



PRESIDING COMMITTEE'S REPORT 2012/2013

- Positions
- Programmes
- Perspectives

Foreword	3
Report	4
Courses Available and Student Demand	12
Advanced Education	19
Research and Development	20
Structural Data	23
Perspective	28
Imprint	31

Willkommen!
Bienvenue!
Hosgeldiniz
Welcome!
欢迎
Tervetuloa!
Benvenuto!
Καλώς ήρθες
Welkom!
Witamy!
добро пожаловать!
Bem-vindo!
أهلاً وسهلاً
Bun venit!



UNIVERSITY OF APPLIED SCIENCES

Increasing the proportion of young people wishing to go to university has long been an objective of the education policy of the Federal Republic of Germany. Even at the regional level the universities have to counteract the imminent lack of young professionals by qualifying young professionals in sufficient numbers.

When taking this into consideration, the current development at the Technische Hochschule Mittelhessen can only be welcomed. In the winter semester 2012/13 almost 3,000 first semester students began their academic education at the THM. The increase of student numbers to a total of 14,000 students in autumn 2012 also marks a new all-time high in the history of the THM.

We consider providing attractive, market-oriented courses and maintaining teachings on the highest quality grade as our main task. At the same time we are becoming increasingly engaged in applied research. This is demonstrated, for example, by the successful acquisition of funds within the framework of the "Hessian Initiative for Scientific and Economic Excellence" (LOEWE).

The present report details the growth of the THM in the various fields. At the same time it delivers meaningful data about the expansion of the infrastructure.

On behalf of the Presiding Committee I would like to thank the many cooperation partners of our university of applied sciences as well as all the faculty members for their contributions to this dynamic development. We would be very happy to continue this productive relationship.

Giessen, 31 March 2013

Dr. Günther Grabatin
President, Technische Hochschule Mittelhessen





2011

April

The THM organises the first scholarship fair where Germany's major organisations for the promotion of young talents are presenting themselves and their offers for students. Participants range from the German National Academic Foundation to political party affiliated organisations or the Germany Economy Foundation. Furthermore, various trade unions and a parent-child initiative have sent representatives.



May

The Centre for Continuing Education is moving to its new home in Eichgärtenallee 6 on Campus Giessen. The Centre of Quality Development and the Department for Internal Academic Continuing Education are also moving into the building.

June

In his role as the chairman of Konferenz Hessischer Fachhochschulpräsidien (Conference of the Hessian Presiding Offices) THM President Professor Günther Grabatin makes the increasing demand for higher education a subject of discussion in a public statement. Demographic changes are one of the reasons why the rush of those wishing to go to university will increase until the middle of the century. This influx is intensified by the double A-level classes in Hessen and other states, as well as the current suspension of the compulsory military service. This results in a higher need for space and teaching staff at the universities. Together with the state government the KHF will make every effort to create additional capacities.



July

More than 7,100 interested people apply for the 17 restricted courses at the THM in the winter semester. A total of 1,490 places are available to them. Giessen registers 4,300 applications for 830 places. Over 2,800 men and women are interested in the 660 places in Friedberg.

August

The City of Giessen and the THM settle their collaboration in the User Centre for Medical Technology in a cooperation agreement. The joint project is being paid with monies from the European Funds for Regional Development within the scope of the Programme for the Support of the Regional Competitiveness and Employability in Hessen.

The planned cinema facility “Kinopolis” at Berliner Platz in Giessen will also be available for academic teachings. The THM signs a ten-year lease contract with the owner; Darmstadt based Weimer GmbH & Co. Lichtspiele KG. Among other issues both partners agreed that the THM can use three cinemas for teachings.

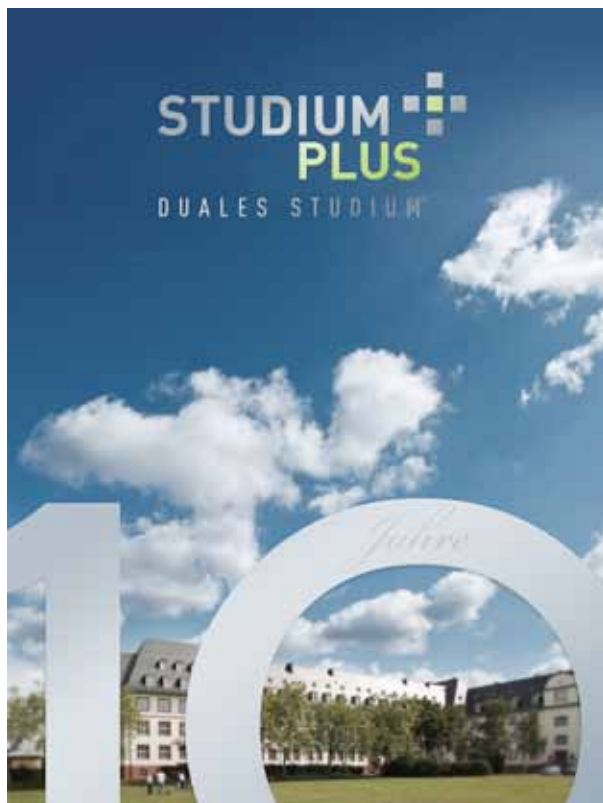
September

The THM achieves a significant success in the “Advancement through Education: Open Universities” competition. A joint application submitted together with the Justus-Liebig-University Giessen and the Philipps-University Marburg receives a funding commitment for about 4.3 million euros. The joint “WM³ Continuing Education Central Hessen” project has the goal of building up extra-occupational master’s and certificate courses as well as study modules, which are to be developed and then marketed in a cooperative effort of the three universities.

October

Despite extended admission restrictions 2,686 first semester students register at the THM for the winter semester. Especially StudiumPlus contributed with 394 first semesters, which is an increase of two thirds compared to the previous year, to this new peak. The total of 13,198 students also reaches a new all-time high.

The history and development of the dual studies programme are in the focus of the tenth anniversary celebration hosted by StudiumPlus, where 250 representatives from politics, economy as well as the THM, and





first semester students are meeting in the municipal hall in Wetzlar. StudiumPlus started teachings with 31 students when it was founded in 2001; the number has increased to a total of 832 in the winter semester 2011/12. In a Competence Centre for Dual University Studies, in which the THM cooperates with the qualification model StudiumPlus, 448 partner companies have joined together since.

