

Financing the doctoral and postdoctoral phase

Are you considering a doctorate or a postdoctoral phase following your dissertation and embarking on an academic career? Moreover, are you wondering how to finance your doctorate and postdoctoral studies?

Doctoral candidates have different financing options at their disposal:

- Employment at an university
- Employment at a non-university research institution
- Being financed as member of a structured doctoral program (scholarship/job)
- Scholarship
- Industry-induced funding
- Self-financing

In general, the postdoctoral phase is financed by a position as a research associate/staff member at the university or at a non-university research institution, a scholarship from foundations and/or funding organizations and - to a small extent - within the framework of structured doctoral programs.

Details on financing types

Employment at an university

Universities can employ doctoral candidates as research associates either in a position at a chair or financed by third-party funds through a project. Payment is made in accordance with the relevant public service wage agreement (TV-L). The job profile usually includes teaching activities of between two and four hours per week and other administrative tasks. These jobs are often part-time. The length of employment of doctoral students varies. For example, it depends on the duration of the approved project and can vary from discipline to discipline.

According to a study by the doctoral student network THESIS, approximately one in three doctoral candidates works at the university. Only in very few cases the doctoral thesis is specifically based on the research to be conducted in the position as research associate; rather, doctoral candidates often conduct research in other projects (as their own) at their institute.

The advantage of working at the university is that the scientific topic is often in close proximity to the content of the thesis. In addition, lectures can be linked to the topic of the dissertation and the opportunity of a professional exchange with colleagues is given.

Nevertheless, the relationship between effort and payment can be challenging. A full-time position in an external project leaves hardly any time for the own research work. A part-time position, on the other hand, is hardly enough to cover the cost of living.

Just like doctoral candidates, post-doctoral candidates can also be financed as research associates at a chair or by third-party funded projects.

Further links to job advertisements at TU Dresden as well as nationwide job offers:

https://tu-dresden.de/karriere/stellenangebote/stellenangebote-der-tud/stellen_tud?set_language=en

<https://www2.daad.de/deutschland/promotion/phd/en/13306-phdgermany-database/>

Employment at a non-university research institution

Non-university research institutions such as the Fraunhofer-Gesellschaft (FhG), the Helmholtz Association (HFG), the Max Planck Society (MPG) or the Leibniz Society also offer doctoral positions.

While universities conduct research and teaching, non-university research institutions are only allowed to pursue research. Therefore, non-university research institutions do not have the right to award doctoral degrees. Nevertheless, they offer employment to doctoral students to varying degrees. The doctorate itself is then conducted at a university.

Non-university research institutions also offer a diverse pool of postdoctoral positions.

Further links to non-university research institutions (DRESDEN-concept partners) and job offers in research institutions:

<https://www.dresden-concept.de/en/alliance/members.html>

<https://tud.stellenticket.de/en/offers/>

Membership in a structured doctoral program

Structured doctoral programs are financially supported and temporary institutions of the university for the promotion of doctoral candidates in mostly interdisciplinary research programs. These programs are characterized by a high degree of practical relevance, teamwork and close exchange between doctoral candidates and supervisors. In addition to specialist content, structured programs also offer key skills seminars such as scientific writing and presentation techniques. Doctoral candidates are financed through the award of scholarships or employment contracts. As a rule, the monthly scholarship amounts to between 1,000.00 EUR and 1,365.00 EUR. In addition, there is an allowance for material costs of 103.00 EUR and a child allowance of 400.00 EUR for the first child and 100.00 EUR for each additional child. The disadvantage of being funded through a scholarship is, however, that there is no social security included and that the awardee has to pay for health insurance and, if necessary, social insurance such as unemployment and pension insurance.

Occasionally, postdoctoral positions are also offered in structured doctoral programs.

Further link to present structured programs at TU Dresden:

<https://tu-dresden.de/forschung-transfer/wissenschaftlicher-nachwuchs/promotion/strukturierte-promotionsprogramme-der-tud-und-ihrer-partnerinstitutionen>

Funding by scholarships

Doctoral candidates can apply for a wide range of scholarships in Germany if they have been accepted as doctoral students by a supervisor and the respective faculty. The majority of doctoral scholarships are awarded by the thirteen organizations for the promotion of young talent (<https://www.stipendiumplus.de>), which are supported by the Federal Ministry of Education and Research (BMBF). In addition to top grades, the prerequisites for scholarships are social commitment and, in the case of foundations with close ties to political parties, political conviction. In general, a dissertation project is funded from the beginning for a fixed period of up to three years. Beside their financial support, these organizations offer a broad range of qualification programs as well as professional, political and cultural events.

In addition to these organizations, non-university research institutions and a large number of foundations (including the Bayer Foundation and the Chemical Industry Fund) and funding organizations such as the DAAD also offer doctoral scholarships. Most grants are supplemented by lump-sum allowances for e.g. children, research trips and/or material costs.

The disadvantage of a scholarship is that the awardee has to pay for health insurance and, if necessary, social insurance such as unemployment and pension insurance him/herself. In case this does not bother you, scholarships offer the excellent opportunity to completely concentrate on your own research project. If you would like to have an additional income during your doctorate pursuing a part-time job despite the scholarship, you should observe the scholarship guidelines of the funding organization and be prepared that the amount of the scholarship grant can be reduced proportionately by the additional income of the sideline activity.

Just like doctoral candidates, postdocs can also draw on a wide range of funding opportunities. In addition to foundations and research institutions, the DFG (German Research Foundation) serves as one of the most important funding authorities in Germany.

Learn more about the GA/TU Dresden internal and external funding opportunities:

<https://tu-dresden.de/ga/finanzierung/finanzierung-postdoc>

PhD positions in industry

Doctoral candidates also have the opportunity to pursue their doctorate in cooperation with a company. Companies finance doctoral projects that are of scientific or economic interest to them. Industrial companies usually advertise their doctoral projects or contact can be established through an unsolicited application. A potential supervising professor can also establish the first contact with an industrial company. Companies in the automotive, electrical engineering or telecommunications sector often offer industrial doctorates. Scope of work and remuneration are agreed upon individually.

The advantage of an industrial doctorate is the work experience that is already gained during the doctoral period. More difficult may be the contact to the chair and the exchange with other PhD students and university lecturers or the participation in conferences. In addition, the balancing act between everyday business and own research work can be challenging and even lead to an extension of the doctoral period.

Further information on doctoral opportunities in industry is available:

<https://www.research-in-germany.org/en/jobs-and-careers/info-for-phd-students/financing-your-phd/paid-positions---parttime-jobs.html>

Self-financing

In addition to the financing opportunities described so far, there is also the option of self-financing the doctorate. As a rule, this implies working outside the academic world or receiving financial support from the family. Self-financing can represent a burden on your research that should not be underestimated and should be carefully considered.

Self-financing might be the most difficult way, as there is often a lack of time and proximity to academia and the exchange of ideas with peers and lecturers. Thus, the doctorate and the doctorate can be delayed for up to five or six years.