Program

Day 1 – Monday, July 4, 2022 *(Greece Time - EEST)*

14:30-14:45	Welcome Session	- Dr. K. Yakinthos, Dean of Engineering, AUTH - Dr. D. Lagoudas, Associate Vice Chancellor for Engineering Research, TAMU
14:45-15:00	Introduction / Expectations (Overview of Topics, Material Systems, Manufacturing, and Experiments to be covered)	Dr. N. Michailidis, Director of the AUTh-TEES Partnership

Session I:	*Advanced Materials & Manufacturing*	*Instructor*
15:00-15:45	Shape Memory Alloys (SMAs)	Dr. D. Lagoudas
15:45-16:30	Additive Manufacturing of Shape Memory Polymers (SMPs), 3D scaffolds and lattice structures	Dr. N. Michailidis
16:30-16:50	Break	
16:50-17:35	Processing and Characterization of Porous Materials	Dr. F. Stergioudi

Day 02 – Tuesday, July 5, 2022

Session II:	*Micromechanics Workshop*	*Instructor*
11:00-13:00	Thermal, mechanical and thermomechanical testing of shape memory materials, porous and composites	Dr. K. Katakalos Dr. F. Stergioudi Dr. N. Michailidis
13:00-15:00	Lunch and transportation between labs	
15:00-16:00	Micromechanics Workshop Part I	Dr. D. Lagoudas Dr. T. Zhou
16:00-16:15	Break	
16:15-17:00	Micromechanics Workshop Part II	Dr. G. Chatzigeorgiou

Day 03 – Wednesday, July 6, 2022

Session III:	*Simulation of Smart Materials and Student projects*	*Instructor*
11:00-13:00	Student Projects Assignment	Dr. G. Chatzigeorgiou Dr. F. Stergioudi Dr. K. Katakalos
13:00-14:00	Lunch	
14:00-15:45	Review of progress on projects	Dr. J. Wilkerson
15:45-16:30	Micromechanics of Ductile Failure	Dr. G. Chatzigeorgiou Dr. F. Stergioudi Dr. K. Katakalos

Day 04 – Thursday, July 7, 2022

Session IV:	Visit at BETA CAE SYSTEMS for training	Instructor
10:00-10:45	Introduction to Computer Aided Engineering - BETA CAE Systems, Company & Products	Nikolaos Trakatelis
10:45-11:00	Break	
11:00-12:30	Pre & Post Processing for FE modelling of Laminated Composite Structures	Vangelis Palaiokastritis
12:30-13:30	Lunch	
13:30-15:00	Multiscale Modelling of Composites with Mean Field and FE Homogenization	Vangelis Palaiokastritis
15:00-15:15	Break	
15:15-15:45	Extended Reality (XR) and collaboration in CAE world	Gerasimos Skouvaklis
15:45-16:00	Q/A	
16:00-	Return to AUTH	

Day 05 – Friday, July 8, 2022

Session V:	Students' evaluation	Instructor
15:00-16:30	Presentation of Student Projects	All instructors
16:30-17:00	Break	
17:00-17:30	Certificate Awarding Ceremony and Conclusion of Summer School	All instructors
17:30-18:30	Networking session / mini-Party	All instructors

Organizing Institutions:

ARISTOTLE UNIVERSITY OF THESSALONIKI

TEXAS A&M UNIVERSITY

CENTER FOR RESEARCH + DEVELOPMENT OF ADVANCED MATERIALS

TEES Texas A&M Engineering Experiment Station

Collaborating Institutions:

CNRS

BETA SIMULATION SOLUTIONS

Under the Auspices of:

School of Engineering AUTh

Department of Mechanical Engineering AUTh