FACULTY A
ARCHITECTURE
AND DESIGN

BACHELOR &
MASTER
PROGRAMME

Hochschule für Technik Stuttgart

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# EXCHANGE GUIDE

**COME CREATE ARCHITECTURE OVERVIEW FIELDS OF STUDY**

**INTRODUCTORY COURSES**

**ERASMUS CURRICULUM**

**B.A ARCHITECTURE**

**B.A. MAJOR COURSES**

**ERASMUS CURRICULUM**

**M.A ARCHITECTURE**

**M.A. MAJOR COURSES**

**M.A. ELECTIVE COURSES**

**B.A. & M.A. ELECTIVE COURSES**

**CAMPUS SITEMAP**

**IMPORTANT CONTACTS**
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 own specific mark in architectural tuition. The HFT Stuttgart Department of Architecture and Design strongly advocates a thorough polytechnical approach in teaching and training architecture in various programmes:

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

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 team-building you will successfully master your career as an architect.

The programme graduates with a degree in Master of Arts.
INTERIOR 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.

M ASTER 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 resource 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.
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. An additional degree in Master of Business Administration may be obtained after absolving a guest semester at the Liverpool John Moores University.

URBAN PLANNING
M.ENG.

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.

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.
Smart City is a city vision that has been acknowledged and promoted as a new paradigm around the world for growing cities and declining rural areas. The development and implementation of Smart City strategies requires interdisciplinary knowledge in a variety of adjacent fields.

MASTER PROGRAMME

Our international master programme Smart City Solutions (SCS) prepares planners, architects, engineers, economists, ecologists, sociologists, entrepreneurs and graduates of related disciplines for implementing smart city technology. You will gain insights about global challenges like climate change, extreme weather events, limited planetary resources and water shortages amongst others. SCS covers eight key aspects of smart city solutions and processes: smart governance, smart mobility, smart energy, smart resources, smart citizen, smart urbanism, smart buildings and smart infrastructure. You will also have the option to receive a double degree in M.Eng. at the HFT Stuttgart and a M.B.A. at the John Moores University in Liverpool, UK.
INTRODUCTORY COURSES

ORIENTATION WEEK
SFA

OBJECTIVES
Situated at the beginning of the semester, our orientation week allows you to become acquainted with each other and with our school. During this week professors and assistants will review the study plans with you and counsel you for an ideal individual study plan for the exchange semester. Additionally, HFT students and exchange students will work together on a small design task which will be announced at the first day.

FORMAT
Tutorials & project work

COURSE LANGUAGE
English / German

CREDITS
3 CP

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

GERMAN CULTURE & SOCIETY

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 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.

INTERCULTURAL COMMUNICATION

OBJECTIVES
> What is »culture«?
> Perception and ethnocentrism
> Cultural standards and dimensions
> Body language
> 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 in Stuttgart, 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

CREDITS
2 CP

For further information about this course please contact the International Student Office at the HFT.
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**
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 A1 (books not included)

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

**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.

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.
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. Before registering for these courses the background knowledge has to be checked during the orientation week. During this week you will compile your ideal schedule for the semester with support from the assistants.

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.

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.

The basic 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. To improve the integration process with other students there will be a small design project at the beginning of the semester.
INTEGRATED PROJECT 1  
MASONRY CONSTRUCTION

OBJECTIVES
> 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 team work

COURSE LANGUAGE
German (lectures) / English (tutorials)

CREDITS
10 CP

INTEGRATED PROJECT 1
> EIP1 / Design IP1 4 CP
> BIP1 / Building Construction 1 4 CP
> RIP1 / Space, Comfort & Energy 2 CP

WORKLOAD
126 hours classroom attendance
174 hours private study

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 team work

COURSE LANGUAGE
German (lectures) / English (tutorials)

CREDITS
8 CP + 5 CP

INTEGRATED PROJECT 2
> BKE3 / Building Construction 3 8 CP
> TWL3 / Structural Design 3 3 CP
> KLB / Climate Adapted Architecture 2 CP

WORKLOAD
154 hours classroom attendance
236 hours private study
INTEGRATED 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 building physics (heat bridges etc.).
> Use modern programming tools to objectify planning decisions.

COURSE LANGUAGE
German (Lectures) / English (tutorials)

CREDITS
8 CP + 8 CP

WORKLOAD
224 hours classroom attendance
256 hours private study

FORMAT
Lectures & tutorials, project team work

URBAN PLANNING 2
STB2

OBJECTIVES
> Criteria and methods of urban planning with a focus on residential housing.
> Local baseline study (urban planning, traffic, environment, public space).
> SWOT analysis (strength, weakness, opportunity, threat).
> Development of planning objectives and planning programs in consultation with the cooperating community.
> Main features of urban master planning, consideration of sectoral development concepts (use, public and green spaces, traffic, design).
> Development of an urban planning concept.
> Development of an explanatory report and an urban planning calculation.
> Presentation of the whole concept.

COURSE LANGUAGE
German (lectures) / English (tutorials)

CREDITS
5 CP

WORKLOAD
56 hours classroom attendance
94 hours private study

FORMAT
Lectures & tutorials, project work
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.

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 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 everyday life of architects.

Please note that some elective courses take place on irregular basis.

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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 everyday life of architects.

Please note that some elective courses take place on irregular basis.

