and sectors. ESCO does so in multiple ways.

In its 1.2 version (the first version was released in October 2013), as a result of many quality and concept reviews as well as a development of new occupations, skills and competences, ESCO has 3.039 occupations and 13.939 skills linked to these occupations, translated into 28 languages (all official EU languages plus Icelandic, Norwegian, Ukrainian, and Arabic). The 2 pillar are:

¹ <https://esco.ec.europa.eu/en>

² <https://www.cedefop.europa.eu/en>

- **Occupations** (which is taken here as the main approach for job profiles) - It organises the occupation concepts in ESCO. It uses hierarchical relationships between them, metadata as well as mappings to the International Standard Classification of Occupations (ISCO) in order to structure the occupations. Each occupation concept contains one preferred term and any number of non-preferred terms and hidden terms in each of the ESCO languages. Each occupation also comes with an occupational profile. The profiles contain an explanation of the occupation in the form of description, scope note and definition. Furthermore, they list the knowledge, skills and competences that experts considered relevant terminology for this occupation on a European scale.
- **Knowledge, Skills and Competences** (KSC method, the description of fields of knowledge, related the abilities, and proven abilities) - The ESCO skills pillar distinguishes between i) skill/competence concepts and ii) knowledge concepts by indicating the skill type. There is however no distinction between skills and competences. Each of these concepts comes with one preferred term and a number of non-preferred terms in each of the 28 ESCO languages. Every concept also includes an explanation in the form of description.

Qualifications are now seen as the formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards. Information on qualifications at European level is now displayed in Europass and comes from databases of national qualifications reflecting the National Qualifications Frameworks that are owned and managed by the European Member States. The qualifications are structured using the European Qualifications Framework (EQF). ESCO is the best and faster tool to describe the panorama around the countries involved. ESCO applies the same definition of "**skill**" as the The European Qualifications Framework (EQF) | Europass³ According to this, "skill" means the

³ <https://europass.europa.eu/en/europass-digital-tools/european-qualifications-framework>

ability to apply knowledge and use know-how to complete tasks and solve problems". They can be described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).

The term skill refers typically to the use of methods or instruments in a setting and in relation to defined tasks.

By other hand "**Knowledge**" is described as the "Outcome of the assimilation of information through learning" and the "Body of facts, principles, theories and practices that is related to a field of work or study".

The ESCO portal can be use by everyone, it's opened to anyone who have some background in training/education and be able to make the due searches.

Bridge TechGrow potential skills development on Technology Watch to occupations in ESCO

One of ESCO's main missions is to build stronger bridges between the world of education and training and the world of work, contributing to reduce skill mismatches and supporting the better functioning of the labour market. The partners decided to explore the bridge between the already mapped occupation and the potential of the new knowledge and skills developed within the project.

Therefore, TECHGROW partners started a study on the existing occupations related to technology watch within the several occupations mapped within the textile and clothing, footwear, furniture and upholstery sectors.

TECHGROW partners went to the training itinerary and analysed what will be the impact of the new knowledge/skills/competences on the upskilling/reskilling of the ESCO skills/competences and occupations

The idea of this exercise is to understand:

- How innovative are the knowledge/skills/competences produced by the TECHGROW project;
- How many of the already mapped occupations in ESCO, in the field of textile and fashion, footwear, furniture and upholstery, can benefit with the new pedagogical materials to be drafted within the project and which will correspond to the training needs identified.

TechGrow innovation on skills development

TECHGROW proposes a training itinerary aimed at enhancing participants' proficiency in Technological Watch and Competitive Intelligence that is able to develop the following outcomes and to empower participants to leverage technological watch and competitive intelligence effectively within their respective organizations. Learners will gain the necessary knowledge, skills, and competences to drive innovation, competitiveness, and strategic growth within their organizations.

The learning outcomes are:

- To establish and maintain an effective technological watch system, overviewing critical aspects such as the importance of technological watch, processes involved, and the roles and responsibilities within the system.
- To explore a variety of tools and resources available, such as alert systems, databases, and specialized software, to enhance their organization's decision-making processes. for gathering, analysing, and interpreting valuable information.
- To learn from the industry-specific best practices aligned with critical technological watch factors fostering competitiveness and innovation.

The table below compiles several occupations found in ESCO with relations to the sectors mentioned above, to whom the curriculum and pedagogical material impact positively. For each occupation encountered, related knowledge and skills/competences also mapped in ESCO are identified.

The curriculum will impact on almost 20 occupations found in ESCO, in the first research.

| OCCUPATIONS | ESCO DATABASE LINK |
|-----------------------------|--|
| Clothing CAD technician | clothing CAD technician ESCO (europa.eu) |
| Clothing fashion designer | clothing fashion designer ESCO (europa.eu) |
| Clothing technologist | clothing technologist ESCO (europa.eu) |
| Fashion designer | fashion designer ESCO (europa.eu) |
| Footwear designer | footwear designer ESCO (europa.eu) |
| Furniture designer | furniture designer ESCO (europa.eu) |
| Industrial designer | industrial designer ESCO (europa.eu) |
| Knitting textile technician | knitting textile technician ESCO (europa.eu) |
| Textile chemist | industrial designer ESCO (europa.eu) |
| Textile designer | textile designer ESCO (europa.eu) |
| Textile dyeing technician | textile dyeing technician ESCO (europa.eu) |

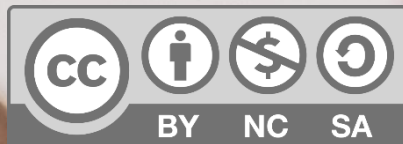
| | |
|--|---|
| Textile product developer | textile product developer ESCO (europa.eu) |
| Textile technologist | textile technologist ESCO (europa.eu) |
| Textile, leather and footwear researcher | textile, leather and footwear researcher ESCO (europa.eu) |
| Chief technology officer | chief technology officer ESCO (europa.eu) |
| Wood technology engineer | chief technology officer ESCO (europa.eu) |
| Robotics engineer | robotics engineer ESCO (europa.eu) |
| Innovation engineer | ESCO (europa.eu) |

The past exercise – the bridge of innovative knowledge/skills/competences to occupation pillar confirms the innovation of the TECHGROW curriculum for several occupations in the field of textile and fashion, footwear, leather goods, furniture and upholstery.

This exercise can also provide improvements in ESCO in terms of knowledge, skills and competences pillar in a future stage, via the diligence of delegates belonging to the ESCO working group (Textile, Cloths, Footwear and Leather).

TECH GROW

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