



TEXTILE AND CLOTHING TECHNOLOGY



Hochschule Niederrhein
University of Applied Sciences

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HOCHSCHULE NIEDERRHEIN

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INTRODUCTION

WELCOME TO THE FACULTY OF TEXTILE AND CLOTHING TECHNOLOGY

Our Faculty in Mönchengladbach is one of the main locations in the whole of Europe for up-and-coming academics in the entire textile and clothing industry to study. It can look back on a more than 100-year tradition and offers outstanding conditions for application-oriented studies that guarantee students a wide range of professional options at home and abroad.

Since the University was founded in 1971, the Faculty has continued to evolve in line with current global requirements, for example by the introduction of the English-language Bachelor's and Master's degree programmes (B.Sc., M.Sc.) in addition to internships and projects in both our own, well-equipped laboratories and technical centres as well as in companies in Germany and other countries. This development is also backed by attendance at national and international trade fairs, participation in national and international competitions and events and also by our institutes and competence centres.

These include the Research Institute for Textile and Clothing (FTB), the Fraunhofer Centre of Textile Logistics (CTL), the Public Textile Testing Institute of the Hochschule Niederrhein GmbH (ÖP), the EthNa Competence Centre CSR (ethics and sustainability) as well as the eWeb Research Centre. This research landscape is supplemented with the "Textile Innovatorium", which serves as an interface for transferring innovative business ideas and promising research results to textile companies.

The Faculty's mandate is to equip students with excellent professional know-how with a practical orientation at all

stages of the textile chain. "From the fibre to the final product" is our motto, meaning teaching and research from the raw fibre to the many different textile end products and the related processes. The represented sectors include clothing textiles (workwear as well as the fashion industry), home and interior textiles as well as technical textiles.

In addition to the subjects related to design and technology, teamwork, problem solving and management competencies, digitisation and sustainability as well as interdisciplinarity and internationality are the core areas of focus of the very varied degree programmes. The students - 20 percent from abroad and more than 80 percent female - are also already introduced to current research topics during their studies.

Currently more than 30 professors as well as a team of 55 other staff members pass on their comprehensive know-how in the fields of teaching and research. A number of cooperation projects with universities across around the globe such as the United States and China as well as many other European and Asian countries demonstrate the excellent reputation of our Faculty in the global textile world.

Contact us – we look forward to hearing from you!

Prof. Dr. Lutz Vossebein
Dean since 1 March 2018



PROF. DR. HABIL. RUDOLF VOLLER

Dean 2014-2018
Faculty of Textile and Clothing Technology
Hochschule Niederrhein



PROF. DR. LUTZ VOSSEBEIN

Dean
Faculty of Textile and Clothing Technology
Hochschule Niederrhein



PROF. DR. UTE STÄNDER

Vice Dean
Faculty of Textile and Clothing Technology
Hochschule Niederrhein



**PROF. DR.
HANS-HENNIG VON GRÜNBERG**
President of the Hochschule Niederrhein

“Over the course of many years a complex of teaching, research and industry has developed at the Faculty of Textile and Clothing Technology in Mönchengladbach that is unique in Europe. It is no coincidence that we were successful in the nationwide „Innovative University“ funding competition with the Textile Innovatorium which was planned at the site. Not only more than 2,000 people from all parts of Germany and the world study at our Faculty, we are also the main hub in the regional innovation system. With the Research Institute for Textile and Clothing (FTB), the Public Textile Testing Institute (ÖP), the Fraunhofer Centre of Textile Logistics (Fraunhofer Center Textillogistik) (CTL) and the Textile Academy NRW (Textilakademie NRW) we have a unique range of resources at our disposal.

I would like to invite you to find out more about us on the following pages.

THE UNIVERSITY AT A GLANCE



STUDIES WITH PRACTICAL ORIENTATION

With more than 14,000 students the Hochschule Niederrhein, founded in 1971, is one of the largest universities of applied sciences in Germany. With its two campuses in Mönchengladbach und Krefeld, the University currently offers more than 80 Bachelor's and Master's degree programmes as well as doctorate options.

The Hochschule Niederrhein enjoys a reputation across Europe for the professional orientation of its degree programmes. With its applied science and practical orientation, the University trains practical thinking in the laboratories and the think tanks that can be put to profitable use by its graduates in their jobs. The degree programmes at the University always have a practical and

applied orientation due to its close links to a number of local, regional and cross-regional companies.

The Hochschule Niederrhein is a teaching institution with an international reputation and appeal. The faculties of Electrical Engineering and Computer Science, Mechanical and Process Engineering, Industrial Engineering as well as Health Care, Chemistry and Design are located in Krefeld. The faculties of Business Administration and Economics, Food, Nutrition and Hospitality Science, Applied Social Sciences and Textile and Clothing Technology are at home in Mönchengladbach. The Faculty of Textile and Clothing Technology is the oldest and second-largest faculty of the University.

FACTS

The Hochschule Niederrhein has ten faculties. Around 900 employees, including 240 professors, ensure that everything runs smoothly. In the examination year 2017 around 2,132 students graduated successfully. The Hochschule Niederrhein has an excellent global network and maintains contact with around 100 partner universities. These include 97 European partners with which exchange programmes for students and lecturers are a firmly established tradition as part of the ERASMUS programme. The other partner universities are located in Russia, China, Australia and the United States as well as in other countries.

RESEARCH/ TRANSFER

Research and knowledge transfer are a firmly anchored element of university life. There are currently nine research institutes and fifteen competence centres at the University that focus on cross-faculty, application-oriented research. In 2017 the University acquired external research funding totalling 19 million euros. Most was obtained from federal, state or EU sources.

THE FACULTIES OVERVIEW

01

CHEMISTRY

The Faculty of Chemistry in Krefeld prepares students for professions with a clear chemical and technical orientation. In the Faculty of Chemistry students can enrol for the "Chemical Engineering" and "Chemistry and Biotechnology" Bachelor's degree programmes (both also possible as a dual degree course) as well as for the "Chemical Engineering" and "Applied Chemistry" Master's degree programmes.

02

DESIGN

Design as a discipline for actively shaping the world by means of communication, spaces and products - this is the focus of the Design training course at the University, which combines artistic creativity with applied practical design know-how. The Bachelor's degree programmes "Communication Design", "Product and Object Design" and the Master's degree programme "Design Projects" in Krefeld offer the opportunity to obtain a professional and recognised qualification.

03

ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Electrical engineers have undergone training in Krefeld for more than 50 years. The "Computer Science" degree programme was added in the nineties. The "Electrical Engineering" and "Computer Science" Bachelor's degree programmes with their practical orientation are available as full-time, dual or career-integrated part-time courses; the Master's degree programmes in both subjects as full-time and career-integrated courses.

04

MECHANICAL AND PROCESS ENGINEERING

The "Mechanical Engineering" Bachelor's degree programme is subdivided into the main fields "Engineering Design and Development" as well as "Production Technology". The "Process Engineering" Bachelor's degree programme focuses on the main fields of "General Process Engineering" and "Energy Engineering". A "Mechatronics" Bachelor's degree programme is also available. The Master's degree programmes "Product Development in Mechanical Engineering" as well as "Computer-Aided Process Engineering" are also available.

05

FOOD, NUTRITION AND HOSPITALITY SCIENCES

The Faculty of Food, Nutrition and Hospitality Sciences in Mönchengladbach with around 800 students is the largest faculty of its kind at any German university of applied sciences in Germany and offers "Nutritional Sciences", "Food Sciences" as well as "Catering and Hospitality Services" Bachelor's degree programmes. More in-depth knowledge in this Faculty can be acquired in the "Nutritional and Food Sciences" Master's degree programme.

06

APPLIED SOCIAL SCIENCES

The Faculty of Applied Social Sciences in Mönchengladbach offers the Bachelor's degree programmes "Social Work and Education" as full-time or part-time courses as well as "Cultural Education" and "Early Childhood Education". Available Master's degree programmes are "Psychosocial Counselling and Mediation", "Cultural Education and Cultural Management" as well as the career-integrated "Social Management" degree programme.

07

TEXTILE AND CLOTHING TECHNOLOGY

The Faculty of Textile and Clothing Technology in Mönchengladbach is the oldest Faculty of the Hochschule Niederrhein. It is one of the leading academic training establishments and can look back on a tradition that spans more than one hundred years. German-language and fully English-language Bachelor's and Master's degree programmes are available.

08

BUSINESS ADMINISTRATION AND ECONOMICS

The Bachelor's degree programmes "Business Administration" with the areas of specialisation "International Management" and "International Business" as well as "Business Information Systems" and "Taxation and Auditing" are full-time courses. Alongside two Master's degree programmes there are also combined study and vocational as well as dual degree programmes and also the "International Marketing" Bachelor's degree programme.

09

INDUSTRIAL ENGINEERING

This Faculty takes the job requirements in the industry as its benchmark for linking technology with business administration. The "Industrial Engineering" Bachelor's degree programme is available as full-time, part-time and dual degree courses. The main areas of specialisation of the Master's degree programmes are "E-Business", "Engineering" as well as "Production and Logistics".

10

HEALTH CARE

Medicine, business administration, management, economics and technology are combined in the "Health Care Management" Bachelor's degree programme. This is supplemented by the "Medical Informatics" and "Applied Therapeutic Sciences" Bachelor's degree programmes. In addition, "Health Care" is available as a Master's degree programme.

THE FACULTY OF TEXTILE AND CLOTHING TECHNOLOGY

TEXTILE FUTURE

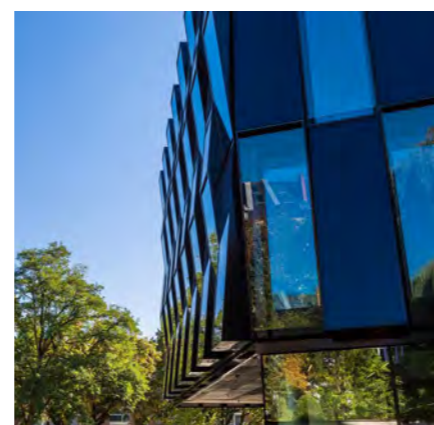


CAMPUS

The campus of the Hochschule Niederrhein is at a central location in Mönchengladbach and is easily accessible by foot, car, bus and other means of public transport. There are two train stations nearby with good links to Düsseldorf main train station. With the delightful mix of listed and modern buildings and its quiet areas, the campus has a very pleasant atmosphere. The Faculty is able to offer its students and project partners a number of laboratories and technical centres with excellent facilities.

INTERNATIONALITY

Overcoming borders and expanding horizons – this is possible with close partnerships! In this way students of the Hochschule Niederrhein can gain in-depth international experience with the special support of the Faculty. The "International Office" of the University coordinates study and internship trips around the world. International guests are always welcome to join the University for short-term study trips or for a full degree programme. The Erasmus programme and the DAAD also provide support.



NEW BLUE HOUSE

As a modern energy efficiency centre, the Blue House stands for close interlinking of science and business. Scientific and business know-how is concentrated under one roof at a central location. The alternating glass and photovoltaic elements on the building's façade enable resource-conserving power generation. It accommodates the library, the "Energy Controlling" endowed chair of the regional energy supplier and the research institutes NIERS - Lower Rhine Institute for Regional and Structural Research (Niederrhein Institut für Regional- und Strukturforschung), GEMIT – Institute of Business Process Management and IT (Institut für Geschäftsprozessmanagement und IT) as well as the Fraunhofer Centre of Textile Logistics (Fraunhofer Center Textillogistik, CTL).

TEXTILE FUTURE FOR MORE THAN 100 YEARS

The Faculty of Textile and Clothing Technology in Mönchengladbach is the oldest Faculty of the Hochschule Niederrhein.

