University of Applied Sciences and Arts of Southern Switzerland
SUPSI

MASSIPV

SOL(AR)CHITECTURE Essentials

SOLARCHITECTURE - Essentials (Amsterdam, the Netherlands)

We dream of and work for a deep beauty. Shaping new boundaries betweeen sustainability and architecture.

Module

Presentation

In recent years, a new energy strategy has created the opportunity to consider solar as a renewable source of decentralised production in the facades and other accessory elements of the envelope active.

The construction of building with integrated photovoltaics (BIPV) poses hybrid challenges between the construction and electrotechnical sectors, which are still often fragmented in their respective disciplinary and professional fields.

Objectives

1) Build expertise in solar-integrated architecture through immersive case studies and hands-on learning. Starting on Day 1, you'll dive into solar technology fundamentals, the integration in architecture, design and modelling, quality and product certifications and cost-effectiveness, laying a strong foundation in both theory and application.

2) Develop interdisciplinary skills through an integrated approach that bridges Architecture and Solar Technology. On Day 2, an experiential tour of case study buildings will allow you to see solar architecture in action and engage directly with architects, constructors and other project stakeholders.

3) Throughout the course, you'll establish a network with industry experts and peers, creating
valuable connections that extend beyond the program. This network will support your ongoing
participation in events, conferences and contests in the Solar Architecture sector, ensuring
continued professional growth and access to future opportunities.

Description

The MASS-IPV project (massipv.eu) aims to foster stronger structural collaborations between the PV and construction sectors by bridging knowledge gaps and promoting best practices in solar architecture.

Through targeted training activities, the project will establish industry and professional networks, knowledge-sharing modules, and training programs, enabling architecture professionals to integrate PV technologies effectively into building design.

A key focus on regional challenges will be ensured thanks to the involvement of local partners, ensuring relevance and impact for participants.

Prospects

Professionals interested in gaining knowledge of BIPV systems:
- architects and civil engineers
- real estate professionals
- project managers
- PV industry professionals
- any other professional looking to develop expertise in Solar Architecture

Certificate

Participation certificate SUPSI

Didactic credits

2 ECTS

Content

CASE STUDIES:
• provide cognitive tools through the real context

ACTION LEARNING:
• promote experiential learning, in direct contact with a network of experts, laboratories, professionals and companies in the sector

INTERDISCIPLINARY:
• strengthen interdisciplinary skills through an integrated approach between architecture and solar technology

NETWORKING:
• create a network to ease the participation in dedicated events, conferences, contests, etc. which will also take place once the course is completed

Program

DAY 1: introduction to Solar Architecture
• BIPV and architecture
• Solar technology fundamentals
• Simulation and modeling
• BIPV dynamics and trends: dutch market
• Digital tools for BIPV in a BIM-based process
• BIPV technical requirements
• Hints on quality and product certifications
• Market Status, process challenges & Cost-effectivenes

DAY 2: building tour
• Experiential tour to case study buildings
• Meet the architects, constructors and relevant actors involved in the process

Duration

2 days, approximately 16 lecture-hours

Head/s of course

• Pierluigi Bonomo, Greta Battaglia, Fabio Parolini, Alberto Follo, Paolo Corti (SUPSI, Deparment of environment, constructions and design)
• Konstantinos Chrysos (UNstudio)
• Bruno Bueno (Fraunhofer-ISE, MASS-IPV project coordinator)
• Ralph Dankers (BIPV world)
• Ruud Derks (BIPV Nederlands)
• Jean-Didier Steenackers (Sunsoak)
• Marlies Zwols (OZ Architect)
• Marloes van Heteren (Solarix)

Lecturer/s

• Researchers SUPSI, Department of environment constructions and design
• Experts from Fraunhofer ISE, BIPV.World, BIPV Netherlands, Sunsoak, OZ Architects, Solarix

Dates

• Tuesday April 29th, 2025
• Wednesday April 30th, 2025

Time

9am - 5pm

Location

• DAY 1 and DAY 2:
Four Elements Hotel
Bert Haanstrakade 1074, 1087 HJ Amsterdam
The Netherlands

Tuition fee

CHF 100.-, transfer and accommodation costs excluded (to be arranged individually).
CHF 30.- refund for students who provide a student ID (to be sent to dacd.fc@supsi.ch).

