

Webinar on «Design of Cold-Formed Steel Structures»

8 sessions on **4 weeks**, from 10:30 CET
 Tuesday **08/06** + Thursday **10/06**
 Tuesday **15/06** + Thursday **17/06**
 Tuesday **22/06** + Thursday **24/06**
 Tuesday **29/06** + Thursday **01/07**

Reference book: Design of Cold-Formed Steel Structures

Speakers: Prof. Raffaele Landolfo, University of Naples "Federico II", Italy
 Prof. Dan Dubina, Politehnica University of Timisoara, Romania
 Prof. Viorel Ungureanu, Politehnica University of Timisoara, Romania

<u>PROGRAMME</u>			
<u>Date</u>	<u>Topic</u>	<u>Content</u>	<u>Speaker</u>
Week 1			
08/06/2021 10:30-12:00	Welcome & Introduction	<ul style="list-style-type: none"> - Content, objectives - Logic of the book and of the lectures 	Professor Dan DUBINA
	Specific features of cold-formed steel structures	<ul style="list-style-type: none"> - Cold Formed Steel Construction: Past, Present and Future - Fabrication technology and properties - Peculiar problems in design of cold-formed steel structures - Examples of application - Q & A 	Professor Dan DUBINA
10/06/2021 10:30-12:00	Basic design rules and procedures according to EN 1993-1-3	<ul style="list-style-type: none"> - Theory and worked examples - Design of sections - Design of members - Connection technology and design - Q & A 	Professor Viorel UNGUREANU
Week 2			
15/06/2021 10:30-12:00	Design assisted by testing	<ul style="list-style-type: none"> - Why design assisted by testing? - Case studies - Design assisted by testing of Palled Racks - Q & A 	Professor Dan DUBINA
17/06/2021 10:30-12:00	Design assisted by numerical models	<ul style="list-style-type: none"> - Principles - Finite Element Model analysis - The signature curve - The Direct Strength Method - Examples - Q & A 	Professor Raffaele LANDOLFO

<u>Date</u>	<u>Topic</u>	<u>Content</u>	<u>Comments</u>
Week 3			
22/06/2021 10:30-12:00	Design of residential, social and industrial buildings	<ul style="list-style-type: none"> - Conceptual design - Prescriptive methods - Case studies - Q & A 	Professor Viorel UNGUREANU
24/06/2021 10:30-12:00	Design of cold-formed steel buildings in seismic areas	<ul style="list-style-type: none"> - Seismic design principles for lightweight construction - Strap-braced shear wall - Sheathing-braced shear wall - Research and codification - Case studies - Q & A 	Professor Raffaele LANDOLFO
Week 4			
29/06/2021 10:30-11:30	Conceptual design and technology aspects of modular multi-storey buildings	<ul style="list-style-type: none"> - Modular Steel Construction - Structural systems and technologies - Examples - Q & A 	Professor Dan DUBINA
01/07/2021 10:30-12:00	Sustainable benefits of cold-formed steel construction	<ul style="list-style-type: none"> - Environmental impact and Life-cycle assessment - Durability - Embodied energy - Prefabrication - Reuse & recycling - Waste minimization - Adaptability & flexibility - Integrated CAD-to-production - Features of an energy efficient building envelope - Q & A 	Professor Viorel UNGUREANU
	Short Conclusions		All

This webinar is organized by the European Convention for Constructional Steelwork. As a not-for-profit association, the aim of ECCS is to promote the use of steelwork in the construction sector by the development of standards and promotional information. More information is available on <https://www.steelconstruct.com/>