



Production Methods and Materials Science - Master of Science -

WHY CHOOSE THIS COURSE

Enhance your career chances

The knowledge and skills acquired in the Master's degree course Production Methods and Materials Science will prepare you for employment in posts with high responsibility in industry and research.

Fit for the future

Play your part in research in production engineering and materials science! These are two key research areas of our university, and contribute to innovative and sustainable developments.

Scientific research

Study contents are closely linked with real-life problems occurring in day-to-day research and development and have a highly scientific approach.

Multidisciplinary approach

Studies impart strong a linkage to various up-to-date working areas from engineering and natural sciences.

Production engineering meets materials science

Sustainable added value in mechanical and plant engineering has always been achieved by combining the closely related disciplines production technology and materials science.

Enjoy technology

If you are interested in exciting engineering and scientific work within a manifold set of themes and tasks you will definitely enjoy participation in this Master's degree course.

JOB PROSPECTS

Materials and their processing technology are the basis of any state-of-the-art product development. Materials will give many products their distinguished properties.

Recent developments such as extreme lightweight design would not be possible without the progress made in materials and manufacturing technology. In addition, sophisticated manufacturing technology is gaining importance through the demands for considerate utilisation of our natural resources, efficient recycling and energy efficiency.

This results in industry calling for engineers with high specialist qualification who combine in-depth knowledge in materials science with a broad-based expertise of production methods and processes. Job prospects on an international, national or regional scale are outstanding in this area. Not only is this Master's degree course in high demand in many industrial areas, but also have graduates many different employment sectors to choose from.

COURSE STRUCTURE

The normal study duration is 3 semesters. While semesters 1 and 2 consist of lectures, lab work and student projects, semester 3 is mainly reserved for the Master thesis.

The studies are application-oriented. As a consequence they feature a high degree of lab work and practical study. By electing modules from "Special Areas of Production Methods and Materials Science" and "Additional Competences" you may deepen your knowledge in certain areas and thus customize your studies according to your likings or requirements. The Master thesis can be done either in a company in cooperation with a professor, or in one of the laboratories of the university.

With the academic degree Master of Science (M. Sc.) you will have acquired the entrance qualification for Ph.D.-studies in Germany or abroad.

Figure: please see next page

Additional competences I	Additional competences II	Master Thesis			
Project: Production Methods	Powder Technology and Materials	Forming Technology (Methods + Systems Engineering)	Cutting and Generative Methods	Special Areas of Production Technology and Materials Science	
Project: Production Methods	Plastics Processing and Application	Advanced Bonding Technology	Coating and Surface Technology		

BEGINNING OF THE COURSE

The Master's degree course Production Methods and Materials Science can be started either in the winter or the summer semester of each academic year.

APPLICATION

The application deadline for the winter semester is 15th July and the deadline for the summer semester is 15th January. For more information on the current application procedure please check our website www.hs-kempton.de.

ADMISSION

The admission requirement for the Master's degree course Production Methods and Materials Science is a course of Mechanical Engineering, Industrial Engineering (Mechanical Engineering with Business), Energy and Environmental Engineering, or Mechatronics, or a comparable course of 210 ECTS minimum, and an engineering work placement of at least 20 weeks. The number of study places is limited. The selection criteria are complete and timely application and grade point average in the first degree study.

Should you not yet have received your final certificate when applying for the course, you may be granted conditional acceptance.

The number of places in this course is limited.

CONTACT

Course Coordinator

Prof Dr Christian Donhauser
[christian.donhauser\(at\)hs-kempton.de](mailto:christian.donhauser(at)hs-kempton.de)

International Relations Coordinators

Prof Dr Michael Layh
[michael.layh\(at\)hs-kempton.de](mailto:michael.layh(at)hs-kempton.de)
 Phone +49 831 2523-9531
 and

Prof Dr Matthias Leonhardt
[matthias.leonhardt\(at\)hs-kempton.de](mailto:matthias.leonhardt(at)hs-kempton.de)
 Phone +49 831 2523-384

International Office

Tel: +49 831 2523-340 or -117
 E-mail: [international\(at\)hs-kempton.de](mailto:international(at)hs-kempton.de)

IMPORTANT LINKS

(Information in English on our website)

www.hs-kempton.de > INTERNATIONAL > click English flag (in the top left-hand corner)

Information for international exchange students
 (> INTERNATIONAL > EXCHANGE STUDENTS / INCOMING)

Study programmes – short description in English
 (> INTERNATIONAL > DOWNLOADS > Study Programmes)

Guests and Visitors at Kempten University
 (> INTERNATIONAL > GUESTS AND VISITORS)

KEMPTEN UNIVERSITY OF APPLIED SCIENCES

Bahnhofstraße 61
 87435 KEMPTEN (Allgäu)
 GERMANY
 Tel: +49 831 2523-0
 Fax: +49 831 2523-104
[post\(at\)hs-kempton.de](mailto:post(at)hs-kempton.de)

PLEASE NOTE that, although this description is written in English, the study course is taught in German.