

Structural fire design for Reinforced Concrete, Steel and Timber in accordance with the Eurocode family







Do you want to learn more about structural fire design?

In three weeks you will have the basic knowledge about about:

- Actions on structures + Combinations of actions;
- Fire models (standard fire, parametric fire, localized fire, zone models, CFD models);
- Fire design for RC structures;
- Fire design for steel structures;
- Fire design for timber structures.

The theoretical aspects are based on the Eurocode family and the worked examples are made in Autodesk Robot.

Day	Alocated time	Week Day	Time	Data	Program
1	2 h	Mon.	10.00-12.00	6th May	Self presentation + TUIASI presentation + Course presentation
3	2 h	Wed.	10.00-12.00	8th May	Robot Autodesk (worked examples)
4	2 h	Thurs.	8.00-10.00	9th May	Robot Autodesk (worked examples)
5	4 h	Fri.	14.30-18.30	10th May	Actions on structures (course)
					Actions on structures (worked examples Robot)
6	2 h	Mon.	10.00-12.00	13th May	Fire models (course)
8	2 h	Wed.	10.00-12.00	15th May	Fire models (worked examples Excel + Mathcad)
9	2 h	Thurs.	8.00-10.00	16th May	Fire models (worked examples Ozone + CFAST)
10	4 h	F:	14.30-18.30	17+b May	RC design (course)
10	4 11	Fri.	14.30-18.30	17th May	RC design (worked examples Robot)
11	2 h	Mon.	10.00-12.00	20th May	Steel design (course)
13	2 h	Wed.	10.00-12.00	22nd May	Steel design (worked examples Robot)
14	2 h	Thurs.	8.00-10.00	23rd May	Timber design (course)
15	2 h	Fri.	14.30-16.30	24th May	Timber design (worked examples Robot)
15	2 h	Fri.	16.30-18.30	24th May	Recapitulation

Bibliographical references:

- EN 1990 Eurocode Basis of structural design;
- EN 1991-1-2 Eurocode 1: Actions on structures Part 1-2: General actions Actions on structures exposed to fire;
- EN 1992-1-2 Eurocode 2: Design of concrete structures Part 1-2: General rules Structural fire design;
- EN 1993-1-2 Eurocode 3: Design of steel structures Part 1-2: General rules Structural fire design;
- EN 1995-1-2 Eurocode 5: Design of timber structures Part 1-2: General rules Structural fire design;





