

ESCO Quick Start Guide 2022

European Skills, Competences and Occupations



Table of Contents

About ESCO	2
What is ESCO?	2
Why is ESCO needed?	2
Main ESCO use cases and organisations that use ESCO	2
ESCO connects people with jobs	2
ESCO connects the labour market with the education & training	2
ESCO facilitates the analysis of labour market data on skills and occupations	3
How to use ESCO	3
Browse the classification online, directly in the ESCO portal	3
Download ESCO	4
Use the API	4
Local API	4
Web API	5
Contacts	5



About ESCO

What is ESCO?

The European multilingual classification of Skills, Competences and Occupations (ESCO) serves as a glossary of occupations and skills relevant for the EU labour market and education and training. ESCO provides descriptions of 3.008 occupations and 13.890 skills linked to these occupations, translated into 27 languages (all official EU languages plus Icelandic, Norwegian and Arabic).

Why is ESCO needed?

ESCO aims to support mobility across Europe by standardising the occupations and skills used in different countries, ensuring transparency and comparability of skills and occupations in Europe.

In addition, ESCO is published as **Linked Open Data**, so it can be implemented in electronic systems, allowing organisations to apply ESCO to their services.

More information about ESCO can be found in the section What is ESCO of the ESCO portal.

Main ESCO use cases and organisations that use ESCO

ESCO is facilitating an interconnected, digital European labour market by supporting 3 main broad uses cases: job-matching & job searching, career guidance and research about the labour market.

ESCO connects people with jobs

ESCO improves e-services that match people to jobs by helping public and private employment services and employers to develop more effective electronic labour market services. This saves them time, reduces costs and increases efficiency of their job-matching services.



ESCO connects the labour market with the education & training

Education and training systems need to keep pace with job market needs. Moreover, the differences between Member States' systems make it difficult for employers to identify the skills and qualifications an individual has obtained in another EU country. ESCO seeks to bridge this communication gap between the education and training institutions and labour market actors by making skills and qualifications visible and comparable at EU level.





ESCO facilitates the analysis of labour market data on skills and occupations

ESCO facilitates the collection and analysis of skills and occupational intelligence by serving as the core taxonomy for extracting and analysing data such as online job vacancies, CVs and qualifications. In combination with technologies such as machine learning, ESCO helps to identify skills and occupational trends in the EU.

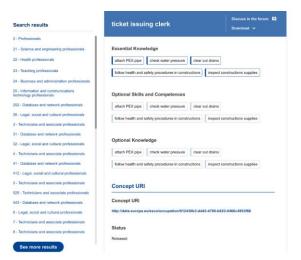


How to use ESCO

There are different ways to access the classification and implement it in your services:

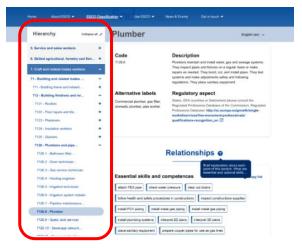
Browse the classification online, directly in the ESCO portal.

You can use the "find" function, by typing the occupation or skill that you're looking for, the functionality also offers a selection of filters for specific types of concepts.



Another option is to browse the **hierarchy** at the left of the page: every time you click on a concept group, all the sub-groups included will appear, until you reach the most granular level. The ESCO classification uses **ISCO** as

its hierarchical structure, in fact, the first four levels belong to ISCO, while **ESCO** adds at least an additional level of granularity, starting from level five. More information about the hierarchical structure of ESCO can be found here.



The skills section also has a finder, which works in the same way as the occupations one.



The skills pillar is organized differently from the occupations, there are 4 main groups of skills:

- Transversal skills
- Languages
- Knowledge
- Skills

In the same way, it's also possible to browse the different skill sections and related hierarchies.

Together with the hierarchical relations, that connect concepts below the same pillar, the **ESCO classification presents links** between occupations and skills. For every occupation, there is a list of skill and knowledge concepts which are connected to it in the European labour market, these links can be essential or optional. In the relationship section, you can click on a concept to learn more about it.

Download ESCO

In the download section of the ESCO portal https://ec.europa.eu/esco/portal/download

choose what information you want to download, and then the version, language, and file type. Note that to download data that is language independent, such as the relationships between occupations and skills, you need to select 'all languages' as a language option.

Once you have a set of files for the download, you will be redirected to the privacy statement page, here you will also insert the email where you will receive a link to download the selected dataset.

If you are looking for a file that includes all the relationships between occupations and skills **in text**, you will have to craft it yourself. In fact, as the relations between concepts are language independent, the files we provide show the relationships using

uniquely the URIs. In order to create your own relations file in the language you desire, follow the instructions:

- Download the ESCO classification in the language you prefer
- Download the language independent files by selecting "language independent" when choosing the language
- 3. Open both files in Excel
- Exploiting the URIs, use the VLOOKUP function in Excel to copy the preferred terms of the ESCO classification into the relations file.



Use the API

On the API page of the ESCO portal you can find documentation on how to use the webservice API or the local API.

Local API

The local API is the downloadable version of the ESCO API, which can be installed locally on a computer or server and thus provides local access to the ESCO API. Compared with the use of the ESCO API hosted by the Commission, the advantage of installing the ESCO API locally is an increased performance and the independence from the availability of the service provided by the Commission.



To use the local API, go to the **Download section** of the portal, select the version you prefer, choose "local API" as content, and finally click on "Export your dataset". Follow then the same steps as described above for the download.

Web API

The web-based service API is designed to support interoperable machine-to-machine interaction over the World Wide Web. It provides applications with access to the different versions of the ESCO classification. The functionalities of the ESCO Web Services API covers the majority of ESCO business cases.

ESCO also provides a set of libraries for local installation of the ESCO Services API. This will allow customising access to the ESCO taxonomy, choosing any version of the ESCO classification, and implementing

Contacts

If you need support in the implementation of ESCO, if you want to collaborate with us, or if you have any kind of question, do not hesitate to contact us through the contact form or directly at:

EMPL-ESCO-SECRETARIAT@ec.europa.eu scalable solutions to meet specific performance needs.

The ESCO Web Services API provides an easy-to-use web interface onto linked data. In Linked data any concept is identified by a Uniform resource identifier (URI). For example, the URI http://data.europa.eu/esco/occupation/528f9 Oed-e250-48bd-aacc-ffb7b1de5654 will identify the occupational profile "Textile specialised seller".

The ESCO Web Services API receives requests for information on concepts or terms and provides a response in a format specific to the sender of the request.

To access the web API, visit the page <u>Use ESCO services (API)</u> and click on "ESCO API documentation", for more information about its use, you can watch this <u>video</u> or read the user manual.