November

The THM is officially taking the new User Centre for Medical Technology into service. The new building was paid with subsidies from the Hessen Ministry of Science and the Arts, the Ministry of Economics and the European Union. For a total of 8.5 million euros offices and laboratories, which are to be used by medical technology start-ups and by cooperation projects between the THM and the economy, were built on a total of 1,333 square metres at Gutfleischstrasse in Giessen.

The THM officially opens the new administration building in Ostanlage in Giessen. The listed former Administrative District Authority building that was built in the 1950s was completely restored and now meets highest energy standards. A new transparent entrance hall connects both buildings that the State of Hessen bought in 2009 for 3.6 million euros. During a celebration THM President Günther Grabatin calls the space gain caused by the move to Ostanlage a significant progress for the constructional development of the THM in Giessen. Besides the Presiding Committee the Budget Department, the Personnel Office, and the Division for Research and Transfer have found a new home. The Central Procurement Division, the Facility Management, the Legal Office, the Planning Office, the Public Relations Office and the Merchandising Office are now located in the side wing of the building. The new domicile, located between the THM campus and the cultural city hall, offers about 3,000 square metres for about 100 work places.

2012

February

Minister of Science Eva Kühne-Hörmann presents a funding grant within the scope of the Landes-Offensive zur Entwicklung Wissenschaftlicher Exzellenz (LOEWE) (Hessian Initiative for Scientific and Economic excellence) in Giessen. The TH Mittelhessen receives more than five million euros. About 1.7 million euros are being used as follow-up funding in the key research area Biomedical Engineering & Imaging. A new LOEWE version offers the universities of applied sciences and small and medium sized businesses in Hessen an opportunity to jointly request funds for research projects. In a first funding round the THM was the most successful university.



March

The Presiding Committee of the TH Mittelhessen now has five members: Professor Günther Grabatin is in his second term in office as the THM President. He is leading the THM since 2006 and was re-elected by the senate in October 2011. Professor Axel Schumann, who in his position as a vice president is dealing with international affairs and infrastructure, is taking his third term in office. As a newly elected vice president Professor Klaus Behler addresses himself among other tasks to the field of teaching and learning. After his election in February as a full-time vice president with a six-year period Olaf Berger assumes the tasks of the Chancellor. In this position he leads the THM Administration and is the Budget Officer. Since autumn 2010 Vice President Professor Frank Runkel focusses among other fields on research and development.



The teachings start with 12,760 students in the summer semester. This is an increase of almost three percent in comparison to the previous year (12,294). Of the 914 first semester students 620 chose Giessen and 294 chose Campus Friedberg.





April

The THM and the Wilhelm-Knapp Schule in Weilburg sign a cooperation contract. It is aimed at the improvement of the quality of offers to pupils and students by mutual support. The agreement rules the future cooperation in the field of environmental science.



May

The Hessen Government supports a four-year data protection project at the THM with a total of 360,000 euros. With the expansion of the IT infrastructure the processing of personal data from university staff and students has increased, explains project leader Hajo Köppen. So far, the effects on data protection and data safety caused by new instruments such as web-based platforms and forums have not been systematically analysed at any German university.



June

The THM receives for the "University in the Migratory Society" project funding in the amount of 280,000 euros from the Programme for Innovation and Structural Development. The goal is to realise the intercultural opening of the THM as a long-term process and to adjust the operations to the needs of a migration society. Professor Axel Schumann is in charge of the project, which includes an empirical study and is set up for the 2012-2015 timeframe.

The THM and the Justus-Liebig-University establish the "Bio Resources and Bio Technology" graduate college. It is set up for five years and is being funded by the Hessen Ministry for Science and the Arts with 450,000 euros. With a structured education programme the college will lead young scientists to a doctoral degree. As a University of Applied Sciences the THM is not entitled to award doctoral degrees, therefore we focus on cooperative solutions, especially with universities in Middle Hessen.

August

The BDH clinic in Braunfels celebrates the appointment as the teaching hospital for the THM. It is the first

academic teaching hospital for medical computer science and medical technology in Germany. "With the BDH clinic Braunfels we have found a partner who is offering with the most modern equipment and innovative goals an excellent training environment for our students." comments Professor Henning Schneider, head of the study course Medical Computer Science, this step.

September

The THM receives 6.4 million euros from the Federal and State Programme for Better Conditions of Studying and more Quality in Teachings (Teaching Quality Pact). Parliamentary State Secretary for the Federal Minister of Science Education and Science Dr. Helge Braun delivers the approval notice. The successful request has a focal point on the improvement of staffing in teaching. Gisa von Marcard from the steering committee of the "Klasse in der Masse" project names the qualification of tutors the centre piece. Additional professorships are expected to improve the faculty-student ratio. For the first time the THM will appoint professors for university didactics.

With 18 engineering students in the subject area Design the new regional office of StudiumPlus in Biedenkopf starts the teachings. The dual study programme is based in Campus Wetzlar. After Frankenberg, Bad Wildungen and Bad Hersfeld Biedenkopf is the fourth regional office.

October

In the winter semester 2012/13 the THM experiences an influx of students as never before. A total of 2,930 new students enrolled, this is an increase of eight percent compared to the previous year. All three campuses report new highest levels. The total number of students reaches exactly 14,000. With that the THM is the largest University of Applied Sciences in Hessen.

November

Professor Alexander Klös ranks second in the "Research Award of the Hessen Universities for Applied





Sciences” competition. The scientist who works in the Nanotechnology and Photonics Centre of Excellence applied with the “Simulation and Modeling of Nanostructure Components in Electronics” project. Sponsored by the Federal Ministry for Education and Research he cooperates with Braun GmbH in Kronberg.

The Hessian universities kick off the federal “Hessen schafft Wissen” scientific campaign. With banners at each university and a joint Internet portal they are presenting the diverse Hessian scientific landscape and their achievements “made in Germany”. The THM is focusing on applied sciences.



December

As a member of a team that has developed a marketable procedure for the production of phosphate fertilizer made of sewage sludge ashes Professor Harald Weigand is being honoured with the German Raw Materials Efficiency Prize 2012. As a partner of RecoPhos Consult GmbH, the eco-geologist receives the prize during a ceremony hosted by the Ministry of Economy and Technology in Berlin.

