

Science Camp Structural Soundscapes 2025-2

ProTELC

Update: 29.08.2025

Schedule

Week 1	Monday 22.09.	Tuesday 23.09.	Wednesday 24.09.	Thursday 25.09.	Friday 26.09.	Sat./Sun. -
09:00 - 10:30	Traveling and arrival at Bauhaus-Universität Weimar Meeting point @ BUW Marianstraße 13B	Guest lecture	Guest lecture	Guest lecture	Guest lecture	Project work
		Discussion break				
11:00 - 12:30		Lecture	Lecture	Lecture	Project work	Processing and visualization of results from shaking table tests & digital twins.
		Exploring sound production withn signal procesing	Audio modulation	Python crash course	Testing structures: Shaking table use and functions	
	13:00hrs Welcome	Lecture Hall D	TBD	M.Sc. Melad Haweyou TBD	M.Sc. Melad Haweyou TBD	M7 - R205 & R206
	Prof. Abrahamczyk	Lunch break				
13:30 - 15:00	Lecture	Project work	Lecture	Project work	Project work	Free time
	Introduction to Structural Dynamics and Vibrations	Assembly of test structures	Introduction to Opensees	Digital twin: Modeling test structures in Opensees	Testing structures: Shaking table with Sines sweep	
	Dr. Thomas Most	M.Sc. Melad Haweyou	M.Sc. Melad Haweyou	M.Sc. Melad Haweyou	M.Sc. Melad Haweyou	
	Lecture Hall D	M7 - R205 & R206	TBD	M7 - R205 & R206	TBD	
Discussion break						
15:30 - 17:00	Guest lecture	Project work	Project work	Project work	Project work	Exploring Weimar's cultural offers
	15:15hrs Natural hazards vulnerability and risk research in Australia RMIT University	Testing structures: Simple vibrations & identification of dynamic properties	Sensors allocation and instrumentation of test structures	Digital twin: Model updating	Testing structures: Shaking table with Earthquake records	
	Dr. Tariq Maqsood	M.Sc. Melad Haweyou	Dipl.-Ing. Christian Kaufmann	M.Sc. Melad Haweyou	M.Sc. Melad Haweyou	
	Lecture Hall D	M7 - R205 & R206	M7 - R205 & R206	M7 - R205 & R206	TBD	
Evening	16:50hrs - Accomodation Check-In					
	Ice-Breaker		Movie night	CityCenter Rally		
	17:30hrs @Zum Sportpark					

Week 2	Monday 29.09.	Tuesday 30.09.	Wednesday 01.10.
09:00 - 10:30	Project work Digital twin & Audio Modulation <i>Supervised project work</i> M7 - R205 & R206	Guest lecture Polytec GmbH <i>Dipl.-Ing. Marco Fritzsche</i> Lecture Hall D	Project work Check-Out ---- Preparation of presentation M7 - R205 & R206
	Discussion break		
11:00 - 12:30	Guest lecture Planning in the Digital Age Emch+Berger GmbH <i>M.Sc. Gustavo Cosenza.</i> Lecture Hall D	Project work Sync of vibrating structures <i>Supervised project work</i> M7 - R205 & R206	Project work Preparation of presentation M7 - R205 & R206
	Lunch break		
13:30 - 15:00	Project work Structure update & improvement <i>Supervised project work</i> M7 - R205 & R206	Project work Orchestra: Tuning of multiple structures <i>*All teams</i> M7 - R205 & R206	Final Presentation M7 - R205 & R206
	Discussion break		
15:30 - 17:00	Project work Structure update & improvement <i>Supervised project work</i> M7 - R205 & R206	Project work Orchestra: Tuning of multiple structures <i>*All teams</i> M7 - R205 & R206	Closing Certificate ceremony and farewell M7 - R205 & R206
Evening	Social Activity		