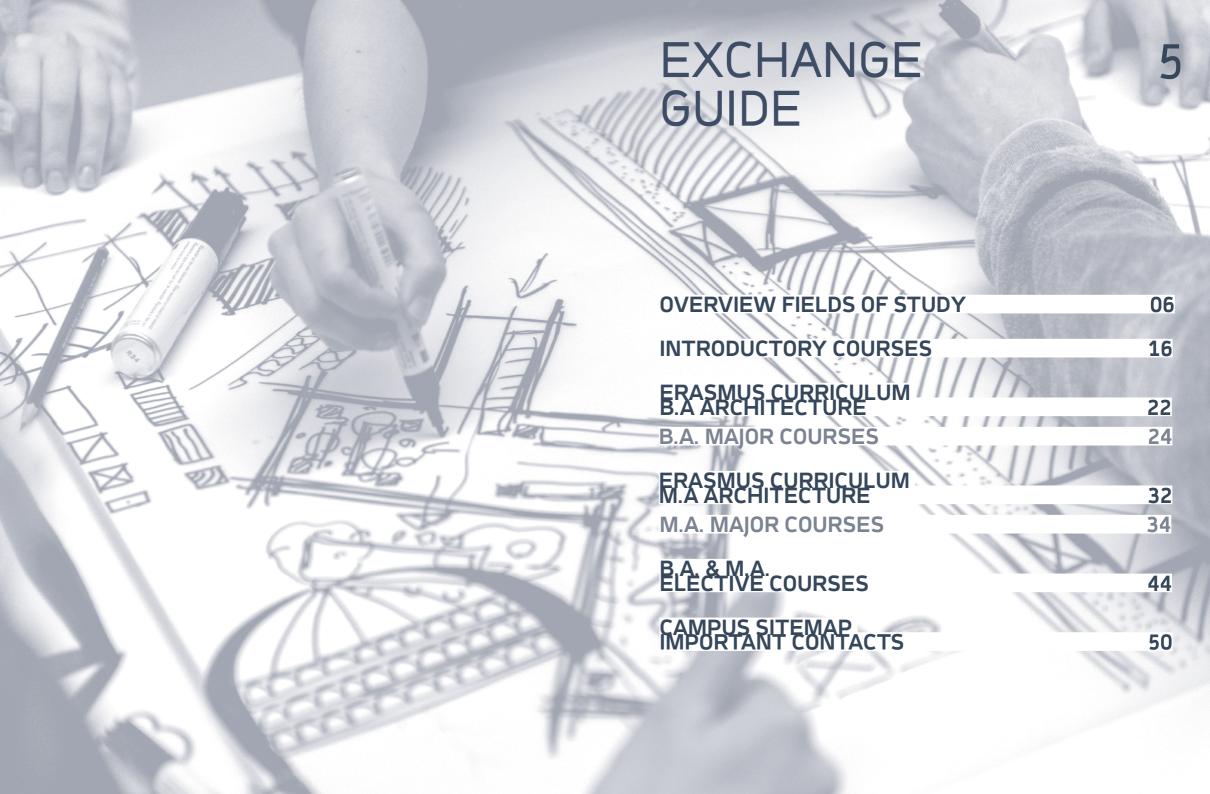
# Hochschule für Technik Stuttgart

# FACULTY A ARCHITECTURE AND DESIGN



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Architecture is the science and art of thoughtful housebuilding, encompassing consideration of shape, spatial composition, function, framework, cladding, climatisation, economy, context and history. The spirit of architecture appears in smallest construction details and vast urban agglomerations likewise. From the beginning of mankind, architecture has always demanded for the most gifted and brightest minds in society.

Education in architecture, its theory and methods, has ever since been a major subject evolving from Vitruv's codex of basics to a complex curriculum of today.

Since 1832, our school has been developing its AHFT Stuttgart Department of Architecture and Design strongly advocates a thorough polytechnical approach in teaching and training architecture in various programmes:

- > Architecture (Bachelor & Master)
- > Interior Architecture Design (Bachelor & Master)
- > Urban Planning (Master)
- > International Project Management (Master)
- > Climate Engineering (Bachelor)
- > Smart City Solutions (Master)

#### ARCHITECTURE B.A. & M.A.

Architects transform intellectual concepts into buildings that last for decades. In doing so, they have to understand the laws of gravity, economy, climate, human behaviour, urban legislation, fire protection and aesthetics. Profound education can trigger this set of virtues in every talented student.

#### **BACHELOR PROGRAMME**

A coherent mix of lectures, tutorials and project teamwork will supply you with just the skills you need to start creating architecture right from the beginning. With all the knowledge you acquire in our basic subjects you will soon be able to evaluate concepts, develop solutions and apply them appropriately. Our decisive focus on practice-oriented planning and construction as well as our generalist approach on all competencies will enable you to pursue a manifold career after graduating at the HFT.

The programme graduates with a degree in Bachelor of Arts.

#### MASTER PROGRAMME

Creating architecture today means working interdisciplinary, building ad-hoc-teams for each new project and recruiting as much expertise as possible. With our department-wide range of courses from interior design to international project management we simulate real-life project work in each single design assignment. With this profound training in integral design and teambuilding you will successfully master your career as an architect.

The programme graduates with a degree in Master of Arts.