Cameroon is the largest nationality group among foreign students at the THM. 293 enrollees originate from the Central African state. This is the result of a current statistic from the THM planning office that records non-national students. These are students who have not received their university admission in Germany. In the winter semester 2012/13 their total number adds up to 954 at the THM campuses Giessen, Friedberg and Wetzlar. Following Cameroon, which is leading the list of countries of origin for years now, are Morocco (142), Turkey (45) and Tunisia (43).



2013

January

The THM awards the first twelve Deutschland Stipendium recipients their funding certificates. For one year the nine male students and three female students from Giessen and Friedberg will receive a monthly 300 euros scholarship. The Federal Government is engaged in this supporting concept with a 50 percent contribution. The other half is funded by sponsors from the economy. At the THM premier these are the Volksbank Mittelhessen, Bilfinger, Heraeus, and Siemens.



February

The THM receives 2.5 million euros within the scope of the Hessian Initiative for Scientific and Economic Excellence. Hessen Minister for Science, Eva Kühne-Hörmann presents the funding certificates to researchers from the THM and the Justus-Liebig University in the forum of the Volksbank in Giessen.



March

Representatives of the University of Duhok visit the TH Mittelhessen. During a visit to Duhok in October 2012 a THM delegation led by Vice President Professor Axel Schumann has agreed on cooperations in research and teaching as well as in the development of new teaching concepts with the Kurdish University. To put the project in concrete terms, University President Professor Dr. Mosley S. Duhoky and his companions are travelling from the autonomous region in Iraq to Giessen to talk to the Presiding Committee and representatives of the Faculties. Medical Technology is one area in which the cooperation is to start.



In the summer semester more than 1,000 students begin their academic education at the THM. Giessen reports 631, Friedberg 377 newly enrolled students. With this, the high level of the previous year is once again exceeded by ten percent.

12 COURSES AVAILABLE AND STUDENT DEMAND

Development of the student numbers 2007-2013

	WS 07/08	SS 08	WS 08/09	SS 09	WS 09/10	SS 10	WS 10/11	SS 11	WS 11/12	SS 12	WS 12/13
--	-------------	----------	-------------	----------	-------------	----------	-------------	----------	-------------	----------	-------------

Campus Giessen

New students	1.074	350	1.455	530	1.570	533	1.299	632	1321	620	1528
Students in standard course length	4.416	4.263	4.891	4.964	5.533	5.551	5.143	5.202	5.266	5.033	5.505
Total students (incl. those on leave)	5.791	5.535	6.310	6.353	7.149	7.106	7.110	7.036	7.433	7.182	7.810

Campus Friedberg

New students	670	134	875	252	1020	294	926	302	971	294	969
Students in standard course length	2.783	2.640	3.029	2.955	3.144	3.109	3.299	3.251	3.304	3.264	3.334
Total students (incl. those on leave)	3.902	3.689	4.181	3.980	4.639	4.467	4.851	4.615	4.927	4.751	5.162

Campus Wetzlar*

New students	/	/	/	/	/	/	233	/	394	/	433
Students in standard course length	/	/	/	/	/	/	648	643	828	821	1.010
Total students (incl. those on leave)	/	/	/	/	/	/	652	643	838	827	1.028

THM total

New students	1744	484	2330	782	2590	827	2458	934	2686	914	2.930
Students in standard course length	7.199	6.903	7.920	7.919	8.677	8.660	9.090	9.096	9.398	9.118	9.849
Total students (incl. those on leave)	9.693	9.224	10.491	10.333	11.788	11.573	12.613	12.294	13.198	12.760	14.000

Division of students in %

Campus Giessen	60%	60%	60%	61%	61%	61%	56%	57%	56%	56%	56%
Campus Friedberg	40%	40%	40%	39%	39%	39%	38%	38%	37%	37%	37%
Campus Wetzlar*	/	/	/	/	/	/	5%	5%	6%	6%	7%

Graduates

Campus Giessen	301	563	312	447	333	409	394	444	536	510	/
Campus Friedberg	236	260	244	214	258	293	312	357	269	290	/
Campus Wetzlar	/	/	/	/	/	147	/	231	/	227	/
THM total	537	823	556	661	591	849	706	1.032	805	1.027	/

New students, female

Campus Giessen	281	81	402	143	457	159	380	156	382	183	544
Campus Friedberg	104	23	173	34	188	39	192	26	173	44	201
Campus Wetzlar*	/	/	/	/	/	/	62	/	89	/	109
THM total	385	104	575	177	645	198	634	182	644	227	854
Total percentage of new students	36%	30%	40%	33%	41%	37%	49%	29%	49%	37%	56%

Students total, female

Campus Giessen	1.244	1.204	1.520	1.543	1.786	1.812	1.865	1.848	1.993	1.948	2.256
Campus Friedberg	530	502	640	606	735	702	814	746	803	777	883
Campus Wetzlar*	/	/	/	/	/	/	155	150	203	199	246
THM total	1.774	1.706	2.160	2.149	2.521	2.514	2.834	2.744	2.999	2.924	3.385
Total percentage of students	18%	18%	21%	21%	21%	22%	22%	22%	23%	23%	24%

* Wetzlar is being statistically recorded as a campus since WS 2010/2011

The extensive development of student numbers at the Technische Hochschule Mittelhessen continued in the winter semester 2012/13. The total number of enrolled students increased in autumn 2012 to exactly 14,000, which means a new all-time high in the history of the University of Applied Sciences. As a consequence the THM is now Hessen's largest university of applied sciences. With the influx of first semester students reaching almost 3.000 and an increase rate of 8 percent a new record level was reached compared to the previous year.

This continuous growth at the THM, which is confirmed by the enrollment numbers for the summer semester 2013, runs contrary to the current trend at state and national levels. The Statistical Office of the State reports a decrease to barely 33,000 in first semester numbers at Hessian universities for the winter semester 2012/13. Compared to the record of autumn 2011 there is a loss rate of around four percent.

The Federal Statistical Office has identified 492,700 new students for the academic year 2012 (summer and winter semester). Compared to the highest number in 2011 (518,700), there a five percent decrease nationwide in new enrollments, according to the authority.

