



# Press release

Aachen,  
March 25, 2009

## **New Master's degree programme in production technology with specialisation in optical technologies to be offered by RWTH Aachen University**

**In line with the Excellence Initiative embraced by the German Federal and *Länder* Governments, RWTH Aachen University is systematically introducing new Master's degree programmes. From the summer semester of 2011, students at the university will be able to study for a Master's degree in Production Technology. And in an associated development, in close cooperation with the Fraunhofer Institute for Laser Technology (ILT), the Laser and Optics Departments of RWTH Aachen University LLT, TOS and NLD will also offer prospective engineers a more in-depth qualification in Optical Technologies.**

The Faculty of Mechanical Engineering at RWTH Aachen University is one of the leading higher education institutions in its field, and indeed holds the No.1 spot in many rankings. With over 1,500 new students in 2008, it is one of Europe's largest Mechanical Engineering faculties. It offers 24 core and specialist subject areas and covers the entire spectrum of machine technology, process engineering and process technology. The Faculty of Mechanical Engineering also contributes to 12 of the 15 Special Research Areas in which RWTH Aachen University is involved.

During the winter semester of 2007/2008, the Mechanical Engineering study programme was redesigned to reflect the internationally-recognised Bachelor/Master scheme. The Bachelor of Mechanical Engineering programme lasts for 7 semesters and can be supplemented with a 3-semester Master's programme. Examples of Master's programmes include Power Engineering, Automotive Engineering and Transport or Production Technology. The Master's degree corresponds to the tried and tested German "Diplom" and RWTH Aachen University considers it a goal well worth striving for.

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The Master's degree programme in Production Technology that is to be offered for the first time from the summer semester of 2011 has been designed by a team of internationally-recognised and experienced Departments, including RWTH Aachen University's Laser and Optics Departments LLT, TOS and NLD and its Laboratory for Machine Tools and Production Engineering. Close cooperation with the Fraunhofer Institutes for Laser Technology and Production Technology guarantees both that the knowledge imparted will be tied in to current research projects while facilitating access to a comprehensive technological infrastructure. As part of this, from the summer semester of 2011, Master's students in Production Technology will be able to choose an in-depth specialisation in Optical Technologies.

Students are given an introduction to optical systems, laser design and laser applications as part of their Bachelor's degree. The Master's degree will reinforce this learning with more in-depth mandatory and compulsory elective study programmes. The Production Technology Master's degree programme will include the mandatory subjects Laser Sources, Optical Systems Technology and Lasers in Microengineering as part of its Optical Technologies specialisation. The compulsory elective subjects on offer will range from Modelling of Laser Material Processing through Computer-Aided Optics Design to Lasers in Life Sciences.

The Master's degree programmes offered at RWTH Aachen University aim to provide students not only with in-depth expert knowledge in their selected fields of technology, but also practical vocational competencies. They thus acquire the tools and skills to carry out demanding development work such as is required by laser manufacturers and users. They also acquire the scientific qualifications necessary to progress to a doctorate. And with its numerous Special Research Areas, clusters of excellence and established cooperation networks, RWTH Aachen University offers an optimal environment in which to complete this type of study programme too.

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**Caption to picture:** Laser technology research at the Fraunhofer Institute for Laser Technology (ILT) and at RWTH Aachen University's Department of Laser Technology.  
Source: Fraunhofer Institute for Laser Technology (ILT), Aachen, Germany

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