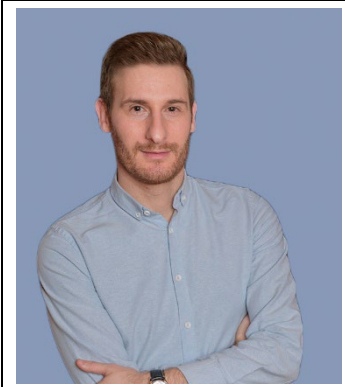


Loris Cantarini

Civil Structural Engineer

Self-Employed and co-founder of LetsDesigns



Profile

Loris is the co-founder of the Italian office LetsDesigns in Montelupone (MC).

Since 2013 Loris's experience has been focused prevalently in the Civil/Structural Engineering sector, but also in the Lighting industry as a Lighting designer.

Core competencies include the design and detailing of seismic structures within Heavy Civil markets and residential.

Other skills include structural integrity assessments of masonry buildings, seismic design using Lead Rubber Bearings (LRB), Digital Automation, Electrical Engineering and Lighting.

In 2014, just after obtaining the Chartership Status as a Civil Engineer in Italy, Loris moved to the UK to expand his knowledge and competencies. In 2021, Loris obtained also the Chartership status in the UK by becoming an ICE Member (MICE - Institution of Civil Engineer.)

In his career, Loris held multiple roles and worked on many projects which made him a flexible and knowledgeable Civil Structural Engineer able to analyse and implement solutions to resolve engineering problems.

Key experience

- Site-based experience in steel and concrete construction in a highly regulated environment – IT and UK
- Heavy Civils Engineering
- Seismic Design and Assessment
- Reinforced Concrete Design (BS EN1992-1-1:2004)
- Digital Construction & Reinforced Concrete Detailing (BS 8666:2005)
- Python coding
- Revit-Dynamo coding
- Italian Structural Standards (NTC08 – updated in 2018)
- Finite Element Analysis
- Programme Management
- Building services engineering (Electrical systems, Lighting and Daylighting)
- Lighting design – Relux Software, Dialux Evo Software.
- Adobe Software - Photoshop, Illustrator, InDesign.

Profession

Co-founder of LetsDesigns

Nationality / Languages

Italian / Italian, English

Qualifications

BEng - Building Engineering

Meng - Building Engineering

Professional associations

Chartered Engineer CEng MICE (UK)



Institution of Civil Engineers

Chartered Engineer in Italy – A2056
Ordine degli Ingegneri di Macerata

LetsDesigns (Feb 2021 – current)

❖ **LetsDesigns** is a project born after 10 years of work experience with the aim of creating an innovative Engineering Design Studio which, through the use of the latest digital and IT technologies, can offer design and consultancy services beyond the geographic location of the project or customer. The core competencies of the office are:

- **Lighting:** Lighting design for residences, offices, shops, streets and more. In compliance with the regulations (UNI-EN-12464-1) and national and international guidelines “The Lighting Design Handbook” by Zumtobel Group and the “Lighting Guide” collection by CIBSE (Chartered Institution of Building Services Engineers).
- **Energy:** Energy is an important subject nowadays but also a complex topic that updates continuously. LetsDesigns is investing on a daily basis to keep up to date with the team and being able to provide a consultancy service that is as complete and professional as possible, which also includes the design of systems (photovoltaic, thermal, electrical...).
- **Technology:** The word Technology was strongly desired within the logo because it represents a fundamental point of the studio's core business. In fact, technology can be seen applied to the profession and the project.
- **Structures:** Design of Concrete, Steel, Masonry and Wood Structures. In compliance with Italian or United Kingdom regulations (DM 17 January 2018, Circular 21 January 2019, n.7 CSLL.PP, Eurocodes)

Experience before LetsDesigns with Atkins Global (Dec 2017 – Jan 2021) – in the United Kingdom

❖ **Project – Hinkley Point C**

Atkins holds three Detailed Design contracts at Hinkley Point C (HPC) for the Classified Buildings, Unclassified Buildings, and Technical Galleries. Scope includes seismic analysis, production of formwork and reinforcement drawings, etc. Loris covered the following roles during this working experience:

- **Site Engineer** for HM building in the Atkins Site Design Liaison team based at the HCP construction site.
 - Responsible for checking, responding, and resolving RFIs (Requests for Information, FCRs (Field Change Requests) and NCRs (Non-Conformance Reports);
 - Main point of contact for the Main Civil Works Contractor (MCWC) working on the HM building on-site, including steel fixers, surveillance team, and site managers.
- **Design Building lead** for the Detailed Design of the Electrical building Unit 1 and Unit 2 (HF building).
 - Responsible for the detailed design of the building including the production of technical calculations, substantiation reports,
 - Managing the Global Design Centre (GDC) Engineering team producing technical calculations and reports.
 - Performing Designer's responsibilities under CDM2015.
- **Civil Engineer coordinator** of the Engineering team working on the HOR building package. Seconded to GDC in India.
 - Responsible for the delivery of the HOR Reinforcement drawings package (100+ drawings);
 - Managing wide teams of modelers and drafters, during the production of reinforced concrete drawings.

❖ Project – Heathrow Airport

Atkins is providing multidisciplinary services as Programme Designer for an £869m Asset Replacement and Management Programme, which forms part of Heathrow's £2bn investment for the five-year period from 2015.

- **Assistant Engineer** to assess the Emergency lighting system of several buildings at Heathrow Airport (not terminal buildings) in accordance with BS 5266-1:2016. The main responsibilities included a site survey, production of emergency calculations, and drawings, and reporting the results.

❖ Others ATKINS DIGITAL – AUTOMATION – CODING

In parallel to daily tasks, Loris has been developing digital tools based on Python programming language to automate tedious tasks and/or improve the quality of deliverables for the Civil / Structure team and the Building Services team.

- **Lighting Auto-Array tool (Dynamo-Revit coding):** The Auto Array tool uses Dynamo and Python coding to automatically design and populate objects in arrays through a Revit model. This tool was developed for the Building Services team to improve the efficiency of the team in the production of preliminary design (layout distribution, quantity) for lighting, ventilation systems, and fire systems.
- **Daylighting Calculation Outputs (Python coding):** This tool collects information from a Daylighting calculation and automatically produces visual graphs to summarise the results of the calculation in accordance with BREEAM and CBDM requirements. This tool has been used in various projects such as the University of Bath School of Management, Richmond Upon Thames College, etc.)

Experience before Atkins (Jan 2013 - March 2017) in the United Kingdom and Italy

❖ iGuzzini Lighting (United Kingdom) – Lighting Designer

Loris initially joined the company for a post-graduate internship through the University (UNIVPM). This led to a permanent role working on different lighting projects involving street lighting, hospital, residential and retail applications. The most relevant projects of this experience are listed as follows:

- **Italian Cultural Institute (London):** Lead Engineer for the lighting system upgrade of the institute. The main responsibilities included a site survey to assess the existing design, the production of lighting calculations and detailed renders to support the design proposal;
- **99 Kensington High Street** - Office building in Kensington London: Lead Engineer for the lighting design in accordance with the Lighting Guides (LG7). Deliverables also included Emergency lighting calculations in accordance with the BS 5266-1:2016;
- **Magnolia House** - Children's Hospital in Birmingham: Building service engineer to design and commission the DALI control system for the facility of the Children's Hospital in Birmingham. The main responsibilities included the definition of the electrical layout and product specifications and a commission on-site to set up the system;
- **Light School (Surface Design Show 2016):** Lead Engineer for the exhibition stand following the entire process from the initial meeting with the clients to the final installation of the products. The main responsibilities included the production of lighting calculations, definition of the product specifications, and liaising/collaborating with the client and contractors.

❖ Gruppo Marche (Italy) – Graduate Structural Engineer

Loris worked as a Structural Engineer for “Gruppo Marche” an architectural and engineering consultancy in Italy. This role involved the seismic design of reinforced concrete, and steel structures, and structural assessments of existing masonry buildings. The most relevant projects of this experience are listed as follows:

- **RSA** - Health Care Home in Fabriano (IT) - Structural Engineer for a 4-storey prefabricated structure in reinforced concrete. The main responsibilities included the design of the structure with Lead Rubber Bearings (LRB) as a seismic isolation system in accordance with the Italian Standard NTC08;
- **Structural Strengthening** of a residential house in Macerata (IT). Structural Engineer for the structural assessment of a masonry building. The main responsibilities included the production of the FE model to run a Non-Linear analysis (Push-over Analysis) for the definition of the factor of safety, as defined in Annex C8A of the Italian Standard NTC08 (updated in 2018).

Education/ Licenses & certifications:

- ❖ Member of **Ordine degli Ingegneri Macerata (2022)** – Macerata
- ❖ Member of UK **Chartered Engineer CEng MICE (2021)** - Ancona (Italy)
- ❖ Passed the government exam and licensed **Italian Chartered Engineer (2014)** - Ancona (Italy)
- ❖ **Postgraduate course – Health and Safety on site (2014)** - UNIVPM - Ancona (Italy)
- ❖ **MEng - Master's degree: Building Engineering (2013)** - 1st (108/110) - UNIVPM - Ancona (Italy)
- ❖ **BEng - Bachelor's degree: Building Engineering (2011)** - 2:1 (106/110) - UNIVPM - Ancona (Italy)