In 2012 the shortfall in skilled professionals was among the issues of educational policy that were the nationwide focus of discussions in the media. Numerous reports revealed that qualified young professionals in technology and engineering branches were the most sought after career entrants. Although there were slight fluctuations in the analysis, they were recognizing the high demand for graduates in those fields. In autumn 2012 the Verein Deutscher Ingenieure (VDI) (Association of German Engineers) and the Institut der Deutschen Wirtschaft (IW) (Cologne Institute for Economic Research) published current results of their "Ingenieurmonitor". According to this in September 2012, for instance, about 19,000 engineering positions in the power engineering and electrical engineering

First semester top 10

Business Administration (Gi)	181
Business Administration (Wz)	170
Industrial Engineering (Fb)	153
Civil Engineering (Gi)	153
Mechanical Engineering (Gi)	152
Engineering (Wz)	134
Hospital Hygiene (Gi)	125
Computer Science (Gi)	104
Multimedia Engineering (Fb)	95
Mechanical Engineering (Fb)	89

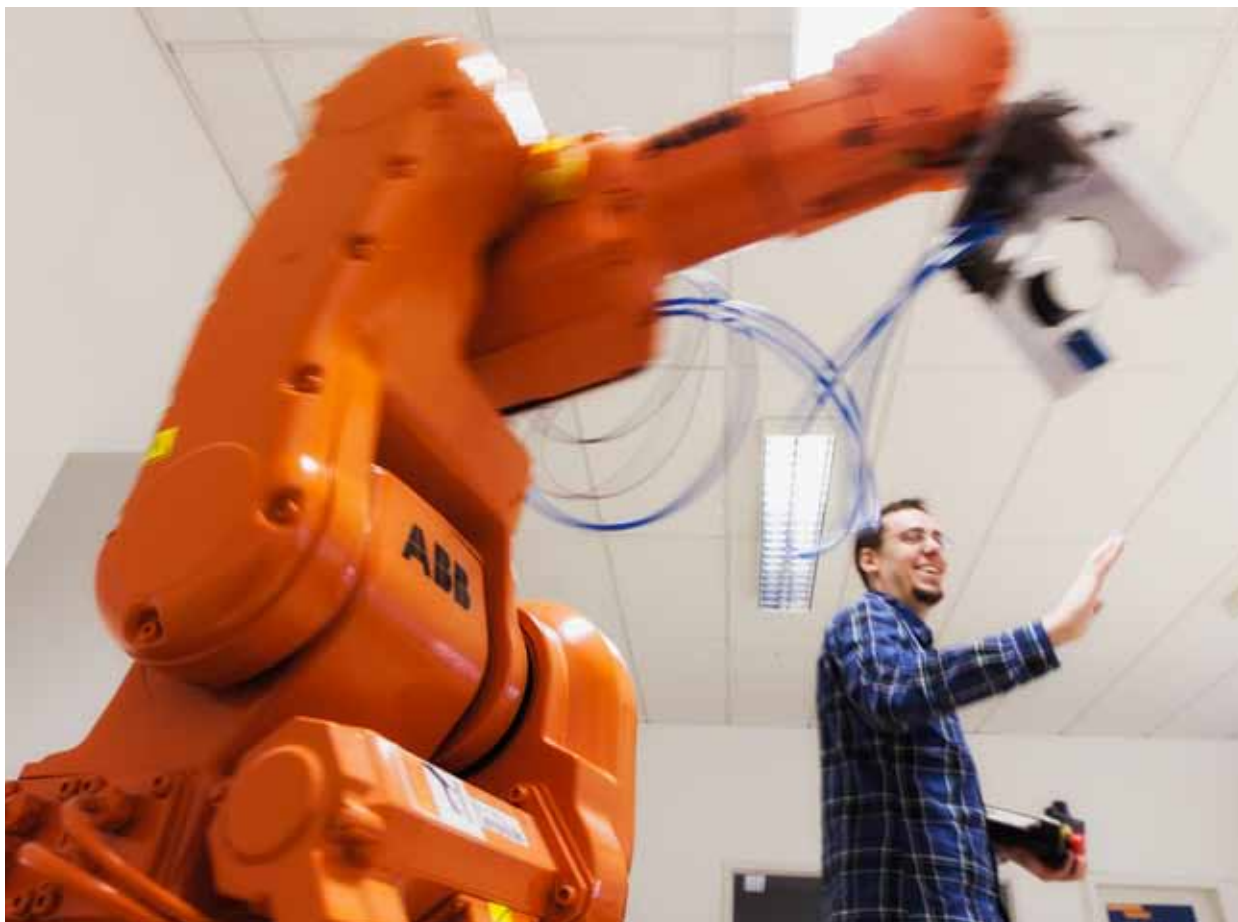
Number of new students in the winter semester 2012/13
All listed courses are Bachelor Programmes.



Available courses at the Technische Hochschule Mittelhessen beginning winter semester 2012/2013

Course	Campus	Degree
Electrical Engineering	Friedberg	Bachelor of Engineering
Architecture	Giessen	Bachelor of Engineering
Architecture (consecutive)	Giessen	Master of Engineering
Automation Engineering	Giessen	Bachelor of Engineering
Civil Engineering	Giessen	Bachelor of Engineering
Civil Engineering (consecutive)	Giessen	Master of Engineering
Vocational Education and Training	Cooperation with JLU Giessen	Bachelor of Arts
Business Administration	Giessen	Bachelor of Arts
Business Administration (dual)	Wetzlar	Bachelor of Arts
Business Administration (advanced education)	Giessen	Master of Business Administration
Biological Information Systems	Giessen	Bachelor of Science
Bioinformatics and Systems Biology	Cooperation with JLU Giessen	Master of Science
Biomechanics-Motor Functions-Human Motion Analysis	Cooperation with JLU Giessen	Master of Science
Biomedical Technology	Giessen	Bachelor of Science
Biotechnology/Biopharmaceutical Technology	Giessen	Bachelor of Science
Biotechnology/Biopharmaceutical Technology (consecutive)	Giessen	Master of Science
Electronics	Giessen	Bachelor of Engineering
Energy Systems	Giessen	Bachelor of Engineering
Facility Management	Friedberg	Bachelor of Science
Facility Management (distance learning)	Friedberg	Master of Science/Zertifikat
Computer Science	Giessen	Bachelor of Science
Computer Science (consecutive)	Giessen	Master of Science
Information and Communications Engineering (consecutive)	Friedberg	Master of Science
Information and Communication Technology	Giessen and Friedberg	Bachelor of Engineering
Infrastructure Management (consecutive)	Cooperation with FH Frankfurt	Master of Engineering
Computational Engineering	Giessen	Bachelor of Science
Engineering (dual)	Wetzlar	Bachelor of Engineering
International Marketing (consecutive)	Giessen	Master of Arts
Hospital Hygiene	Giessen	Bachelor of Science
Hospital Engineering Management	Giessen	Bachelor of Science
Logistics	Friedberg	Bachelor of Science