It is one of the leading academic training establishments and can look back on a tradition that spans more than one hundred years. For this reason it has an unsurpassed level of textile competence. As the established faculty has undergone consistent further development, it has adapted to global challenges. The international orientation of the Faculty is reflected in its range of available Bachelor's and Master's degree programmes in both German and English as well as the option of obtaining a German-Chinese double degree. This comprehensive range of degree

programmes offers graduates a high level of flexibility and therefore a wide choice of additional options at home and abroad.

The close practical orientation achieved by applied, practical science as well as the opportunity to conduct creative research ensure an optimum study environment and improve graduates' chances on the job market.

Important areas of focus are applied research and the development of textile technologies. The acquired theoretical knowledge can therefore be applied in practical and solution-oriented projects.

A large number of specialists for the textile and clothing industry have been

successfully trained at Mönchengladbach and are now working around the world in leading positions. Most graduates are able to find a job before graduating.

Due to many years of cooperation and partnerships with companies, the University's own laboratories and technical centres focus on discussing and analysing practical problems from the industry. Collaboration and the know-how of companies on the one hand and the in-depth knowledge of the University on the other enable consistent, application-oriented science that resolutely and effectively develops new technologies.





IMPLEMENTATION

Modern research and teaching require a suitable infrastructure. The new, multi-purpose building of the University has considerably increased the scope of research. The L-shaped, three-storey multi-purpose building offers students 3,800 square metres of modern interiors for lectures, seminars and practical laboratory work. The new building closes a gap on the site to create an almost enclosed campus. This allows student life to unfold more effectively before and after lectures in the green inner courtyard.

VISION

The Textile Innovatorium was founded as a research and qualification centre (creative lab) for the textile industry. Although the aim is to secure the technological leadership of the textile industry, at the same time it is also planned to be a role model for other faculties of the University.

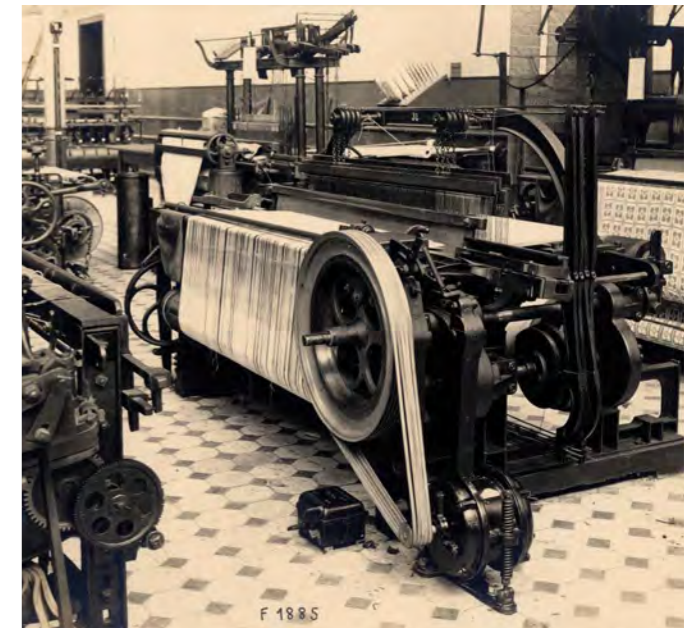
The concept includes the establishment, set-up and operation of a central facility on the university campus. The goal is to enable transfer of products which have already been almost fully-developed within the framework of small-scale research projects as well as in student theses to the final, finished form which is ready for production. Specialists and experts from the textile industry therefore work together with scientists from the University to coach students or graduates of the University during the final stage of development so that the results and the respective graduate can then be subsequently transferred to the companies of the industrial partners. The University also benefits greatly from the new products which have been created, as it can use the knowledge gained for further cooperation projects in the same way as it participates in marketing of the products with joint patent applications.

HISTORY

The textile industry was the spearhead of industrial development in the 19th century and had important centres in Mönchengladbach and Krefeld. The "Higher Weaving School Crefeld" was already founded in 1855 in Krefeld – the founding year of the Hochschule Niederrhein. In 1883 the "Royal Weaving, Dyeing and Finishing School" was established to permit incorporation of all branches of textile technology and chemistry including all dyeing and finishing processes. The Prussian state also founded higher weaving schools in addition to the weaving schools. In 1901 the "Prussian Higher Vocational School for the Textile Industry" opened in Mönchengladbach for training managers.

In 1932 the close collaboration with the local textile industry resulted in the establishment and incorporation of the "Higher Clothing Vocational School" and finally in 1936 to the "Textile School of Engineering". In 1971 part of the "State School of Textile Engineering in Krefeld" was merged with the "State School of Textile Engineering in Mönchengladbach". This merger formed the Faculty of Textile and Clothing Technology of the Hochschule Niederrhein with its extensive expertise - unique in Europe – starting with the fibre through to the final product in the clothing as well as the technical textile sectors.

Since then this teaching establishment has lost none of its appeal and with many more than 100 years of experience has a unique wealth of knowledge.



THE LOCATION

TEXTILE CITY WITH KNOW-HOW



HANS WILHELM REINERS

The Lord Mayor
City of Mönchengladbach

"The Hochschule Niederrhein and the city of Mönchengladbach – this means close ties and an excellent partnership. Both lecturers and students work together to generate a tremendous innovative force that shapes the profile of the city and the reputation of the University. Increasing student numbers evidence the outstanding position of the University. The students have a choice of around 80 degree programmes in ten faculties at the two campuses. These are excellent framework conditions for teaching and research. With the Faculty of Textile and Clothing Technology the textile tradition of Mönchengladbach is being carried forward in a contemporary manner that is geared to the future. It makes our city one of the most important teaching locations for the textile business sectors in Germany and Europe."

MÖNCHEGLADBACH

Mönchengladbach is an urban district with around 276,000 inhabitants on the left bank of the Rhine. The city is located around 25 kilometres to the west of Düsseldorf.

During Roman times today's Mönchengladbach was part of the province of Germania inferior. Important road links to Roman Cologne and Xanten were already in use in the first century. The construction of the Gladbach cathedral, the landmark of the city, and establishment of an abbey in the year 974 are regarded as marking the city's founding hour.

Mönchengladbach's industrial rise was mainly characterised by the development of the textile industry from the middle of the 19th century to the middle of the 20th century. This was accompanied by the development of a textile-based mechanical engineering industry.

With a number of historic buildings, the world-famous Abteiberg museum and a host of parks and green areas, Mönchengladbach offers students a high quality of living and best conditions for their studies.

One renowned name is that of the Borussia Mönchengladbach soccer club. The team plays in the Bundesliga, the top tier of the German football league system, and is world famous as "Die Fohlen" (The Foals) due to long tradition and resounding success in the seventies. It is still very successful.



EUROPEAN TEXTILE CITY WITH KNOW-HOW

Mönchengladbach was and still is a textile stronghold. The city used to be referred to as "Manchester on the Rhine", not without reason, due to its widespread textile and clothing industry. A number of renowned textile companies settled in Mönchengladbach after World War II due to its proximity to the manufacturing industry.

As a consequence of globalisation, the textile and clothing industry has moved abroad. Mönchengladbach experienced the textile demise at close quarters. A number of companies did not survive the restructure, but its textile heart continued to beat. Many companies regarded the crisis as an opportunity and reorganised themselves to meet the demands of the global markets. The companies specialised and made use of their know-how to become the technological leaders in their respective fields. The University supported them in this



BUSINESS

transformation process in joint think tanks. With the wealth of knowledge of the University and the application-oriented know-how of the local companies, new textile technologies were created that are now successfully used and developed all over the world.

With its renowned clothing companies and global market leaders in the field of textile mechanical engineering as well as a university that enjoys an excellent reputation as a training establishment for young textile specialists, Mönchengladbach was and still is the European City of Textiles.

The city of Mönchengladbach has defined major sectors that are of decisive importance for the economic power of the region. Alongside mechanical engineering and logistics, the textile industry is still an important factor for economic prosperity.

The region is of interest to national and international investors. Its closeness to the Netherlands and Belgium and also direct proximity to the large sales markets in the Ruhr region in particular has made Mönchengladbach a central hub in Germany and Europe, especially for logistics specialists. A well developed motorway and railway network, a large airport (Düsseldorf) and the bordering Rhine for shipping are decisive growth factors for Mönchengladbach that make the city competitive on an international scale.

DEGREE PROGRAMMES

BACHELOR OF SCIENCE

TEXTILE AND CLOTHING TECHNOLOGY | 18

TEXTILE AND CLOTHING TECHNOLOGY (DUAL) | 22

DESIGN ENGINEER | 24

TEXTILE AND CLOTHING MANAGEMENT
(IN ENGLISH) | 28

MASTER OF SCIENCE

TEXTILE PRODUCTS | 30

MANAGEMENT OF TEXTILE TRADE AND
TECHNOLOGY (IN ENGLISH) | 32

LABORATORIES AND TECHNICAL CENTRES | 34



TEXTILE AND CLOTHING TECHNOLOGY

BACHELOR OF SCIENCE TEXTILE AND CLOTHING TECHNOLOGY

DEGREE PROGRAMME

The Textile and Clothing Technology degree programme is divided into the two fields of study Textile Technology and Clothing Technology.

After an identical period of basic study the students are able to decide themselves in which of these fields they would like to specialise. The Bachelor's degree programme has a practical orientation and in the initial semesters teaches important basic knowledge and skills in the natural and economic

sciences. Graduates of this degree programme are able to control and monitor processes along the textile chain.

Graduates with a degree in Textile and Clothing Technology have exciting prospects in a wide field of activities in the textile and clothing industry. The standard time to degree is seven semesters.



FIELD OF STUDY TEXTILE TECHNOLOGY

Areas of specialisation:
// Textile Management
// Textile Technologies

FIELD OF STUDY CLOTHING TECHNOLOGY

Areas of specialisation:
// Clothing Management
// Product Development





LUCAS LU

Textile Technology | Textile Management



"I decided to enrol in the Textile and Clothing Technology degree programme because I'm interested in the clothing industry, especially the fields of purchasing, fashion marketing and textile production. The course is structured in a way that ensures that the curriculum not only includes comprehensive specialist knowledge on materials and processing, but also a great deal of commercial know-how. It is perfect for my career ambitions."

TEXTILE TECHNOLOGY

The Textile Technology course includes the two areas of specialisation Textile Management and Textile Technologies.

The Textile Management area of specialisation covers a wide range of subjects from the entire textile technology and management theory fields that are geared to the future. The Textile Technology course includes basic principles from design theory through to yarn, surface and finishing technologies as well as quality management and quality assessment of textile materials. One important area of focus is manage-

ment-related subjects such as organisation, marketing and human resource management.

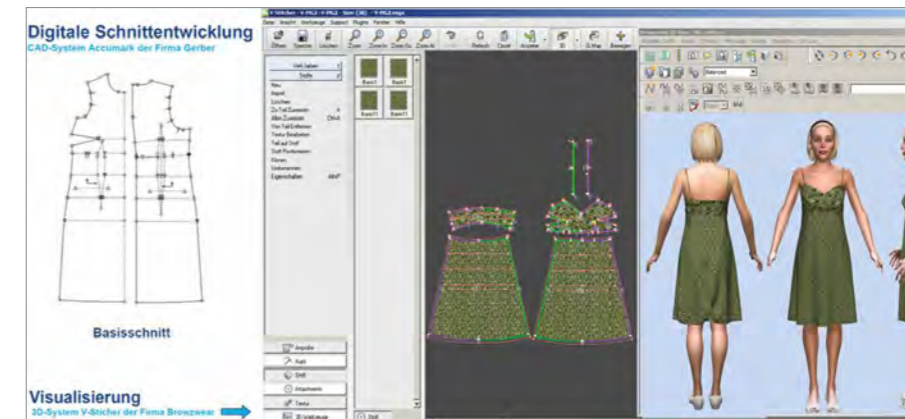
The Textile Technologies area of specialisation focuses on spinning, weaving, knitting, braiding, dyeing and finishing as well as the production of narrow textiles, non-wovens and composite materials. Innovative materials are introduced in particular in the Technical Textile field. This area of specialisation includes complex demands on the employed raw materials as well as the production processes

and manufacturing technologies. In the field of Quality Management students are taught how the quality of the manufactured products can be tested and assessed.



