

POLITECNICO DI MILANO



SCUOLA DEL DESIGN

# SUMMERSCHOOL

## DRAWING THE GENIUS

### 3D MAPPING, ICT AND DESIGN FOR PLACES

In partnership with TOPCON POSITIONING INC

#### PROGRAMME

07/17: Arrival in Como  
 07/18: Mobile Mapping. Presentations and demo  
 07/19: 3D Mapping. Presentations and demo  
 07/20: Infomobility / Data Visualization, GIS. Presentations and demo  
 07/21: Indoor positioning / Mobile technologies. Presentations and demo  
 07/22: Day off  
 07/23: Design for cultural heritage and places. Workshop  
 07/24: Design for cultural heritage and places. Presentations and workshop  
 07/25: Design for cultural heritage and places. Workshop  
 07/26: Final review, exhibition and presentation of works. Jury panel  
 07/27: Departure

#### BACKGROUND

Italian cities, rich with layers of history, heritage, meaning, craft, and tradition, are complex cultural landscapes. Managing growth, change, innovation, and modernization in such cities requires careful intervention and thorough analysis to retain and enhance the genius or spirit of the place or its identity. With their numerous craft products as well as visual and cultural patterns, when each element is identified and documented, the cities can be interpreted as a catalogue: a catalogue that can help future interventions and innovation. An accurate understanding of the cultural landscape of such cities demands that we study the tangible and intangible cultural heritage and their inter-relationships, as well as the influences of the natural setting. From the scale of a small crafted product to the architecture and planning of the city and region, the historical, formal, figurative, construction, cultural, natural, and socio-economic attributes need to be studied, documented, and analyzed. Many tools and methods are necessary for such analysis. Digital technologies provide important tools for documentation, analysis, and design innovation. Information and Communication Technologies (ICT) are also critical to improve the competitiveness of European craft and creative industries and to meet the demands of its society and economy. ICTs have a catalytic impact on culture and creative industries in three key areas: productivity and innovation by facilitating creativity and management; modernization of public services through advances in science and technology; and supporting cooperation by facilitating access to cultural and information.

#### SUBJECT

The premise of the program is that strategic design actions based on interpretative models for analysis, representation, and regeneration of places with their tangible and intangible values, promote innovation and while retaining the identity of a place.

Design in historic places act as strategic levers for the transfer of innovative processes to enhance the cultural heritage values of built forms and landscapes in their widest sense. The program aims to develop a methodological model for reading, interpretation, and narration of tangible and intangible cultural assets of a built environment, through the creation of visual and/or multimedia digital catalogues as well as spatial mapping. Cities as cultural landscapes are historically constituted locales rich with local meanings. The heritage of a place is a complex, dynamic web of relationships between the natural, built and the imagined landscapes. The emphasis is on relationships that includes both the important monuments and non-monumental, and on processes, interactions, and relations as well. Sustainability is re-interpreted as interventions that make possible the web of positive interconnections.

#### WORKSHOP TOOLS AND METHODS

The workshop will follow three steps for each of the selected urban sites: first survey and documentation; second, representation and interpretation; third innovation and design. Techniques will range from traditional drawing to digital information technologies. Digital techniques like mobile mapping, indoor positioning and infomobility will be utilized along with cultural mapping visual mapping, and spatial visualization of data and Smart Cities. Design for adapting and integrating cultural heritage and place identity for contemporary needs, aspirations, functions, and meanings.

#### TECHNICAL PARTNERS

Topcon Positioning Inc  
Compagnia delle Misure

#### INVITED PARTNERS

Universidad CEU San Pablo, Columbia University New York, University of Aveiro Portugal, State University of Minas Gerais Brasil, INTBAU - The International Network for Traditional Building, Architecture & Urbanism London

#### EXPECTED OUTCOMES

Expected outputs are documentation, analysis and interpretation and finally, design related to place mapping and ICT for heritage, cities and cultural landscapes. These include:

- Following good practices for 3D modeling, documentation and visualization;
- Going from field survey to pattern books and catalogues: representation, dissemination, interpretation,
- Preparing cultural maps of of tangible and intangible uc intangible issues;
- Interpreting value maps, thematic/topological representations using GIS tools;
- Defining guidelines/codes for design regeneration at various scales.

#### ADMISSION AND FEE

Candidates are invited to submit the Application form and the CV/Portfolio stating education, employment history and drawings projects (a 150 dpi PDF format is kindly requested). The cost of the programme includes enrolment and accommodation fee.

#### CREDITS & EVALUATION

5 ECTS credits are available from Politecnico di Milano

#### EXHIBITION & CONFERENCE

Drawing and projects will be evaluated during a public exhibition and conference with the participation of an international jury

#### SCIENTIFIC BOARD

Giuseppe Amoroso, Director  
Jyoti Hosagrahar, Co-Director  
Paolo Ciuccarelli  
Roberto de Paolis  
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#### FOR FURTHER INFORMATION

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#### LOCATION

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