



## Guidelines on the Promotion of Early Career Researchers by Ingenium - Young Researchers at TU Darmstadt

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### I. Preamble

TU Darmstadt pursues a consistent concept in the promotion of early career researchers, structured along the three qualification phases - doctoral phase (R1), postdoctoral phase (R2), qualification phase for a professorship (R3). In its **strategy "Acquiring, promoting, creating momentum"**<sup>1</sup>, it has set out its University-wide goals. In all qualification phases, the University aims to create optimum framework conditions and offer an outstanding environment in which young researchers can develop their potential to the best of their ability.

To achieve its goals in the promotion of early career researchers, TU Darmstadt has established a **twofold support structure**:

- 1) On a **University-wide level**, the umbrella organisation Ingenium - Young Researchers at TU Darmstadt promotes University-wide standards in the doctoral and postdoctoral phases and offers services and information with regard to plural career options. All departments and structured doctorate programmes (e.g. graduate schools and research training groups) are open to voluntary membership.
- 2) On a **technical level**, the departments and structured doctorate programmes organised in Ingenium promote early career researchers under binding and reliable conditions and support career development.

The **aim of the guidelines** is to formulate University-wide standards in the promotion of early career researchers, to explain the self-conception of Ingenium and its members, and to concretise the cooperation of the two supporting levels with regard to the services provided.

### II. Overarching framework for the promotion of early career researchers

Through its targeted and University-wide promotion of early career researchers and the provision of a wide range of services and information, Ingenium and its members pursue the following specific aims in the doctoral and the postdoctoral phase:

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<sup>1</sup> Download: [https://www.tu-darmstadt.de/forschen/wissenschaftlicher\\_nachwuchs\\_tu/index.en.jsp](https://www.tu-darmstadt.de/forschen/wissenschaftlicher_nachwuchs_tu/index.en.jsp)



### **Supervision of doctoral candidates under binding and reliable conditions and creation of a supportive environment to promote scientific independence**

Doctoral candidates are supervised under binding and reliable conditions, which are agreed upon between the supervisors and the doctoral candidates at the beginning of the doctorate. The aim is to achieve transparency in terms of the content and time frame of the doctorate as well as a successful completion of the doctorate within an appropriate period of time. In accordance with the doctoral degree regulations and by mutual agreement, a further person (e.g. mentor) may be appointed to guide a doctorate and act as an adviser. Depending on the discipline, this person can be an early career researcher and either be related to or outside of the respective discipline. As part of the supervision, early career researchers with increasing scientific qualifications are supported in the development of their scientific independence.

The university creates a supportive environment for all early career researchers, which increases scientific independence and offers optimum development opportunities. As scientific qualification progresses, the necessary scientific independence increases. Professors take on the role of mentors and support young scientists in planning their qualifications and further career steps.

### **Qualification, counselling and information for early career researchers for plural career options**

The focus of the doctoral and the postdoctoral phase lies on the scientific qualification of early career researchers. The departments and supervisors convey technical and methodological knowledge also beyond the actual research topic and scientific discipline. The scientific development as well as the development of professional and personal skills are important goals of the qualification phases and are thus supported. In this way, the early career researchers develop an individual skills profile to prepare for plural career options within and outside the University.

### **Professional, interdisciplinary and intersectoral networking of early career researchers and science communication**

The networking of early career researchers with the scientific community is essential for an academic career. The departments and supervisors support the networking of early career researchers with the scientific community and support them in their individual propositions with regard to networking and cooperation as well as communication about their scientific work. In order to promote a broad range of careers, TU Darmstadt supports interdisciplinary as well as external networking and science communication with people from academia, industry and society.

### **Internationalisation of the doctoral phase and in particular the postdoctoral phase**

In the doctoral phase and especially in the postdoctoral phase, international orientation and networking as well as the qualification of early career researchers for an international career are aimed at. Doctoral candidates and postdocs in particular are promoted with regard to the international visibility of research achievements and international networking through research stays abroad, conference participations and the integration in international networks. The dissertation should be submitted in the language customary for the relevant scientific community.



### **Shaping transitions between two qualification phases**

Early career researchers are supported in their preparation for as well as the transition to the next qualification phase. In order to facilitate conscious career decisions, counselling offers inform about entry requirements for the different phases. Thereby, early career researchers are supported in their career development and the planning of individual career paths, especially before upcoming transitions.

### **Improving equal opportunities and the compatibility of work and family**

The promotion of early career researchers takes into account the principles of equal opportunities and the compatibility of work and family. Early career researchers are particularly promoted in those fields, in which they are underrepresented in comparison with the proportion of women or men in the previous qualification phase. The aim is to keep gender relations stable throughout the qualification phases. Early career researchers with families are supported, and the structuring of a doctorate or postdoc phase is designed to ensure compatibility with family responsibilities.