MEHTAP DURSUN

Clothing Technology | Product Development



"I really enjoy fashion! This is why I decided to study at the Hochschule Niederrhein to make sure that I will be able to work in this field in the future. By specialising in Clothing Technology I can combine my creativity with technical implementation and textile processing to increase my chances in the future."

CLOTHING TECHNOLOGY

The Clothing Technology degree programme includes the Clothing Management and Product Development areas of specialisation.

The Clothing Management area of specialisation trains students as young managers for a number of technical and business administration tasks in the clothing industry. Students learn about manufacturing and process technologies in the fields of apparel, work wear and protective clothing as well as in the technical textiles sector. In addition they learn basic occupational principles as

well as aspects of factory planning. Sustainability, quality and environmental management are also focused on.

The specialisation phase of Product Development imparts comprehensive knowledge in all fields of the product development process. Students acquire expertise in planning, controlling and logistics and how to organize these processes within the Clothing industry. Additionally, they become familiarized with the core areas of apparel product development such as design, pattern making, fit control, grading, marker

making, so that graduates gain the ability to create garments for various target and product groups. Production related studies and training as well as lectures and seminars on product data management, quality management and human resources management complete the curriculum.

TEXTILE AND CLOTHING TECHNOLOGY (DUAL STUDIES)



LINDA HAASEN

Textile Technology | Textile Technologies

"I decided to enrol for the Dual Textile and Clothing Technology programme (KIA) because the combination of practical training and studying allows me to gain a lot of experience in dealing with textiles of all kinds. I also like the variation of lectures and practical work and that I can apply the knowledge from my studies directly in the field."

BACHELOR OF SCIENCE TEXTILE AND CLOTHING TECHNOLOGY (DUAL STUDIES)

The dual degree programme combines practical work with theory in a unique manner. Students complete a course of training in a company that is coordinated with their parallel studies at the University. In addition to financial independence, this approach also ensures a high level of practical relevance. The mutual influence of practical content from company training and the theoretical and scientific course of studies on the other hand enables students to gain incomparable practical experience as well as wide ranging and practical basic knowledge at the University. The dual degree programme is an optimum way to prepare for the demands to be met by an engineer in the working world. This combination of practical training and studying is appreciated and valued around the world.



DEGREE PROGRAMME

The Textile and Clothing Technology degree programme is offered as either a full-time course or also as a dual programme in the form of Dual Engineering Training (KIA). Students can choose between Textile Technology with the areas of specialisation Textile Management and Textile Technologies, or Clothing Technology with the areas of specialisation Clothing Management and Product Development. The standard time to degree is nine semesters.

TEXTILE TECHNOLOGY

Textile Technology with the area of specialisation Textile Management covers a wide range of subjects from the entire textile and finishing technology field through to Quality Management and Business Administration. Other subjects such as organisation, marketing and human resource management are taught in depth. In the Textile Technologies area of specialisation students can concentrate on the technologies of spinning, weaving, knitting, narrow textiles, finishing and technical textiles.

CLOTHING TECHNOLOGY

On the one hand the Clothing Technology degree programme includes Clothing Management. In this course engineers are trained as young specialists and managers for the many technical and business administration tasks of the clothing industry. The degree programme focuses on the topics of manufacturing technologies and processes for garment production. An advanced course in business administration and occupational science fields is also offered. On the other hand, in the Product Development area of specialisation students acquire comprehensive knowledge and skills in all relevant fields of pattern making: sizing and fit, basic block concept, prototyping, fit control, production pattern and grading.



DESIGN ENGINEER

BACHELOR OF SCIENCE DESIGN-ENGINEER



in a unique manner



Fields of study

- // Textile
- // Fashion

DEGREE PROGRAMME

The Design Engineer degree programme comprises the two fields of study Textile and Fashion. The combination of design and technology is a particular challenge in this degree programme and ensures a wide and sound basic range of knowledge that does justice to the requirements of an innovative and global textile and clothing industry.

The term design is to be understood as conscious shaping or styling. Making industrial, technically manufactured

products defines the engineering part. To ensure that a product reaches market maturity, many different levels of knowledge are required during its development. Design engineers therefore combine construction and design competence. An aptitude test must be taken before enrolling in this degree programme. The standard time to degree is seven semesters.



LENA GANSWINDT
Design Engineer | Textile



"The combination of this degree programme really sparked my interest. When I design a surface I also want to know whether and how my ideas are actually implemented. One great advantage is that the University can actually practically realise designs and ideas to a certain degree. The experience that you gain helps you handle future assignments and projects. If someone likes working with product orientation and is also interested in the technical principles of textile fabric production, then I can really recommend the Design Engineer-Textile degree programme."

TEXTILE

The Textile field of study focuses on the design of fabrics for garments, fashion, interior textiles and technical textiles from the basic idea through to the development of marketable collections.

In the Draft Analysis and Methodology Module students learn about the artistic and technical features and functions of textile materials and patterns. Innovative methods of surface construction, pattern design and fabric applications are taught that can be implemented in textile design in a creative and technical production manner. The Fabric Design

Module is also divided into the fields of Knitted Fabric Construction, Jacquard Technology and Weave Design. In addition, important knowledge in the field of textile materials and manufacturing processes in the fibre and yarn technology sector are acquired. The Finishing module gives students the opportunity to acquire basic knowledge on the processes and technology of textile finishing in the pre-treatment, dyeing and finishing fields. In the Technical Textiles field the future Design Engineers learn about the requirement profiles to be met by technical textiles using

selected examples from the car interior, personal protective equipment as well as medical and hygienic product areas.

The aim is to plan, design and develop a textile product. Different CAD systems and modern machines enable a course of study that is geared to practical applications.



ANN-KATHRIN DICK
Design Engineer | Fashion



"After training to be a bespoke custom tailor I realised that I would like to continue on my career path by focusing on clothing technology. I felt that the Design Engineer-Fashion degree programme at the Hochschule Niederrhein was just made for me as it combines both creative and design subjects with the technical principles! I really enjoy my studies and can really recommend the programme."

FASHION

The Fashion field of study trains Design Engineers who create aesthetic and functionally demanding garments while taking the industrial and specific market requirements into account. A wide range of optional subjects such as CAD subjects, fashion photography and fashion theory offers room for specialisation. Close links with the Clothing Technology Engineering degree programme qualifies students in pattern-making and manufacturing processes. Within this field of study students acquire important know-how for serial clothing designs. The close examination of shape and material

properties of individual product groups provides a good basis for innovative ideas. Students learn how to interpret model sketches and subsequently use them independently to create models. Furthermore, competencies both for independent development of a collection as well as its technical implementation to industrial standards are taught.

TEXTILE AND CLOTHING MANAGEMENT



KAI NÖCKER

Textile and Clothing Management

"I am studying Textile and Clothing Management at the Hochschule Niederrhein after a tailor apprenticeship followed by an internship in Berlin gaining my first experience in the fashion world. The English degree programme helps me to acquire more in-depth knowledge and additionally broaden my mind in this internationally operating industry."

BACHELOR OF SCIENCE TEXTILE AND CLOTHING MANAGEMENT



DOUBLE DEGREE

As part of a Bachelor's degree programme in cooperation with the Tianjin Polytechnical University in China it is possible to acquire the exclusive German-Chinese double degree in "International Textile and Clothing Management". The standard time to degree is eight semesters.

DEGREE PROGRAMME

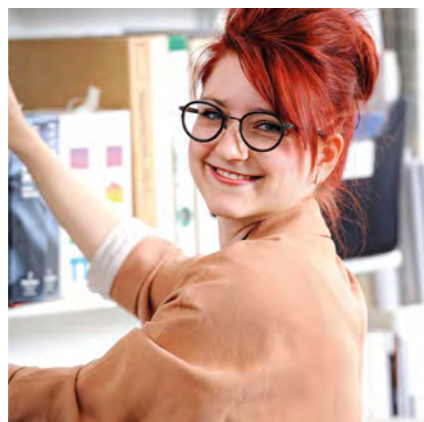
In the course of on-going internationalisation and relocation of the textile markets, graduates are increasingly required to offer interface competencies and be able to speak English fluently. The Textile and Clothing Management degree programme is tailored to suit the needs of the international textile and clothing sector. The degree programme is held entirely in English. Students in this degree programme acquire comprehensive knowledge of textile and clothing technology as well as management. The standard time to degree is seven semesters.

QUALIFICATIONS

Students acquire detailed management qualifications. This degree programme combines various models from the fields of textiles and clothing, natural sciences, commerce and management. By gaining English language skills and with an interdisciplinary approach the graduates from this degree programme acquire extensive, cross-sector problem-solving competencies, taking the different cultural aspects into account.

Each semester project topics are offered in which interdisciplinary and practical problem solutions are developed.

TEXTILE PRODUCTS

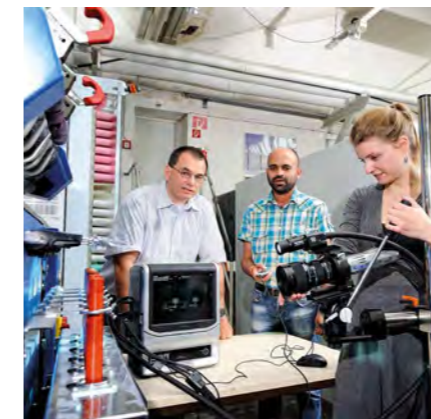


SABINA BUK

Textile Products | Design

"The Textile Products degree programme offers a wide range of options to focus on areas of specialisation and discover new fields of interest. The main focus is always on innovative research and development. The different laboratories that are always open are very helpful in this respect. Innovation is particularly important, as nothing ever stands still in the clothing sector."

MASTER OF SCIENCE TEXTILE PRODUCTS



TEXTILE

The Textile field of study gives students the opportunity to create intelligent and innovative processes for textile products and follow these through to production. Integrated management systems as well as energy-efficient processes are developed further on the basis of modern analysis processes. These include methods for functionalisation of textiles and the application of current manufacturing processes.

DEGREE PROGRAMME

The Textile Products Master's degree programme is divided into the Textile, Clothing and Design sections. During this degree programme the future graduates learn how to think analytically and in a networked manner and are systematically taught how to solve complex questions. The standard time to degree is three semesters.

CLOTHING

The Clothing field of study qualifies students for the development and implementation of product and process innovations. Students gain expertise in innovative and future oriented product development processes for integrated product development in the clothing industry, in quality control for textile products, in mass customization and digital product development.

FIELDS OF STUDY

- // Textile
- // Clothing
- // Design

DESIGN

The Design field of study combines Design, Technology and Management. Collections are developed with the aid of CAD programmes and virtually displayed. Specific design competencies are developed further with the focus on Innovative Product Design, and with specialisation go far beyond the classic field of application of a textile or fashion designer.

MANAGEMENT OF TEXTILE TRADE & TECHNOLOGY



MAHMOOD SAYAL

Management of Textile Trade and Technology |
Technical Textiles

"It's a really nice experience to be part of the Hochschule Niederrhein. I have enjoyed the multicultural environment. Overall it's the right choice for Masters in Textiles, the best part is that it's in English. And you have better job opportunities after the completion of your studies."

MASTER OF SCIENCE

MANAGEMENT OF TEXTILE TRADE AND TECHNOLOGY



FIELDS OF STUDY

- // Technical Textiles
- // Trade and Retail

DEGREE PROGRAMME

The fully English-language Management of Textile and Trade Technology degree programme deepens the competencies acquired in the Bachelor's degree programme by working on project topics in a team and examining relevant questions from the industry. The standard time to degree is three semesters.



