

DLR_Campus

DLR_Campus

A DLR initiative
to promote young
research talent



At both the school and university level, DLR sets a high priority on promoting the next generation of scientists:

It operates several DLR_School_Labs to awaken in students an early interest in science and engineering and provides courses of practical training. Other means aimed at children and young people include school brochures related to DLR research topics, programmes for especially gifted young people, and activities like the annual Girls' Day which focus on encouraging schoolgirls to consider science careers.

In the academic field, support is provided to university students working on their thesis, in workshops, and in summer schools, followed up by the supervision and coaching of postgraduates.

Other activities range from training courses for teachers to students competitions calling for pioneering ideas.

These varied pursuits are not designed as single, independent activities but rather as components of an integrated concept, going by the name of DLR_Campus, to encourage the development of new talent. DLR_Campus addresses in suitable ways the different target groups along the entire educational path and includes two main fields of activity:

- First of all, the measures for children, young people and teachers carried out by the DLR_School_Labs,
- Secondly, the activities relating to university students and postgraduates, united under the designation DLR_Academic_Lab.

The whole DLR_Campus programme is designed, implemented and evaluated by in-house and external experts and centrally managed by the DLR coordinator for education/outreach on behalf of the chairman of the DLR executive board. With DLR_Campus we want to make a meaningful contribution toward promoting the next generation of scientists: in our own interest with a view to future staff, in the interest of our partners in the science community and our knowledge-based society in general, and finally, and primarily, in the interest of the young people themselves whom we want to inspire and assist to take up careers in research and technology.

DLR_School_Labs

DLR was one of the first German research institutions to establish a student lab, already in the year 2000: DLR_School_Lab Göttingen. At that time it was one of the first so-called out-of-school learning centres in the country. Since then, thirteen DLR_School_Labs at various DLR locations and partner universities together welcome about 40,000 children and young people annually, enabling them to experience the fascination of research in the context of visits by their school classes. The focus is on conducting hands-on experiments: tailored to the respective age level, these experiments provide an authentic link to “genuine research” and acquaint the students with the world of science in an inspiring, learning-by-doing atmosphere. Each DLR_School_Lab reflects the thematic specialisation of the institutes and facilities of the hosting location. The portfolio targets the junior as well as senior grades of secondary schools, exceptionally also elementary school classes. The children are supervised by DLR staff and university student tutors who have the appropriate didactic training and are thoroughly acquainted with the subjects to be covered in the various experiments.

In addition to the typical one-day class visits, DLR_School_Labs also have on offer additional services for schools in the form of courses, working groups and workshop projects, such as the DLR_Project_Lab in Neustrelitz or the student workshop at DLR_School_Lab Göttingen. They also conduct workshops for teachers, providing background information on the current status of research and ideas for the attractive presentation of science and technology subjects in the classroom.

While the majority of DLR_School_Lab activities address as many schools and youngsters as possible, DLR_School_Labs are also engaged in stimulating selected highly gifted students. For example, DLR invites—in close cooperation with relevant partner institutions—selected groups of particularly talented young people to a DLR_Talent_School. These several-day information visits are intended to give the participants deeper insights into the work of DLR institutes and career paths. Special efforts are also made to encourage girls and young women to consider careers in science and technology, to which the DLR_School_Labs pay particular attention not only during the annual Girls’Day, but also on a day-to-day basis.

Furthermore, DLR_School_Labs offer student traineeships at the various DLR locations. Internet resources for children and young people, information material for schools, and student competitions round out this DLR portfolio.

Finally, DLR assumes responsibility as a “trainer” in classic apprenticeship programmes. Guidance is provided about 20 different vocations, with above-average success because, in addition to their vocational school instruction, DLR supports its almost 250 trainees with extensive in-house schooling and tailored preparation for their examinations. In cooperation with appropriate institutions and technical colleges, DLR also provides several courses of study which culminate in a Bachelor of Engineering degree.

DLR_Academic_Lab

DLR provides many opportunities for university students and postgraduates. The DLR institutes supervise numerous students, either in traineeships lasting several weeks or long term in the practical portion of their thesis projects.

Students are also invited to attend various high-calibre information events at individual DLR locations. These programmes provide a condensed presentation of the current state of research with lectures by in-house and external specialists and workshops with practical exercises for participants. During these events there is also time for informal discussions between students and DLR representatives, for example concerning on-the-job training or career options. Organisational details about the conditions for participation and the application procedure are posted in good time on the DLR website and in the relevant department of our university partners.

Competitions calling for pioneering ideas in which students can themselves carry out their experiment proposals for high-altitude rocket and balloon campaigns, such as in the joint DLR-Swedish REXUS/BEXUS project, parabolic flights with students on board, and a research aircraft modified as an “in-flight lecture room”—what DLR has to offer in the way of such exceptional “highlights” far exceeds the usual standard. In addition, DLR regularly supports the participation of highly motivated students in science conferences worldwide. Furthermore, as an official academic partner of the Lindau Nobel Laureate Meetings, DLR is proud to have the privilege of nominating promising young researchers as candidates to attend this internationally renowned annual gathering.

Candidates for doctoral degrees benefit from excellent supervision and coaching at the individual DLR institutes. To complement the thematic aspects of their graduate work the DLR_Graduate_Program offers all postgraduate staff members additional high-quality training to enhance their soft-skill qualifications. It involves, in particular, the acquisition of overall methodological, management and social competence, including, for example, successful publication and presentation, project management, funding procurement, conducting negotiations, and similar skills. This tailor-made programme for doctoral candidates, initiated in 2009, is extremely popular. Many staff members working on their dissertations, who are invited to participate on a voluntary basis, have signed up for the DLR_Graduate_Program. Successful completion of this three-year programme leads to official certification—which enumerates the courses and activities.

More details about all these measures are available under DLR.de/Education. Enquiries can be addressed to the contacts listed should additional information be desired.

DLR at a glance

The German Aerospace Center (DLR) is the national aeronautics and space research centre of the Federal Republic of Germany. Its extensive research and development work in aeronautics, space, energy, transport, digitalisation and security is integrated into national and international cooperative ventures. In addition to its own research, as Germany's space agency, DLR has been given responsibility by the federal government for the planning and implementation of the German space programme. DLR is also the umbrella organisation for the nation's largest project management agency.

DLR has approximately 8000 employees at 20 locations in Germany: Cologne (headquarters), Augsburg, Berlin, Bonn, Braunschweig, Bremen, Bremerhaven, Dresden, Goettingen, Hamburg, Jena, Juelich, Lampoldshausen, Neustrelitz, Oberpfaffenhofen, Oldenburg, Stade, Stuttgart, Trauen, and Weilheim. DLR also has offices in Brussels, Paris, Tokyo and Washington D.C.

Published by **Deutsches Zentrum
für Luft- und Raumfahrt**
German Aerospace Center

Layout CD Werbeagentur GmbH, Troisdorf

Press date Cologne, November 2017

Reproduction in whole or in part or any other use is subject to prior permission from the German Aerospace Center (DLR).

Supported by:



Federal Ministry
for Economic Affairs
and Energy

on the basis of a decision
by the German Bundestag



DLR

**Deutsches Zentrum
für Luft- und Raumfahrt**
German Aerospace Center

Linder Höhe
51147 Köln

Telephone +49 (0) 2203 601-3653
Fax +49 (0) 2203 601-4544

DLR.de