Certificate supplement





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| 1. Title of the certificate[[1]](#footnote-2) |
| Wood construction methods for energy efficient building  |
| 2. Translated title of the certificate [[2]](#footnote-3) |
| Wood construction methods for energy efficient building   |
| 3. Profile of skills and competences |
| The holder of this certificate will be able to demonstrate the following knowledge, skills and competencies:* Develop knowledge and understanding of the different types of wood and their properties.
* Give an account of the limitations that wood presents as a building material in a given situation.
* Understand the benefits of using wood in the active and passive design of a building in terms of energy efficiency.
* Evaluation of the climate influence in wooden buildings in order to reduce energy consumption.
* Autonomously select the most appropriate type of wood or wood building element according to construction project requirements.
* Demonstrate the skills to work with prefabricated wooden building elements.
* Make appropriate use of digital woodworking methods and tools.
* Autonomously select the appropriate wooden structure.
* Critically evaluate and apply modern CLT technology for large-scale design.
* Assess the use of wood in renovation, extension or deconstruction projects.
* Be able to organise/prioritise tasks and collaborate with team members.
* Understand fire/sound protection and building physics in the construction process.
* Be able to integrate technical building components in timber construction.

These skills will be provided to the student through the following learning units and curriculum:

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| **LU1: Qualities of wood and its various applications in construction** |
| * Wood properties, its limitations and wood construction physics.
* Possibilities of improving the properties of the wood and wood protection, durability.
* Availability and environmental friendliness of wood as building material.
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| **LU2: Timber construction, renovation and deconstruction**  |
| * Performance and durability of wooden constructions
* General instructions for the use of wood material
* Guidelines on work with GLT and CLT
* The use of construction products
* Connectors and adhesives
* Restoration, reconstruction and dismantling
* Wooden trusses
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| **LU3: On-site wood construction assembling management** |
| * Work planning and Team Management
* Ergonomics and labor safety
* Transport and Storage guidelines
* Architectural design
* Short Vapor Barrier
* Fire safety of timber buildings
* Thermal insulation materials
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| **LU4: Functionality and efficiency of wooden buildings** |
| * Energy-efficiency value of wood as a building material
* Climate influence on wooden building.
* Trainings for plumbing, drywall construction, sealing
* Heating, ventilation, air conditioning, lighting, information and communications technologies systems
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| 4. Range of occupations accessible to the holder of the certificate [[3]](#footnote-4) |
| The *International Standard Classification of Occupations* (ISCO)[[4]](#footnote-5) seeks to facilitate international communication about occupations by providing statisticians with a framework to make internationally comparable occupational data available. According to the latest version known as ISCO-08, this certificate is accessible to the **skill level 3: Technicians and associate professionals** which perform technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations and **skill level 4: Professionals** whose main aim is to increase the existing stock of knowledge; apply scientific or artistic concepts and theories; teach aboutthe foregoing in a systematic manner; or engage in any combination of these activities. Of the main sub-groups in these categories: **21-** **Science and Engineering Professional/ 31- Associate Professionals and 23- Teaching Professionals** are of particular interest for this certificate, specifically those related to the construction sector, Construction sector employees and unskilled construction workers who never worked with wood or skilled workers of construction site, but not educated in timber construction.  |

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| 5. Official basis of the certificate |  |
| Body awarding the certificate | Authority providing accreditation / recognition of the certificate |
| [*Name, address and web site of the entity providing the course*]*Example:*  **Liepājas Valsts Tehnikums (LVT)**Ventspils iela 51, Liepāja, LV-3405, Latvia (<https://www.lvt.lv/>)Grading scale / Pass requirements**Assessment materials** *Pass / Fail* Pass rate ≥ 50% passed**Online practical scenarios** *You lose / It’s a draw / You win / You win ultimately*Pass rate: you win or you win ultimately in all scenarios | National Organization for the Certification of Qualifications and Vocational Guidance (EOPPEP) Ethnikis Antistaseos 41, Nea Ionia, 142 34 Athens-Greece.https://www.eoppep.gr/index.php/el/ Ministry of Education and Vocational TrainingCalle de Alcalá, 34, Madrid (Spain)<https://www.educacionyfp.gob.es/portada.html>OeAD | National Coordination Point for the NQF in Austria (NCP) Ebendorferstraße 7 | 1010 Vienna<https://www.qualifikationsregister.at/en/>State Education Quality Service Republic of Latvia, Smilšu street 7, Rīga, LV-1050, <https://www.ikvd.gov.lv/en>Ministry of Education and Culture P.O. Box 29, FI – 00023 Government, Finlandhttps://okm.fi/en/ |
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| Level of the certificate (national or European) [[5]](#footnote-6) | International agreements on recognition of qualifications5 |
| Level 4-5 in the European Qualifications Framework  | N/A |
| Access to next level of education / training 5 |  |
| N/A  |  |
| Legal basis |  |
| Qualifications and Quality Assurance (Education and Training) Act 2012. |
| 6. Officially recognised ways of acquiring the certificate |
| This apprenticeship course has a theoretical part and a practical part. The first one consists of around 160 pages of lecture notes, which are summarized in more visual presentations with slides for each topic. On the other hand, the practical part of personal work consists of a large number of multiple-choice questions, case studies and virtual scenarios that put the student in a real life situation. |
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| Description of vocational education and training | Percentage of total programme (%) | Duration (approx.) |
| Lecture notes, slides presentations and FAQs | 55% | 42 hours of reading |
| Questions  | 20% | 15 hours for answering the multiple-choice questions  |
| Case studies  | 20% | 15 hours completing the case studies  |
| Online training scenarios | 5% | 4 hours completing the training scenarios |
| Total duration of the education / training leading to the certificate: | 76 hours |

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| 7. Additional information |  |
| Entry requirements 5 |  |
| Candidates are expected to be able to complete the course and have appropriate numeracy skills. |
| More information (including a description of the national qualifications system) |
| *[Include your national qualification system website]* *Example:**Spain*: https://incual.educacion.gob.es/informacion*Latvia*: [*https://www.latvijaskvalifikacijas.lv/en/educational-system/*](https://www.latvijaskvalifikacijas.lv/en/educational-system/)*Finland:* *The Finnish National Agency for Education helps develop quality assurance in vocational education and training (VET). Vocational training providers are responsible for the quality of the qualifications, training and other services they provide and for the continuous development of quality assurance. The National Agency for Education is also the National Reference Point (NRP) for quality assurance in VET in Finland.*<https://www.oph.fi/en/education-system/finnish-vocational-education-and-training/quality-assurance-national-reference-point-vet> |
| National Europass Centre |  |
| *[Include your national Europass Centre website]**Example:**Spain* [*http://sepie.es/iniciativas/europass/index.html*](http://sepie.es/iniciativas/europass/index.html) *Österreich* [*https://www.europass.at/*](https://www.europass.at/) *Latvia:* *https://europass.lv/* *Finland:* [*https://www.oph.fi/en/europassi*](https://www.oph.fi/en/europassi) |
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Certificate supplement

1. In the original language [↑](#footnote-ref-2)
2. If applicable. This translation has no legal status. [↑](#footnote-ref-3)
3. If applicable. [↑](#footnote-ref-4)
4. https://ec.europa.eu/esco/portal/occupation [↑](#footnote-ref-5)
5. If applicable. [↑](#footnote-ref-6)