



Associazione Italiana di Aeronautica e Astronautica
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Founded in 1920
Member of:
International Astronautical
Foundation (IAF)
International Council of
Aeronautical Sciences (ICAS)
Council of European
Aerospace Societies (CEAS)

To: Members of the European Aerospace
Associations

Object: AIDAA Courses 2022

Turin, 23 March 2022

Dear Members of the European Aerospace Associations,

I am pleased to invite you and your organizations to attend the courses organized by the AIDAA Academy in 2022.

The first edition of the AIDAA courses was organized in 2021 during COVID lockdowns, and they contributed to sharing aerospace knowledge among our members. There was outstanding participation fueled by the necessity to maintain the aerospace culture and network alive despite the pandemic restrictions. Attendees from AIDAA and other organizations participated with interest coherently with the founding principles of our associations.

In a way, the AIDAA courses are an outcome of COVID, and due to the success of the first editions, AIDAA decided to continue this initiative and expand the offer of courses spanning the entire aerospace field and related disciplines. Furthermore, such courses can foster the aerospace community in preparation for the upcoming events in Europe: ICAS in Stockholm and Florence and IAC in Paris and Milan.

The list of courses for 2022 is attached to this letter, and they will be published on the AIDAA website, <https://www.aidaa.it/courses/>. For further information and registration procedure, please, contact academy@aidaa.it.

Professor Erasmo Carrera
President of AIDAA

AIDAA COURSES 2022

ID	Title	Speakers	Duration (hours)	Dates or quarter
1	Challenges and opportunities for the aerospace frontier research offered by the ERC and the MSCA programme	C. Colombo (POLIMI), A. Giacomello (Sapienza), A. Pagani (POLITO), F. Topputo (POLIMI)	4	25 March 2022
2	Tethers in Space: deorbiting and power generation	G. Colombatti (UNIPD)	4	Q3
3	Aircraft impact dynamics	M. Guida (UNINA) et al.	4	Q4
4	An overview on space debris protection best practices	L. Olivieri (UNIPD), L. Barilaro (U Malta)	4	Q4
5	Global-local analysis techniques for metallic and composite structures	E. Zappino (POLITO)	15	Q3
6	Sound transmission control through optimized composite sandwich lattice panels	C. Orlando (U Kore)	8	6-13-20-27 April
7	Innovative propulsion system in service of small satellites	D. Pavarin (UNIPD) et al.	4	Q4
8	Planetary probes entry and descent science	A. Aboudan (UNIPD)	4	Q4
9	Introduction to the design of LEO nanosatellite orbits for local coverage	C. Bettanini (UNIPD)	4	Q4

10	Multiscale techniques for nonlinear analysis of composite structures	I. Kaleel (NASA), M.H. Nagaraj (U Mass Lowell)	8	11-12 April
11	Boosting the commercialization of space activities	L. Dal Monte, A de Clercq, C. Elderling (ESA)	4	26 April
12	Numerical modeling of hypersonic flows	F. Bonelli (POLIBA), L. Sciacovelli (ParisTech)	8	Q4
13	Optical methods for spacecraft attitude and orbit determination	D. Modenini (UNIBO)	6	9-10 May
14	The Space Environment Interaction Engineering: Physics, Test Technology and Experimental Validation	A. Delfini (Sapienza)	6	Q4
15	Toward Smart Air Mobility: a Model-Based Design approach	E.L. De Angelis (UNIBO)	6	Q3
16	Basics of Corrosion and Protection of Metals for Aerospace	F. Di Franco, A. Zaffora (UNIPA)	10	Q3
17	High-order accurate numerical methods in aeronautics at the Exascale	V. Gulizzi (UNIPA)	8	Q3
18	Full Flight Simulator: testing and research platform	A. Alaimo, A. Esposito (U Kore)	8	Q4
19	Nonlinear spacecraft attitude control	F. Celani (Sapienza)	4	Q3
20	High-speed civil aircraft on-board systems integration	N. Viola, R. Fusaro, D. Ferretto (POLITO)	8	23, 25-26 May

21	Economic assessment of future environmentally sustainable high-speed vehicles	R. Fusaro, D. Ferretto, N. Viola (POLITO)	8	21-22, 28-29 April
22	Aerothermodynamic and propulsive investigations to support pollutant and greenhouse gases emissions estimation of future high-speed vehicles	M. Marini, P. Roncioni, G. Saccone, L. Cutrone (CIRA)	4	18 May
23	HMI Design in Aeronautics	S. Bagassi, S. De Crescenzo (UNIBO)	6	Q4
24	Structural Dynamics and Acoustics in aerospace and transport engineering field	G. Petrone (UNINA), P. Gardonio (UNIUD), C. Adams (TU Darmstadt), V. Meruane (U Chile), O. Robin (U Sherbrooke)	4	Q3