



We are here for you

Central Student Advisory Service

Support in choosing a course of study and with general questions about the course of study
studienberatung@uni.kn

– uni.kn/zsb

Academic Advisory Service Physics

Further information and advice on specific questions about the course

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– uni.kn

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**Physics
MSc**

Master of Science



Overview

Degree:	Master of Science
Programme start:	winter semester & summer semester
Period of study:	4 semesters
Application period:	until 15.9. for the winter semester until 15.3. for the summer semester
Application restrictions:	no
ECTS:	120
Number of students:	< 50
Unique feature:	attractive options from various specialisations

Master in Physics

Master of Science

Study content

The Master's Degree in Physics at the University of Konstanz offers you a variety of advanced courses at the highest level in theoretical and experimental physics as well as integration into current cutting-edge research. It is characterised by excellent student supervision. Thus, you will be optimally prepared for your career in various fields.

The Master's program is composed of two phases: In the first year, the **in-depth phase**, you can choose courses from various specialisations, both in experimental and theoretical physics. You will consolidate and intensify your knowledge and find your thematical orientation.

In the second year, the **research phase**, you will gain extensive research experience in an excellent and internationally renowned environment. You are fully integrated into a research group at our department and, under supervision, investigate your own research question in theoretical and experimental physics.

Research focus

A wide range of opportunities are available to you through the wide range of topics in computer simulation, renewable energies with focus on photovoltaics, nanoscience, novel solid state physics and modern materials, optics, photonics and ultrafast phenomena, quantum physics and quantum information, soft condensed matter and statistical physics.

Career prospects

- further education and research as a PhD student
- basic and industrial research
- software and hardware industry
- management consultancy, financial sector
- automotive industry, chemistry, electrical engineering, optics and photonics
- medical technology, mechanical engineering, engineering office
- and many more options

“... I was convinced by the focus on solid state physics and the excellent doctoral prospects.”

Ulrike Ritzmann (M.Sc. and doctorate at the University of Konstanz)



Curriculum

Physik – Master of Science

1. Semester (WiSe)	2. Semester (SoSe)	3. Semester (WiSe)	4. Semester (SoSe)
In-depth Phase		Research Phase	
Advanced Quantum Theory and Electrodynamics or Statistical Mechanics (4+2) ECTS 10	Elective Course II (4+2) ECTS 10	Research group seminar ECTS 4	Research group seminar ECTS 4
Elective Course I (4+2) ECTS 10	Elective Course III (4+2) ECTS 10	Methodological knowledge and project planning ECTS 18	
Seminar I (2) ECTS 4	Seminar II (2) ECTS 4	Master Thesis ECTS 30	
Advanced Physics Lab II or Project Practicum ECTS 6	Advanced Physics Lab III or Project Practicum ECTS 6	Presentation MSc Thesis ECTS 4	

Weekly semester hours in brackets (Lecture + Tutorial); Start of studies also possible in summer semester

“The broad physics program and the many interdisciplinary lectures in the Master’s program in Konstanz have been the basis for my current research work at Bosch.”

Martin Putnik (B.Sc. and M.Sc. University of Konstanz, subsequently doctorate at Bosch)



Application

Information on the application process:

– uni.kn/en/study/before-you-study/application-and-enrolment

Your benefits

- to gain a deeper understanding of the fundamental laws of physics and technology
- to research previously unknown phenomena and to solve complex tasks in the field of high technology
- to be integrated in a research group
- to have excellent and varied career prospects from basic research to high-tech industry

Unique features in Konstanz

- integration into an excellent, interdisciplinary and internationally renowned research environment
- best laboratory equipment
- attractive options and specialisations in experimental and theoretical physics
- excellent networking through international contacts and research networks
- good professor-student ratio and open-door atmosphere

Admission requirements

- Bachelor's degree in physics or an equivalent degree in a related subject of study or passing the entrance examination