The Otto-von-Guericke University (OVGU) was founded in 1993 as the result of a merger of three universities. Its main focus is on engineering and medicine. Natural sciences, mathematics, computer science, economics, business management, the humanities and social sciences also make up an integral part of its profile. The university trains future teachers as well. Neuroscience, dynamic systems/systems biology and automotive engineering are the main areas of research at the OVGU. The approach to research is interdisciplinary and is strengthened through the university’s cooperation with research institutes located in Magdeburg. The OVGU strives to develop innovative strategies for promoting regional and national activities. There are currently more than 13,000 students (1,295 students from abroad) enrolled in 78 bachelor’s and master’s programmes at the university. It is the aspiration of the OVGU to enable students to pursue accredited courses of study that are subject to systematic quality assurance. Exchange programmes as well as a growing number of international students and PhD students are the basis for the cross-cultural education available on our campus. Our alumni form a national and international network of ambassadors for the OVGU. Our students appreciate the compactness of the campus. It facilitates the students’ contact to their instructors and makes it easy for students to get to know one another during their time at the university and at the numerous events that take place here.

We invite you to find out about researching and studying at the OVGU.

Prof. Dr. K. E. Pollmann
Rector
Research has always been fundamentally-based at our university. However, this was never understood to mean that the search for an applied approach was rejected. The research here produces innovative processes that lead to ideas, prototypes and finally results in products.

Our main areas of excellence in research are neuroscience, dynamic systems as a part of process technology and biomedical engineering, and automotive/digital engineering. Moreover, transfer-related areas of focus are medical engineering, renewable energies and particle technology. The university’s associated institutes and the Technology Transfer Centre are intermediaries between the university and industry. They make access to university research resources easier for enterprises while strengthening their capacity for innovation at the same time.

The Faculty of Medicine with its University Medical Centre is located on a separate campus and is the educational institution for approx. 1,300 prospective physicians.
The university received green points, in other words top marks, in the CHE ranking of German universities. 2010 was the OVGU’s most successful year since its foundation. The University of Magdeburg ranks among the top universities in Germany in numerous courses of study. For example, the Faculty of Medicine was rated among the three best in Germany. The psychologists from this faculty could even score in areas where all other East German universities have room for improvement: raising research funds. The OVGU’s excellent results in the ranking were the due to its general conditions for studying (as voted by the students), its state-of-the-art facilities, as well as the good student to teacher ratio. This results in high-quality education and individual support.

2009 was already an exceptionally successful year. The amount of third-party funding rose by approx. 1 M euros to 37.4 M euros. Newly acquired joint research projects with the DFG completed this record of success. Another collaborative research centre based in Magdeburg, a Transregio CRC, and a postgraduate programme were acquired and a further Transregio CRC and post graduate programme were confirmed. Another highlight of this successful year was the positive evaluation of the Magdeburg Centre of Systems Biology (MACS) which is one of four German centres of systems biology (FORSYS). And, to top it all off, setup work for the Centre for Neurodegenerative Disorders also started at the Magdeburg location.
Magdeburg stands for top neuroscientific research in the academic world. It is an established neuroscientific location with researchers of international renown and a flagship for brain research. The Excellence Initiative of the state of Saxony-Anhalt provides the momentum. The "Centre for Behavioural Brain Sciences" (CBBS) creates networking and synergy effects and provides state-of-the-art equipment. This includes a 7-Tesla Magnetic Resonance Imaging System – the first one in Europe when the centre opened in 2005. The CBBS organises the interdisciplinary work of research-intensive groups in experimental and clinical neuroscience and related fields. It trains the junior scientific staff, taps financial resources for third-party funded projects and coordinates the research transfer. Several faculties of the university, affiliated centres, associated research institutes and non-university research facilities are all involved in this structure.

The Faculty of Medicine at the Otto von Guericke University, the Leibniz Institute for Neurobiology and the Centre for Neuroscientific Innovation and Technology (ZENIT) all work closely together. Pioneering research work is also carried out at the Centre for Advanced Imaging (CAI), one of five regional imaging centres that gets key funding from the Federal Ministry of Education and Research. A current research topic at the CBBS is, for example, the application of neuroprosthetics that electrically stimulate the brain tissues after nerves or regions of the brain have been impaired. Scientists at the CBBS were successful with using brain pacemakers for Parkinson patients. The CBBS is considered to be an outstanding centre of excellence in the field of learning and memory research, due in part to its cooperation with the Leibniz Institute for Neurobiology in Magdeburg and Prof. Henning Scheich, its director. At the newly founded German Centre for Neurodegenerative Disorder (DZNE), researchers from the Leibniz Institute and the University Hospital for Neurology, led by Prof. Dr. Hans-Jochen Heinze, work together on innovative diagnostic and treatment options for diseases such as dementia. The DZNE is one of six partner institutes of the Helmholtz Centre for Dementia Research in Bonn and a beacon for nationwide dementia research.
The Otto von Guericke University in Magdeburg plays a leading role in the field of automotive research. Automotives is an area of excellence that is part of the Faculty of Mechanical Engineering. In addition to the fundamental research done here, there are also strong application-oriented research activities. A joint research project "COmpetence in MObility", or COMO for short, was created for this purpose. In addition to several companies, its partners also include non-university research facilities, such as the Fraunhofer Institute for Factory Operation and Automation (IFF) and the Automobile Network MAHREG.