## INTERIOR ARCHITECTURE DESIGN

## CLIMATE ENGINEERING

#### INTERIOR ARCHITECTURE DESIGN B.A. & M.A.

Interior design fills and enriches space created by architecture — by means of light, colour, texture and furniture; or, with trade fair construction and scenography, it creates temporary realms within bigger background structures. Compared to architecture, interior design changes its look in shorter waves, granting trends and zeitgeist more room and relevance.

#### BACHELOR PROGRAMME

A densely packed portfolio of courses enables you to design space using the appropriate techniques, tools and objects. Each semester challenges your readiness to grasp a project, develop the right concepts, defend, refine and present your idea to the audience. More often than in our architecture courses, you may want to realise your projects, especially furniture, in our highly professional workshop department.

The programme graduates with a degree in Bachelor of Arts.

#### MASTER PROGRAMME

In our International Master of Interior-Architectural Design (IMIAD) we take the course portfolio of our Bachelor programme to the next level, first of all by embedding it into an international cooperation with other schools worldwide. Working your way through complex interior design projects interdisciplinary and together with students from different countries will train your creativity and team-leading competencies. Proceeding from a Bachelor degree (B.A.), participants receive the qualification International Master of Arts (M.A.) in Interior-Architectural Design after the successful completion of four semesters. The IMIAD qualification is recognised by all partner institutions.

## CLIMATE ENGINEERING B.ENG.

Our new study programme Climate Engineering is the youngest member of HFT Stuttgart's Department A. Focusing on minimising ressource consumption and optimizing comfort levels in architecture and urban planning, it is the answer to rising demands for experts in architecture-related technologies and building physics.

#### **BACHELOR PROGRAMME**

Equipped with profound knowledge about architectural, structural, energetic and thermodynamic correlations and their utilisation in terms of design and construction, predominantly you will exercise interdisciplinary cowork with architects and urban planners of our various department courses. Confronted with rising complexity you learn how to develop appropriate and visionary solutions using state-of-the-art simulation tools.

The course graduates with a degree in Bachelor of Engineering.

# 10 INTERNATIONAL PROJECT MANAGEMENT

#### INTERNATIONAL PROJECT MANAGEMENT M.ENG. & MBA

Greater building projects essentially demand for professional project management. With globalisation of competition and shifting markets, vast progress in information and design technology (BIM), emergence of new building techniques and rising ecological standards, the need for project management rises ever more, while its tools and strategies have to be revised and refined constantly.

#### MASTER PROGRAMME

Our course »International Building Project Management « (IBPM) provides you with the knowledge and tools to structure and manage complex projects: either self-employed, as project entrepreneur for an international consulting company or as a project-leading architect or engineer in a design firm. In our course »International Infrastructure Technology & Management « (IITM) you will be equipped with fundamental technical and management skills enabling you to successfully develop and implement local and international infrastructure strategies for the future.

Both courses finish with a degree in Master of Engineering.

## URBAN PLANNING

Department A Urban Planning aims for qualifying team-minded urban planners by imparting fundamental knowledge in urban design, urban development and urban regeneration. Starting from these fundamentals, students may specialise in fields such as project development, energy efficiency or the design of urban space.

PLANNING

#### **MASTER PROGRAMME**

The special characteristics of the programme is its practice-oriented training with theoretical background. The accreditation report highlights the integrative study model as a unique innovative approach: during three semesters, theory is linked to hands-on urban planning concepts in study projects that focuses on urban development, urban design and urban regeneration. Results are presented to local stakeholders and documented in a comprehensive report.





## INTRODUCTORY COURSES

## INTRODUCTORY COURSES

## GERMAN CULTURE &

#### **OBJECTIVES**

Our international students are offered an overall picture of the German society, focussing on our differences of cultural values and resources. Important topics covered during the course > Body language include the following:

- > Educational system
- > Demographic transformation
- > Liberation of women
- > Minorities
- > Migrants and refugees
- > Social security system
- > Status quo of reunification
- > Political system
- > German economy

#### **COURSE LANGUAGE**

English / German (min. C1)

#### **CREDITS**

2 CP

For further information about this course please contact the International Student Office at the HFT.

### COMMUNICATION

#### **OBJECTIVES**

- > What is »culture«?
- > Perception and ethnocentrism
- > Cultural standards and dimensions
- > What is »typically German«?
- > Existing value systems and ideals
- > Helpful techniques for coping with intercultural challenges

#### **COURSE LANGUAGE**

German (min. B1)

#### **CREDITS**

2 CP

For further information about this course please contact the International Student Office at the HFT.

## ART & ARCHITECTURE HISTORY

#### **OBJECTIVES**

This course addresses Bachelor and Master students and focuses on architectural highlights inStuttgart, e.g. Staatsgalerie, Weißenhofsiedlung, Kunstmuseum, Mercedes-Benz Museum.

Furthermore, we will explore the birthplace of the famous philosopher Friedrich Wilhelm Hegel in Stuttgart and the city of Tübingen where he used to study. We will also make an excursion to Marbach and visit the place where the dramatist Friedrich Schiller was born.

#### **COURSE LANGUAGE**

English Fig.

#### CREDITS

2 CP

For further information about this course please contact the International Student Office at the HFT.

Please note that not all introductory courses take place every semester.

