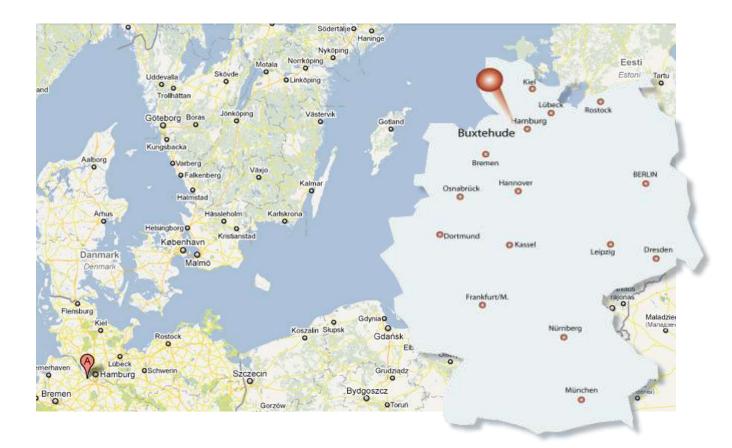


## **Welcome to Buxtehude**

**University of Applied Sciences** 

#### Where You Can Find Us





#### Easy Access by Public Transport





## **Buxtehude, A Hanseatic City**



#### **Tradition**

- founded in 1197
- member of the Hanseatic League since 1363
- hometown of the fairy tale "The Hare and the Hedgehog"
- surrounded by historic landscapes "Altes Land" (pomiculture) and "Lüneburger Heide" (heathlands)









Fotos: Madle Fotowelt, Daniela Ponath

## **Buxtehude: Industrial Activities**



#### **Current Status**

- 40.000 residents
- 80 square kilometers
- part of the metropolitan area Hamburg

#### **Industrial Sectors**

- aircraft industry
- building industry
- chemical industry
- medical industry
- shipping companies



#### University of Applied Sciences

Facts & Figures

- State-recognized
- Founded in 1875
- 1.100 students
- 3 faculties
- 8 bachelor programs

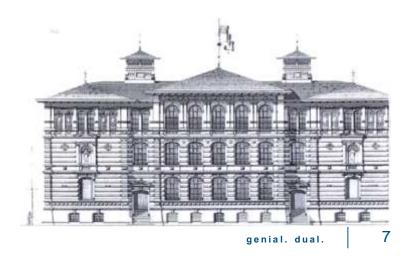




#### **Our History**



- **1875** founded as an academy for Civil Engineering
- 1971 University of Applied Sciences, focus on Building Sciences
- 2004 Transformation from public University into a private public partnership
- 2005 Kick-start as a privatized University, 48 students reading Civil Engineering
- 2006 Introduction of Physiotherapy
- 2009 Introduction of Mechatronics
- 2015 Launch of Midwifery
- 2017 Launch of Nursing
- 2019 Launch of Building Services Engineering



#### **Bachelor Degrees**



- Architecture DUAL (BEng)
- Civil Engineering DUAL (BEng)
- Building Services Engineering DUAL (BEng)
- Mechatronics DUAL (BEng)
- Midwifery DUAL (BSc)
- Nursing DUAL (BSc)
- Physiotherapy DUAL (BSc)
- Industrial Engineering and Management Construction and Real-estate DUAL (BEng)



#### **Our Brand – Our Strengths**



- Dual curriculum: combines higher education with professional practice
- Small cohorts: typically 30 to 50 students per year and course
- Small learning groups: Easy access to Professors and Tutors
- Our Campus setting: Family atmosphere





## The Structure of Our Dual Curriculum



#### Structure of our engineering courses

- two terms per year
- start of university year in September
- per term: 50% theoretical education, 50% professional practice within an employment company
- illustration of the educational phasing:

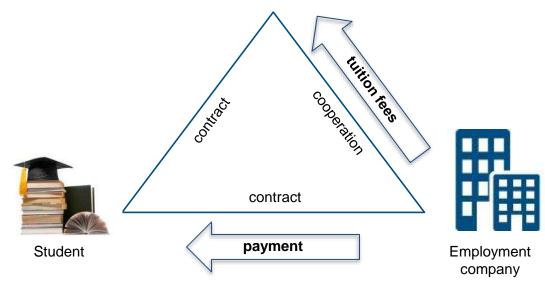
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## **The Contractual Triangle**



#### Students have a dual contractual relationship

- 1. with hochschule 21 (the student contract)
- 2. with an employment company (the employment contract)



hochschule 21

# How Does Duality Work for Health Studies?





- Partner hospitals offer vocational training at their in house schools as well as work practice
- Students hold a contract with hochschule 21 (the student contract)
- hochschule 21 offers academic tuition
- Academic tuition integrates vocational training



