

# University of Applied Sciences Dresden





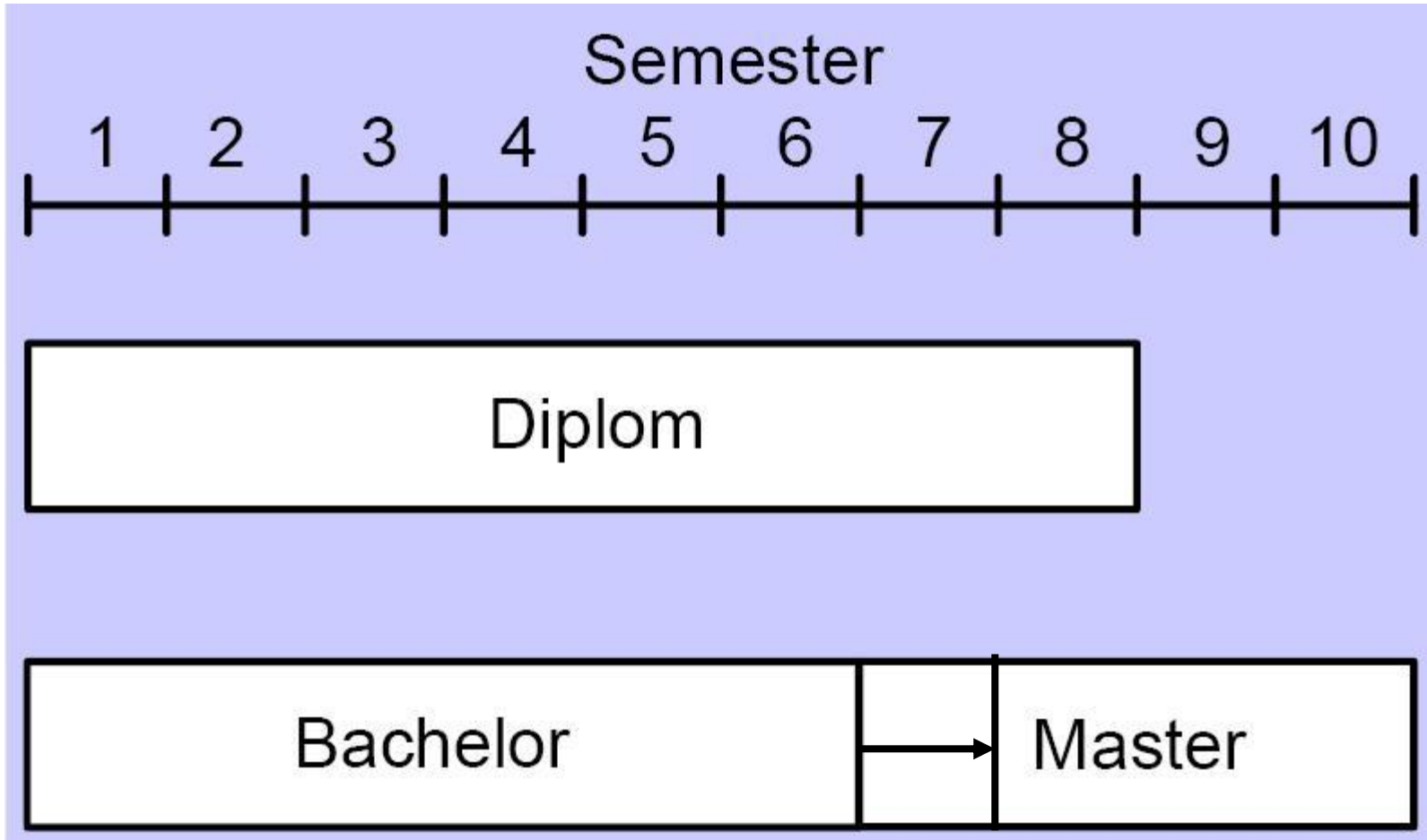
# Facts

Foundation:	16.07.1992
Administration:	Rectorate
Faculties:	8
Students:	5400
Staff:	490
Budget:	28 Mio €/a
Area:	34,400 m <sup>2</sup>

# Faculties and Students

	% students
Civil Engineering/ Architecture	11
Electrical Engineering	15
Information Technology/ Mathematics	13
Spatial Information	10
Agriculture/ Landscape Management	11
Mechanical Engineering/ Process Engineering	20
Business Administration	18
Design	2