Studiengang	Campus	Abschluss
Logistics (distance learning)	Friedberg	Master of Science/ Zertifikat
Mechanical Engineering	Friedberg	Bachelor of Engineering
Mechanical Engineering	Giessen	Bachelor of Engineering
Maschinenbau und Energiesysteme (konsekutiv)	Giessen	Master of Science
Mathematics for Finance, Insurance and Management (consecutive)	Cooperation with Hochschule Darmstadt, UAS	Master of Science
Mechatronics	Friedberg	Bachelor of Engineering
Media and Computing	Friedberg	Bachelor of Science
Media and Computing (consecutive)	Friedberg	Master of Science
Medical Informatics	Giessen	Bachelor of Science
Medical Physics (consecutive)	Giessen	Master of Science
Methods und Didactics in Applied Sciences - MEDIAN (Continuing Education)	Giessen – Cooperation with Hess. Universities of Applied Sciences	Master of Higher Education
Optotechnic and Image Processing	Cooperation with Hochschule Darmstadt, UAS	Master of Science
Organisation Management in the Health Service, dual	Wetzlar	Bachelor of Science
Engineering Physics	Friedberg	Bachelor of Science
Process Management (dual, consecutive)	Wetzlar	Master of Science
Systems Engineering (dual, consecutive)	Wetzlar	Master of Engineering
Supply Chain Management (consecutive)	Friedberg	Master of Science
Computer Engineering	Friedberg	Bachelor of Engineering
Technical Editing and Multi Media Documentation (consecutive)	Giessen	Master of Arts
Environmental-, Hygiene-, and Safety-Engineering	Giessen	Bachelor of Science
Environmental-, Hygiene-, and Safety-Engineering (consecutive)	Giessen	Master of Science
Management (consecutive)	Giessen	Master of Arts
Business Information Systems	Friedberg	Bachelor of Science
Business Information Systems (consecutive)	Friedberg – Cooperation with the UAS Frankfurt	Master of Science
Business Administration and Engineering	Friedberg	Bachelor of Science
Business Administration and Engineering (dual)	Wetzlar	Bachelor of Engineering
Business Administration and Engineering (distance learning)	Friedberg	Master of Business Administration and Engineering/Certifikate
Business Administration and Engineering (consecutive)	Friedberg	Master of Science
Business Mathematics	Friedberg	Bachelor of Science



fields could not be filled. The publication states that the number of vacant engineering positions is 80,000 and the number of unemployed engineers about 23,000. VDI director Willy Fuchs verified that an encouraging trend of “ceaseless efforts to encourage more and more young people to study engineering sciences, is now paying off.” At the same time VDI and IW pointed out that there is still a lack of qualified engineering sciences graduates in the subject areas of mechanical engineering and vehicle construction as well as energy and electrical engineering.

Against this background, the renewed increase in numbers of new students at the THM is generally welcomed. Two of our three campuses have reached new high levels of enrolments for the winter semester

2012/13. The largest increase took place in Giessen where 1,528 new students enrolled. This is 14 percent more than in the previous year. The Scientific Centre of Dual University Studies (ZDH) in Wetzlar exceeded the 1,000 students mark for the first time and with 433 first semester students clearly surpassed the peak of the previous winter semester. Of the 5,162 students in Friedberg, 969 have begun their academic education. That is insignificantly fewer than in the record semester of 2011/12.

The continuous expansion of the THM is even more remarkable when considering that the university had to introduce further course restrictions, for example in civil engineering and business mathematics. The numerus clausus is a restrictive tool that, in the opinion

First-year students at German Universities since 2010

Type of University	Academic Year ¹		
	2010/11	2011/12	2012/13 ²
Universities	417.981	485.267	480.964
Universities of Education	6.879	6.761	6.887
Universities of Theology	609	653	608
Art Colleges	9.035	9.363	9.799
Universities of Applied Sciences	212.393	244.505	255.929
Public Administration Colleges	10.416	10.856	10.701
Total	657.313	757.405	764.888

¹ First semester students in the summer semester and the consecutive winter semester

² Preliminary result

© Federal Statistical Office Wiesbaden, 2013

of the THM Presiding Committee, should only be applied cautiously. This is because the THM is committed to the task of contributing to the structural development of the region by qualifying high numbers of young academic professionals. However, it is also continuously responsible for providing the best possible quality teaching and learning. If a quantitative overload impacts the quality of teachings, and when short-term improvements in space and personnel are not possible, there may be no way around the restriction of admissions.

At the THM in Giessen Business Administration with 181 new students was the most sought-after course in the winter semester 2012/13. In Friedberg the Industrial Engineering course once again had the most new enrollments (153). In Wetzlar the dual study programme Business Administration attracted the most new students (170). All three courses are Bachelor programmes.

Foreign students at the TH Mittelhessen*

Total	954
Cameroon	293
Morocco	142
Turkey	45
Tunisia	43
Bulgaria	27
Ukraine	27
Russian Federation	26
Iran	24
Gabon	21
Yemen	19

as per: winter semester 2012/13

* = Students that have not obtained their higher education entry qualification in Germany

18 COURSES AVAILABLE AND STUDENT DEMAND



In the winter semester 2012/13 the Technische Hochschule Mittelhessen was the sole provider of 53 study programmes. Of these courses 32 lead to a bachelor's degree and 21 lead to a master's degree. The following courses were newly established in 2012:

- Hospital Hygiene (Bachelor, Faculty of Hospital and Medical Engineering, Environment and Biotechnology)
- Organisational Management in Healthcare (Bachelor, dual, ZDH)
- Supply Chain Management (Master, Faculty of Social and Cultural Sciences)
- Mechanical Engineering and Energy Systems (Master, Faculty of Mechanical Engineering and Energy Technology)

- Bioinformatics and Systems Biology (Master, Faculty of Mathematics, Science and Computer Science in cooperation with the Justus-Liebig University Giessen).