## INTRODUCTORY COURSES

## INTRODUCTORY COURSES

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#### GERMAN AS FOREIGN LANGUAGE

International students enrolling for our degree programmes taught in German language are advised to prepare up to a German language course level of B1 or higher in order to be able to follow course lectures. The International Office (ISO) of the HFT Stuttgart offers both residential and online German courses for exchange students from our partner universities and for international degree students. Accreditation is based on mandatory attendance and successful completion of a final language test.

## **GERMAN A1**BEGINNERS BASIC

#### **COURSE DURATION**

4 weeks (80 hours) including 20 days x 4 hours, (4 x 45 minutes/day)

#### **CREDITS**

3 CP

#### **FEES**

100 Euro (books not included)

## **GERMAN A2**BEGINNERS BASIC

#### **COURSE DURATION**

44 weeks (80 hours) including 20 days x 4 hours (4 x 45 minutes / day)

#### **CREDITS**

3 CP

#### FFFS

100 Euro (books not included)

For further information about our language courses please contact the International Student Office at the HFT.

### **GERMAN A2**BEGINNERS BASIC

#### **COURSE DURATION**

10 weeks (40 hours) including weekly lessons with 4 teaching hours (4 x 45 minutes) per week

#### **CREDITS**

2 CP 0

#### **FEES**

Free after successful completion of course A1 (books not included)

### GERMAN B1 INTERMEDIATE

#### **COURSE DURATION**

10 weeks (40 hours) including weekly lessons with 4 teaching hours (4 x 45 minutes) per week

#### **CREDITS**

2 CP

#### FEES

Free after successful completion of course A2 (books not included)

For further information about our language courses please contact the International Student Office at the HFT.

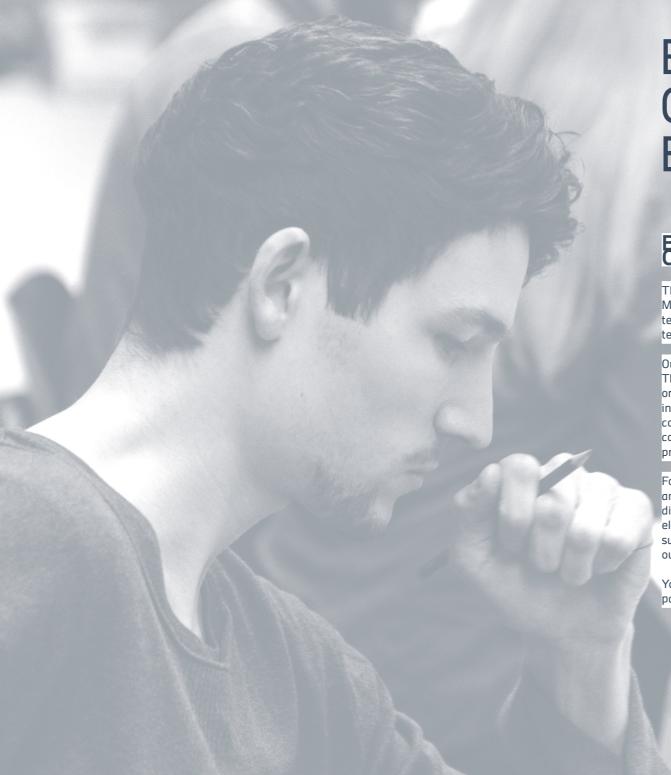
#### SELF LEARNING ONLINE COURSES

As exchange student you are eligible to take part in our online German courses organised by DUO DEUTSCH-UNI ONLINE. Take the advantage of learning German from at home for up to 3 months prior to your arrival in Germany, allowing you the best preparation for your stay in Germany. Successful students can earn up to 3 credit points.

For further information about our language courses please contact the International Student Office at the HFT.

Please note that not all introductory courses take place every semester.





## ERASMUS CURRICULUM B.A. ARCHITECTURE

### BACHELOR

The Bachelor is the first part of our Bachelor/ Master system and begins in summer and winter semester. The programme lasts six semesters, including the Bachelor thesis.

Our Bachelor programme is divided into modules. The curriculum focuses on technical, design and organisational skills, our Integrated Projects being the central topic. They allow you to work collaboratively and interdisciplinary which we consider as utterly crucial in the professional practice of today.

For our incoming exchange students we created an own study plan. This special curriculum is divided into basic courses, major courses and elective courses. All modules contain a variety of subjects reflecting on major competencies within our programme.

You can find the whole study plan on our homepage: https://www.hft-stuttgart.com/

The introductory courses offer several language courses to achieve a basic level of German and English and furthermore a course about general information about German society and culture.

The major courses contain our Integrated Projects. In teams of two or three you will work on an architectural task including design, construction and HVAC technology. These main subjects will be tutored by a group of professors and assistants. Depending on the background knowledge it is possible to choose between projects.

In the elective courses we are offering workshops for various subjects. Their aim is to provide supplementary knowledge and skills in the field of their major subjects which you can apply to your projects. The contents of these courses comprise general topics of the cultural, social and technical everyday life of architects.

Please note that not all elective courses take place every semester.

## B.A. MAJOR COURSES

## B.A. MAJOR COURSES

25

## IP 1 INTEGRADTED PROJECT 1 MASONRY CONSTRUCTION

- Design of a simple structure in monolithic building method
- > Constructive development of a simple building in monolithic construction method
- > Designing of key details of the building shell and the interior space for raw construction and interior finishing
- > Preparation of plans in accordance with the work planning standard
- > Focus on passive and active use of solar energy
- > Fundamentals of heating technology (psychological preconditions, types of heat transfer, heating systems)
- > Fundamentals of ventilation, refrigeration and air conditioning technology
- > Basics of sustainable building technology

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

10 CP

#### INTEGRATED PROJECT 1

> EIP1 / Design IP1	4 CP
> BIP1 / Building Construction IP1	4 CP
> RIP1 / Space, Comfort & Energy IP1	2 CP

#### WORKLOAD

Classroom attendance 126 h Private study 174 h

#### IMPORTANT NOTE

In order to receive the ECTS for the project, all submodules must be taken, worked on and completed with an examination performance.

#### ETW2 DESIGNING 2

#### **OBJECTIVES**

- Transfer of the theoretical and conceptual findings into architectural, spatial solutions
- > Exercises in free design with a focus on architectural space
- > Methodology and communication in the design process

#### **FORMAT**

Tutorial

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

6 CF

#### WORKLOAD

Classroom attendance 56 h Private study 124 h

#### BIM BIM

#### **OBJECTIVES**

- > Digital Image Processing: basics, import of images and graphics, selections, colour corrections and histogram, layers, masks, alpha channels
- > CAD: basics, 2D drafting, 3D construction, layer management, editing, export
- > Graphics: Plan- and photomontage, layout, typography
- > Output: colour management, printing, PDF

#### FORMAT

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### CREDITS

4 CP

#### IMPORTANT NOTE

Pre-application required due to limited number of participants

## IP 2 INTEGRATED PROJECT 2 WOOD CONSTRUCTION

#### **OBJECTIVES**

- > Work on a wood construction project and discuss your proposal with tutors in design, building construction and structural design
- > Understand the forming and joining of wood and wood-based materials to elementary building components
- > Construct and design shear walls, load-bearing, space enclosing internal and external wooden building components
- > Familiarise with the principles of skeleton construction techniques based on a building made of wood
- > Recognise the interaction between structure, space enclosure, building technology and building physics based on different design techniques in wood construction
- Be aware of the impact of multiple layer wall structures onto physics, statics, and design of a building

#### FORMAT

Lectures & tutorials, project work

#### COURSE LANGUAGE

German (lectures), English (tutorials)

#### CREDITS

16 CP

#### INTEGRATED PROJECT 2

> EIP2 / Design IP2

> BIP2 / Building Construction IP2

> TIP2 / Structural Design TIP2

> RIP2 / Space, Comfort & Energy IP2

#### WORKLOAD

Classroom attendance 182 h Private study 298 h

#### IMPORTANT NOTE

In order to receive the ECTS for the project, all submodules must be taken, worked on and completed with an examination performance.

### ETW3 DESIGNING 3

**OBJECTIVES** 

- >Design of tectonic elements of space and spatial contexts
- > Working through design approaches to the completion of a building design using concept and architectural drawings and models

#### FORMAT

Lectures & tutorials

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

4 CP

4 CP

4 CP

3 CP

5 CP

#### WORKLOAD

Classroom attendance 28 h Private study 32 h

#### ABG OLD BUILDING HISTORY

#### **OBJECTIVES**

- > Building history in thematic focuses from antiquity to the Classicism
- > Explanation of the interplay of specific design features and Potentials of room and body design
- > Introduction to the method of building description

#### FORMAT

Lectures

#### COURSE LANGUAGE

German

#### **CREDITS**

2 CP

#### WORKLOAD

Classroom attendance 28 h Private study 32 h

#### **IMPORTANT NOTE**

90 min. written exam at the end of the semester

## B.A. MAJOR COURSES

## B.A. MAJOR COURSES

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## **STB1** URBAN PLANNING 1

#### **OBJECTIVES**

The students get a first insight into the topics, questions and approaches of urban planning. This serves as preparation for the first urban development draft in the following semester.

After successful participation, students can

- > explain the most important urban building blocks, their components and their interplay in the neighborhood
- > interpret and apply basic representation techniques in urban planning
- > outline the most important urban developments in the 20th century
- > Identify and apply criteria for assessing urban design quality.

#### FORMAT

Lectures & tutorials

#### **COURSE LANGUAGE**

German (min. B1)

#### **CREDITS**

2 CP

#### WORKLOAD

Classroom attendance 28 h Private study 32 h

## IP 3 INTEGRADTED PROJECT 3 STEEL CONSTRUCTION

#### **OBJECTIVES**

- > Work on a complex steel construction project and discuss your proposal with tutors in design, building construction, structural design and building services
- > Learn about steel construction and its specific features and options for load-bearing structures in the context of building physics and required constructional needs
- > Verify your design decisions with advanced simulation tools considering heat, climate, energy and light
- > Learn more about the material properties of steel in terms of manufacturing and processing, application fields, special material characteristics of linear structures made of steel
- > Understand the interaction between structures and its usage, the technical realisation process, the use of space and the appearance after completion
- > Acknowledge structure as means of design, learn about regulatory systems, building hull systems (facades etc.) and builing physics (heat bridges etc.)
- > Use modern programming tools to objectify planning decisions

#### FORMAT

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

14 CP

#### **INTEGRATED PROJECT 3**

> EIP3 / Deisgn IP3	4 CF
> BIP3 / Building Construction IP3	4 CF
> TIP3 / Structural Design TIP3	3 CF
> RIP3 / Space, Comfort & Energy IP3	3 CF

#### WORKLOAD

Classroom attendance 145 h Private study 224 h

#### **IMPORTANT NOTE**

In order to receive the ECTS for the project, all submodules must be taken, worked on and completed with an examination performance.

## B.A. MAJOR COURSES

## B.A. MAJOR COURSES

## 31

#### NBG NEW BUILDING HISTORY

#### **OBJECTIVES**

- > Building history in thematic focal points from the reform movements in Urban planning and architecture of the late 19th century until after the Second World War World War II
- > Explanation of the different currents in the modern age with the help of Analysis of exemplary buildings
- > Breakdown of the various architectural and urban development Design as different answers to aesthetic and social questions

#### **FORMAT**

Lectures

#### **COURSE LANGUAGE**

German

#### **CREDITS**

2 CP

#### **WORKLOAD**

Classroom attendance 28 h Private study 32 h

#### IMPORTANT NOTE

90 min. written exam at the end of the semester

### ETW4 DESIGNING 4

#### **OBJECTIVES**

- Design of tectonic elements of space and spatial contexts
- > Working through design approaches to the completion of a building design using concept and architectural drawings and models

#### FORMAT

Lectures & tutorials

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

4 CP

#### WORKLOAD

Classroom attendance 28 h Private study 32 h

#### **STB2** URBAN PLANNING 2

#### **OBJECTIVES**

- Creation of integrated local as-built documentation and analysis
- > Development of planning goals and formulation of objectives
- > Development of urban design scenarios for spatial optimisation
- > Development of an integrated urban design concept for a urban quarter with integration into the spatial context
- > Formulation of the most important criteria of urban design
- > Evaluation of the design of public spaces
- > Survey of urban planning data

#### **FORMAT**

Lectures & tutorials

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

5 CP

#### WORKLOAD

Classroom attendance 56 h Private study 94 h



## ERASMUS CURRICULUM M.A. ARCHITECTURE

#### **MASTER CURRICULUM**

The main focus of the Master programme is set on designing and realising architecture.

All the subjects are based on contemporary methodologies and on holistic design processes to solve interdisciplinary projects. According to this we support students to enlarge their knowledge in theoretical and practical design tasks to boost their competencies for planning and realisation processes.

Our integrative teaching methods comprise intensive studio work in small groups to successfully work on solutions for various architectural design tasks.

The second main focus is on Engineering Design. The design with a major in technology provides for a self-contained construction task with a constructive focus.

The third main focus is on Urban Planning. Students will be able to define and present the reciprocal interactions between urban planning and building design disciplines and their significance in the wider context of architecture and urban planning.

## ERASMUS 33 CURRICULUM M.A. ARCHITECTURE

For our incoming exchange students we created an own study plan. This special curriculum is divided into introductory courses, major courses and elective courses. All modules contain a variety of subjects reflecting on major competencies within our programme.

You can find the whole study plan on our homepage: https://www.hft-stuttgart.com/

During the Master Programme students will learn how to develop their own projects thoroughly and so prove that they are able to transfer theoretical concepts into detailed practical realisation. At the same time they can prepare themselves for future activities and positions of building realisation e.g. as a project leader who focuses on high quality architecture as well as on the realisation of projects.

The introductory courses offer several subjects such as language courses to achieve a basic level of German and English and furthermore a course about general information on German society and culture.

In a team or in single work you will work on an architectural task including design, construction and HVAC technologies. These main subjects will be tutored by a group of professors and assistants. Depending on your background knowledge it is possible to choose the different subjects.

The elective courses offer workshops for diverse themes. The aim of these subjects is to provide supplementary knowledge and skills to the students in the field of their major subjects which they can then apply to their projects. The contents of these courses always comprise general topics of the cultural, social and technical every day life of architects.

Please note that not all elective courses take place every semester.

## M.A. MAJOR COURSES

## M.A. MAJOR COURSES

35

## **ER**SPATIAL DESIGN

#### **OBJECTIVES**

After attending the module, the students will be able to integrate exterior, interior, structural and tectonic aspects into the design. The students will recognise and develop a basic understanding of the interactions between building structure, construction, expression and space.

After successful participation in the module, they will be able to develop design concepts indepen-dently and apply a basic design idea to all aspects of a building.

- > Students will be able to reflect typologically on a building and design it appropriately for a location and context.
- > Students will be able to appropriately and comprehensibly implement a design concept and its building structure in accordance with materials and construction methods.
- > Students will be able to develop and present a new building design with its exterior and interior qualities as well as their expression.

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

10 CP + 5 CP

> ETR / Spatial Design 10 CP > IER / Integrated Spatial Design 5 CP

#### WORKLOAD

Classroom attendance 112 h Private study 338 h

## **ET**ENGINEERING DESIGN

#### **OBJECTIVES**

The design with a major in technology provides for a self-contained construction task with a constructive focus. The work is carried out up to a scale of 1:1. In the simultaneous and equal supervision by an architect and an engineer, the cooperation of both disciplines is practised and the synergy of the specific competences can be experienced.

- > Students can develop an idea up to a functional artistic concept oriented on the static-constructive laws of the supporting structure.
- > During the design and construction process, the students are able to recognise the aesthetic potential of the structure and its joints and use it with confidence.
- > Students are put in a position to cooperate competently with a civil engineer during the structural design process.
- > Students get to know the complex interactions of construction, supporting structure and design in a logically structured and constructively driven design.
- > Students are able to translate this knowledge into a project with a corresponding depth of processing.
- Students get to know the nature of light surface structures and their practical design in static, material-specific, technical and design terms are trained.

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

10 CP + 5 CP

> ETT / Engineering Design	10 CP
> IET / Integrated Engineering Desig	gn 5 CP

#### WORKLOAD

Classroom attendance 112 h Private study 338 h

## M.A. MAJOR COURSES

## M.A. MAJOR COURSES

#### ES **URBAN DESIGN**

#### **OBJECTIVES**

Students will be able to define and present the > Students can match the building design reciprocal interactions between urban planning and building design disciplines and their significance in the wider context of architecture and urban planning based on the basic knowledge they have learned about these disciplines.

After successful participation in the module, they can name essential aspects of urban planning and building design, produce and evaluate analyses of urban planning situations and, on this basis, make the most important design decisions for the connections between urban planning and building concepts.

The students can apply and assess the aspects of the aesthetic appropriateness of the building and urban design in size (space and building), > ETS / Urban Design form (space and building), shape (space and building), surface materiality (to public space), typology and structure. They can implement the requirements for the functionality of a building and its urban situation as well as their mutual correlation in the design.

#### Desian:

- > Students will be able to develop urban analysis techniques.
- > Students can develop a holistic design framework for a complex urban space.
- > Students can present the design during the editing phase and on completion before a plenum and discuss their results.
- > Students can design a building.

Integration design urban planning:

- with an urban situation.
- > Students can optimize urban desian for possible building designs.

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

10 CP + 5 CP 111

10 CP

5 CP

> IES / Integrated Urban Design

#### WORKLOAD

Classroom attendance 112 h Private study 338 h

#### RGE ARCHITECTURAL SPACE

#### **OBJECTIVES**

During a three-day seminar in a monastery in Bronnbach you will work on a small design project:

- > Application of natural light
- > Design process, place, space definiton
- > Conscious and unconscious perception
- Design methods, extended repertoire of creative tools
- > Characteristics and features of architectural elements. design application, spatial specification

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### CREDITS

5 CP

#### **FEES**

The fees will be approximately 220 Euro per person (payable at the beginning of the semester)

#### IMPORTANT NOTE

Pre-application required due to limited number of participants. This course will only be available during the summer term.

## M.A. MAJOR COURSES

## 39

#### STS STUDIO CITY

#### **OBJECTIVES**

The »Studio Stadt« module aims to contribute to the ongoing debate on urban topics and to discuss current urban planning issues as part of the master's programme in architecture.

The students learn the interdependence of a city, its buildings and public spaces, as well as the degrees of privacy, publicity and community, and develop their own approaches to designing urban space.

#### Professional competence

- > Knowledge and understanding of urban processes and their complexity
- >Knowledge and understanding of societal shifts and their manifestation in urban space
- > Knowledge and understanding of economic and regulatory parameters for the emergence of cities
- > Use of analysis-based design methods and their application for contemporary tasks and orientation to contextual conditions and their protagonists
- Use, application and generation of knowledge about quality design in an urban context

Cross-disciplinary competence

Students

- > justify their own practices with theoretical and methodological knowledge
- > recognise situational framework and rationalise their decisions

#### **FORMAT**

Lectures & tutorials, project work

#### COURSE LANGUAGE

German (lectures), English (tutorials)