## Architecture DUAL – A Brief Intro



Nomination	15 April for winter term, 15 November for summer term
Application	15 June for winter term, 15 January for summer term
Duration of studies	8 terms, integrated practical periods (2x3 months) per year
Credit Points	Min. 240 CP
Degree	Bachelor of Engineering; certificate for engineers issued by the Chamber of Engineers in Niedersachsen; acknowlegded by the Chamber of Architects
Tuition fees	None for Erasmus exchange students



Study Structure Arch	nitecture DUAL (Status as	s of March 2018)					hochschule 7
1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester	8. Semester
Design Basics and	Building Typology	Architectural Design 1	Architectural Design 2	Architectural Design 3	Brief D	esigns	Final Bachelor Module
Design Basics	Building Typology			Constructive Design	Brief Designs	(min. 5, 5 CP)	Preparatory Seminar
Computer Aided Design and Presentation		Building Recordin	g and Surveying		Design Projects		
CAD and Presentation (1)	CAD and Presentation (2)	Surveying	Building Recording and Surveying		Design Projects (min. 3, 15 CP)		Bachelor Thesis
Visual Representation and Creative Design	History an	d Theory 1	History and Theory 2		Architectural Representation		
	History of Architecture and Art (1)	History of Architecture and Art (2)	Architectural Theory		Representation (min. 1, 2 CP)	Sketch Book	
Construction und Technology 1	Construction und Technology 2	Construction und Technology 3		Urban Plannir	Urban Planning and Design Urban Design		Planning Laws and Building Regulations
Building Construction 1	Building Construction 2	Building Construction 3	Historic Preservation	Urban Planning and Design (1)	Urban Planning and Design (2)		
				Energetic Building Refurbishment	Key Qu	alifications and Compulsory E	ectives
Structures	Structural Engineering 1	Structural Engineering 2	Architectural Excursion		Key Qualifications (n	nin. 3, 6 CP) and Compulsory E	ectives (min. 3, 9 CP)
			Business Administration	Construction	Management	Building Damages	Cost and Schedule Planning
Building Materials 1	Building Physics and Technology A	Building Physics and Technology B		Construction Management A	Construction Management B		
Practice Module I		Practice M	Practice Module II		Practice Module III		
Practice Phase 1	Practice Phase 2	Practice Phase 3	Practice Phase 4	Practice Phase 5	Practice Phase 6	Practice Phase 7	
							total 240 Cl

## **Civil Engineering DUAL – A Brief Intro**



Nomination	15 April for winter term, 15 November for summer term
Application	15 June for winter term, 15 January for summer term
Duration of studies	7 terms, integrated practical periods (2x3 months) per year
Credit Points	Min. 210 CP
Degree	Bachelor of Engineering; certificate for engineers issued by the Chamber of Engineers in Niedersachsen
Tuition fees	None for Erasmus exchange students



hochschule 21

1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester
Structures	Structural Analysis 1	Structural Analysis 2	Structural Analysis 3		Civil Engineering Hydraulics	Urban Water Supply and Sanitation / Waste
Business Administration A	Planning Law s and Building Regulations	Construction Management A	Excursion	Construction Management B	Construction Management C	Compulsory Elective B
Building Construction 1	Building Physics and Technology A	Building Physics and Technology B	Steel Structure Design 1	Steel Structure Design 2	Design of Timber Structures	Compulsory Elective C
Mathematics 1	Mathematics 2	Building Construction 2	Geotechnical Engineering 1	Geotechnical Engineering 2	Specialization Module A	Specialization Module B
Building Materials 1	Building Materials 2	Reinforced Concrete and Masonry Design 1	Reinforced Concrete and Masonry Design 2	Reinforced Concrete and Masonry Design 3	Compulsory Elective A	
Information and Communication Technology	Surveying		Traffic Infrastructure 1	Traffic Infrastructure 2	Key Qualification A	Key Qualification B
Practice Phase 1	Practice Phase 2	Practice Phase 3	Practice Phase 4	Practice Phase 5	Practice Phase 6	Practice Phase 7; Bachelor Thesis
						Subject to modifications