Considering the demands for these new programmes, the strong interest in Hospital Hygiene, where teaching activities began in autumn 2012, must be emphasised. The initiation of the course was agreed upon by the THM and the Ministry of Science in the target agreements for 2011-15. One hundred and twenty-five students enrolled for the first semester, 83 of whom were women. Hospital Hygiene is now the course with the highest percentage of women (about 67 percent) at the THM.



Since 2007 the THM's Hochschulzentrum für Weiterbildung (HZW) -Centre for Continuing Education- has been concentrating on the systematic conceptualisation and marketing of continuing education. The tasks of the centre include offering its own advanced education programmes, conducting educational research, and supporting faculty staff who wish to take advantage of advancement.

One emphasis of the work of the centre in 2012 was the addition of regionally networked certification courses cooperation with external partners, offering qualifications in the following fields:

- Municipal energy consulting
- Regional energy project development
- Renewable energy consulting
- Personnel services
- Business Administration (in cooperation with General Logistics Systems)
- Pedagogy in health care
- Medical team and project management
- Management in the Food Industry.

The HZW also offers the MEDIAN (Approach and Methods in Applied Sciences) Master's Programme that

has been available throughout Hessen since the winter semester 2011/12 and is open to graduates of all fields of study. In autumn 2012 the third class began their studies.

A part-time extra occupational advanced education bachelor study course in Business Administration that was jointly initiated by the HZW and the Hessen Ministry of Science and the Art as well as the Chamber of Crafts Wiesbaden, is due to be launched in the winter semester 2013/14 in cooperation

with the THM's Business Department. It will be the first of its kind in Hessen and is aimed at master craftsmen with higher education entrance requirements.

Looking at Research and Development in the HZW, the granting of a joint application from the three Middle Hessen universities in the "Advancement through Education: Open Universities" competition of the Federal Ministry of Education and Research marks a significant success. The joint development of cooperative programmes for lifelong academic learning is supported by federal funds in the amount of 4.3 million euros.

The "WM³ Weiterbildung Mittelhessen" project, launched in the winter semester 2011/12, has the goal of building up new, demand-oriented and extra occupational master's degree study programmes, certificate courses and study modules that are to be developed and marketed in a cooperation of the three universities.

Further research and development activities of the HZW include among other issues the consolidation of the international component in professional training, lifelong learning, transfer of knowledge and virtual learning in trade schools.



The re-naming of the FH Giessen-Friedberg to Technische Hochschule Mittelhessen in 2011 was also the result of continuously increasing performance in application-oriented research. At the same time, we reaffirmed our claim to continue our course of dynamic advancement in research and development.

Successful applications for research funding programmes from the Federal Government and the State of Hessen are not only improving our initial financial situation. They also provide internal momentum that at the same time promotes our cooperations with primarily regional partners. As a provider of academic qualifications in foundation courses and further education, we also regard this regional orientation in the field of applied research as an obligation.

With our establishment as a research-intensive university we were able to achieve significant successes

during the reporting period. In 2012 research teams from the THM began working on projects that are being funded by several federal ministries. They are dedicated to tasks in the fields of microelectronics, traffic technology, energy technology, waste management technology, medical technology as well as e-business. In the competition for LOEWE (Hessian Initiative for Scientific and Economic Excellence) subsidies we achieved a leading position.

The LOEWE Line of Funding 3 gives universities of applied sciences and small or medium sized enterprises the opportunity to jointly request funds for research projects. Within this framework the State is currently supporting 13 THM research projects. "In comparison with the other Hessian universities of applied sciences they have achieved the best results", stressed Eva Kuehne-Hoermann, Hessian Minister for Science and the Arts, in February 2013 when she awarded six new

grants in Giessen. Thus a further 2.5 million euros are flowing into the research at our university. These funds are distributed among the following projects:

- Studies on the “fast and easy design processes for vehicle structures with regard to the operational stability” (Professor Udo Jung, Faculty of Mechanical Engineering; Mechatronics, Materials Technology)
- “Emergency action documentation and controlling system Hessen” (Professor Erdmuthe Meyer zu Bexten, Faculty of Mathematics, Science and Computer Science)
- “Telemonitoring for patients with chronic respiratory diseases” (Professors Volker Gross and Henning Schneider, Faculty of Hospital and Medical Technology, Environmental and Biotechnology)
- Procedure for the disinfection of cloudy liquid media using pulsed electrical fields” (Professor Markus Röhricht, Faculty of Hospital and Medical Technology, Environmental and Biotechnology)
- “PIMAR-Platform Independent Mobile Augmented Reality” (Professor Michael Guckert and Cornelius Malerczyk, Faculty of Mathematics, Science and Computer Science)
- “Development of a hybrid tower for wind turbines made of precast reinforced concrete units, steel framework and tubular steel tower” (Professor Jens Minnert, Faculty of Civil Engineering).

In 2012 projects led by Professors Dr. Hans-Martin Seipp (Center of Excellence for Medical and Hospital Hygiene), Olaf Strelow (Competence Center for Energy and Environmental Systems Technology), Martin Fiebich (Institute for Medical Physics and Radiation Protection) as well as professors Peter Czermak and Frank Runkel (both Institute for Biotechnology and Pharmaceutical Technology) already received grants from this LOEWE funding line.

As a partner of the leading Justus-Liebig-University Giessen (JLU), Professor Dr. Stefan Kolling (Faculty of Mechanical Engineering and Energy Technology) is involved in the new LOEWE research cluster- “Store-E:



Storage in boundary layers”.

Professors Ubbo Ricklefs, Rainer Thueringer and Uwe Probst (Center of Excellence for Nanotechnology and Photonics) cooperate in the JLU’s focus group “RITSAT. Ion Thrust for Space Travel – Plasma Physics and Future Technologies.

