

The present English translation of the official document „Richtlinien mit positiven Kriterien für die Festlegung der Doktorgrade und die dazugehörigen Qualitätssicherungsmaßnahmen gemäß § 1 der Promotionsordnung des Promotionszentrums Digitale Technologien und ihre Anwendung (DigiTech) der Hochschulen TH Deggendorf, TH Augsburg & HaW Landshut“ is not legally binding and serves for information purposes only.

**Guidelines with positive criteria for the awarding of doctoral degrees and the associated quality assurance measures in accordance with Section 1 of the Doctoral Degree Regulations of the Promotionszentrum DigiTech (Digital Technologies and their Application) of the Deggendorf Institute of Technology, the Technical University of Applied Sciences Augsburg and Landshut University of Applied Sciences**

of 31/01/2024

**Preamble**

In accordance with Section 1 (2) of the Doctorate Regulations (PromO), the Promotionszentrum DigiTech may award the following doctoral degrees

- Dr.-Ing.
- Dr. phil.
- Dr. rer. pol.

In accordance with Section 1 (3) PromO (3), the university management of the Deggendorf Institute of Technology, in agreement with the university managements of the Technical University of Applied Sciences Augsburg and Landshut University of Applied Sciences, and the Steering Committee of the Promotionszentrum, hereby adopt guidelines with positive criteria for defining the respective doctoral degrees and the associated quality assurance measures. These shall be the basis for justifying the awarding of the desired doctoral degree according to Sections 11 & 12 PromO (Opening of the doctorate proceedings).

**1. Criteria for the awarding of the doctoral degree Dr.-Ing.**

At least one of the following research results in engineering science is to be achieved:

- The invention, conceptualisation and implementation of novel processes and systems
- The modelling, description and optimisation of processes and systems
- The verification, testing and checking of processes and systems

The research should achieve findings beyond the current state of the art that are either of general relevance or have an applied research character.

At least one of the following methods in engineering science should be used:

- The planning and conducting of experiments in the laboratory or the field, and statistically underpinned analysis with models
- The measurement, analysis and/or modelling of systems by means of methods that ensure the reproducibility of results
- The designing, implementation and evaluation of procedures and systems
- Mathematically-based theoretical studies, possibly computer-aided.

## **2. Criteria for the awarding of the doctoral degree Dr. phil.**

An academic research result is to be achieved:

- Research should yield findings beyond the current state of the relevant literature that are either of general relevance or have an applied research character
- This includes interdisciplinary research questions.

The appropriate methodology is used or developed:

- The dissertation should correspond to the current state of methods in theory and/or empiricism in the respective research area or develop existing methods further
- The methods used may be experimental, empirical, theoretical or model-based/simulative in nature or contain combinations of these.

## **3. Criteria for the awarding of the doctoral degree Dr. rer. pol.**

A research result from an economic and/or social science field is to be achieved:

- Questions should analyse an economic or social science aspect.
- Research should achieve findings beyond the current state of the relevant literature that are either of general relevance or have an applied research character
- This includes interdisciplinary research questions.

An appropriate methodology is used or developed:

- The dissertation should correspond to the current state of methods in theory and/or empiricism in the respective research area or develop existing methods further
- The methods used may be experimental, empirical, theoretical or model-based/simulative in nature or contain combinations of these.

## **4. Quality assurance measures for the awarding of doctoral degrees**

At least one reviewer should hold the title to be awarded or an internationally recognised equivalent. For the awarding of the Dr.-Ing. degree, the respective reviewer may also hold the title Dr. rer. nat. Alternatively, the qualification of the reviewer to award the respective doctoral degree may be based on their own high-ranking academic publications in the subject area of the degree to be awarded. This publication record of the reviewer must as a minimum meet the requirements of a doctorate in this subject area and be assessed and confirmed by the Doctoral Committee.

In the event of a favourable opinion on the awarding of the doctoral degree in question, each review must contain explicit wording of the following type: "The dissertation fulfils the criteria for the awarding of the degree [*Dr.-Ing./Dr. rer. pol./ Dr. phil.*]. I recommend the acceptance of the dissertation and the continuation of the proceedings to obtain the degree [*Dr.-Ing./Dr. rer. pol./ Dr. phil.*]."