

92. Lean4 Smart Factory	
Level I	
Department of Industrial Engineering (DIEF)	
<i>The course will be carried out in collaboration with the University of Pisa and the University of Modena and Reggio Emilia</i>	
Course coordinator	Filippo De Carlo filippo.decarlo@unifi.it 055/2758677
Executive Committee	Massimo Bertolini Marcello Braglia Mario Giovanni Cosimo Antonio Cimino Filippo De Carlo Marco Frosolini Francesco Leali Paolo Nepa Giacomo Petrini Mario Tucci
Contact person for information regarding teaching organization, class schedule, course content	Roberta Giunta Consorzio Quinn Piazza Carrara, Pisa 0502201232 segreteria didattica@consorzioquinn.it
Practical-professional profile of the course and industry sector of reference	<p>Participants, given the training received in the master's course, will be able to be placed in various roles and functions in public or private organizations that operate in the product sectors of the production of goods or services. These professional figures may, for example, cover the role of:</p> <ul style="list-style-type: none"> - Lean Manager; - Responsible for continuous improvement projects for company performance; - Lean expert to support the Management and the Quality and Production departments; - Expert in Lean techniques for the "Times and Methods" department; - Consultant in Lean techniques for improving company performance <p>The distinctive activities of the outgoing profile are:</p> <ul style="list-style-type: none"> - Promotion and management of continuous company improvement projects by means of methods and tools based on Lean production; - Support for various company functions for process optimization; - Dissemination of Lean principles and techniques and the "Customer Oriented" approach within the company.

Access prerequisites

First level degree obtained in the following classes:

- L-2 Biotechnology;
- L-4 Industrial design;
- L-7 Civil and Environmental Engineering;
- L-8 Information Engineering;
- L-9 Industrial Engineering;
- L-17 Architectural Sciences;
- L-18 Economics and Business Management Sciences;
- L-23 Building Sciences and Techniques;
- L-25 Agricultural and Forestry Sciences and Technologies;
- L-26 Agro-Food Sciences and Technologies;
- L-27 Chemical Sciences and Technologies;
- L-28 Navigation Sciences and Technologies;
- L-29 Pharmaceutical Sciences and Technologies;
- L-30 Physical Sciences and Technologies;
- L-31 Information Sciences and Technologies;
- L-32 Science and Technologies for the Environment and Nature;
- L-33 Economic Sciences;
- L-34 Geological Sciences;
- L-35 Mathematical Sciences;
- L-38 Zootechnical and Technological Sciences of Animal Production;
- L-41 Statistics;
- L-43 Diagnostics for the Conservation and Restoration of Cultural Heritage;
- L/SNT3 Class of degrees in technical health professions;
- L/SNT4 Class of degrees in preventive health professions;
- L/DS Defense and security sciences; Single-cycle master's degree in:
- LM-4 Architecture and Building Engineering-Architecture (five years);
- LM-13 Pharmacy and Industrial Pharmacy;
- LM-42 Veterinary Medicine;

II level degree obtained in one of the following classes:

- LM-4 Architecture and Building Engineering-Architecture;
- LM-6 Biology;
- LM-7 Agricultural Biotechnology;
- LM-8 Industrial Biotechnologies;
- LM-9 Medical, Veterinary and Pharmaceutical Biotechnologies;
- LM-12 Design;
- LM-13 Pharmacy and Industrial Pharmacy;
- LM-16 Finance;
- LM-17 Physics;
- LM-18 Computer Science;
- LM-19 Information and Editorial Systems;
- LM-20 Aerospace and Astronautical Engineering;
- LM-21 Biomedical Engineering;
- LM-22 Chemical Engineering;
- LM-23 Civil Engineering;
- LM-24 Building Systems Engineering;
- LM-25 Automation Engineering;
- LM-26 Safety Engineering;
- LM-27 Telecommunications Engineering;