Since 2008 Hessen has been funding the “Bioengineering & Imaging” project as the first LOEWE research cluster in a university of applied sciences. Under the direction of Professors Czermak and Runkel the scientist of the Institute for Biotechnology and Pharmaceutical Technology are working on medically compliant platform technologies and procedures for cell and particle based therapies. Due to the excellent evaluation results from external consultants the State will support this key research



area until 2013 with an additional 1.7 million euros. The consultants regard it as “an outstanding beacon project for the Technische Hochschule Mittelhessen (...) In the research fields of application-oriented biopharmaceutical research, in the white and red biotechnology segments, in the manufacturing and measurability of active substances as well as in the reproducibility of galenic processes and increasingly in the joint optical imaging projects more outstanding results can be achieved in the requested period. There are good chances for considerable acquisitions of third-party funds.”

The TH Mittelhessen wants to provide qualified students with institutionalized access to a doctorate. In

2012 the THM made an important step in this direction when they established the joint post-graduate programme “Bio resources and Biotechnology” in cooperation with the Justus-Liebig University. It is set up for five years and financially supported by the Hessen Ministry for Science and the Art. The doctoral candidates work together on a research topic in the graduate college and receive an attractive training programme. The joint post-graduate programme is based on the successful research networks “Biomedical Technology-Bioengineering & Imaging” at the THM and the “AmbiProbe – Mass Spectrometric in situ Analytics for the Problem Areas of Health, Environment, Climate, and Security at the JLU.

The current overall economic situation of the Technische Hochschule Mittelhessen is characterized on the one hand by a structural deficit, but on the other hand also by a considerable improvement as a result of the approval of additional funds from the Higher Education Pact 2020.

The calculation of our budget (46.6 million euros in 2012), allocated by the State of Hessen, is based on students numbers targets that are determined by the state government and only records students who completed their studies within the designated time period. For the THM the target number is 9,034 students. In the winter semester 2012/13 we actually had 9,849 students within the designated study period. The funding shortfalls, which have also been criticized in previous reports and are a result of unrealistic, faulty calcula-

tion methods, continue to exist on a larger scale. That the current financial situation nevertheless seems more positive than in 2011 is the result of funding from the Higher Education Pact 2020, in which federal and state governments are cooperating. The THM thus received about 11 million euros in 2012. Within the framework of this Pact, an additional 18.5 million euros were announced in 2013 to create the necessary training capacity. We are using them for the short-term increase in staff as well as spatial expansion projects.

In close consultation with the Faculties the Presiding Committee has identified the personnel requirements that have resulted from the increasing number of students as well as from measure to ensure and increase the teaching quality. This will amount to at least 109



Budget of the Technische Hochschule Mittelhessen

	2008	2009	2010	2011	2012
Total Budget	43.803.882	43.966.082	45.804.581	47.071.777	48.031.198
State Budget grants	41.794.200	42.917.822	43.761.923	45.156.177	47.166.579
other funds ¹⁾	2.009.682	1.048.260	2.042.658	1.915.600	864.619
budgeted payroll costs ²⁾	31.361.162	32.530.882	32.927.592	35.086.495	36.278.847
budgeted material costs	12.442.720	11.435.200	12.876.989	11.985.282	11.752.351
funds for the improvement of the quality of conditions of studying and teaching ³⁾	6.506.737	6.082.478	6.140.377	6.317.223	5.977.521
Funds from the University Pact 2020	947.750	1.627.750	3.605.750	5.820.133	7.087.855

¹⁾ i.e. administrative fees and revenues, reserves etc.; ²⁾ starting 2008 incl. payments to the pension fund of the state of Hessen

³⁾ budget amount for winter semester 07/08: 2008: budget amount for winter semester 08/09

Development of third party funds at the THM

		2009	2010	2011
Third party funds total, based on revenues		6.024.026	6.735.062	7.995.338
Third party funds that are eligible for performance oriented allocation		2.919.248	3.638.940	4.131.519
Third party funds w/o State funding	w/o advanced education	2.470.370	2.496.131	2.282.673
	with advanced education	3.104.778	3.096.122	3.863.819

Data in euros (Research in total, Advanced Education and others)

Staff at the Technischen Hochschule Mittelhessen

	Employees in the Departments				Administration	Total
	Professors	Research assistants	Administrativ-technical employees	Total Employees in Departments		
2010	203	45	270	518	265	783
2011	203	63	345	611	255	866
2012	209	73	354	636	271	907

Indicated is the number of persons, not the position in full time equivalents!

Development of the main usable area at the Technische Hochschule Mittelhessen

Campus/Year	2006	2007	2008	2009	2010	2011	2012
Giessen	28.840	31.853	32.982	33.702	34.679	39.456	41.084
Friedberg	11.839	15.364	15.615	15.615	15.406	15.545	15.454
THM total	40.679	47.217	48.597	49.317	50.085	55.001	56.538

positions of which 62 are planned for professors and 47 for teachers with special tasks. The professorships are “overlapping” positions, whereby newly hired staff are employed in those fields where professors with a chair are close to retirement. When they do retire, the additional staff are generally appointed as civil servants. The announcement of such overlapping professorships began in the winter semester 2012/13. In 2012 the THM had a total of 907 members of staff, 203 of them with a

professorship. The comparative figure for 2011 is 866 (203 of them professors).

In the field of structural development the THM was able to achieve significant progress in the winter semester 2011/12. In Giessen we have put the User Centre for Medical Engineering into operation. The new building was funded by the Hessen Ministry for Science and the Arts, the Hessen Ministry for Economics and Trans-





port, and the European Union. For a total of 8.5 million euros, laboratories and office space, which should partially be used by start-ups in the medical technology field and partially by cooperation projects between the THM and the economy, were built on an area of 1,333 square metres in Gutfleischstrasse.

The THM Administration moved as scheduled to the former Administrative District Authority building. The presiding office and administrative units are now located in the new building that was officially opened in November 2011. The move to Ostanlage marks an important step in the structural development of the THM in Giessen because with this current high of student influx it creates urgently needed space for teachings and studies on the campus in Wiesenstrasse. Thus the administrative headquarters of the THM are moving closer to the centre of Giessen.

