

SUSTAINABLE BUILDING DESIGN AND ENGINEERING

Prof.ssa Rossella Corrao

On line course "ex Art. 10" Program

Semester 1st, TEAMS platform

Nov. 12th, 2021, 16:00-18:30, Intro, Climate Change, part 1 (2,5 hrs)

Climate change: an environmental, social, and political challenge
Rossella Corrao, MArch (Hons), PhD, Full Prof. @University of Palermo, IT

Embodied carbon: how much it affects the construction process and management of buildings
Daniela Azzaro, MEng CEng MICE, Project & Design Manager, Associate @Arup Italy, Milan, IT

Nov. 15th, 2021, 15:30-18:30, Climate Change, part 2 (2,5 hrs)

JRL Group DfMA Strategy: Design, Manufacture and Buildability for Innovative Envelope Systems
Emanuele Calabrò, MEng (Hons) PGDip CEng MSFE MCIBSE, Head of Engineering @Midgard Ltd, London, UK

Energy and Climate 2030 in Italy
Enrico Genova, MS Bldg Eng-Arch, PhD, Researcher @ENEA, Bologna Research Centre, Bologna, IT
PBL

Nov. 26th, 2021, 14:30-19:30, Strategies for mitigating microclimate (5 hrs)

Multiscale methodology for evaluating the microclimate effects of vegetation on the built environment
Rossella Corrao, MArch (Hons), PhD, Full Prof. @University of Palermo, IT

The challenges of sustainability in UAE. SWA group's experience: "A Tower in a Park" and EXPO 2020
Sergio Lima, MArch, Instr. @AAU, Associate Principal @SWAgroup, San Francisco, CA, USA

Sustainability Pavilion @EXPO 2020 and Museum of the Future in Dubai
Simone Miriana, MSc (Hons) Meng CEng MCIBSE, Associate @Eckersley O'Callaghan, London, UK
PBL

Dec. 3rd, 2021, 14:30-19:30, Sustainable buildings in Mediterranean and sub-tropical areas (5 hrs)

Water and vegetation in traditional Mediterranean architecture
Calogero Vinci, MEng, PhD, Associate Prof @University of Palermo, IT

Natural Ventilation in high-rise buildings
Humera Mughal, MS Arch Eng, BS Bldg Arch Eng, PhD, Assistant Prof. @Prince Sultan University, Riyadh, SA

Towards a net zero building: a case study
Daniela Azzaro, MEng CEng MICE, Project & Design Manager, Associate @Arup Italy, Milan, IT

Renovation wave: technical and economic solution for retrofitting buildings
Enrico Genova, MEng-Arch, PhD, Researcher @ENEA, Bologna Research Centre, Bologna, IT
PBL

Dec. 10th, 2021, 14:30-19:30, Energy Efficiency of the Building Envelope and Design of Innovative Components (5 hrs)

Climate resilient facades
Simone Miriana, MSc (Hons) Meng CEng MCIBSE, Associate @Eckersley O'Callaghan, London, UK

Paddington Gardens in London: A new facade solution for Energy Design and Fire Engineering Compliance
Emanuele Calabrò, MEng (Hons) PGDip CEng MSFE MCIBSE, Head of Engineering @Midgard Ltd, London, UK

DfMA - Design for Manufactory & Assembly e DfD - Design for Disassembly
Daniela Azzaro, MEng CEng MICE, Project & Design Manager, Associate @Arup Italy, MI

BIV and BIPV innovative products
Rossella Corrao, MArch (Hons), PhD, Full Prof. @University of Palermo, IT
PBL

Dec. 17th, 2021, 14:30-19:30, Quality of Sustainable Buildings (5 hrs)

Circular Economy, principles and applications in building construction
Daniela Azzaro, MEng CEng MICE, Project & Design Manager, Associate @Arup Italy, Milan, IT

Energy Performance Certificates worldwide
Enrico Genova, MEng-Arch, PhD, Researcher @ENEA, Bologna Research Centre, IT

LEED and the outdoors. Guthrie Green in Tulsa and other case studies
Sergio Lima, MArch, Instr. @AAU, Associate Principal @ SWAgroup, San Francisco, CA, USA