- LM-28 Electrical Engineering;
- LM-29 Electronic Engineering;
- LM-30 Energy and Nuclear Engineering;
- LM-31 Management Engineering;
- LM-32 Computer Engineering;
- LM-33 Mechanical Engineering;
- LM-34 Naval Engineering;
- LM-35 Environmental and Territorial Engineering;
- LM-40 Mathematics;
- LM-41 Medicine and Surgery;
- LM-42 Veterinary Medicine;
- LM-44 Mathematical-Physical Modeling for Engineering;
- LM-48 Territorial, Urban and Environmental Planning;
- LM-49 Planning and Management of Tourist Systems;
- LM-53 Materials Science and Engineering;
- LM-54 Chemical Sciences;
- LM-56 Economic Sciences;
- LM-58 Sciences of the universe;
- LM-59 Public Communication Sciences, Business and Advertising;
- LM-60 Natural Sciences;
- LM-61 Human Nutrition Sciences;
- LM-66 IT Security;
- LM-69 Agricultural Sciences and Technologies;
- LM-70 Food Science and Technology;
- LM-71 Sciences and Technologies of Industrial Chemistry;
- LM-72 Navigation Sciences and Technologies;
- LM-73 Forestry and Environmental Sciences and Technologies;
- LM-74 Geological Sciences and Technologies;
- LM-75 Sciences and Technologies for the Environment and Territory;
- LM-76 Economic Sciences for the Environment and Culture;
- LM-77 Business Economic Sciences;
- LM-79 Geophysical Sciences;
- LM-82 Statistical Sciences;
- LM-83 Statistical Actuarial and Financial Sciences;
- LM-86 Zootechnical Sciences and Animal Technologies;
- LM-91 Techniques and methods for Society of Information;
- LM-92 Communication Theories;
- LM-93 Theories and Methodologies of E-Learning and Media Education;
- LM/DS Defense and Security Sciences;
- LM/SNT3 Sciences of technical health professions;
- LM/SNT4 Sciences of health professions of prevention;

Other qualifications required	<p>the basis of the existing inter-university UNIFI-UNIFI-UNIMORE agreement, access to the master's course is available to "auditors" or individuals who do not have at least a three-year degree.</p> <p>An auditor can attend, even partially, the teaching activities of the master's degree, but cannot take the intermediate tests or attend the internship activities.</p> <p>Participation as a listener does not in any case allow the acquisition of the title or the achievement of training credits.</p>
How the admission procedure takes place	Selection based on qualifications combined with a selective test. The test will consist of an interview.
The test is aimed at verifying	<p>Topics deriving from the basic knowledge acquired in course of studies carried out and/or any experience of work or otherwise, integrated with an assessment of the aptitude to acquire the knowledge and the level of professionalism and qualification required by the Master. The selection will be carried out regardless of the number of candidates who have registered.</p> <p>Evaluation of the ability to express and understand in language notions and concepts related to the technical contents that will be the subject of the master's degree.</p>
Duration	12 months
Teaching methods	Presence/distance mode
Remote or mixed mode is proposed, specify: synchronous, a-synchronous, platforms intended to use.	Synchronous through MS TEAMS
Language of instruction	Italian
Attendance requirements	At least 70% hours in class
Location of the course	Florence at the premises made available to the Department of Industrial Engineering from the University of Florence
Foreseen lecture schedule	<p>Weekend formula from November 2023 to July 2024:</p> <ul style="list-style-type: none"> - Friday afternoon: from 2pm to 8pm - Saturday morning: from 8.30am to 2pm
Examinations procedures and schedule	There will be 2 intermediate tests lasting 4 hours each structured into tests with closed-ended questions and open questions.
Final examination	<p>At the end of the course there is a final test which consists of:</p> <ul style="list-style-type: none"> - the presentation of a paper; - the presentation of a related report to practical/internship training activities.

Available places and enrolment fees	
Full-fee students	
Minimum number	9
Maximum Number	24 ordinary and 6 auditors
Enrolment fee	4950 euros for ordinary students and 2470 euros for listeners
Single Modules	
Maximum Number	2
Enrolment fee	97,38 euro/CFU

Description of the activities and training objectives of the internship.	<ul style="list-style-type: none"> • The internship is the area in which the final project work takes place which has the aim of completing the training process through the application of the principles, methods and tools learned to a real case, generally linked to the activity and to the company environment in which it will be carried out during the dedicated period. 425= 17 ECTS
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Access prerequisites	To be admitted to attend single modules, a five-year high school diploma is necessary.
Selection test	<ul style="list-style-type: none"> • The selection of candidates for enrollment in individual modules, if the number is greater than the number of places available, consists of an interview.

^{i 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 652 (record 154925) of 13th of July 2023, 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.