

COURSE LIGHTING DESIGN FUNDAMENTALS AND CAD

XII EDITION



AWARDING BODY

Laboratorio LUCE
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MANAGEMENT

POLI.design, funded by
Politecnico di Milano
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PERIOD

22 February - 06 April 2018

DURATION

84 hours (2 modules)

WEBSITE

www.luce.polimi.it

TEACHERS

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POLITECNICO DI MILANO
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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.

REGISTRATION FEE

Total cost of the course is 1180€ + IVA. Cost of module 1 (Fundamentals - 42 hours) is 600€ + IVA. Cost of module 2 (CAD - 42 hours) is 600€ + IVA. Modules can be purchased individually. For more info, please contact the Secretariat. Discount of 10% for the members of AIDI, APIL, ASSIL, ASSODEL and ASSOLUCE.

LANGUAGE

The course will be held in English language.

CONTENT OF THE COURSE

The course offers introduction and deepening of lighting design fundamentals in interior and exterior, through exercises and with the use of a specific CAD for lighting. 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, color and color rendering. Light sources and control systems. Luminaires. The

objectives of good lighting. Examples of design and calculation; isotropic source, 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 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 project and those 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

Computer graphics fundamentals.

Real-time photorealistic rendering. Software interface. Creating the environment, import, modeling, furniture, materials management, textures, luminaires, import and management of photometric files, calculation and representation of the project in a report. Final project exercise.

WITH THE PATRONAGE OF

