

ARRIVAL | SUNDAY AUGUST 27

Time	Location	Course/Event
14.30 – 19.30 h	Hall of the Casa de E.	Informal get together
19.30 – 20.30 h	Canteen of the Casa de E.	Dinner

DAY 1 | MONDAY AUGUST 28

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 10.00 h	Course Opening	
10.00 – 10.30 h	Historic masonry architecture: geometry and equilibrium	S. Huerta
10.30 – 11.00 h	New tools for masonry reviving the old approach	M. Angelillo
11.00 – 11.30 h	Historic masonry structures facing earthquakes	G. de Felice
11.30 – 12.00 h	Coffee Break	
12.00 – 13.00 h	Introduction to Field Work Presentation of the case studies	A. Gerges, F. Orozco, F. Rodriguez, A. Weichbrodt
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 – 18.15 h	Field work Visit to case studies.	Teachers and Tutors
18.15 – 19.30 h	Lecture (online) The art of Masonry Construction	J. Ochsendorf
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Lecture The Theory of Survey 1	A. Bortot, P. Fuentes, R. Guerra

DAY 2 | TUESDAY AUGUST 29

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 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	A. Bortot, P. Fuentes, R. Guerra
16.30 – 17.00 h	Coffee Break	
17.00 – 19.30 h	Field work Visit to case studies.	Teachers and Tutors
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Field work Group work on case studies	

DAY 3 | WEDNESDAY AUGUST 30

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 some case studies	S. Huerta
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	Lecture Digital Drawing 2	A. Bortot, P. Fuentes, R. Guerra
16.30 – 17.00 h	Coffee Break	
17.00 – 18.15 h	Field Work Group work on digital restitution and drawing	Teachers and Tutors
18.15 – 19.30 h	Invited Lecture (online) How historical masonry principles can be translated for circular construction innovation	P. Block
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Field work Group work on case studies	

DAY 4 | THURSDAY AUGUST 31

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 Safe Theorem and the Kinematic Theorems at work	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) Applications	M. Angelillo C. Olivieri 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 – 19.30 h	Field Work Group work on digital restitution and drawing	Teachers and Tutors
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Panel Discussion Cancelled	

DAY 5 | FRIDAY SEPTEMBER 1

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	Advanced Theory Rigid Blocks for masonry. Numerical approximations: PRD, CDF	M. Angelillo A. Iannuzzo
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	Advanced Theory The force approach: identifying singular stresses with a computer: CASS Lumped Force Networks	M. Angelillo A. Montanino A. Amendola
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	Lecture Computational assessment strategies for URM developed in the last years	P. Block Masonry Research Group
16.30 – 17.00 h	Coffee Break	
17.00 – 18.15 h	Invited Lecture TBA	C. Blasi
18.15 – 19.30 h	Lecture Tile vaulting: actual possible uses both in restauration and new buildings	E. Redondo C. Martin
19.30 – 20.30 h	Dinner	

DAY 6 | SATURDAY SEPTEMBER 2

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 Segovia and Segovia Historical surroundings The Alcazar	Teachers and Tutors
19.30 – 20.30 h	Dinner	

DAY 7 | SUNDAY SEPTEMBER 3

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	Free Afternoon: Picnic Lunch	
19.30 – 20.30 h	Dinner	

DAY 8 | MONDAY SEPTEMBER 4

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	Field work Group work on case studies	
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	Advanced Theory Seismic assessment	G. de Felice M. Sangirardi
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	Lecture Demo of COMPAS Masonry toolbox	Block R.G.
16.30 – 17.00 h	Coffee Break	
17.00 – 18.15 h	Lecture Demo of COMPAS Masonry toolbox	Block R.G.
18.15 – 19.30 h	Invited Lecture TBA	A. Amorosi
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Field work Group work on case studies	

DAY 9 | TUESDAY SEPTEMBER 5

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 – 14.00 h	Lunch	
15.00 – 16.30 h	Advanced Theory Seismic assessment and retrofitting	G. de Felice P. Meriggi
16.30 – 17.00 h	Coffee Break	
17.00 – 18.15 h	Tile vaulting workshop	C. Martin, E. Redondo
18.15 – 19.30 h	Invited Lecture (online) TBA	M. De Jong
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Field work Group work on case studies	

DAY 10 | WEDNESDAY SEPTEMBER 6

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	Tile vaulting workshop	C. Martin, E. Redondo
13.00 – 14.00 h	Lunch	
15.00 – 16.00 h	Invited Lectures Combining traditional masonry with AR technology	S.Adrianssens
16.00 – 17.00 h	Advanced Theory Seismic assessment and retrofitting	G. de Felice
17.00 – 17.30 h	Coffee Break	
17.30 – 19.00 h	Field work Group work on case studies	Teachers and Tutors
19.00 – 19.30 h	Invited Lectures Dynamic analysis of block masonry structures under seismic excitation	N. Nodargi
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Field work Group work on case studies	

DAY 11 | THURSDAY SEPTEMBER 7

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 – 18.15 h	Advanced Theory Rigid Blocks for masonry. Numerical applications of PRD, CDF, CASS to some case studies	A. Iannuzzo A. Montanino
18.15 – 19.30 h	Lecture Thrust Network Analysis	Philippe Block
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Field work Group work	

DAY 12 | FRIDAY SEPTEMBER 8

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 10.00 h	Lecture Experimental aspects of masonry dynamics	A.Fraddosio
10.00 – 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 – 18.15 h	Lecture The analysis and evaluation of complex monumental buildings	Antonello De Luca
18.15 – 19.30 h	Lecture TBA	John Ochsendorf
19.30 – 20.30 h	Dinner	
20.30 – 22.00 h	Panel Discussion Real Masonry Structures. What tools should we use?	Hosts, Teachers, Tutors, Students

DAY 13 | SATURDAY SEPTEMBER 9

Time	Course/Event	Teachers/Lecturers
8.30 – 9.15 h	Breakfast	
9.30 – 11.00 h	Field Work Group work	Teachers and Tutors
11.00 – 11.30 h	Coffee Break	
11.30 – 13.00 h	Students' Final Presentations Group work on Structural Analysis	Teachers and Tutors
13.00 – 14.00 h	Lunch	
15.00 – 16.30 h	Students' Final Presentations Group work on Structural Analysis	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 10

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