QUALIFICATION

The students are incorporated into on-going research projects and can approach complex questions in the research institute of the University. The programme aims at promoting analytic and networked thinking to prepare students for the challenges of a globalised world. Depending on the field of study, the programme focuses on human resource and finance management, supply chain management or international commerce as well as special textile technologies.

The Master's degree programme is divided into the two fields of study Trade and Retail and Technical Textiles. Graduates from this degree programme are in a position to fill executive posts in textile and clothing companies around the world.

DEGREE PROGRAMMES

LABORATORIES AND TECHNICAL CENTRES

AT A GLANCE

The Faculty is able to offer its students and project partners a number of laboratories with excellent facilities. This would not be possible without the close and active support of the industry. With its help the Faculty is able to offer excellent conditions for training and research with a practical orientation. A total of more than 30 laboratories and technical centres are available for teaching the students. In these facilities they are instructed by a number of specialists and given the best possible support. Only a small segment of the laboratories are listed as examples.



WEAVING, KNITTING AND NARROW FABRIC LABORATORY

The Weaving, Knitting and Narrow Fabric Laboratory is a facility that is unique in the world. The wide range of different machines and the number of the courses and projects on offer for Bachelor and Master students are unparalleled. The Narrow Fabric Laboratory for example, has more than 15 different braiding machines for making tubular braids, flat braids, spiral braids, buttonhole braids, overbraiding of hoses and cores. One machine supplied by Herzog has variable tracks (Vario braider).

The Weaving Laboratory has five Jacquard weaving machines of leading manufacturers such as Stäubli, Bonas and Grosse and eight dobby machines. The machine capacities are supplemented by a "Two-for One Twisting"

machine, a precision and random winding machine as well as a warp-tying machine with tying frame.

Seven warp knitting machines (Raschel and tricot) are installed in the Knitting Lab, on which fine fabrics for all kind of applications, e. g. reinforcement, lace and curtains can be made. In addition there are more than twenty hand knitting looms for warp and weft knitting, three high-tech, computer controlled flat knitting machines, one fully automatic sock knitting machine as well as large diameter circular knitting machines with different gauges and diameters for single, double and interlock structures.

The students not only become familiar with machines, but also work with professional CAD systems for weaving, knitting, hosiery and braiding applications.



TECHNICAL TEXTILES LABORATORY

The University's Laboratory for Technical Textiles comprises a technical centre and a chemistry laboratory. The technical centre contains mechanical-technical testing devices that are used, for example, to measure the air permeability and the thickness as well as filter properties of textile surfaces or the shrinking and shrinking force behaviour of yarns and twisted yarns.

In the chemistry laboratory textile samples are finished with commercially available and also self-developed chemical mixtures and then examined for changes in their properties and applications.



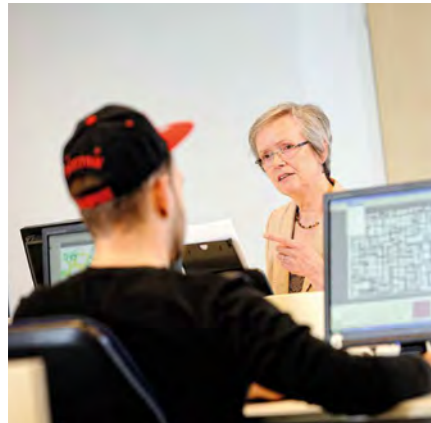
GARMENT PRODUCTION TECHNOLOGY LABORATORY

The outstanding equipment in the laboratories for production technology for processing clothing and technical textiles comprises around 150 technically advanced machines for all stages of manufacturing: Laying, cutting, fusing, sewing, ironing and finishing. An automatic CNC controlled single layer cutter is available for fabric cutting. The Sewing Technology section is equipped with industrial sewing machines with a wide range of stitch types and designs. In the field of alternative joining technology the latest technology in ultrasonic welding, hot air welding and bonding technology is available.



SPINNING LABORATORY

The Spinning Laboratory includes the entire process chain from the fibre through to the blowing rooms, spinning preparation and spinning shop and the finished yarn. There are therefore machines for short staple and long staple spinning for opening and mixing flock fibres. Single or multi-ply yarns, core and effect yarns can therefore be manufactured for a very wide range of applications. In addition the laboratory has a roller card with a compensating stacker and a needling machine. The technical textile processes can be analysed in the Spinning Laboratory by means of a high-speed video system.



DIGITAL PRINTING LABORATORY

When the new multi-purpose building was inaugurated, the Hochschule Niederrhein opened the doors to the newly created Digital Printing Competence Centre in the Faculty of Textile and Clothing Technology on the Mönchengladbach campus in 2013. The University offers its students unique training opportunities as part of its Bachelor's and Master's degree programmes for digital textile printing. In the special Design and Textile fields of study the students are trained in the following state-of-the-art digital printing technologies: The TX2 1600/Mimaki is used for printing with reactive inks on paper or textiles. In contrast, the Arachne 74 V8 Combo/d.gen is used for printing with disperse dyes. A very environmentally friendly technology was developed with the solid ink printer PixDro, LP 50/Roth & Rau. It can be used to print on any

textile substrate with "Toner-Pearls"™/Océ solid inks. Another special printing technology is the Zimmer Chromojet for printing polar articles such as carpets, towels or felt.

Another innovation in the Digital Printing Technical Centre is the Kornit-Digital printer for printing T-shirts with water-based pigments. The latest highlight is the MS JP5 evo, that prints with reactive dyes. This digital printer works in the same way as the world's fastest digital printer, the MS LaRio. In addition the prints are fixed with the SETeMa BV B-Steam.



CHEMISTRY LABORATORY

Various internships are offered in the generously-dimensioned Chemistry Laboratory to introduce the students to basic work techniques that are required for laboratory work for finishing and technical textiles.

The comprehensive equipment corresponds to that of a standard chemistry laboratory and enables tests for acidimetry, complexometry, gravimetry, water analysis, tenside analysis, textile testing (for example fastness testing), photometric testing and viscosimetry. Simple synthesis is naturally also possible.



QUALITY CONTROL LABORATORY

The Quality Control Laboratory and the Official Textile Testing Institute deal with questions and assignments in the Textile and Clothing Technology sector. The test portfolio also includes fibre and yarn testing, testing of textile fabrics for wear properties and colour fastness, comfort testing, such as measurements on skin models, material analyses, colour measurements and flammability testing. The laboratory is equipped with all important equipment for carrying out standard tests on fibres, filaments, woven fabrics and knitted goods, including seam tests.



FINISHING LABORATORY

In the Textile Finishing Laboratory all textile finishing processes can be tested on a laboratory scale for teaching and research purposes. This equipment includes preparation units, laboratory dyeing equipment, laboratory paddlers, printing tables, driers, steamers, coating systems, denim washing machines as well as a very well-equipped dye and chemical store. A special feature is the inclusion of the recipe in the current software of renowned chemical suppliers as well as the use of programmes for statistical trials planning. All laboratory work is supervised by very experienced textile finishers.

INSTITUTIONS AND COMPETENCE CENTRES

RESEARCH INSTITUTE
FOR TEXTILE AND CLOTHING (FTB) | 40

OFFICIAL TEXTILE TESTING INSTITUTE
OF THE HOCHSCHULE
NIEDERRHEIN GMBH (ÖP) | 46

TFI | TFN | 48

ETHNA COMPETENCE CENTRE CSR | 50

EWEB RESEARCH CENTRE | 52

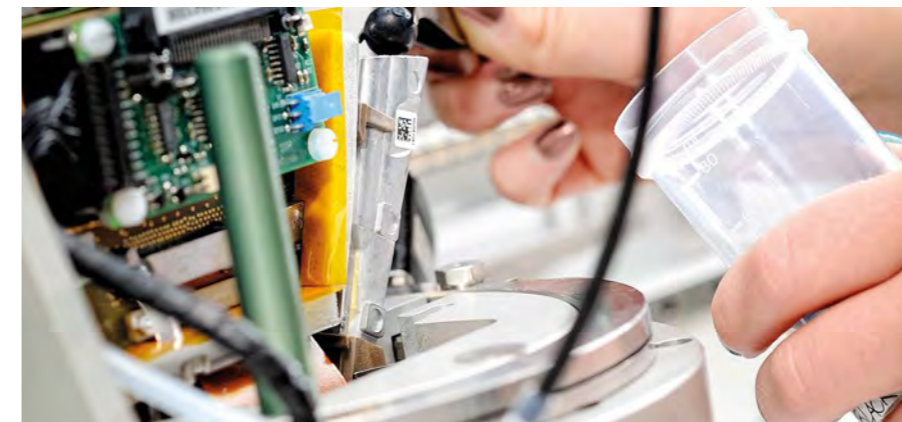
FRAUNHOFER CENTRE OF TEXTILE LOGISTICS (CTL) | 54



FTB

INSTITUTIONS AND COMPETENCE CENTRES RESEARCH INSTITUTE FOR TEXTILE AND CLOTHING

OUR KNOWLEDGE - YOUR FUTURE The Research Institute for Textile and Clothing of the Hochschule Niederrhein (FTB) as an institute of the faculty is a powerful and versatile development partner for the textile and clothing industry at home and abroad. In this way the University is not only actively involved in imparting specialist textile knowledge, but also in gaining new insights. www.hs-niederrhein.de/research/research-centres/ftb/



POWERFUL PARTNERS

The Research Institute for Textile and Clothing of the Hochschule Niederrhein, founded in 2009, concentrates the research activities of the faculty. As the industry itself, the topics are very diverse and range from electrically conductive textiles for use in sensor or light-emitting textiles, from stab protection systems and products with a barrier effect against heat radiation or electrosmog to sustainable design and resource-efficient processes. In this way the research institute acts as an important bridge between the teaching, scientific and business sectors. New developments are decisive in the industry to be able to keep pace with global competitors. However, if there is

insufficient time, know-how or technical facilities to drive innovation forward, companies can find support and assistance at the FTB. At the same time the research facility gives students at the University the chance to take an in-depth look at what actually goes on in the industry by actively participating in industry-related research projects. The future engineers are exposed to scientific and creative work at an early stage under the supervision of experienced scientists and professors. It is also quite often the case that they make contact with their future employers in the course of their work. This is a win-win situation for everyone involved.

FACILITIES

The FTB is in a position to carry out research and transfer projects along the entire textile value chain on a laboratory and industrial scale, as it has the machines and equipment of the Faculty in 32 laboratories and technical centres at its disposal. Special highlights are coating systems for yarns and fabrics, plasma systems, equipment for UV polymerisation or sputtering, 3D-printers and digital textile printers, laser technology, modern embroidery and fibre placement systems as well as a comprehensive range of analysis instruments.

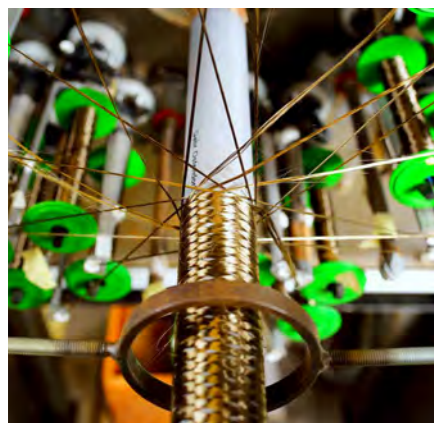


PROF. DR. HABIL. MAÏKE RABE
Head of the Research Institute FTB

"Just 10 years after its foundation, the Research Institute for Textile and Clothing has achieved remarkable results. Today, numerous professors from the Faculty and 30 scientific employees focus on solving problems along the entire textile value chain. The experience and the tremendous wealth of knowledge in the FTB offer unique conditions to pave the way for goal-oriented innovations. We are particularly proud of the fact that every year around 60 students participate in the research projects and have the opportunity to get to know the industry even more effectively than is possible by purely academic teaching."

