



# DLR DESIGN CHALLENGE 2025

## MedEvac: Designing the Future of Emergency Air Transport

### Background

In emergency situations, rapid and efficient medical evacuation can mean the difference between life and death. This year's DLR Design Challenge invites participants to develop innovative aircraft concepts that improve medical evacuation (MedEvac) capabilities. These specialized aircraft must be designed to ensure speed, stability, and patient safety, while also integrating advanced medical equipment and optimizing fuel efficiency.

Participating teams will address a range of mission scenarios, from rapid emergency response to long-distance medical evacuation. The challenge requires each team to design an innovative, high-performance MedEvac aircraft that meets critical operational, medical, and cabin requirements. Students must balance between medical transport solutions and optimal aircraft performance across the diverse mission profiles. By integrating advanced aviation technologies, smart medical systems, and streamlined rescue procedures, teams will develop holistic MedEvac solutions that enhance emergency response capabilities.

### Organization

You and your fellow students are interested? The German Aerospace Center (DLR) is inviting you to represent your university at the DLR Design Challenge 2025. For team registration, please get in touch with the responsible supervisors at your university, who will forward the registration to [DesignChallenge@dlr.de](mailto:DesignChallenge@dlr.de).

- Each team may consist of a maximum of six members, However, at least one team member must represent the team at each event.
- Kick-Off event and release of the detailed design task.
- Preparation of a technical report for the documentation of the results.
- Closing event and presentation of the results by all teams.
- Evaluation of the reports by a jury of experts from the DLR.

Preliminary planning for this year's Design Challenge:

