Bachelor degree programme CONSTRUCTION DESIGN AND ECONOMICS

DESIGN > PLANNING > STRUCTURAL ENGINEERING > CIVIL ENGINEERING > CONSTRUCTION > PROJECT MANAGEMENT

W e offer a high-quality education in the fields of architecture and construction engineering, focusing our teaching and research on the challenges of our time.

The beginning of the programme is devoted to learning the basics of construction engineering and architecture using state-of-the-art teaching methods. Students can choose to specialise in Architecture or Construction Engineering. Interdisciplinary projects link the individual disciplines and prepare you for the complex tasks in industry. These projects are carried out in the form of both individual and team work and comprise different areas of focus to foster your abilities to work both independently and as part of a team. In the sixth semester students will also undertake an internship which is not only a stepping stone to your later career but also gives you an insight into the wideranging fields of construction engineering and architecture - from building construction to civil engineering, from planning to execution, from office work to site management. The internship can be completed anywhere in the world so that you gain both professional and intercultural experience.

"I find the emphasis placed on practical projects a real plus. This gives a better overview of project-related processes in construction engineering and management, and shows how the specialist areas are interrelated."

DI Hans Christian Arzberger, BSc, Graduate

FACTS

- · Bachelor of Science in Engineering (BSc)
- · Full-time
- · 6 semesters / 180 ECTS
- · Language of instruction: German
- · 60 places per year
- Head of Institute and Degree Programme: FH-Prof. DI Dr. Michaela Kofler
- · FH JOANNEUM Graz

www.fh-joanneum.at/bbw

CAREER PROSPECTS

Our graduates can specialise in the FH JOANNEUM master degree programmes in Architecture or Construction Management and Engineering or continue their studies at another university in Austria or abroad. Or they decide to enter the world of work straight away, where they can implement their knowledge in national or international building projects, from project preparation and planning to construction.

"The wide variety of tasks I was given during my internship allowed me to apply the knowledge I've acquired and to gain many new experiences and impressions. I found it very interesting to experience the financial and technical aspects of how a construction project unfolds."

Bianca Johanna Gollner, BSc, Student of Construction Management and Engineering

CURRICULUM: 180 ECTS (30 ECTS per semester)

1st semester	2nd semester	3rd semester	4th semester	5th semester	6th semester
Geometry - Mathematics - Structural Analysis 9 ECTS	Building Contracts and Procurement Procedure - Surveying 3 ECTS	Construction Economics 3 ECTS	Public Law and Authority Procedure - Project: Structural Engineering and Construction Economics 6 ECTS	Project Management – Planning Process and Scheduling - Health and Safety Protection	
Structural Engineering 1 - Architectural Style and Cultural History 6 ECTS	Building Ecology – Structural Engineering 2 – Building Physics 1 8 ECTS	Building Services Engineering - Structural Engineering 3 - Building Physics 2 7 ECTS		and Coordination of Construction Works 10 ECTS	
General English 1 2 ECTS	General English 2 2 ECTS			Bachelor's Thesis 1 3 ECTS	
Introduction to Construction Engineering - Construction Methods and Operations Scheduling 4 ECTS	Strength of Materials - Structural Analysis 1 - Civil Engineering Informatics	Structural Analysis 2 - Applied Statistics 5 ECTS	Barrier-Free Const- ruction – Analysis of Buildings, Renovation and Masonry 5 ECTS	Urban Water Management 4 ECTS	
Informatics - Plan Development and CAD 5 ECTS	7 ECTS CAD - Applied Mathematics for Civil Engineers 6 ECTS	Concrete Construction 1 - Steel Construction 8 ECTS	Concrete Construction 2 - Timber Construction - Detailed Solutions in Construction Design 12 ECTS	Glass Construction – Interdisciplinary Project 9 ECTS	Internship 25 ECTS
	o ters	Soil Mechanics and	Cost Estimation	Project Management in Practice 2 ECTS	i - eam ign
Building Materials - Geology and Mineralogy 4 ECTS	Environmental Protection Technology and Law - Commercial and Labour Law 4 ECTS	Engineering 5 ECTS	3 ECTS Professional English – Academic Writing 4 ECTS	Professional English – Communication and Team 2 ECTS	
		Professional English 2 ECTS			
Architectural and Artistic Design - Introduction to Design - Materials in Architecture 10 ECTS	Digital Presentation Techniques - Architectural and Artistic Design 6 ECTS	Building Surveying and Architectural Drawings - History of Architecture 4 ECTS	Urban and Regional Planning – Urban Development – Project: Urban Development 8 ECTS	Interdisciplinary Design 8 ECTS	
	Design 1 – Structural Design 1 – Architectural Typology 11 ECTS	Interior Design - Residential Buildings - Design 2 - Structural Design 2 15 ECTS	Design 3 - Structural Design 3 - Cost Estimation 14 ECTS	Building Analysis and Renovation -	
Basic Principles of Construction Law and Plan Preparation - CAD 3 ECTS			Professional English – Academic Writing 2 ECTS	As-Built Design and Revitalisation 8 ECTS	Bachelor's Thesis 2 5 ECTS
		Professional English 1 ECTS		Professional English 1 ECTS	

Specialisation in Construction Engineering

Specialisation in Architecture