INSTITUTIONS AND COMPETENCE CENTRES

RESEARCH INSTITUTE FOR TEXTILE AND CLOTHING



TEXTILE STRUCTURES

Textile structures such as yarns, fabrics, knitwear and narrow textiles can be produced and researched at the research institute in a variety of ways in a wide range of dimensions right through to an industrial scale. The options for the development of plush knitted fabrics on state-of-the-art machines are unique in Germany. In-depth knowledge of virtual processes and simulations help researchers to find innovative solutions to comprehensive questions, such as the production of ropes and ribbons, including complex core-sheath composite systems made of high-performance fibres.



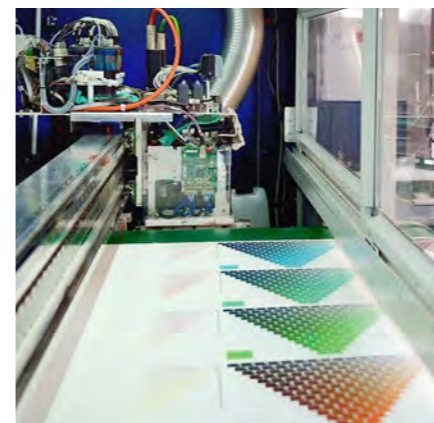
HIGH PERFORMANCE FIBRES

Narrow textiles and precision fabrics made of high-performance fibres such as glass or carbon fibres are developed in a specially equipped clean room environment. For example, backing fabrics made of glass fibres are currently being developed for innovative technical tufting textiles. These are tested for high temperature resistance, filter and sound insulation suitability as well as mechanical strength in accordance with the requirements of the users. For these complex fabric constructions, selected rigid rapier looms were equipped with two warp beams to also enable variations in the warp.



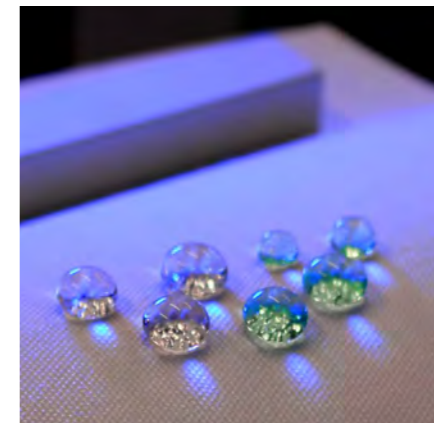
3D-PRINTING

At the FTB, 3D-printing is extensively investigated for its possible textile applications. To this purpose, fused deposition modelling with thermoplastics is used for three-dimensional textile printing, which is comparable to a digital coating method. In this way, completely new textile structures and functions are created. In combination with body scanners, for example, protectors with individual dimensions are applied to textiles. One special area of focus is the investigation of new compounds for 3D-printing, for example to achieve functions such as abrasion resistance, electrical conductivity or flexibility. In addition to 3D-printers, systems for printing functional pastes and binder systems are also available.



DIGITAL PRINTING

The Textile Digital Printing Centre features a range of equipment for digital textile printing that is unique in Germany. With the corresponding printers and ink systems, textiles from simple fabric sheets through to towels, carpets and T-shirts can be printed and are then ready for use. Current research projects in cooperation with industrial partners focus among other things on optimising the digital textile printing processes for clothing production from the suitable pretreatment methods to the necessary printing after-treatment. New paths have been trodden in particular in the development and application of resource-conserving digital printing processes with hot melt and pigment inks.



FUNCTIONALISATION

Innovative, water-based finishing chemicals are developed using sound know-how in the field of nanotechnology and the sol-gel process. The product particles of these systems are so small that they can form a thin, flexible and closed film over the individual fibres or filaments in a textile. A modular concept is used to adjust various functions and provide textiles with finishes that are water and oil repellent, flame-resistant, anti-bacterial and antistatic. For example, liquids can be removed from a textile with a hydrophobic finish with a dry cloth.



SUSTAINABILITY

The FTB develops concepts for sustainable processing of textiles. These include the development of water-saving finishing processes with UV polymerisation, plasma functionalisation or in cotton finishing by the use of dyes with a high bath exhaustion. In addition, for example, in the Knitting Laboratory products are developed that are highly functional and do not pollute the environment with polymers or even particles that are difficult to biodegrade during processing and use. In this context, processing of synthetic, biodegradable fibrous materials is also being investigated and optimised.



SMART TEXTILES

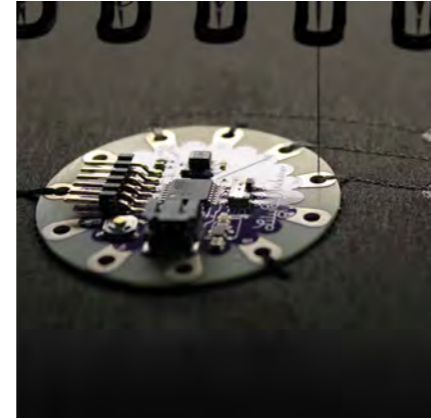
Electrically conductive textiles are developed at the FTB. To this purpose various conductive systems are integrated into textiles. One long-standing and major field of research has been coatings on the basis of intrinsically conductive polymers and their blends with conventional raw coating materials as well as metal and carbon particles.

Conductive yarns are produced by means of sputtering or thread coating which can be directly integrated into surfaces using embroidery technology. The textile electrodes are then used for making flexible sensors, electrically luminescent textiles and also actively breathable textiles.



JOINING PROCESSES

Connecting textile surfaces „correctly“ is just as important in fashion as it is for technical textiles. The aim is to join products efficiently and reproducibly with a high quality and also achieve new impulses in design, haptics or function - and preferably to combine them all. In the field of garment production, extremely versatile industrial machine technology is available for the textile joining processes of sewing, embroidery, welding, bonding and riveting. Especially in the field of technical applications, there is an increasing demand for material-locking processes, for example to create seams that are both water and gas-tight. Universal ultrasonic welding technology offers a wide variety of tools in this respect and can be used for joining, cutting and surface design.



EMBROIDERY

Embroidery as a special field of sewing technology is one of the most versatile textile joining processes. It offers the unique ability to freely vary the size, direction and position of each stitch between two consecutive needle insertion points. Modern machine embroidery technology enables the reproducible, automated execution of fashion and technical embroideries, the latter being an area with great potential. For example, a multifunctional portal embroidery machine can be used to selectively attach wires for heating textiles, polymer optical fibres or functional LED sequins (FSDs) for the production of light-emitting textiles.

VIRTUAL PRODUCT DEVELOPMENT LABORATORY



Textile product development focuses on the full range of clothing (classic and functional), technical clothing systems (e.g. operating theatre garments, chemical/ABC protection suits, clean room clothing, personal protective equipment etc.) and technical products such as filters, car interiors, sleeves and packaging. The entire product development process is covered, starting with a requirement profile, the concept, design, technical development and prototype production through to the necessary industrial production of the products by means of innovative joining processes such as bonding and welding. Innovative technologies are combined in the Virtual Laboratory (VirLab) of the University and concentrated for digital and virtual product development.

3D-SCANNING

3D-scanning technologies enable not only the acquisition of dimensions and the generation of human models (avatars), but also the general acquisition of 3D-shaped body data, which is of particular interest in the technical field such as the automotive and furniture industries for digital product development. In addition to the possibility of statistical analyses and the development of virtual target markets for the clothing sector, detailed investigations of the relationship between body and textiles can also be carried out and selectively control the use in the simulation of textile products. In particular, compressible shaped bodies play an increasingly important role in realistic simulation, which should not only be static but also made accessible for movement in the form of so-called animations.

3D-SIMULATION

The development times in the textile and clothing industry are becoming increasingly shorter and therefore make it necessary to take a critical look at the product development process. Digital product development is regarded as a general term for the use of innovative digital technologies that are geared to the future. Highly efficient CAD technologies are used in the areas of digital design, pattern construction and production. These systems are incorporated into the overall process with the use of PDM (Product Data Management) and PLM (Product Lifecycle Management). One important pillar in this field is the 3D-simulation of clothing, which helps achieve tremendous savings potential at an early stage of the development process.

3D-MATERIALS

The material character is an important pillar of virtual product development. For realistic clothing simulation, both the material properties such as mass, thickness, elasticity and bending strength as well as the material appearance - colour, structure, depth and gloss - must be determined and incorporated into the simulation. In addition to classic applications and test procedures, new and innovative technologies and processes are developed and tested in the Virtual Lab to optimise the digitisation of the material character for the clothing industry and also make this accessible to a rendering process. The product development process is therefore carried out in a secure digital space, which greatly contributes to process reliability.



PROF. DR. LUTZ VOSSEBEIN
Head of the Public Textile Testing Institute

“Protective clothing today should fulfil several functions. This often requires certification in several areas. We can offer everything from one source as our testing institute is equipped with the very latest equipment and covers all test options necessary for technical textiles. The close practical orientation and high level of relevance for the degree programme are a clear advantage over test institutes at universities or of private service providers.”

INSTITUTIONS AND COMPETENCE CENTRES

PUBLIC TEXTILE TESTING INSTITUTE OF THE HOCHSCHULE NIEDERRHEIN GMBH

A public testing institute that is firmly integrated into the on-going university life is unique in Europe. With its range of services the Hochschule Niederrhein has many years of testing experience for the industry, commerce and consumers that is held in high esteem in the professional world. The Public Textile Testing Institute of the Hochschule Niederrhein GmbH (ÖP) is an institute of the Faculty of Textile and Clothing Technology of the Hochschule Niederrhein and as a neutral, state facility of the Federal State of North-Rhine Westphalia carries out material tests.



manufacturers, and is the first contact when testing is required. The ÖP advises and develops innovative products in collaboration with businesses that have become trend-setters in the technical textiles field. The Public Textile Testing Institute offers students the opportunity to write their Bachelor's or Master's thesis with direct reference to practical activities.

MICROBIOLOGICAL TESTS

As the testing institute is approved by the Public Health Office, it is certified to carry out microbiological tests in compliance with the Infection Protection Law Article 44. The testing institute is therefore permitted to offer extended test procedures in the field of textile hygiene.

CERTIFICATION

Following accreditation in accordance with DIN EN ISO/IEC 17025 in July 2014, the Public Testing Institute has now also been certified as a notified body. This means that it has been promoted to the rank of a state-appointed testing institute that tests and certifies industrial products.

TESTING PROCEDURES FOR SPECIAL FINISHES

The Public Textile Testing Institute of the Hochschule Niederrhein GmbH (ÖP) carries out tests along the entire textile chain from fibre production through to the finished fabric. With its unique range of equipment the Public Textile Testing Institute is the right contact for testing procedures.

The ÖP specialises in heat, flame and high-visibility clothing as well as in testing the electrostatic conductivity of clothing. The institute tests, for example,

personal protection equipment or special finishes for welding personnel. In the heat and flame protection field the institute has state-of-the-art testing equipment so that complex testing processes can be carried out at the facility. Retroreflection and fluorescence measurement for warning protection are a special field of expertise.

The testing institute receives orders from laundry service providers, fabric and yarn manufacturers as well as garment



TFI | TFN



MARKUS SCHMITZ

CEO, Textile and Fashion Network

„The TFN offers the opportunity to promote students and their activities directly for the textile and fashion sector, independently of other funding bodies. In addition, companies are offered the chance to communicate through this network on an interdisciplinary level as well as to contact potential future professionals directly and selectively and ultimately acquire them as part of their workforce. Specific corporate aspects can be taken into account and also promoted directly during training.“

INSTITUTIONS AND COMPETENCE CENTRES

TEXTILE AND FASHION NETWORK E. V. TEXTILE AND FASHION INSTITUTE

A NETWORK FOR EVERYONE – As a foundation the Textile and Fashion Network (TFN) creates a network for private and social contacts. In its specific professional orientation the TFN regards itself as a competence centre for the entire textile-oriented industry in all fields along the textile chain from the raw material through to sales. In addition to professors, staff, students and alumni of the Hochschule Niederrhein, the foundation unites a number of famous people, institutions and company representatives. Together they form a network of affiliates outside the University. The regular events and constructive collaboration with a number of professional associations permit open dialogue between the industrial and scientific communities.