This convergence towards the centre of the university town is also supported by the contractually fixed plans to use the "Kinopolis" cinema complex at Berliner Platz, which is currently under construction, for academic teachings. Three cinemas with 110 seats each will still be available for lectures in 2013. Additional

rented seminar rooms and offices provide alternative backup capacity so that the THM can further structurally develop the campus in Wiesenstrasse within the scope of the Hessian University Development, Expansion and Renovation Programme.

Currently the most important component in the development of the campus Friedberg is the expansion of the THM to the former Housing Area. For this purpose, the State of Hessen purchased an 8,300 square metre plot in 2010. In 2012 the THM submitted this requirement to the Hessian Ministry for Science and the Arts, proposing the construction of a Technology Centre with a 1,836 square metres main usable area and an investment volume of 12.5 million euros. The construction of a laboratory building on the Housing Area was also announced to the Federal Government. The planned buildings are to be made available to all Friedberg faculties for teaching and research purposes. The centre should also contribute to the expansion of the campus in Wilhelm-Leuschner-Strasse since it enables the demolition an old laboratory building and the space will be used to build a new refectory.

Furthermore, for another 1.7 million euros, allocated by special programme HSP1, is to be used to build a seminar building on campus in Wilhelm-Leuschner-Strasse. The planning stage was completed in 2012. The construction permit application for the two-storey building, that will be available to all local departments, has already been submitted.

Photos on page 27: additional space will be available in 2013 in the cinema in Giessen (top left), as well as the Friedberg Campus (bottom right), later also in the "Housing Area" (top, right), and in the vicinity of the User Centre for Medical Technology.





The development goals that were agreed upon in the Higher Education Pact 2020, a pact between the government and the universities, provide for an increase in student numbers after the short-term decrease in autumn 2013. It is estimated that in the winter semester 2015/16 the number of new students will be above the 15,000 mark. A continuous increase to more than 3,500 new students is predicted. In order to expand the infrastructure to the required extent, the THM was promised a total of 40.5 million euros for 2013 and 2014 from the Higher Education Pact, which we will use to rapidly increase staff and expand the existing space. We are ready to mobilize all of our powers to admit additional students and to release more academically trained graduates into the job market. The Presiding Committee will continue to appeal to the State of Hessen to increase the budget and thus be able to finance "good teaching" for a larger number of students.

Strategic planning means first of all that we recognize the further development of our subject spectrums as a permanent task. Whether in engineering sciences, in information technologies, business sciences or in disciplines that emerge from overlapping contents in those sciences: we have to use a dynamic similar to the one that changes products, procedures, fields of applications and entire markets to develop our range of skills supply for students. Internationally networking study programmes are just as important to us as the increased recruiting for students from migrant families. We also recognize a major chance in the development of study programmes in those fields of occupation where the need for academically trained professionals is newly arising.

We also want to remain innovative and on the path to expansion with our programme models. StudiumPlus,

which we founded together with partners from the Lahn-Dill region in 2001, has been very successfully established. As a result the THM was able to develop the Wetzlar Campus and to open four StudiumPlus satellite stations in the region in the meantime. Our dual concept of linking academic qualification and in-company training is winning more and more allies in the enterprises. In addition, it demonstrates exemplarily how positioning innovation courses in line with the market can work in the future.

The development of dual studies therefore belongs to the positions that are mentioned in the target agreements for 2011-2015 between the THM and the state government. This framework for our development planning, in which the respective projects of the faculties and institutes are included, puts focus on the key areas teaching, research and continuing education. Moreover that it declares that quality management, continued internationalization, the promotion of women

and family advancement as well as the structural development of the THM within scope of a master plan, are primary tasks.

The area-related expansion, which became essential with the increasing influx of students, will not only extend to the provision of rooms for teaching and studies. We also want to improve the spatial infrastructure for research. This intention was encouraged by the Hessian Prime Minister Volker Bouffier upon his visit to our User Centre for Medical Technologies in August 2012. On this occasion he advocated the construction of a laboratory and technology centre in Giessen's Gutfleischstrasse, and promised to support the rapid start of construction.

More efficient research work in many professional fields is important in order to realize our goal of being the technology driver for the entire region. At the same time the range of courses at the THM will benefit from



it because high-quality Master's programmes should not only bear upon current research, but should also actively include students in current projects. Even for the advanced education, our third focal point, the promotion of research will open new perspectives and target groups.

We view the establishment of the cooperative graduate college "Bio Resources and Bio Technology" in partnership with the Justus-Liebig University as a groundbreaking progress for research and teaching at the THM. For some years we have been pursuing the goal of providing graduates of certain branches of study with an institutionalized access to a doctorate. A regulated way of advanced scientific education with a doctoral

degree is not only an important step in the continuing development of our THM. It also has an impact on the economic areas of Giessen, Lahn-Dill, Wetterau and Vogelsberg that should not be underestimated. The emigration of ambitious young graduates in the technical engineering disciplines is causing problems for the region. If the Technische Hochschule Mittelhessen stands for a broad range of academic qualifications that, in addition to the Bachelor's and Master's degrees, include the doctoral degree, this will not only have a binding effect on the best in-house graduates but also increase the appeal to skilled employees coming from other parts of Germany or Europe. This is even more important in an area such as Middle Hessen for which an unfavourable demographic trend has been forecast.





IMPRINT

Publisher:	Der Präsident der Technischen Hochschule Mittelhessen Wiesenstraße 14, 35390 Gießen
Editorial Office:	Pressestelle Tel.: 06 41-3 09 10 40, Pressestelle@thm.de Statistiken auf den Seiten 12, 17, 24, 25: Referat für hochschulpolitische Fragen
Translation:	Alexandra Williams
Photos:	Armin Eikenberg, Erhard Jakobs, Franz Möller, Anna Schroll, Till Schürmann Titelfoto: Anna Schroll Grafik auf S. 5 und 32: Till Schürmann
Design:	Satz+Druck Böll, Unkel
Print:	Druckerei Bender, Wettenberg
Copies:	1,000
Date:	31 March 2013



Biedenkopf

Frankenberg

Bad Willungen

Bad Hersfeld

Wetzlar

Gießen

Friedberg