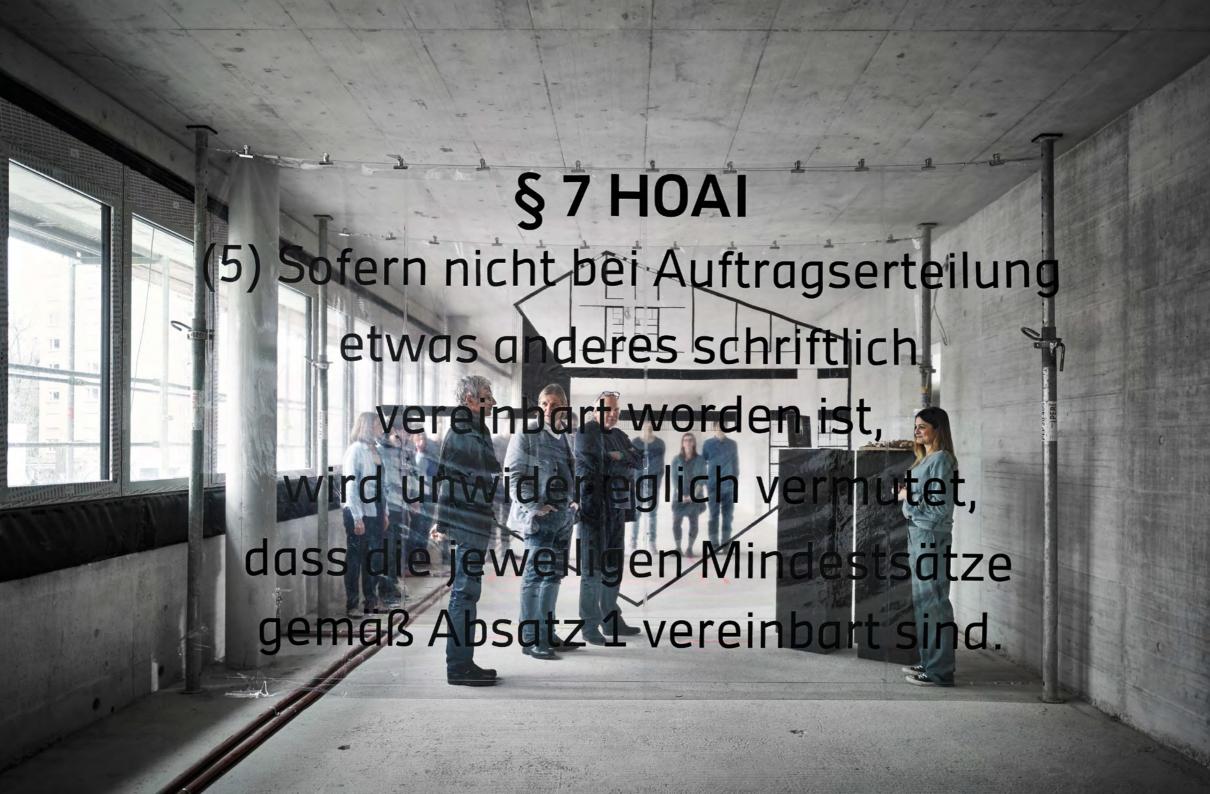
#### **CREDITS**

2 CP

#### WORKLOAD

Classroom attendance 28 h Private study 32 h





## B.A. & M.A. ELECTIVE COURSES

### 45

#### AFO ARCHITECTURAL PHOTOGRAPHIE

#### **OBJECTIVES**

By shooting images of houses, interiors and urban scenes you learn to perceive architecture intensely. Deciding for the right perspective, the ideal light set and appropriate image composition creates a chance to reveal the very essence of architecture.

In this course, the basic principles of photographic techniques and image processing will be taught in lectures and exercises. You will create a portfolio consisting of self-composed images of Stuttgart architecture.

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

2 CP

#### FREEHAND DRAWING

#### **OBJECTIVES**

Advanced techniques of freehand drawing of buildings, associated interior and exterior objects, and vegetation.

#### **FORMAT**

Tutorials

#### **COURSE LANGUAGE**

German, English

#### **CREDITS**

2 CP

#### WORKLOAD

Classroom attendance 14 h Private study 16 h

#### STG1/STG2 IMPROMPTU DESIGN

#### **OBJECTIVES**

This subject is about developing a spatial sequence from one of your previous integrated projects or impromptu designs and presenting it in a 1:20 model. Which characteristics should the rooms possess, with which materials can the desired spatial impression be achieved? The fo-cus is on the design elements: material, colour and daylight.

B.A. & M.A.

ELECTIVE

COURSES

You have the chance to work on and reflect on a work that has interested you. At the same time you can enhance your portfolio.

We will focus on the defining elements of the interior, such as floor, wall, ceiling and other character-forming elements, such as doors and railings.

The goal is to investigate material, mood and lighting. It is about sensitising the meaning of the material selection and practising craftsman precision.

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

2 CP

## B.A. & M.A. ELECTIVE COURSES

#### AGP ARCHITECTURAL GRAPHICS AND PRESENTATION

#### OBIECTIVES

learn profound techniques of architecture losses in time and quality. The primarily applied programmes are Cinema 4D® with Arnold® Renderer and Adobe Photoshop®

#### FORMAT

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

4 CP

#### BIM+ BIM +

#### **OBJECTIVES**

Interdisciplinary seminar in which BIM-compliant building construction planning is simulated On the basis of a render assignment you will and trained in cooperation among architects, structural and building technology engineers. visualisation. You will learn how to handle Students work simultaneously and coop-3D-models, set up light rigs, compose real life erativevely on BIM models as representatives textures and render the final images without of all planning disciplines. These will be exchanged, tested and revisedby IFC on fixed dates. In iterative revision, a building model is created which is optimally integrated in terms of architecture, structural engineering and building technology.

#### **FORMAT**

Lectures & tutorials

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### CREDITS

4 CP

#### WORKLOAD

Classroom attendance 14 h Private study 16 h

#### IMPORTANT NOTE

requirements: fundamental CAD-knowledge, i.e. BIM material

## B.A. & M.A. ELECTIVE COURSES

#### FAK FACADE CONSTRUCTION

#### **OBJECTIVES**

Exterior walls, generally referred to as »facades« (lat. facies), are the »face« of a building. In other words, something built that looks into its surroundings and is perceived from there. The façade as an interface between interior and exterior space is thus exposed to internal and external demands.

So it is the task to use new materials and techniques to positively influence the comfort and energy balance of the building.

A sustainable façade is therefore an aesthetic identification feature and fulfils a technical purpose.