TEXTILE TRAINING AND FURTHER TRAINING

The Textile and Fashion Institute Mönchengladbach (TFI) is a further training institute that is specifically aimed at satisfying the demands of the textile and clothing industry. The TFI organises individually tailored seminars lasting one or several days in both German and English. Depending on the requirements, these are planned specifically for various target groups from purchasers through to product managers. The Textile and Fashion Institute Mönchengladbach (TFI) is funded by the Textile and Fashion Network e.V., the association of the friends and sponsors of the Faculty of Textile and Clothing Technology at the Hochschule Niederrhein in Mönchengladbach. The lecturers are professors and teachers of the Faculty of Textile and Clothing Technology.

TEXTIL ACADEMY NRW

In cooperation with the Hochschule Niederrhein, the Textile Academy NRW (Textilakademie NRW gGmbH) launched an unique nationwide training and further education programme. The heart of the Textile Academy NRW is a private alternative vocational school, in which the industrial-technical vocational training of the sector is concentrated for the whole of North-West Germany. It also offers vocational preparation, general school-leaving qualifications, inter-company training, further training

for technicians and master artisans, industry-specific further training and dual studies.

The new Training and Further Training Academy for the Textile and Clothing Industry cooperates closely with the Hochschule Niederrhein and the Faculty of Textile and Clothing Technology, for example in the use of machinery and laboratories by the vocational school or in further training. The three-storey academy building is encased in an undulating textile façade.





ETHNA CSR



PROF. DR. HABIL. RUDOLF VOLLER
Co-management of the EthNa/CSR

“The EthNa Competence Centre CSR creates a cross-faculty platform to anchor the topic of sustainability more effectively in the University and to emphasise its importance in research, teaching and further training as well as in everyday university life. In addition, projects are carried out that support the companies during development and implementation of CSR strategies. Special offers are developed for SMEs so that CSR can be implemented in a practical manner and, importantly, also economically. Consumers and companies therefore both benefit.”

INSTITUTIONS AND COMPETENCE CENTRES

ETHNA COMPETENCE CENTRE CSR OF THE HOCHSCHULE NIEDERRHEIN

The University concentrates on the growing significance of ethics and sustainability on the management level in its EthNa Competence Centre CSR (Corporate Social Responsibility). This Competence Centre creates offers for students, graduates and companies that want to create ethically acceptable and sustainable processes.

www.hs-niederrhein.de/research/research-centres/ethna-competence-centre-csr/



ETHICS AND SUSTAINABILITY

Consumers today increasingly demand products that are ecologically and socially compatible. Companies react to this trend with ethical and sustainable corporate management that creates stability, consistency and trust.

This new orientation naturally has to satisfy economic demands. The University concentrates the topics of Corporate Social Responsibility (CSR), ethics and sustainability in its “EthNa“ Competence Centre, integrating the basic principles of corporate social responsibility in research and teaching.

Foresighted economy, fair treatment of the workforce and responsibility towards society and the environment – these are the pillars of a new CSR corporate management. These demands include the added value activities of suppliers along the entire supply chain. The EthNa Competence Centre develops new training programmes and methods for these activities in an area of conflicting priorities. The Competence Centre is headed by Prof. Dr. Monika Eigenstetter, Prof. Dr. Rudolf Voller and Prof. Dr. Martin Wenke. Almost all faculties collaborate closely in the EthNa.

CUSTOMER EXPECTATIONS AND SUPPLY CHAIN MANAGEMENT



In a project initiated by the Ministry of Economic Affairs of North Rhine-Westphalia as part of the ERDF funding programme, EthNa, together with the Business Development Corporation Mönchengladbach (Wirtschaftsförderung Mönchengladbach) (WFMG), ZiTex and the Research Centre for General and Textile Market Economics at the University of Münster (Forschungsstelle für allgemeine und textile Marktwirtschaft an der Universität Münster) (FATM), operates a CSR competence centre for textiles and clothing to support SMEs in the development of CSR strategies and the implementation of corresponding measures.



EWEB RESEARCH CENTRE



PROF. DR. GERRIT HEINEMANN
Head of the eWeb Research Centre

“A digital allergy is not forward-looking in the age of digitisation.”

INSTITUTIONS AND COMPETENCE CENTRES EWEB RESEARCH CENTRE



The focus of research of the eWeb Research Centre is in empirical social research for analysis of online induced purchasing behaviour. It examines the effects that the changes in purchasing behaviour have on trade.

THE FUTURE OF TRADE

The eWeb Research Centre located at the Hochschule Niederrhein was founded in 2010 by Professors Dr. Gerrit Heinemann, Dr Michael Schleusener and Professor Dr. Silvia Zaharia. The eWeb Research Centre is actively involved in the research and design of the retail landscape with highly-acclaimed publications and reference works, projects, conference contributions and memberships, such as at the Scientific Society for Market-Oriented Corporate Management of the Commercial College of Leipzig (Wissenschaftliche Gesellschaft für marktorientierte Unternehmensführung der Handelshochschule Leipzig) (WiGe and HHL) e.V., the Research Institute for General and Textile Market Economics of the University of Münster (Forschungssstelle für Allgemeine und Textile Marktwirtschaft der Universität Münster) (FATM) and the Federal Association of the Digital Economy (Bundesverband Digitale Wirtschaft e.V.) (BVDW) e.V. In addition, there are research cooperation agreements with the Federal Association for E-Commerce and Mail Order Business (Bundesverband für E-Commerce und Versandhandel e.V. (bevh) and the German Trade Association (Handelsverband Deutschland e.V.) (HDE).

The central content of the eWeb Research Centre's research projects is the question of how retailers are making optimum use of the opportunities offered by e-commerce and how traditional retailers are meeting this challenge. This question is central in the retail industry, to which omni-channel-retailing, among other things, is intended to provide an answer.

Omni-channel retailing - often also referred to as cross-channel or multi-channel retailing - means that a retailer reaches or serves his customers where the customer wishes. This can be in an online shop, a mobile shop or also in a street-side shop.

GUIDE FOR COMMERCE OF THE FUTURE

In a joint pilot project with the Business Development Corporation Mönchengladbach (WFMG) entitled mg.retail2020, the eWeb Research Centre of the University analyses the changes in consumer behaviour and their consequences for street-side traders for the Ministry of Economic Affairs of North-Rhine Westfalia, using the inner cities of Mönchengladbach and Rheydt as examples.

This led to the Mönchengladbach pilot project on eBay, of which Prof. Dr. Heinemann was the scientific director. In cooperation with WFMG and the online marketplace eBay, local retail trade was linked to shopping on the internet. The declared aim was to strengthen the street-side retail trade and to dissolve the boundaries between street-side trade and online shopping with a local shopping experience. This aim was achieved and the project was completed with excellent results. The conclusion of the pilot project is that street-side retail trade can profit from the booming e-commerce market and generate additional online sales without any investment risk - both with customers from the region and from other areas.

FRAUNHOFER CENTRE TEXTIL LOGISTICS (CTL)



PROF. DR. MARKUS MUSCHKIET

Head of the Fraunhofer Centre of Textile Logistics

“Logistics is a decisive success factor in the textile industry. This has to do with quick seasonal changes, the high import quota, returns in online trading and a number of other aspects. Logistics is an essential core competence for textile companies. This is a field in which science can decisively support business.”

INSTITUTIONEN UND KOMPETENZZENTREN LOGISTICS FOR TEXTILES - TEXTILES FOR LOGISTICS



The Fraunhofer Centre of Textile Logistics (Fraunhofer Center Textillogistik) (CTL) is a cooperation project between the Hochschule Niederrhein and the Fraunhofer Institute for Material Flow and Logistics (IML) in Dortmund. Two working groups are to be established at the Mönchengladbach and Dortmund sites under the joint leadership of Prof. Dr. Markus Muschkiel. The Mönchengladbach working group is currently being set up, and start-up funding has been approved by the Ministry of Culture and Science of North Rhine-Westphalia. In the final stage of expansion, in addition to Professor Muschkiel, up to 12 people ranging from student assistants to scientific assistants will work on research and industrial projects for the CTL. The funds for the working group in Dortmund have been applied for.

The central idea and motivation of the partners is to closely connect business and science in the fields of logistics and the textile industry. The CTL is intended to focus the efforts of industry to apply innovative solutions in practical applications and concentrate the interests of scientific partners in practice-related, current research topics in the field of textile logistics in the Lower Rhine region. The two working groups in Dortmund and Mönchengladbach will complement each other and contribute their respective strengths and competencies. The CTL's motto is „Logistics for textiles - textiles for

logistics“. „Logistics for textiles - textiles for logistics“ stands for the optimisation of logistics processes in the textile industry on the one hand and textile technologies for production and logistics on the other. The focus will be on five fields of research:

- Sustainable textile logistics
- Textile logistics of the last mile
- Intralogistics and IT of the textile chain
- Textile logistics for intelligent clothing
- High-performance textiles in production and logistics

In addition to these fields of research, another aspect of the Centre of Textile Logistics is of central importance - its self-image.

The self-image of the CTL arises from the service provider concept that is generally inherent in logistics. Partners from business and science are to benefit from the solutions of the CTL, which functions as an „enabler“. This is possible in different ways, from joint tendering of study, Bachelor's and Master's theses through to research and/or industrial projects. This will not only benefit the business and scientific communities, but also the students, who will be able to establish appropriate contacts, work on current topics and grow.

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MG ZIEHT AN – GO TEXTILE!



HIGHLIGHTS OF THE FACULTY

MG ZIEHT AN – GO TEXTILE!



MG ZIEHT AN is a success story. The recruiting fair for the next textile generation is one of the leading recruitment fairs in Europe.

This fair is unique due to its unique and comprehensive features. In the Faculty of Textile and Clothing Technology, students as well as school attendees can spend two days finding out more about career opportunities and traineeships in textile and clothing companies.

AN ALLURING EVENT

The first next generation fair MG ZIEHT AN was staged in Mönchengladbach in 1999. Textile companies from the city joined forces to promote an industry that lost its attractiveness after a far-reaching structural shift and increasing globalisation. Textile companies wanted to attract attention and encourage young people to take up textile professions. With more than 100 national and international exhibitors as well as over 7,000 visitors, the fair has become a firm fixture on the industry's calendar.

For the companies the MG ZIEHT AN is an ideal contact platform to recruit young specialists. Over two days the fair covers the entire textile value chain from fibre production through to the final textile product. With its high-quality ancillary programme, which also includes specialist lectures, and matching meetings, MG ZIEHT AN is an unique event and an unusual networking opportunity to contact a large



number of employers. An exciting fashion show with collections from young design engineers and clothing technicians of the Faculty impressively demonstrate the strength of the University.

PARTNERS

The biennial innovation and recruiting fair MG ZIEHT AN is supported by the Confederation of the German Textile

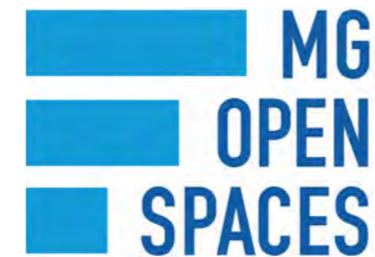
and Fashion Industry (Gesamtverband der deutschen Textil- und Modeindustrie e.V.) that launched the „GO TEXTILE!“ campaign in 2009. GO TEXTILE! showcases all professions of the textile sector and informs visitors about the opportunities in an industry that is geared to the future.

