Requirements for Master Degree

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Introduction

This document summarizes the requirements for a Master degree. It is based on

- the German qualification framework for lifelong learning (DQR - https://www.dqr.de) from the BMBF,
- the European Qualifications Framework (EQF - https://ec.europa.eu/ploteus/de/node/1440) from the EU and

The highlighted knowledge, skills and competences described below must in particular be demonstrated in the final thesis.

Requirements for Master Degree

- **Knowledge - DQR:**
  - Be in possession of comprehensive, detailed, specialist and state-of-the-art knowledge in a scientific subject
  - or
  - be in possession of comprehensive occupational knowledge in a strategically oriented field of occupational activity.
  - Be in possession of extended knowledge in adjoining areas.

- **Knowledge - EQF:**
  - Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research.
  - Critical awareness of knowledge issues in a field and at the interface between different fields

- **Skills - DQR:**
  - Be in possession of specialised technical or design concept skills relating to the solution of strategic problems in a scientific subject
  - or
  - in a field of occupational activity.
  - Consider alternatives even in circumstances where information is incomplete.
  - Develop and use new ideas or procedures and assess such ideas and procedures according consideration to various evaluation criteria.

- **Skills – EQF:**
  - Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields
• **Competence - DQR:**
  - Assume responsibility for leading groups or organisations within the scope of complex tasks set and present the results of the work of such groups or organisations.
  - Promote the technical development of others in a targeted manner.
  - Lead divisionally specific and cross-divisional debates.
  - Define objectives for new applications or research oriented tasks reflecting on possible societal, economic and cultural implications, deploy appropriate means and tap autonomously into own knowledge for the purpose.

• **Competence – EQF:**
  - Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches;
  - Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams

• **Competence – QF:**
  - They can also apply their knowledge and understanding as well as their problem-solving skills to new and unfamiliar situations that lie in a broad or multidisciplinary context relating to their academic subject.
  - They can integrate knowledge and handle complexity;
  - They can make scientifically-founded decisions and draw conclusions, also on the basis of incomplete or limited information, and in so doing can consider social, scientific and ethical insights that also derive from the application of their knowledge and their decisions;
  - They can independently acquire new knowledge and ability;
  - They can carry out independent scientific or applied research projects in a largely self-directed and/or autonomous manner.