ARRIVAL | SUNDAY AUGUST 31

Time	Location	Course/Event
14.30 – 20.00 h	Hall of the Convent of Saint Francis	Informal get together
20.00 – 21.00 h	Dinner, Canteen of the Convent	

DAY 1 | MONDAY SEPTEMBER 1

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 h	**Course Opening (Lecture Room of the "Museo Diocesano")**	
9.30 – 10.00 h	Course welcome and overview. The city of Oristano	A. Cazzani, M. C. Porcu
10.00 – 10.30 h	Historic masonry architecture: geometry and equilibrium	S. Huerta
10.30 – 10.45 h	New tools for masonry reviving the old approach	M. Angelillo
10.45 – 11.00 h	Historic masonry structures facing earthquakes	G. de Felice
11.00 – 11.30 h	Coffee Break	
11.30 – 12.00 h	**Introduction to Field Work** Presentation of the case studies	A.Gerges, F. Rodriguez
12.00 – 13.00 h	**Lecture** The Theory of Survey 1	P. Borin, G. Piccinin
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Field work** Visit to case studies	Teachers and Tutors
16.30 – 17.00 h	Coffee Break in the City Centre	
17.00 – 19.00 h	**Field work** Visit to case studies	Teachers and Tutors
19.00 – 20.00 h	**Introductory Lecture** The art of Masonry Construction	J. Ochsendorf
20.00 – 21.00 h	Dinner	

DAY 2 | TUESDAY SEPTEMBER 2

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Basic Theory** Material masonry. Heyman's principles of limit analysis. Equilibrium and thrust lines. Arches. Cracks. Collapse of arches.	S. Huerta
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Basic Theory** Equilibrium and thrust lines. Arches. Cracks. Collapse of arches. Limit analysis, safety. Buttresses. Case Study: The Church of Guimarei.	S. Huerta
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Lecture** Digital Drawing 1	P. Borin, G. Piccinin
16.30 – 17.00 h	Coffee Break	
17.00 – 20.00 h	**Field work** Visit to case studies.	Teachers and Tutors
20.00 – 21.00 h	Dinner	
21.00 – h	**Field work** Group work on case studies	

DAY 3 | WEDNESDAY SEPTEMBER 3

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Basic Theory** The Gothic Structure. Flying buttresses and cross vaults. Case Study: The stability of the Cathedral of Palma de Mallorca	S. Huerta
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Basic Theory** Towers & Spires. Rose windows. Flat vaults. Case Studies: The Towers of the Obradoiro (Cathedral of Santiago de Compostela), Flat vaults of the Convent of Llucmajor	S. Huerta
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Field work** Visit to case studies.	Teachers and Tutors
16.30 – 17.00 h	Coffee Break	
17.00 – 18.00 h	**Invited Lecture** Session 1: Principles for the conservation of historic structures	Paulo Lourenco
18.00 – 19.00 h	**Lecture** TBA	P. Fuentes
19.00 – 20.00 h	**Lecture** TBA	P. Fuentes
20.00 – 21.00 h	Dinner	
21.00 – h	**Field work** Group work on case studies	

DAY 4 | THURSDAY SEPTEMBER 4

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Advanced Theory** Heyman's No Tension continua. Limit Analysis and energy The Equilibrium and the Kinematic approaches	M. Angelillo A. Iannuzzo
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Advanced Theory** Vaults and domes. The membrane Equilibrium Analysis (MEA)	M. Angelillo A. Montanino
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Field Work** Group work on digital restitution and drawing	Teachers and Tutors
16.30 – 17.00 h	Coffee Break	
17.00 – 18.00 h	**Invited Lecture** Discrete Element Modelling: modeling masonry with 3DEC	José Lemos
18.00 – 19.00 h	**Invited Lecture** Session 2: Inspection, diagnosis and advanced material data	Paulo Lourenco
19.00 – 20.00 h	**Lecture** Digital Drawing 2	A. Bortot
20.00 – 21.00 h	Dinner	
21.00 – h	**Field Work** Group work on digital restitution and drawing	Teachers and Tutors

DAY 5 | FRIDAY SEPTEMBER 5

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Field Work** Group work on digital restitution and drawing	Teachers and Tutors
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Advanced Theory** Rigid Blocks for masonry. Numerical approximations: PRD, CDF The "force" approach: CASS Lumped Force Networks	M. Angelillo A. Iannuzzo
13.00 – 14.00 h	Lunch	
15.00 – 16.15 h	**Invited Lecture** Modeling masonry with 3DEC - Application topics	José Lemos
16.15 – 17.30 h	**Computational Masonry through COMPAS** Discrete Element Modelling and compas_3dec	A. Dell'Endice (Block Res. Group)
17.30 – 18.00 h	Coffee Break	
18.00 – 19.00 h	**Computational Masonry through COMPAS** Digital Graphic Statics, TNA & TNO	A. Dell'Endice (Block Res. Group)
19.00 – 20.00 h	**Lecture** Tile vaulting: actual possible uses both in restauration and new buildings	E. Redondo C. Martin
20.00 – 21.00 h	Dinner	
21.00 – 22.00 h	**Field Work** Group work on digital restitution and drawing	Teachers and Tutors

