

LIST OF COURSES 2022

AIDAA is pleased to announce the **list of courses for 2022** in the framework of the institutional activities for members organized by the Educational Series and Academy technical committee.

Courses will be **online on Webex**, and exact dates will be announced for each course via dedicated web pages on www.aidaa.it. **Twenty-three courses** are scheduled to date, but a few more could be added.

Participation fees are indicated below, and registration platforms will be available soon.

At the end of each course, attendance certificates will be sent to participants.

For further info: academy@aidaa.it.

Title	Speakers	Duration (hours)	Dates (quarter)
Challenges and opportunities for the aerospace frontier research offered by the ERC and the MSCA programme	C. Colombo and F. Topputo – Politecnico di Milano A. Giacomello – Università La Sapienza A. Pagani – Politecnico di Torino	4	1
Economic assessment of future environmentally sustainable high-speed vehicles	R. Fusaro, D. Ferretto, and N. Viola – Politecnico di Torino	8	1
Multiscale techniques for nonlinear analysis of composite structures	I. Kaleel – NASA Glenn M.H. Nagaraj – University of Massachusetts Lowell	8	2
Sound transmission control through optimized composite sandwich lattice panels	C. Orlando and S. Valvano – Università di Enna Kore	8	2
Boosting the commercialisation of space activities	L. Del Monte, A. de Clercq, and C. Eldering - ESA	4	2
Optical methods for spacecraft attitude and orbit determination	D. Modenini – Università di Bologna	6	2
High-speed civil aircraft on-board systems integration	N. Viola, R. Fusaro, and D. Ferretto – Politecnico di Torino	8	2
Aerothermodynamic and propulsive investigations to support pollutant and greenhouse gases emissions estimation of future high-speed vehicles	M. Marini, P. Roncioni, G. Saccone, and L. Cutrone - CIRA	4	2



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Title	Speakers	Duration (hours)	Dates (quarter)
Tethers in space: deorbiting and power generation	G. Colombatti – Università di Padova	4	3
Toward smart air mobility: a model-based design approach	E.L. de Angelis – Università di Bologna	6	3
Basics of corrosion and protection of metals for aerospace	F. Di Franco and A. Zaffora – Università di Palermo	10	3
High-order accurate numerical methods in aeronautics at the Exascale	V. Gulizzi – Università di Palermo	8	3
Nonlinear spacecraft attitude control	F. Celani – Università La Sapienza	4	3
Aircraft impact dynamics	M. Guida – Università di Napoli	4	4
An overview on space debris protection best practices	L. Olivieri – Università di Padova L. Barilaro - Malta College of Arts, Science and Technology	4	4
Numerical models for the solution of multifield problems	E. Zappino – Politecnico di Torino	8	4
Innovative propulsion system in service of small satellites	D. Pavarin and F. Barato - Università di Padova E. Toson – T4i	4	4
Planetary probes entry and descent science	A. Aboudan – Università di Padova	4	4
Introduction to the design of LEO nanosatellite orbits for local coverage	C. Bettanini – Università di Padova	4	4
Numerical modeling of hypersonic flows	F. Bonelli – Politecnico di Bari L. Sciacovelli - DynFluid Laboratory of Arts & Métiers Institute of Technology	8	4
The space environment interaction engineering: physics, test technology and experimental validation	A. Delfini – Università La Sapienza	6	4
Full flight simulator: testing and research platform	A. Alaimo and A. Esposito – Università di Enna Kore	8	4
HMI design in aeronautics	S. Bagassi and F. De Crescenzio – Università di Bologna	6	4



LIST OF COURSE PACKAGES 2022

AIDAA courses are part of the institutional activities of the Association for its **members**. As detailed below, an online payment platform will be available soon to purchase courses packages. For further info: **academy@aidaa.it**.

PACKAGES FOR ORGANIZATIONS (UNIVERSITIES, DEPARTMENTS, COMPANIES, ETC.)

For each package it is possible to select **one of the two** options.

ID	Price (EUR)	Content and benefits *
El	650	A. 5 accesses to each course or B. 100 tokens to access courses
E2	1200	A. 10 accesses to each course or B. 200 tokens to access courses
E3	5000	A. 50 accesses to each course or B. 1000 tokens to access courses
E4	8000	A. 100 accesses to each course or B. 2000 tokens to access courses

^{*}Each package includes 1-year AIDAA Membership for the organization.

PACKAGES FOR INDIVIDUALS

ID	Price ** (EUR)	Content and benefits *
11	40	2 tokens
12	80	6 tokens
13	160	Access to all courses

^{*}Each package includes 1-year AIDAA Membership.

^{**} For AIDAA members the price of I2 and I3 is 40€ and I20€, respectively.