The seminar examines different types of facades and construction methods according to their technical and design qualities and applies and deepens them in one's own design projects.

#### FORMAT

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (min. B1)

#### **CREDITS**

2 CP

#### NKB SUSTAINABLE BUILDING

#### **OBIECTIVES**

Background and contents:

The worldwide increasing demand for raw materials with increasingly scarce reserves poses growing problems for the construction sector as the largest consumer.

The lecture series shows strategies for a dismantable design and the implementation of circular engineering and explains the effects of pollutant- and emission-relevant building products on indoor climate. The lecture series also provides initial insights into environmental medicine.

#### **FORMAT**

Lectures & project work

#### **COURSE LANGUAGE**

German (min. B1)

#### **CREDITS**

2 CP

## B.A. & M.A. ELECTIVE COURSES

## PMA PARAMETRIC MODELLING

#### **OBJECTIVES**

The architectural model is the focus of digital planning. Its form potential is determined by the architectural concept and the tools with which it has been constructed.

PMA familiarises you with Rhino3D/Grasshopper where you can construct models and components that are not possible in BIM programs (Revit, ARCHICAD, etc.).

Data management, curves and surfaces, transformations, NURBS + polymeshes, loops, simulation, chain lines, membranes, shells, integration of parametric model elements in the BIM model and iterative geometry referencing are the topics with which you will gain a broad understanding of parametric modeling.

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

4 CP

#### **IMPORTANT NOTE**

Qualifying test (CAD- and BIM-knowledge)

#### TUA STRUCTURE & ARCHITECTURE

#### **OBJECTIVES**

In the elective course a variety of projects are presented and discussed. In the examples, architecture and structural framework are integrated according to different approaches and objectives. An understanding of these approaches is conveyed and discussed.

Exemplary questions are: »How can structure and architecture support each other?« or »What is an integral design?«

The learning objective is to gain a deeper understanding of how to deal with structural systems in architecture and to discover the opportunities that structural systems create for architecture.

#### **FORMAT**

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (lectures), English (tutorials)

#### **CREDITS**

**A2 CP** 

# B.A. & M.A. ELECTIVE COURSES

#### KUG ART HISTORY

#### **OBJECTIVES**

By drawing and building architects contribute to our cultural heritage. That implies a basic historical understanding and knowledge of the main ideas of philosophy, science and art. During this course you will learn to distinguish between important and exchangeable, between central and marginal elements of culture.

#### FORMAT

Lectures & tutorials, project work

#### **COURSE LANGUAGE**

German (min. B1)

#### CREDITS

2 CP

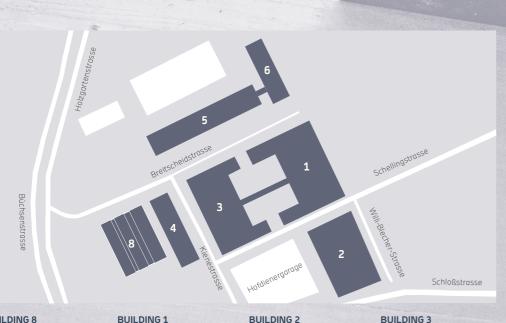
### ADDITIONAL ELECTIVE COURSES

There will be more elective courses.

However, these will only be fixed shortly before the start of lectures.

## CAMPUS SITEMAP

## IMPORTANT CONTACTS



#### **BUILDING 8**

Architecture, Interior Architecture Design International Project Management, Urban Planning, Climate Engineering Smart City Solutions

Various Workshops

Location café cre8,

Lecture theatres,

Computer Rooms

#### **BUILDING 4**

Cafeteria,

Administration.

Lecture theatres

Business Management,

Faculty of Architecture Digital Fabrication Laboratory Studios

#### **BUILDING 2**

Library, Department C Geomatics, Comp. Science & Mathematics. Lecture theatres

#### **BUILDING 5**

Lecture theatres

#### **BUILDING 3**

Department B Civil Engineering and Building Physics, Lecture Theatres

#### **BUILDING 6**

Uni Stuttgart

## HFT CONTACTS & EMAILS

#### **FOREIGN STUDENT ADVISOR**

Prof. Harald Roser harald.roser@hft-stuttgart.de

#### INTERNATIONAL STUDENT OFFICE

incoming@hft-stuttgart.de

#### PRINTING & PLOT

claudia.kuebler@hft-stuttgart.de

#### SCALE MODEL WORKSHOP

philip.spoun@hf-stuttgart.de

#### **LASERCUTTER & DIGITAL FABRICATION LABORATORY**

make@hft-stuttgart.de

#### IT SUPPORT

fbasupport@hft-stuttgart.de

## MATERIAL BOOKS & STATIONERY

#### **RAUMPROBE**

Material Research Hohnerstrasse 23, 70469 Stuttgart

#### **BASTLERZENTRALE**

Modelbuilding & Stationery Lange Strasse 51, 70174 Stuttgart

#### **DEKO MAIER**

Modelbuilding & Stationery Rotebühlstrasse 71, 70178 Stuttgart

#### IDEE

Modelbuilding & Stationery Kronenstrasse 4, 70173 Stuttaart

#### KARL KRÄMER

Specialised Bookstore for Architecture and Building Industry Rotebühlstrasse 42, 70178 Stuttgart