The fair is staged by the Faculty of Textile and Clothing Technology and the Business Development Corporation of the city of Mönchengladbach (WFMG).

MG OPEN SPACES

HIGHLIGHTS OF THE FACULTY

MG OPEN SPACES



MG OPEN SPACES is a communication platform that focuses regularly on innovative topics in the field of textile and clothing research. The Open Spaces conference method is based on the principle of self-organisation observed in biological systems. Participants from a wide range of specialist fields can actively work on topics on an interdisciplinary level within a defined framework and gain new insights that are not necessarily assignable to their field of specialisation.

RESEARCH SYMPOSIUM

The RESEARCH SYMPOSIUM MG OPEN SPACES is an active conference method that has been on offer at the Hochschule Niederrhein every two years since 2012. MG OPEN SPACES is a response to the question of how a networked textile world can communicate more effectively. This platform for exchanging information extends the scope of activities and gives professional visitors the chance to get to know different fields and topics with which they normally do not come into contact and to use these for their own projects.

Numerous national and international participants from the industry, commerce and politics as well as professors, scientists and students from various universities and research institutions are inspired by MG OPEN SPACES. Various topics such as digitisation, sustainability and functionalisation in the textile and clothing industry, some of which are also worked on experimentally, are discussed in open workshops under the guidance of experienced moderators. This conference method requires the active participation of all participants and networks different fields of know-how.



TRANSFER OF KNOW-HOW

The interdisciplinary exchange of know-how therefore permits attendees to widen their horizons and raises awareness in other fields of knowledge. Company representatives demonstrate their enthusiasm and participate in the workshops just as actively as the scientists. MG OPEN SPACES sensitises attendees to various topics and expands the horizons of knowledge in outside fields. The event draws attention to problems and their solutions that can be implemented under practical conditions and provides the opportunity to make new contacts. At MG OPEN SPACES, for example, seasoned specialists meet budding experts from the textile and clothing industry.

INTERNATIONAL WEEK OF NARROW AND SMART TEXTILES

HIGHLIGHTS OF THE FACULTY INTERNATIONAL WEEK OF NARROW AND SMART TEXTILES

The **INTERNATIONAL WEEK OF NARROW AND SMART TEXTILES** offers lectures, workshops, colloquia and a match-making event. Presentations with the latest developments in industry, research and education cover the various aspects of technology, machinery, materials, applications and training in the fields of narrow weaving, braiding and intelligent textiles. Meet leading machine and fibre manufacturers, researchers, partners and competitors.

www.hs-niederrhein.de/narrow-textiles

NARROW TEXTILES | SMART TEXTILES

For five days the Mönchengladbach textile campus is the meeting place for national and international experts from the narrow textiles and smart textiles sectors. At the event at the Hochschule Niederrhein, researchers and entrepreneurs discuss the latest developments, machines and possible applications of narrow textiles and functional textiles. After the launch of this event in 2016, in 2018 around 150 guests came to Mönchengladbach. The aim of the conference is to present the latest developments in the industry and to discuss the current state of research. Entrepreneurs, researchers, teaching staff and students are brought together at one place so that they can get to know one another.

Narrow textiles are products from the narrow fabric weaving and braiding sectors that are no wider than half a meter. The material used for braiding is irrelevant. It can be wire, glass fibre, copper, carbon fibre or classic yarn. Textiles are considered smart if they fulfil additional tasks and functions beyond their textile structures. These materials are used, for example, in leisure or sports clothing such as self-luminous bicycle jackets or ECG shirts that measure the wearer's heart rate.

The conference is framed by all-day workshops, which train participants in various central topics. All lectures

are simultaneously translated into English or German. At the same time as the colloquia there is an "International Matchmaking Event", which is organised in cooperation with NRW International. Based on the speed dating principle, companies, researchers, institutes and students can establish new business contacts, exchange information on innovative technologies or initiate cooperation projects in sessions of around 20 minutes. An evening programme of events is also organised on two days.





TRADE FAIRS AND EXHIBITIONS



**HEINRICH TRÜTZSCHLER &
DR. MICHAEL SCHÜRENKRÄMER**
Managing Partner Trützschler

“The textile industry and textile mechanical engineering have been active on a global scale for decades, whereby today the production sites for the textile industry are mainly located in Asia. A number of textile machine manufacturers, including Trützschler, control their operations from Europe. Engineers and technicians collaborate in intercultural teams around the world. Coordination of training subjects and the cultural exchange are supported by an effective, close network on the university level.”

HIGHLIGHTS OF THE FACULTY GLOBAL TRADE FAIRS AND CONTACTS

Many textile and clothing companies operate on a global scale. People from different countries and cultures work together almost everywhere. Anyone who wants to understand global markets and communities must also demonstrate a global presence. The Hochschule Niederrhein has international contacts and has adapted to suit the needs of a globalised world. The Faculty attends various shows and symposia around the world as a competent contact at the various venues.

ITMA

The international textile machinery exhibition ITMA is held every four years. Attendance at the world's leading trade fair for textile machinery construction has a long tradition in the Faculty of Textile and Clothing Technology. Renowned textile machine manufacturers based in Mönchengladbach collaborate with the Faculty in a joint presentation at this major trade fair to promote Mönchengladbach as an European textile city. This offers a large number of journalists from around the world the opportunity to obtain in-depth information about the Faculty and its teaching and research programmes. The Faculty will continue to attend the ITMA in the future.

TEXPROCESS

The successful attendance of the Faculty at the Texprocess focuses on presentation of the wide range of degree programmes as well as the many work and research results in the clothing manufacturing industry, for example in 3D-product development. A large number of students also make use of the organised day excursions from Mönchengladbach to Frankfurt to find

out more about new products, the corresponding operating resources, research trends and career prospects. The comprehensive range of products ranges from machine technology with the corresponding software solutions to design and cutting, sewing, joining, embroidery and knitting through to finishing, textile printing, logistics and IT.

AACHEN-DRESDEN

DENKENDORF

Since 2007, the textile research institutes of the regions around Aachen and Dresden have been jointly organising the Aachen-Dresden International Textile Conference. With more than 700 participants at the last count, the conference is one of the most important textile conferences in Europe. Since 2016, the German Institutes for Textile and Fibre Research in Denkendorf (Deutsche Institute für Textil- und Faserforschung Denkendorf) (DITF) have also been on board as organisers. The Aachen-Dresden-Denkendorf International Textile Conference takes place every year, with the venue alternating among the three sites.

TECHTEXTIL

The Tectextil biennial trade fair in Frankfurt covers the full spectrum of applications for modern textile technologies in twelve fields of application. The Hochschule Niederrhein always attends this fair with its own stand. This stand is a central port of call for a number of textile companies from around the world. Nowhere else is it more evident how many former students from Mönchengladbach work for companies around the globe today. With its focus on technical textiles, Tectextil is an obligatory event for the University's own research institute.

HEIMTEXTIL

The Heimtextil is the largest international trade fair for home and contract textiles and the global benchmark for quality textiles with design and innovative functionality. In cooperation with Roomsforfree e.V., the Faculty has already appeared in front of the international trade fair audience several times as a leading European design university. Students and graduates present their textile and surface design work at special shows.

COMPETITIONS/ EXCURSIONS/ PROJECTS

HIGHLIGHTS OF THE FACULTY COMPETITIONS, EXCURSIONS AND PROJECTS

Students present their work to an international professional audience each year at a number of clothing and design competitions. They are often among the winners at these events that are assessed by a panel of renowned judges. Students are also able to get a feeling for the textile and clothing industry on regularly organised excursions. A selection of current projects is shown on the Faculty's website.

THE ART OF FINE DINING

This was the motto of an excursion of students to Morocco. After an initial workshop in Cologne at Mosáico Zementfliesen GmbH on the subject of „Patterns and working methods in the field of cement tiles for arts and crafts in Morocco“, it quickly became clear that both sides were interesting in expanding their cooperation.

At the invitation of Mosáico, students of the Design Engineer degree programme with specialisation in textiles were able to immerse themselves and find inspiration in Morocco's patterns for seven days. During the excursion the students were able to enjoy an intensive exchange of thoughts and experience with local artisans as well as with cooperatives from Marrakech and the surrounding area. In addition to the insights and impressions of the working techniques, the students were also invited to a hands-on experience and join the working teams. Some of the students were allowed to make their own carpets and work on the looms.

COMPANY VISITS

Well-known and renowned textile and clothing manufacturers in Germany and abroad are regularly visited by students of the Hochschule Niederrhein. Many companies also come to the Hochschule Niederrhein and give lectures to the students. This communication and cooperation enables in-depth insights into company operations and effectively shows the young graduates what they will be facing in everyday working life.



KNITTED HIKING BOOTS

A knitted hiking boot that also withstands a trip to the mountains? Former MA student Nicole Swoboda proved that this is possible in her Master's research project entitled „Hike&Knit“, which was developed in cooperation with the Austrian company „Dachstein Outdoor und Lifestyle GmbH“ as well as the Italian manufacturers „Mac Tecno Materials“ and „Calzaturificio Skandia S.P.A.“.

The result - the „Super Leggera DDS“, the world's first knitted hiking boot, won the „Outdoor Industry Award“.

MUSEUM EXCURSIONS

On these museum excursions textile technology students are able to view historical machines and special equipment for spinning and weaving shop preparation. They are also able to expand their horizons by visiting different exhibitions.



TEXPERIMENTAL

This publication documents a selection of outstanding artistic and engineering case studies which were completed as part of several high-level BA and MA student projects by the Faculty of Textile and Clothing Technology at the Hochschule Niederrhein in Mönchengladbach, Germany.

The results of the projects and research evidence the extensive range of creative potential, scope of technical design and compliance with sustainability demands as well as the success of combined engineering solutions. They also show the excellent standard of interdisciplinary networking between the teaching staff in various scientific and design disciplines as well as with partners from the industry in the Lower Rhine region, Europe and beyond.

The design and management concepts and works of art focus on the following topics, which at the same time demonstrate the tremendous range of textile opportunities that the future holds: Textile Technology, Art of Textiles, New Interior Solutions, Textile Industry 4.0, Sustainable Design Concepts, Design Transfer, Female Statements and Smart Future. Many solutions anticipate the future of textiles, which may at some point in time become the accepted state of the art. Presentation of the projects is supplemented by statements of the teaching staff in which they reflect on their work and motivation, as well as by reports of external experts and journalists from the lifestyle and textile business who are very ambitious in aiming for a sustainable and worthwhile future while still satisfying the needs of modern industry.

web.hs-niederrhein.de/fileadmin/dateien/FB07/Forschung/Forschungsprojekte/Gesamt_Texperimental_digital_gesichert.pdf

THE WORLD IS PHILAMBDA

The Master's thesis „The world is Philambda“ of Verena Winkelmann focuses on the social and economic process of flexibility in the context of the megatrend of mobility. Special attention has been paid to a shift in consumer behaviour as well as the digital facets with the consequences for the fashion market. For this reason, in order to satisfy all consumer needs, online and offline commerce should be merged into omni-channel-systems which can offer an all-round shopping experience with a wide range of contact points. Based on this analysis, the Philambda omni-channel concept combines the aspects of fashion, lifestyle and travelling. In particular, the concept focuses on the development of a fashion and accessory collection. The concept's main focus is greatly inspired by the characteristics of Iceland, including the rough beauty of its landscape and its remarkable sights as well as its culture and traditions.



SOUND ABSORBERS

As part of her Bachelor's thesis, student Maya Breuer developed sound absorbers which are both functional and decorative and combine three elements - textile material, surface texture and the joining technique. Using the principle of origami, she created new 3D-structures to enlarge the surface. The joining technology makes it possible to develop durable 3D-structures and to create a very interesting look. The sound absorbers were tested in a certified reverberation room in compliance with DIN EN ISO 354; all structures proved to be functional and improved the room acoustics enormously.