This course is developed by SUPSI within the MASS-IPV project (massipv.eu), funded by the European Union: Grant No 101135299 and from the Swiss State Secretariat for Education, Research and Innovation (SERI).

• applicants will receive a registration confirmation/payment receipt after successful payment transaction
• major credit cards are accepted (VISA, Mastercard, PostFinance, Twint)

Contacts

SUPSI Department of Environment Constructions and Design
Continuing education
via Flora Ruchat-Roncati 15
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T +41 58 666 63 10
dacd.fc@supsi.ch

Information

• limited admissions
• should the minimum number of eligible participants not be reached, SUPSI reserves the right to postpone the course

Registration deadline

by April 14th, 2025

Enrolment link

https://fc-catalogo.supsi.ch/Course/Details/46166

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Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Education,
Research and Innovation SERI

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Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA.
Neither the European Union nor the granting authority can be held responsible for them.

General conditions

Application and admission procedure
In order to attend a course, participants must first complete a formal and binding enrolment procedure. Admission to long-term courses is nevertheless subject to verification that the enrolment requirements have been met. In order to ensure high quality levels, SUPSI may set minimum and maximum numbers of participants.

Enrolment fee
If there is a fee charged for the course, the enrolment amount must be paid to the bank account of the University of Applied Sciences and Arts of Southern Switzerland (SUPSI):
- From Switzerland, before the course start date, using the payment slip sent together with the enrolment confirmation
- From abroad, after enrolment confirmation, by bank transfer to SUPSI.
Banca dello Stato del Cantone Ticino, CH-6501 Bellinzona
IBAN CH05 0076 4190 8678 C000C
Swift Code BIC: BSCTCH 22
Clearing 764
Reason for payment: Course name

Obligation to pay the enrolment fee
Enrolment fees must be paid within 30 days of the invoice date. The enrolment confirmation and the invoice are sent to the participant after the enrolment deadline for the course. In specific cases, a participant may request to pay the enrolment fee in instalments. This request must be sent to the appropriate administrative office before the enrolment deadline. The participant is the party responsible for paying the enrolment fee, and by enrolling on the course, in accordance with the LEF, she/he explicitly acknowledges her/his debt, together with her/his payment obligation, and undertakes to pay the amount due. Should the educational programme be financed by an employer, or by a third party, the participant is still in any case the debtor with SUPSI until the enrolment fee has effectively been paid by the employer or by the specified third party. In relation to this, should the employer or the specified third party fail to pay the amount due, the participant agrees, and has a commitment with SUPSI, to pay the enrolment fee. These payment obligation regulations do not apply to courses that do not stipulate any fees.

Cancellations and withdrawals
If the number of participants is too low, or for other reasons, SUPSI reserves the right to cancel a course. In this case, those enrolled will be notified promptly, and, any enrolment fees will be reimbursed in full. Participants who decide to withdraw from a course must pay 50% of the enrolment fee, if the withdrawal is notified:
- within 7 days from the course start date, for enrolments on short-term programmes (0-9 ECTS)
- within 21 days from the course start date, for enrolments on long-term programmes (10-60 ECTS)
Specific cases may be examined and determined together with the department directorate. In the event of withdrawals notified after the deadlines specified above, participants will not be entitled to any reimbursement and the entire enrolment fee will become immediately payable, without prejudice to any exceptions specified in the regulations of each course, to which explicit reference is made. Any participant who is unable to attend a course may propose another person in replacement, after having notified SUPSI and after having received the approval of the course director. Should a participant request withdrawal due to illness or accident, the invoice for the enrolment fee may be cancelled, provided a medical certificate has been presented.

Modifications
SUPSI reserves the right the make changes to course programmes, registration fees, locations, in accordance with organisational requirements.

Accident insurance cover
Participants are not insured by SUPSI.

Privacy
Data is treated in compliance with Swiss legislation (Federal Law on data protection, and related Ordinance).

Court of jurisdiction
In the event of any dispute, the court of jurisdiction is the Court of Lugano, which is also the executive court in accordance with the LEF (Federal law on execution and bankruptcy). Swiss Law is the applicable law.