#### Study Structure Civil Engineering DUAL (Status as of March 2018)

## Industrial Engineering and Management Construction and Real-estate DUAL – A Brief Intro



Nomination	15 April for winter term, 15 November for summer term
Application	15 June for winter term, 15 January for summer term
Duration of studies	7 terms, integrated practical periods (2x3 months) per year
Credit Points	Min. 210 CP
Degree	Bachelor of Engineering; certificate for engineers issued by the Chamber of Engineers in Niedersachsen
Tuition fees	None for Erasmus exchange students



tudy Structure Industrial Engineering and Management Construction and Real-estate DUAL (Status as of July 2018)							
1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester	
Structures	Building Physics and Technology A	Building Physics and Technology B	Introduction to Building Planning	Projects A	Projects B		
Building Materials	Planning Law and Building Regulations	Construction Management A	Construction Management B	Accounting Commercial law	Construction Management C	Business Administration D	
Business Administration A Excel, Access	Business Administration B	Macro Economics	Business Administration C	Property Portfolio Management	Facility Management	Digital Real-estate Management	
Building Construction CAD	Structural Engineering	Project Development	Private Construction Law	Life-cycle Management	Specialization Module A	Specialization Module B	
Mathe	Mathematics		Project Management		Compulsory Elective		
	Key Qualification	Foreign Language	Excursion				
Practice Phase 1	Practice Phase 2	Practice Phase 3	Practice Phase 4	Practice Phase 5	Practice Phase 6	Practice Phase 7; Bachelor Thesis	
						Subject to modifications	

## **Mechatronics DUAL – A Brief Intro**



Nomination	15 April for winter term, 15 November for summer term
Application	15 June for winter term, 15 January for summer term
Duration of studies	7 terms, integrated practical periods (2x3 months) per year
Credit Points	Min. 210 CP
Degree	Bachelor of Engineering; certificate for engineers issued by the Chamber of Engineers in Niedersachsen
Tuition fees	None for Erasmus exchange students



1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester
Mathematics 1	Mathematics 2	Machine Components 1	Machine Components 2	Production and Manufacturing Technology 1	Production and Manufacturing Technology 2	Quality Management - Law s ar Technical Standards 2
Technical Mechanics 1	Technical Mechanics 2	Electric Pow er Units	Hydraulic and Pneumatic Systems	Control Engineering 1	Control Engineering 2	Mechatronic Systems 2
Chemistry / Materials Science	Computer Science 1	Computer Science 2	Computer Science 3	Energy and Environmental Engineering	Mechatronic Systems 1	Specialization Module 2
Physics	Electrical and Electronics Engineering	Industrial Electronics - Components and Applications	Automation Engineering	Project Management and Business Management 2	Specialization Module 1	Compulsory Elective 2
Technical Drawing 1	Measuring and Sensor Engineering	Technical Drawing 2 (CAD)	Project Management and Business Management 1	Quality Management - Law s and Technical Standards 1	Compulsory Elective 1	
Key Qualification 1			Technical English 1	Technical English 2	Technical English 3	
				Key Qualification 2		
Practice Phase 1	Practice Phase 2	Practice Phase 3	Practice Phase 4	Practice Phase 5	Practice Phase 6	Practice Phase 7; Bachelo Thesis
						Subject to modificati

## **Physiotherapy DUAL – A Brief Intro**



Nomination	15 April for winter term, 15 November for summer term
Application	15 June for winter term, 15 January for summer term
Duration of studies	7 terms, including a 3 year vocational training at our clinic partners
Credit Points	Min. 180 CP
Degree	Bachelor of Science, state-approved physiotherapist
Tuition fees	None for Erasmus exchange students
Partners	Cooperation with Elbe Clinics Stade-Buxtehude, University Clinic Hamburg- Eppendorf



Study Structure Phys	siotherapy DUAL (Statu	s as of January 2019)				hochschule 21 d
1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester
Research Methods Evidence		Evidence-ba	sed Medicine	Interprofessional Practice	Research Workshop	Bachelor Thesis
Introduction to Scientific Work Damage/Impairment of Sensory Systems, Motor Control and Pain				Differential Diagnosis a	and Differential Therapy	Intervention und Outcome
Normal Functi	Normal Functions and Health		airments of Neuromuscular and Motor Systems 2 Medical Care in		Diverse Contexts	
Structural and Function Imp	airments of Internal Organs				From Beginne	ers to Experts
	Structural and Function Impairments of Neuromuscular and Motor Systems 1		Prevention and Rehabilitation 2			
	Prevention and Rehabilitation 1	Practical Course Phase 1	Practical Course Phase 2 Practical Cou		urse Phase 3	Practical Course Phase 4
						Subject to modifications

## **International Relationships**



#### **Partnering Universities**

- German University of Technology in Oman
- Lublin University of Technology
- Oestfold University College
- Politechnico di Milano
- Slovak University of Technology
- Technological University Dublin
- Universidad de Cantabria
- University of Patras
- University of Rzeszów



GEFÖRDERT VOM



Bundesministerium für Bildung und Forschung





# **Thank You for Your Attention**