THE CATWALK IN PARIS

The exhibition and catwalk design of the project „The Beauty in Design - Aesthetics and Functions“ at the Avantex fair in Paris was the highlight and conclusion of the Paris project. A mixed group of BA and MA students from the field of textile and fashion design of the Design Engineer degree programme spent a semester examining the subject of „Beauty in Design“ with a very diverse range of inspirations from other countries and also examined the beauty of functions and sustainability in design.



ECOPOLIS

In her Master's thesis Theresa Brinkmann worked with sustainable design strategies in fashion and textile design and developed a collection which features a high-quality and fair alternative to fast fashion. For this she was awarded the prize of the Rhineland Textile and Clothing Industry Association (Verband der Rheinischen Textil- und Bekleidungsindustrie e.V.).

Following the example of „Seven Easy Pieces“ by Donna Karan, she developed a collection concept which is based on the idea of a „Capsule Wardrobe“. The clean and restrained colour concept, inspired by modern and sustainable architecture, emphasises the different looks and feels of the materials.



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INTERNATIONAL EXCHANGE

INTERNATIONAL/ COOPERATION PROGRAMMES GLOBAL NETWORKING

Making contacts and providing assistance GLOBUS is a loose community of students that facilitates orientation at the University and the campus. It organises various excursions, a Christmas party, a regular meet&mingle event and lots of other opportunities to meet other students.



XINYU SONG
Master's student
from China

„I know the Globus from the previous international students at first. There are nice and kind tutors organizing traveling and other activities (like BBQ recently) every semester. Globus helps us, the international students, to get familiar with our study and living environment fast. The activities conduce to better integration into German culture for the international students. I have had great and happy experience with Globus.“

STUDENT ORIGINS

In the winter semester 2017/18 around 2,000 students from 57 nations were enrolled at the Faculty of Textile and Clothing Technology. Most of the international students come from Bangladesh (20%), Turkey (17%), China (18%) and Pakistan (6%) as well as the Russian Federation (3%). The international students profit from the opportunity of being able to complete a Bachelor's or Master's degree programme in English at our Faculty.

SPORT

The University offers its students an attractive range of sports free of charge. In addition to classic sports such as soccer, basketball and hockey, students can also attend capoeira, martial arts and Argentine tango courses.

PRACTICAL SEMESTER ABROAD

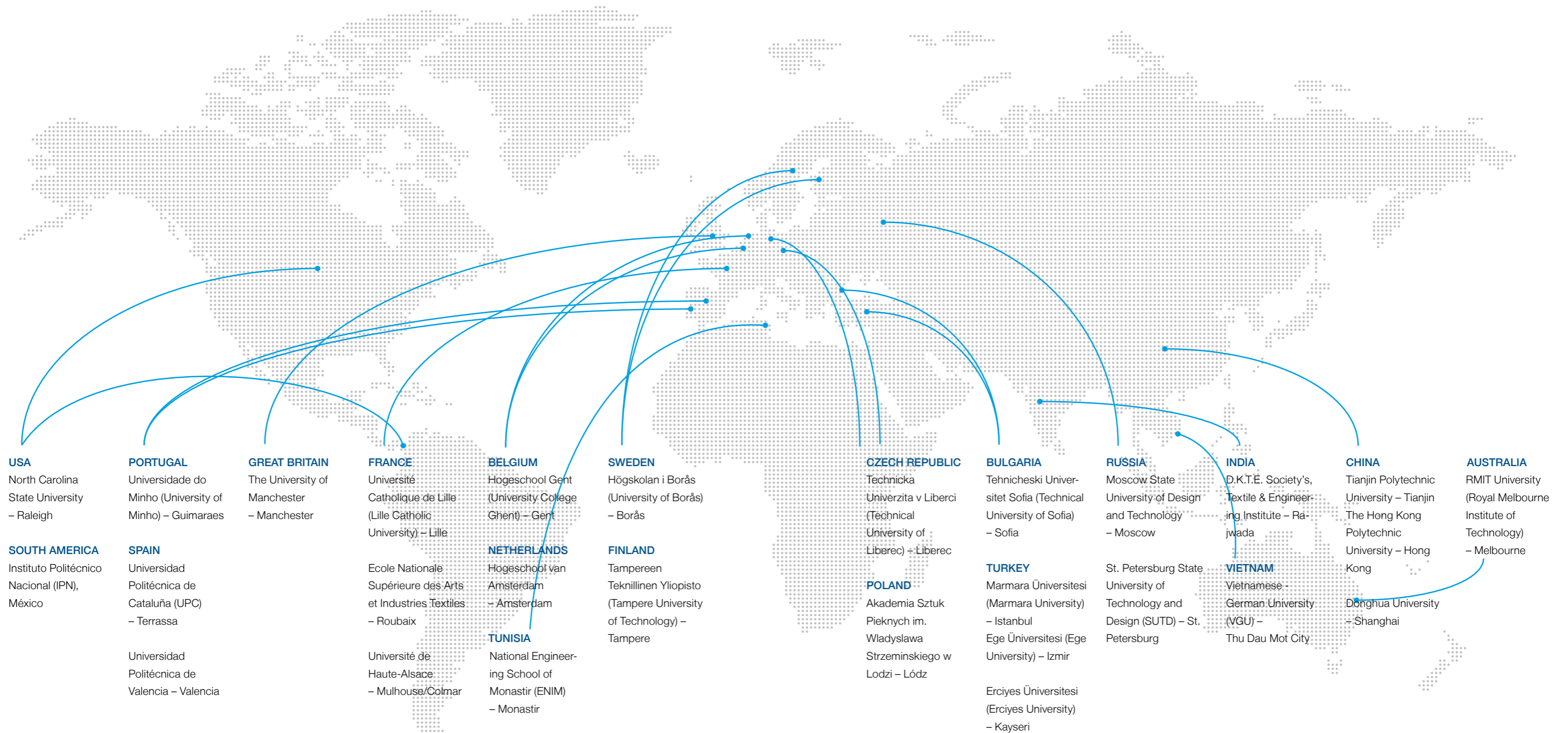
Testing your personal skills and acquiring specialist know-how – a period of study abroad not only looks good in a job application but also widens your horizons. Special highlights are internships in Bangladesh and China. These are organised at our Faculty by the Dean and the professors. In addition there are special tutorials and advisory services available for the students.

PARTNERS OF THE UNIVERSITY

Internationality is a special hallmark of the Faculty of Textile and Clothing Technology. The Hochschule Niederrhein is partnered with a number of universities on all continents including India, China, the United States, Australia and Russia.

INTERNATIONAL / COOPERATION PROGRAMMES

GLOBAL LINKS – COOPERATION PARTNERS OF THE FACULTY





NATIONAL SYNERGIES



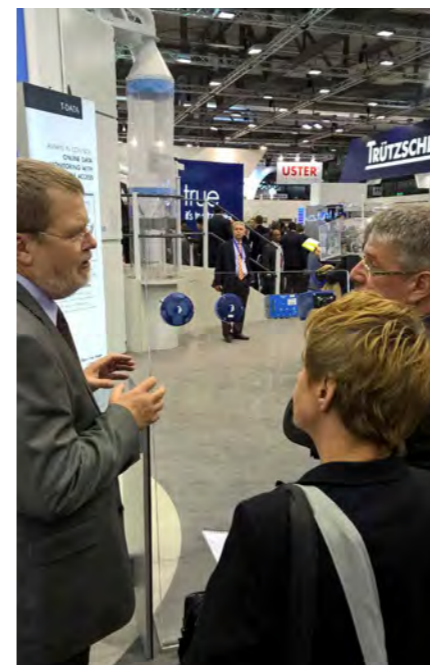
ROLF A. KÖNIGS

President of the Association of the Rhine Textile and Clothing Industry, CEO of the AUNDE Group

"Training and further training is the key to success for the textile and clothing industry. In Germany we will only be able to promote this sector and maintain its leading position if we train young people and offer further training opportunities. This is important for both domestic business and exports. The degree programme and practical work experience are the perfect combination for a successful career."

"Today 30 percent of the turnover of the textile industry is generated with new products. This value evidences the innovative and technological power of this sector. The University is a fantastic platform for training and further training as well as innovation."

COOPERATION PROGRAMMES NATIONAL SYNERGIES



COOPERATION PROGRAMMES WITH COMPANIES

The Faculty is always looking to forge close alliances with the textile and clothing industry and receives a great deal of support in many ways in the procurement of machines, equipment and software. The textile mechanical engineering industry provides the University with textile machines for

research and teaching, and therefore ensures that its facilities keep pace with the state of the art. Students have the opportunity to write their dissertations, research papers and theses in a wide variety of companies or to cooperate with companies within the scope of fifth semester projects. The Faculty publishes internships and job advertisements on the internet and noticeboards, and company presentations can be integrated into lectures.

In addition, a number of companies collaborate with the University to offer students the chance to enrol for a dual degree programme in Textile and Clothing Technology, and also participate in the MG ZIEHT AN recruiting event as exhibitors and premium partners or attend the MG OPEN SPACES symposium. Companies can also support students financially with a Master's Scholarship or the German Scholarship.

ALUMNI OF THE FACULTY

The alumni network of the Faculty of Textile and Clothing Technology is the contact platform between the University and the graduates from the Faculty.

Former students support the Faculty both personally and financially by keeping in regular contact. Active contact to the alumni of the Faculty is also maintained with newsletters and invitations to graduation ceremonies.

COOPERATION PROGRAMMES WITH INSTITUTES

The Faculty maintains a variety of cooperation programmes with associations such as the Association of the North-West German Textile and Clothing Industry (Verband der Nord-westdeutschen Textil- und Bekleidungsindustrie e.V.), Association of the Rhineland Textile and Clothing Industry (Verband der Rheinischen Textil- und Bekleidungsindustrie e.V.), the German Fashion Association (German Fashion Modeverband Deutschland e.V.) and Confederation of the German Textile and Fashion Industry (Gesamtverband der deutschen Textil- und Modeindustrie).

PUBLISHING INFORMATION

PUBLISHED BY

Hochschule Niederrhein,
Faculty of
Textile and Clothing Technology
Webschulstraße 31
41065 Mönchengladbach
Germany

Telephone: +49 (0)2161 186-6011
Telefax: +49 (0)2161 186-6013
E-Mail: dekanat-07@hs-niederrhein.de

www.hs-niederrhein.de

RESPONSIBLE

Prof. Dr. Lutz Vossebein

COORDINATION

Bettina Hansmeier
Francesca Corradi

Year of publication 2018

EDITING

Francesca Corradi

CONCEPT & DESIGN

Stefano C. Picco
(spicOne multimedia e.K.);
Cristina Lohr
(Hochschule Niederrhein)

TRANSLATION

Linda Bestwalter, Ravensburg

PRINTING

Bergner & Köveker oHG

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// Carlos Albuquerque

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| Fotoarchiv der Hochschule Niederrhein (S. 11, r.
und S. 13, o.) | Pressestelle, Stadt MG (S. 14, o.) |
Stefan Völker (S. 14, u. | S. 58 | S. 59) | Archiv www.
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Dipl.-Ing. Gisela Dahmen (S. 27, r.) | Prof. Dr. Kerstin
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Markus Rick (S. 51) | Thinkstock-photos (S. 52, o. |
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O. Weber (S. 76, o.) | TD-IHK Berlin (S. 76, u.) |
Prof. Dr. Rudolf L. Voller (S. 77)

Hochschule Niederrhein
Faculty of Textile and Clothing Technology
Webschulstraße 31 | 41065 Mönchengladbach

Telephone: +49 (0) 2161 186-6011
Telefax: +49 (0) 2161 186-6013
E-Mail: dekanat-07@hs-niederrhein.de

www.hs-niederrhein.de

