

**COURSE PROSPECT**  
**Lighting Design - Fundamentals and CAD – 15<sup>th</sup> edition**

Scientific Director: Maurizio Rossi

Technical supervisor: Andrea Siniscalco

Starting date: 17 September 2020

Ending date: 11 December 2020

Number of hours: 82 hours (40 hours FUNDAMENTALS OF ILLUMINATING ENGINEERING and 42 hours CAD FOR LIGHTING)

Weekly schedule: (see calendar)

Venue: Online

Cost: cost of the whole course 1.180,00 € + VAT.

Cost of the single modules 600 € + VAT.

**COURSE DESCRIPTION**

The course offers an introduction and deepening of lighting design fundamentals in interior and exterior, through exercises and with the use of a specific CAD for lighting. The course is held in English.

The following are the contents of the two modules:

**MODULE 1 – FUNDAMENTALS OF ILLUMINATING ENGINEERING**

Photometric units and relationships between them. Illuminance from point sources, linear and extended. Natural lighting, colour modelling and colour rendering. Light sources and control systems. Luminaires. The objectives of good lighting. Examples of design and calculation; isotropic source, the lighting of a dressing table, a bookcase, the aisle of a church, a hotel room, an office, a library, a restaurant, a blackboard, a painting protected by a glass plate, of a shelf in a shop. Integration of artificial and natural light. The lighting of the exterior: Street lighting purposes. Nighttime accidents and economic conditions of street lighting. Urban lighting. The Municipal Regulator Plan of Light. Visibility at night on roads. UNI norm. The determination of reference categories, categories of a project and those are operating for the different types of roads. Arrangement of light points. System planning. Preliminary design (illuminance). Punctual calculation of illuminance and luminance. The urban lighting of monuments, parks and gardens. Ambient lighting. Luminaires and light source types for different applications. Existing provisions and comparison of performance and charges. Examples.

**MODULE 2 - CAD FOR LIGHTING**

Creating the environment, import, modelling, furniture, materials management, textures, luminaires, import and management of photometric files, calculation and representation of the project in a report. BIM principles, the interaction between BiM and Lighting software. Final project exercise.

**TARGET**

The course is intended for students, technical graduated and non-graduated professionals who wish to know the principles and methodologies of lighting design in interior and exterior.

**ENROLLMENT MODALITIES**

There are no pre-requisites to enter. Interested candidates can request the admission to [lab.luce@polimi.it](mailto:lab.luce@polimi.it) or [formazione@polidesign.net](mailto:formazione@polidesign.net)

Documents to send for the admission are: resume (optional), admission form, copy of ID and tax code.

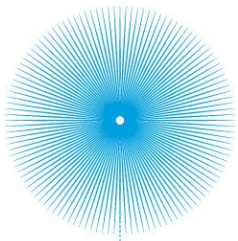
**GIVEN TITLE**

At the end of the course, students who will have attended for at least 80% of the total hours will obtain a frequency certificate to the course released by POLI.design.

POLI.design reserves the right not to activate the course if an adequate number of members has not an, or if the necessary educational, logistical and administrative support requirements are not met for any reason.

**COST**

The participation fee must be paid in a single solution. The payment must be made by bank transfer to the following bank details indicating the reason "Course Lighting design Fundamentals and CAD" and "name of the student":



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**The cost of the whole course is 1.180,00 € + VAT. The cost of the single modules is 600 € + VAT.**

#### **INFORMATION AND CONTACTS**

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