DAY 6 | SATURDAY SEPTEMBER 6

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 13.00 h	**Tile vaulting workshop**	C. Martin, E. Redondo
13.00 – 14.30 h	Lunch	
14.30 – 19.00 h	**Visit: Tharros, S.Giovanni di Sinis and archaeological museum of Cabras**	Teachers and Tutors
20.00 – 21.00 h	Dinner	

DAY 7 | SUNDAY SEPTEMBER 7

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 13.00 h	**Tile vaulting workshop**	C. Martin, E. Redondo
13.00 – 19.30 h	**Visit: Nuraghe Losa and pozzo sacro di Santa Cristina**	Teachers and Tutors
20.30 – 21.00 h	Dinner	

DAY 8 | MONDAY SEPTEMBER 8

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Advanced Theory** Centrifuge testing Doing unilateral with a Computer: Applications to the Case Studies Blocky Structures: Applications to the Case Studies	A. Iannuzzo A. Gerges A. Montanino
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Advanced Theory** Blocky Structures: Applications to the case studies	A. Iannuzzo A. Montanino
13.00 – 14.00 h	Lunch	
14.30 – 16.00 h	**Field Work** Group work on case studies	Teachers and Tutors
16.00 – 16.30 h	Coffee Break	
16.30 – 17.30 h	**Lecture** TBA	P. Meriggi
17.30 – 18.30 h	**Lecture** TBA	Philippe Block
18.30 – 20.00 h	**Field Work** Group work on case studies	Teachers and Tutors
20.00 – 21.00 h	Dinner	
21.00 –h	**Field work** Group work on case studies	

DAY 9 | TUESDAY SEPTEMBER 9

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
11.30 – 13.00 h	**Advanced Theory** Seismic assessment	G. De Felice M. Sangirardi
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
13.00 – 14.00 h	Lunch	
14.30 – 15.15 h	**Guest Lecture** TBA	Giulio Mirabella
15.15 – 16.00 h	**Lecture** TBA	V. Paris
16.00 – 17.00 h	**Invited Lecture** Dynamics of rocking structures	Nicola Nodargi
17.00 – 17.30 h	Coffee Break	
17.30 – 18.30 h	**Lecture** Case Studies: post-seismic interventions in Mexico	F. Orozco
18.30 – 20.00 h	**Field work** Group work on case studies	Teachers and Tutors
20.00 – 21.00 h	Dinner	
21.00 – h	**Field work** Group work on case studies	

DAY 10 | WEDNESDAY SEPTEMBER 10

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Advanced Theory** Seismic assessment and retrofitting	G. De Felice
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
16.30 – 17.00 h	Coffee Break	
17.00 – 19.00 h	**Field Work** Group work on case studies	Teachers and Tutors
19.00 – 20.00 h	**Invited Lecture** TBA	A. Fraddosio
20.00 – 21.00 h	Dinner	
21.00 – h	**Field work** Group work on case studies	

DAY 11 | THURSDAY SEPTEMBER 11

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Advanced Theory** Experiments and Applications to case studies	G. De Felice
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
16.30 – 17.00 h	Coffee Break	
17.00 – 19.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
19.00 – 20.00 h	**Invited Lecture (online)** Seismic Analysis of Masonry	M. DeJong
20.00 – 21.00 h	Dinner	
21.00 – h	**Field work** Group work on case studies	

DAY 12 | FRIDAY SEPTEMBER 12

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
16.30 – 17.00 h	Coffee Break	
17.00 – 19.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
19.00 – 20.00 h	**Invited Lecture** Artificial Intelligence in Structural Mechanics	E. Ruocco
20.00 – 21.00 h	Dinner	
21.00 – h	**Field work** Group work on case studies	

DAY 13 | SATURDAY SEPTEMBER 13

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	**Field Work** Group work on Structural Analysis	Teachers and Tutors
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	**Students' Final Presentations**	Teachers and Tutors
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	**Students' Final Presentations**	Teachers and Tutors
16.30 – 17.00 h	Coffee Break	
17.00 – 19.00 h	**Tile vaulting workshop** Vault tested to collapse. "Rubble beer party" (to dispose the resulting materials)	C. Martin, E. Redondo
20.00 – 23.00 h	**Social Dinner**	

DEPARTURE | SUNDAY SEPTEMBER 14

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.00 – 13.00 h	Farewell and Departures	