The OVGU has a unique automotive research centre in Germany, namely, the Institute for Competence in Automobility (IKAM), for which a total of 32.5 M euros of federal and state funding have been earmarked in coming years. Magdeburg is actively involved in the structural change of the automotive industry of the 21st century, both in fundamental research work and through intensive co-operation with leading automobile manufacturers.
At the Dynamic Systems Research Centre in Magdeburg, scientists work on both biomedical and procedural problems. In this context, they have an interdisciplinary cooperation with the Collaborative Research Centre “Molecular organisation of cellular communication in the immune system”. This alliance within the Research Centre leads to completely new solutions with the systems biology sector playing a key role. The Magdeburg Centre for Systems Biology (MaCS) is one of the foundation pillars of the Dynamic Systems Excellence Centre. Researchers from several faculties of the Otto von Guericke University in Magdeburg and scientists from the Max Planck Institute for Dynamics of Complex Technical Systems combine methods of molecular biology with those of mathematics, computer science and systems science. The core of their research work is to understand the dynamic networks of cells. They are working on better understanding signal processing and signal transduction through biochemical reactions. Efficient regulators for ensuring smooth cell operation are also being investigated.
Joint Research:
Projects of excellence, collaborative research centres, post graduate programmes – successful research at the Otto von Guericke University (OVGU) works thanks to interdisciplinary cooperation that goes beyond subject-specific and institutional limits. Two examples:

- The neuroscience area of excellence: The coordination work across the faculties and institutions is carried out by the “Centre for Behavioural Brain Sciences” (CBBS). The network consists of more than 20 institutions and third-party funded joint research projects.
- Micro-Macro-Interactions in structured media and particle systems: The faculties of Mechanical Engineering, Process and Systems Technology, Mathematics and Natural Sciences work closely together in this DFG post graduate programme.

Affiliated Centres:
- Centre for Neuroscientific Innovation and Technology (ZENIT)
- Centre for Product, Technology and Process Innovation (ZPVP)

Non University Research Facilities:
- Leibniz Institute for Neurobiology
- Fraunhofer Institute for Factory Operation and Automation (IFF)
- Max Planck Institute for Dynamics of Complex Technical Systems

Associated Institutes:
- Institute for Neuro-Simulation and Imaging Technologies
- Research Institute for Applied Neuroscience (FAN)
- Institute for Neurologic-Neurosurgical Rehabilitation Research (INNRf)
- Institute for Quality Assurance within Operative Medicine
- METOP GmbH
- Institute for Automation and Communication (IFAk)
- Laboratory for Environmental Protection and Chemical Analytics (LUS)
- International Neuroscience Institute – Hannover GmbH (INI)
There are approximately 1,400 foreign students from over 90 countries at the University of Magdeburg. With international students making up more than 10% of the student body, the OVGU is well above the national average. In addition, an average of 200 foreign scientists per year are guests of the university. A number of cooperation agreements with universities from 49 countries offer students and scientists from Magdeburg excellent opportunities to study and research abroad. Double degree programmes with American and British, but also with Ukrainian, Bulgarian and Polish universities allow a parallel degree at both locations.

In particular, the OVGU is dedicated to exporting its academic activities. Among others things, the university has established German study schemes in the Ukraine, Vietnam, Russia and Belarus. International research networks stretch from Magdeburg around the world.

The internationalisation of study and academic activities is one of the most important objectives of the OVGU. With the continuation of the Bologna process, more and more courses of study are offered in English. Numerous international programmes have been implemented, including the “East Partnerships” programme, the interactive internet platform “VOCAL” which prepares students for a year abroad, and the “Staff Mobility Week”. Moreover, the OVGU is pursuing new approaches with regard to the joint mentoring of German and international first-year students. The “Integrative Welcome Weeks” offer guidance in handling all administrative processes and help familiarise new students with all that campus life has to offer. The conception was developed by the International Office in collaboration with the student union and the IKUS, a voluntary association of OVGU students. German and international students start their new life “in tandem”. First-year students are thus able to find their way around the campus and Magdeburg, their temporary new home.
There are more than 70 courses of study on offer at the University of Magdeburg. These currently include 38 bachelor’s and 33 master’s degree programmes. Physicians graduate after passing a state examination.

In the bachelor degree courses, scientific principles and methodological competence as well as specific career-related qualifications are taught. The master’s programme also provides professional training, however, in contrast to the bachelor degree, it qualifies students for a PhD programme.

