



DLR DESIGN CHALLENGE 2026

X-Design: Demonstrator of the Future



The German Aerospace Center (DLR) invites students from German universities to participate in the DLR Design Challenge 2026: Take the next step, help shape tomorrow's aviation and **develop an innovative, realistic concept for an experimental aircraft** to demonstrate future aviation technologies!

Background:

The generation of airliners after next is due to enter into service by 2050. Many of the technologies required for this are already being intensively researched or tested on the ground. However, integrating them into future aircraft in time requires previous testing under real flight conditions. This is precisely why test aircraft are needed.

We are not looking for a modified existing aircraft, instead we would like to see a completely new design that could realistically be built in the coming years. The basic framework conditions are based on regional aircraft with 9 seats and CS-23 certification.

Your Task:

New types of propulsion, manufacturing technologies, material innovations, new aircraft concepts and aerodynamic solutions? It is on you to decide which (combination of) future technologies your demonstrator should be able to test. While the selection of technologies to be demonstrated by your design is important, its feasibility, operation and certification right from the start are crucial, too.

This is included for all participants:

- Going through a design process from A to Z - under realistic conditions
- Deepening and applying the knowledge acquired during your studies
- Exchange with an experienced DLR mentor during the design process
- Build on your soft skills through teamwork
- Fun, challenges and recognition, including an official certificate of participation from DLR, with the opportunity to have academic achievements recognised at your university*
- Invitation to DLR in Braunschweig and Hamburg for kick-off and closing events** including networking opportunities
- Feedback on your concept from a DLR jury of experts headed by Dr. Markus Fischer, Divisional Board Member for Aeronautics
- Mention in DLR press release and other communication channels

What's also in it for the finalists:

- First to third place: One-off opportunity to present the concept at the German Aerospace Congress (DLRK)**.
- If you win: One-off opportunity to present the concept at an international conference**

Ready for the challenge?

We are pleased to share **more details about this year's DLR Design Challenge** on the next page.



More information here

* to be clarified individually with the respective universities

** incl. reimbursement of travel and accommodation costs as well as any conference fees incurred



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Notes on registration

- Registration via the responsible university supervisors by e-mail to DesignChallenge@dlr.de.
- **Registration deadline** for the DLR Design Challenge 2026 is **01.03.2026**.
- Maximum of six team members, with each team represented by at least one team member at each event.
- Teams with students from different universities are also possible. If required, the DLR Design Challenge Team is happy to support with matchmaking.
- The following documents are required for registration:
 - List of participants
 - Declaration of consent and privacy policy
 - Consent to the right to one's own image
- The **detailed task definition** will be published in **mid-February**.
- There will be a **virtual Q&A event** about a month after the kick-off event where questions about the task will be answered.



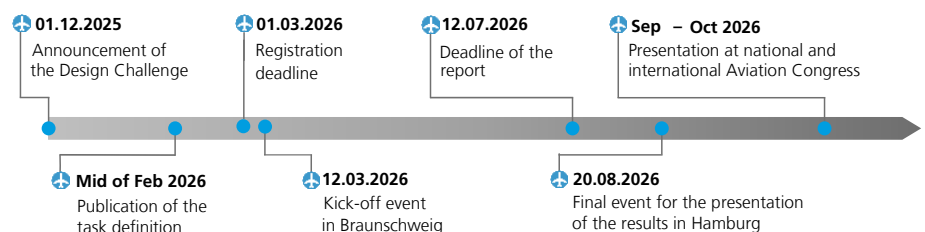
Kick-off event

The **kick-off event** will take place on **Thursday, 12 March 2026** at the DLR site in Braunschweig. The teams' travel expenses will be reimbursed in accordance with the Federal Travel Expenses Act. The preliminary agenda includes:

- Video greetings from the Chair of the DLR Executive Board, Prof. Dr. Anke Kaysser-Pyzalla.
- Welcome by the DLR Divisional Board Member for Aeronautics and Jury Chairman Dr. Markus Fischer
- Presentation of the Institute of System Architectures in Aeronautics and the Institute of Aerodynamics and Flow Technology
- Keynote speeches by technical experts on the topic of this year's Design Challenge
- World Café - interactive workshop on the Design Challenge task
- Tour of the DLR site in Braunschweig, including the wind tunnel and the flight test fleet



Further dates and conditions of participation will be announced on time.



More information here