

A close-up photograph of three young women in graduation caps and gowns. They are all smiling and looking down, possibly at a diploma. The woman on the left is in the foreground, wearing a black cap and a white gown with a black stole. The woman in the middle is slightly behind her, also smiling. The woman on the right is partially visible, wearing a black cap and a white gown. The background is blurred green foliage.

# The crowning glory: a PhD

When a doctorate will work to your advantage  
and when you can easily do without it.

Having successfully earned your Master's degree, you may be asking yourself whether you should add on a doctorate. Maybe the research surrounding your Master's thesis was so enjoyable that you really want to carry on with your research. Or your supervisor has offered you a position at the Chair with an opportunity to earn you a PhD.

## *Where's your career taking you?*

A PhD is still a prerequisite around the world for an academic career. So if you want to be an academic at a university, college, technical college or a non-university research institute, a PhD is definitely the next sensible step to take. Please bear in mind that especially in Germany, it is not always easy to climb the academic career ladder and enjoy success here. So check out the conditions for a career in research thoroughly and early and find out about any legal restrictions imposed by the Academic Fixed-Term Contract Act (for example on the website of the German Federal Ministry of Education and Research).

If you have a career in the private sector in mind, whether a doctorate will help to advance your career will depend on your subject area and sector of industry. In Germany, most doctoral dissertations are written in Medicine and the Natural Sciences (Chemistry, Biology, Physics). The percentage of graduates with Master's degrees in Biology who go on to earn their PhD is as high as 90 percent. In the Chemical and Pharmaceutical industry or in the Biotech industry, a doctorate is therefore usually a prerequisite for a job in research and development. Engineers, on the other hand, tend to be more practically minded. Apart from teaching and research, the status of a PhD in technical disciplines is of secondary importance. There are many doors open to engineers in industry even if they don't have a PhD. Only around 30 percent of all engineers add on a doctorate to their Master's degree. In Mathematics and Informatics, it depends very much on the sector. Management consultants, for example, like to employ PhDs for reasons of prestige. Otherwise there are plenty of opportunities also without a PhD, especially as there is an urgent need for specialists in this area. In the Social Sciences, Economics and Political Sciences, PhDs tend to be the exception when you go into business. Specialization at the Master's degree level such as a Master of Business Administration (MBA) is increasingly winning out over the PhD route.

## *Would you like to take on responsibility?*

In most cases, you don't need a PhD any more to enjoy a stimulating career in the private sector. But it can still be advantageous. PhDs usually get promoted faster and have responsibility for projects or even managerial posts given to them earlier than those without a doctorate. This is doubtless due to the fact that PhDs are trained to take on tasks requiring a high degree of analytical expertise, stamina and the ability to solve problems. The starting salary is higher in nearly every field if the applicant has a PhD. But ultimately, it's not so much the starting salaries as the fact that PhDs tend to reach management positions more quickly, which is why you often get better pay in the long run with a PhD.

## *Do you feel the flame of academic curiosity?*

The most important criterion for or against a PhD should always be the answer to the question. Do you actually feel like doing a PhD? A doctorate is a lengthy, costly and always stressful path to take. Nearly all PhD students reach their limits during their doctorate. If you already found your Master's degree tough going, a PhD is probably not a smart idea. But a doctorate also gives you the opportunity to enjoy a great amount of freedom, take responsibility for your work and grow as a person in a way that you are unlikely to experience again in your professional career. You can immerse yourself in a subject, try out new methods, research abroad and use the opportunities for further education offered by your university. Ultimately, you will be richer for the experience and above all, immensely proud of what you've achieved.

### **Newsletter for PhDs and Postdocs**

The career experts of TUM Alumni & Career support you with an exclusive career program for PhD students and PhDs. Sign up for the newsletter to never miss any events.

[www.community.tum.de/career-with-doctorate](http://www.community.tum.de/career-with-doctorate)

## Earning your PhD at TUM

# Dr.

Most PhDs at TUM are conducted as individual doctorates. PhD students work on their research project with a high level of independence, supported by their supervisor. At the same time, they are involved in the work of the Chair, meaning that they conduct their own teaching assignments. A so-called external doctorate is also possible. In this case, you are usually employed by a company or a non-university research institution, but have a doctoral supervisor at TUM. Make sure that you discuss your doctoral topic with your supervisor before signing the contract with the cooperation partner. You can find out more about the different paths to a doctorate here:

[www.gs.tum.de/en/gs/applicants](http://www.gs.tum.de/en/gs/applicants)

At TUM, the TUM Graduate School accompanies you during your PhD. It complements the professional qualifications by offering services that support PhD students and their supervisors. For example, this includes the early conclusion of a support agreement, regular feedback sessions, professional courses as well as offers for transdisciplinary further education and financial support for stays abroad. [www.gs.tum.de/en](http://www.gs.tum.de/en)