

Appendix 2

To the Programme Regulations 2017 für den
Master-Studiengang Pharmaceutical Sciences

Qualification profile

Introduction

The Master's degree programme in Pharmaceutical Sciences is run in cooperation with faculty who are active in the pharmaceutical industry, pharmaceutical consultancy, and public authorities. The main objective of the programme is to impart students with comprehensive training in the concepts and methods of pharmaceutical research and product development. The programme enables its graduates to assume responsible positions in pharmaceutical and biomedical research, the pharmaceutical industry and medicines regulatory authorities.

Domain-specific knowledge and understanding

Graduates with a Master's degree in Pharmaceutical Sciences

- possess highly specialised knowledge regarding the various concepts, methods, and objectives of scientific research in pharmaceutical sciences and biomedicine;
- possess highly specialised knowledge regarding the methods of preformulation, development, manufacture, and testing of medicinal products;
- possess in-depth knowledge regarding all important medicinal products and their effects at the molecular level and at the level of the entire organism;
- possess in-depth knowledge regarding pharmacokinetics and biotransformation;
- understand the processes of pharmaceutical product development, quality assurance, patenting, regulatory approval, and post-marketing surveillance of medicinal products from an academic, industrial, and regulatory perspective.

Skills

a) Analytical skills

Graduates with a Master's degree in Pharmaceutical Sciences are able to

- recognise, analyse, and document scientific and practical problems in the area of pharmaceutical research and product development;
- statistically analyse and represent scientific data from their field in a correct manner;
- understand the scientific literature, keep up with the latest developments in their field and judge these critically.

b) Development skills

Graduates with a Master's degree in Pharmaceutical Sciences are able to

- formulate a hypothesis and propose and/or develop methods to test it experimentally based on their scientific understanding and their analysis of current data;
- assess a practical problem in the area of pharmaceutical product development and develop an approach to solve it.

Personal and social competences

Graduates with a Master's degree in Pharmaceutical Sciences are able to

- represent and describe scientific data in oral and written form intelligibly and precisely for specialists and the general public;
- collaborate respectfully and constructively with experts from neighbouring disciplines;
- recognise the social relevance and ethical dimensions of their activities and act accordingly.