# Study Programmes



# Study Programme

## Initial Practice (8 weeks)

Type: Site, apprenticeship,  
draughtsman



➤ 8 weeks up to Intermediary Exam

## Basic Studies

Semester 1 - 3



➤ Mathematics, other Science Subjects

➤ Buildings, Applied Mechanics,  
Construction Materials

➤ Informatics for Engineers

## Advanced Studies

Semester 4 - 7



➤ Applied engineering subjects  
(concrete design, structural steel, timber,  
bridge engineering)

➤ Practice semester (semester 5) at least  
20 weeks

➤ Specialised Studies (semester 6 & 7)

## Final-Year Project

Semester 8

# Classical Civil Engineering Education

1. APPLIED NATURAL SCIENCES  
(Maths, Physics, Chemistry)
2. ENGINEERING SCIENCES  
(Mechanics, Geology, Materials ...)
3. APPLIED ENGINEERING SUBJECTS  
(Roads, Water, Structures ...)

PROPORTIONS 1 : 2 : 8

# Faculty of Civil Engineering

120 Students each year

15 Professors

20 Staff

2 Specialisations

Construction Engineering

Transportation and Geotechnical Engineering

# Subjects and Laboratories

- Maths for Engineers
- Applied Geometry
- Physics for Engineers
- Chemistry for Engineers
- Applied Mechanics & Theory of Structures
- Project- & Construction Management
- Construction Materials
- Structural Engineering
- Geotechnical Engineering
- Water Engineering
- Traffic-, Road-, Railway Engineering
- Land Surveying
- Computer-aided Drawing, FE Analysis
- Foreign Language
- Light- & Heavy Structures
- Materials Lab
- Road Matls. Lab
- Hydraulics Lab
- Soils Lab
- CAD Pool
- Language Lab



# The Civil Engineer and his work

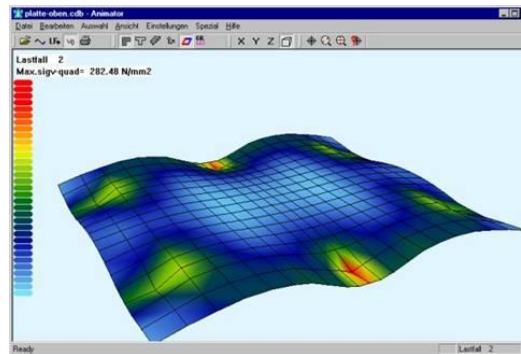
## Main activities of graduate Civil Engineer

### Planning and Design

- Function of Structure
- Structural layout
- Fabrication & Building
- Structural Analysis
- Design of Structure
- Construction Drawings

### Execution

- Project- & Construction Management
- Building & Construction Technology



# Division of Water Sciences

- 120 Students in semester 3 & 4
- 12 Students in semester 6 & 7
- 6-9 Students Diploma/ MSc thesis

Subjects:

- Technical Hydromechanics
- Engineering Hydrology
- Water Engineering
- Drinking Water Supply
- Sewage Treatment
- Groundwater Engineering
- Environmental Protection
- Urban Water Management

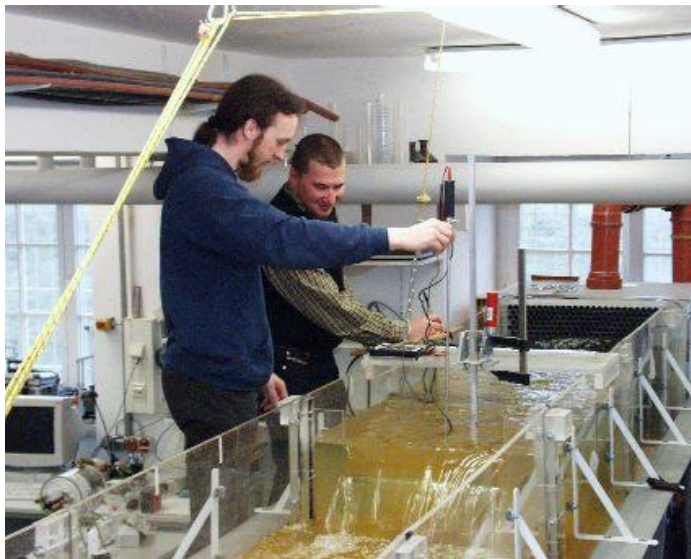
# Water Engineering Laboratories

## ➤ Hydraulics Laboratory

Water-related experimentation, river engineering tests, pipe hydraulics & flume design, computer assisted analysis & measurement

## ➤ Geohydraulics Laboratory

Research & Final Year Projects with students, well design, groundwater flow and transport



# Research Focus



Riverbank Filtration and  
Artificial Groundwater  
Recharge

Subsurface Iron and  
Manganese Removal

Groundwater Management  
and Monitoring

Surface Water & Groundwater  
Interaction