### **Conducting the doctorate and postdoctoral research according to the rules of good scientific practice**

TU Darmstadt attaches great importance to the safeguarding of good scientific practice and has defined rules and processes that are binding for all members of the University. In addition, the senate appointed an internal ombudsperson for good scientific practice.

## **III. Self-conception of Ingenium and its members**

### **Membership structure**

Ingenium - Young Researchers at TU Darmstadt is the umbrella organisation for the promotion of early career researchers. Together with the departments, graduate schools, and research training groups, Ingenium promotes and qualifies early career researchers at TU Darmstadt for both academic and non-academic careers. The departments with their professors as well as the graduate schools and research training groups are the pillars of the promotion of early career researchers. They safeguard the high quality of research projects, impart their technical expertise and create room for independent research and the acquisition of skills. Besides, they engage themselves in the career planning of early career researchers.

The collaboration of the departments, graduate schools, and research training groups with Ingenium is based on their voluntary membership in Ingenium. Members are given the opportunity to contribute to the organisation of Ingenium and to make suggestions regarding its portfolio. Membership offers an additional way of helping to shape the University-wide promotion of early career researchers. Members are represented by professors and early career researchers and contribute their perspectives to the promotion of early career researchers at Ingenium. Further details are regulated in the statutes of Ingenium.

### **Target groups**

Target groups of Ingenium are early career researchers in the doctoral phase (R1 according to EU phase model) and in the postdoctoral phase (R2 according to EU phase model). A definition of qualification phases, the respective support goals as well as the intended skills devel-



opment, admission requirements and funding measures can be found in the University-wide strategy for promoting early career researchers.

With Ingenium, early career researchers receive independent contact persons outside their own research group, who are available for general and exclusively non-scientific information and counselling.

### **Aims of the promotion of early career researchers**

Ingenium and its members strive to offer early career researchers optimum conditions for excellent scientific achievements in every qualification phase. In order to achieve this goal, they are guided by the following aims defined in the TU Darmstadt strategy for promoting early career researchers:

- Acquiring talents
- Shaping transitions
- Creating transparency
- Developing skills
- Promoting permeability
- Opening-up career paths

More details can be found in the University-wide strategy for promoting early career researchers at TU Darmstadt.

### **Portfolio of Ingenium**

Within the framework of the strategy and in close cooperation with its members, Ingenium sets the University-wide framework conditions for the doctoral and the postdoctoral phase and develops them further.

In order to achieve the goals of TU Darmstadt in the promotion of early career researchers in the R1 and R2 phases, Ingenium offers its members support by means of comprehensive services and information. On the one hand, this includes support programmes for R1 and R2 early career researchers to acquire skills and develop their careers. On the other hand, Ingenium supports professors and the management of structured doctorate programmes in the implementation of their goals in the promotion of early career researchers.

Services and information are open to all early career researchers of TU Darmstadt. Participation in and use of these services are voluntary, there is no fixed curriculum.

Ingenium is in exchange with other organisational units at TU Darmstadt in order to ensure a coordinated promotion of early career researchers. Ingenium functions as a single point of contact for all questions regarding the promotion of early career researchers and assumes a steering and guiding function in this complex of topics.

Ingenium follows national and international debates on the promotion of early career researchers and introduces them to the University. In addition, Ingenium is well connected with organisations promoting early career researchers at other universities.



#### **IV. Services by Ingenium (fields of action)**

The range of comprehensive and general services and information that Ingenium offers to its members includes, for example:

- Qualification programme for early career researchers: The conveying of general and career-oriented skills beyond technical skills is an additional offer for the preparation of doctoral candidates and postdocs for future university and non-university activities and tasks and serves the acquisition of skills outside the professional field. Ingenium regularly offers a general qualification programme and, on request, organises and coordinates offers for its members within the framework of a cooperation programme. The design of the qualification program (e.g. determination of the modules) is carried out in coordination with the members of Ingenium. The individual courses are designed to meet the needs of specific target groups. Gender, diversity and good scientific practice will be taken up as cross-cutting issues to raise awareness of these aspects.
- Networking: Ingenium supports the career-relevant networking inside and outside of the University as well as the integration at TU Darmstadt. Ingenium regularly offers networking events for this purpose.
- Target group-specific advice and information for early career researchers, supervisors and administrative staff on topics such as career planning, in particular at transitions between qualification phases, skills profile and funding opportunities. Ingenium offers individual counselling and information events for this purpose.
- Advising departments, graduate schools and research training groups on the creation, maintenance and further development of favourable framework conditions for doctoral candidates and postdocs.
- Administrative services for the situation of early career researchers at TU Darmstadt and for communication about the promotion of early career researchers at the University, e.g. provision of statistics and documents on topics related to the promotion of early career researchers.
- Financial support for early career researchers at specific points in their career development, such as scholarships to complete the dissertation or career bridging grants (subject to the availability of appropriate funds).

The offers are based on the needs of the members. They are constantly audited together with the members and the University committees for their suitability and adapted if necessary.

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