

51. DESIGN OF WOOD BUILDINGS AND STRUCTURAL WORKSⁱ

Level II

Department of Agriculture, Food, Environment and Forestry (DAGRI)

The course is conducted in collaboration with
Institute for Bio Economics -National Research Council (CNR IBE)
Federlegno Arredo
and the University of Trento with the award of a joint degree

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| Course coordinator | Marco Togni |
| Executive Committee | Marco Togni Marco Fioravanti Ivan Giongo Alessandro Prada Nicola Macchioni Michela Nocetti |
| Contact person for information regarding teaching organization, class schedule, course content | Prof. Marco Togni Tel. 055 275 5609 e-mail: marco.togni@unifi.it |
| Practical-professional profile of the course and industry sector of reference | <p>Over the past decade, the structural timber supply chain has carved out a growing space within the residential and non-residential construction industry. In particular, in the face of sharp contractions that have emerged in the traditional building sector, the market for wooden buildings has shown continued expansion, placing Italy fourth in Europe in terms of construction volume. This success is related to numerous issues, among which it is worth mentioning the growing public awareness of sustainability, the principles of green building and the bioeconomy, seismic resistance, and energy-saving features reduced construction time, and low and certain construction costs.</p> <p>Italy is a country that has built a lot but, for a variety of causes, has suspended routine and extraordinary maintenance of existing buildings, including technological upgrading of its facilities and infrastructure. Today, the tools and technologies available represent resources that can bridge this gap. Wood and its derivative products are unanimously considered one of the keys to the recovery and structural and energy upgrading of the built heritage (the need for reconstruction in earthquake zones, modernization, including from a seismic point of view, and the redevelopment of public buildings and suburbs). Based on these assumptions, the Master course's program aims to train and place on the job market professionals who are experts in the design of structural works of wood through highly interdisciplinary training that allows them to acquire knowledge about wood and wood-derived products, the relevant technical regulations, structural design codes, and good construction practices.</p> <p>The Master course, therefore, aims to support the growing need for professionals capable of working in the field of design and construction of wooden buildings, the market for which is expanding rapidly in Italy and for which technical figures with appropriate skills are required. To this end, the training activities will be divided into 240 hours of lectures (40 CFUs), 18 hours of seminars and in-depth technical studies (3 CFUs), 300 hours of internship training to be carried out in companies in the supply chain (12 CFUs) and a final paper (5 CFUs).</p> <p>At the end of the course, learners who have successfully completed all the subjects as well as the internship and the final paper will receive the title of Level II Master in "Design of Wood Buildings and Structural Works," issued jointly by the University of Florence and the University of Trento.</p> |

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| Access prerequisites | <p>Master's degree obtained in accordance with the system under Ministerial Decree No. 270/2004 (or specialist degree under Ministerial Decree No. 509/1999 equated under D.I. July 9, 2009) in one of the following classes</p> <ul style="list-style-type: none"> • LM-4 Architecture and Construction Engineering - Architecture; • LM-23 Civil Engineering • LM-24 Building Systems Engineering • LM-69 Agricultural Science and Technology • LM-73 Forestry and Environmental Science and Technology <p>Degree awarded according to a system prior to Ministerial Decree No. 509/1999 in</p> <ul style="list-style-type: none"> • Architecture • Civil engineering • Agricultural science • Agricultural science and technologies • Forestry and environmental sciences <p>Degree awarded according to a system prior to Ministerial Decree No. 509/1999 of closely related content, deemed suitable by the Executive Committee or a Commission specifically appointed by it.</p> <p>Knowledge of the Italian language is required for foreign students (B1 level).</p> |
| How the admission procedure takes place | Selection by qualifications combined with a test, aimed at verifying motivations. The test will consist of an interview. |
| Duration | 12 months |
| Teaching methods | Lectures will be held in person, while some seminars may be delivered remotely in synchronous mode on the WebEx platform. |
| Language of instruction | Italian |
| Attendance requirements | 67% |
| Location of the course | The master's program will take place at the University of Florence and the University of Trento. |
| Foreseen lecture schedule | Classes will be held during the week on Thursdays, Fridays as well as Saturday mornings. |
| Examinations procedures and schedule | A test (written examination) will be held at the end of each module. |
| Final examination | The final examination consists of the presentation of a paper. |

| Available places and enrolment fees | |
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| Full-fee students | |
| Minimum number | 15 |
| Maximum number | 20 |
| Enrolment fee | €3,500 |
| Single Modules | |
| None planned | |

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| Description of the activities and training objectives of the internship | The internship is aimed at an in-depth practical application of the theoretical subjects studied during the lectures. For such internship, the learners will be placed in the technical offices of companies affiliated with the University of Florence and will follow design activities as well as research and development of new wood construction solutions. They may also be involved in site activities related to the supervision of structural woodwork. |
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ⁱ This document is a translation of the form A.1 relating to the characteristics of the course attached to the Decree of the Deputy number 873 (record 158006) of 25th of July 2022, drafted in Italian and issued on the Master | Didattica | Università degli Studi di Firenze | UniFI and which therefore constitutes the only official document. This English translation cannot be used for legal purposes and has the sole purpose of supplying information in English on the content of the public notice.