The Otto von Guericke University also offers dual courses of study in cooperation with businesses. And people who already have a university degree and have gained some work experience can further their career by studying at the OVGU in the evening while working during the day.

Unique in Germany: bachelor’s degree in safety and hazard prevention

Disaster in the chemical factory. It is a question of the right crisis management. Experts in safety and hazard prevention as well as other specialists are qualified at the Faculty of Process Engineering and Systems Technology at the University of Magdeburg. Magdeburg is the only place in Germany where this programme is offered. It is a joint collaboration between the OVGU and the University of Magdeburg-Stendal.
The academic year is divided into a summer semester and a winter semester at the Otto von Guericke University. The duration of an academic hour is 45 minutes. Lectures, seminars, exercises and tutorials are mainly held as double lessons.

The following university degrees can be attained at the Otto von Guericke University:
- Bachelor of Science
- Master of Science
- Bachelor of Arts
- Master of Arts
- State Examination

**Academic Calendar**

- **Winter semester:** 1st October – 31st March
  - Start of lectures: Beginning of October
  - End of lectures: Beginning of February
  - Exam Period: February
  - Semester break: March
- **Summer semester:** 1st April – 30th September
  - Start of lectures: Beginning of April
  - End of lectures: Mid-July
  - Exam period: July
  - Semester break: August – September

Your primary address – The Campus Service Centre
The Campus Service Centre at the entrance to the university is the new service centre of the OVGU and the interface between the campus and the city. In the future, students will receive one-stop student counselling here – from enrolment to career management. Even university employees, guest researchers and all those interested in studying at the OVGU can find just the right information they need here.

This is modern administration at its best.
Lecture halls, laboratories, a canteen, a café, a library and dormitories are all located close by on campus. Students live in the refurbished Campus Tower and guest researchers find housing in renovated studios near the city centre and campus. Only a few minutes’ walk from the campus is the exuberant city centre of the state capital Magdeburg with its lively stages and bars, but equally near are also the quiet walks and parks along the Elbe river. More than 100 types of sports, including trendy ones such as Futsa and Zumba are offered by the University Sports Centre. Magdeburg is an athletic city, being the location of an Olympic Training Centre. Various dates are reserved in the university’s calendar for sporting events like the tower sprint, a contest of the “university eight” that is staged together with the University of Halle, and the dragon boat race. Students act in several drama groups and a cabaret. They also organise broadcasts for the Campus TV. The academic orchestra and choir and the university big band host well-attended concerts in the city and on the road. The campus is also a fixed address for visitors to the Night of Science, the Open Day, the summertime Student Days and many other meetings and events.
The state capital is located midway along the course of the Elbe River and has a history that is deeply rooted in the German and European past. Otto the Great, the first German Emperor and founder of the Holy Roman Empire, declared Magdeburg his favourite palace and presented the city as a morning gift to his first wife, the English Princess Edith. Magdeburg was a centre of the mediaeval world along with Rome and Byzantium.

Magdeburg is one of the greenest cities throughout Germany: The Elbauen Park with the millennium tower and the tropical butterfly house is a legacy of the German Horticultural Show in 1999. There are numerous events in the Elbauen Park, such as the “Ballonglühen” in the summer with glowing hot air balloons hovering over the grassland on the Elbe river. A considerable number of parks, including the city park “Rotehorn” on the inner-city Elbe island, Herrenkrug Landscape Garden, Klosterberge Garden that was laid out according to Lenné’s plans as the first public park in Germany, and many other smaller gardens and parks are popular places of recreation.

In a city with 230,000 inhabitants, there are also many opportunities for cultural and sporting events, shopping and stopping for a bite to eat. The Harz Mountains and four UNESCO world heritage sites: the historic city of Quedlinburg, the Dessau Bauhaus, the Gardens of Dessau-Wörlitz and the Luther memorials in Eisleben and Wittenberg are just around the corner.
FACTS ABOUT THE UNIVERSITY

Number of students
The total number of student enrolments is about 14,000. The number of students has more than doubled since the university was founded. 78 courses of study are offered by 9 faculties. There are even dual courses of study available.

Faculties
The Otto von Guericke University offers courses of study in the following faculties:
• Mechanical Engineering
• Process and Systems Technology
• Electrical Engineering and Information Technology
• Computer Science
• Mathematics
• Natural Sciences
• The Faculty of Medicine
• The Humanities, Social Sciences and Education
• Economics and Management

Buildings
A total of 228.8 M euros has been invested in the modernisation of the university buildings and laboratories during the years since the Reunification, investments in equipment not included.

Employees
199 professors, including 17 junior professors
1,637 scientific employees, 547 these paid by third-party funds

Auditing
The Otto von Guericke University has the “Family-Friendly University Audit” certification.

Contact:
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