In a team 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. Before applying for these courses the background knowledge has to be proved during the orientation week. During this week you will compile your ideal schedule for the semester with support from the assistants.
**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 independently 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 comprehensively implement a design concept and its building structure in accordance with materials and construction methods.
> The 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

**WORKLOAD**
112 hours classroom attendance
338 hours private study

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**ENGINEERING DESIGN**

**OBJECTIVES**
The design with a major in technology provides for a self-contained construction task with an inter-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 practiced and the synergy of the specific competences can be experienced.

> The 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.
> Design task with a focus on load-bearing construction (structural design), developed according to functional, technical and design aspects.
> Complex load-bearing structures (Raumfachwerk, Shell, Mesh, etc.) and their joints.
> Dimensioning aids
> Structures and space

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures) / English (tutorials)

**CREDITS**
10 CP + 5 CP

**WORKLOAD**
112 hours classroom attendance
338 hours private study
URBAN DESIGN

OBJECTIVES
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 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.

FORMAT
Lectures & tutorials, project work

COURSE LANGUAGE
German (lectures) / English (tutorials)

CREDITS
10 CP + 5 CP

> ETS / Urban Design 10 CP
> IES / Integrated Urban Design 5 CP

WORKLOAD
112 hours classroom attendance
338 hours private study

ARCHITECTURAL SPACE RGE

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 definition
> 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.
**IMPROPTU DESIGN**

**STG1**

**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 focus is on the design elements: material, colour and daylight. 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 sensitizing the meaning of the material selection and practicing craftsman precision.

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures), English (tutorials)

**CREDITS**
2 CP

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**PROJECT DEVELOPMENT**

**PRE**

**OBJECTIVES**
- Characteristics and tools of real estate project development
- Process & phases
- Tools
- Financing
- Marketing
- Facility Management
- Redevelopment
- Success criteria

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures), English (tutorials)

**CREDITS**
2 CP

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**QUALITY MANAGEMENT FOR ARCHITECTS**

**AKR**

**OBJECTIVES**
- Basics and history of quality management
- Transfer QM methods on building projects
- Understand the concept of QM as an overall tool
- Learn to identify, evaluate and compare qualities in architectural projects
- Learn to spot and manage controllable topics systematically

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures), English (tutorials)

**CREDITS**
2 CP

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**STUDIO CITY**

**STS**

**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.

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures), English (tutorials)

**CREDITS**
2 CP

**IMPORTANT NOTE**
Course takes place on an irregular basis

**WORKLOAD**
28 hours classroom attendance
32 hours private study
§ 7 HOAI

(5) Sofern nicht bei Auftragserteilung etwas anderes schriftlich vereinbart worden ist, wird unwiderruflich vermutet, dass die jeweiligen Mindestsätze gemäß Absatz 1 vereinbart sind.
**B.A. & M.A. ELECTIVE COURSES**

**DESIGNING 1**
**ETW1**

**OBJECTIVES**
- Transfer of theoretical and conceptual findings into architectural, spatial solutions
- Exercises in free design with an emphasis on architectural space and its structure
- Methodology and communication in the design process

**FORMAT**
- Lectures

**COURSE LANGUAGE**
- German (lectures) / English (tutorials)

**CREDITS**
- 4 CP

**WORKLOAD**
- 56 hours classroom attendance
- 124 hours private study

**BUILDING SERVICES & HVAC 1**
**GET1**

**OBJECTIVES**
- Basics of domestic installation and integration into architecture
- Basics of installation planning
- Drinking hot & cold water supply
- Basic knowledge in sewer lines

**FORMAT**
- Lectures

**COURSE LANGUAGE**
- German (min. B1)

**CREDITS**
- 2 CP

**IMPORTANT NOTE**
- 120 mins exam at the end of the semester

**DESIGNING 2**
**ETW2**

**OBJECTIVES**
- Design of tectonic elements of space and spatial contexts
- Working from initial design ideas 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**
- 28 hours classroom attendance
- 92 hours private study

**DESIGNING 3**
**ETW3**

**OBJECTIVES**
- Design with focus on concept development for extensive architectural tasks and complex building types
- Concept, iteration and synthesis in the design process
- Orientation, topography, site and urban scale as determining factors in architectural design
- Balancing out architectural elements, typologies and tectonic systems in consideration of the design process

**FORMAT**
- Lectures & tutorials, project work

**COURSE LANGUAGE**
- German (lectures) / English (tutorials)

**CREDITS**
- 4 CP
B.A. & M.A. ELECTIVE COURSES

CAAD

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

BUILDING HISTORY 2
BGS2

OBJECTIVES
In a series of lectures about life and work of selected architects and engineers you will receive an overview of the architecture of the 20th century, its predecessors in the 19th century and their effect on current building practice. The main threads of modern architecture will be emphasised by presenting their main protagonists. Connections between life and work of an architect are made. In addition, you will train your ability to associate an architectural oeuvre with its biographical, temporal, socio-political and economic context.

FORMAT
Lectures

COURSE LANGUAGE
German (mind. B1)

CREDITS
2 CP

IMPORTANT NOTE
90 min. exam at the end of the semester
B.A. & M.A. ELECTIVE COURSES

URBAN PLANNING
STB 1
OBJECTIVES
> Various approaches to urban design based on the contextual conditions of the place
> City structures according to their date of origin and cultural background
> Interdependency of housing typology, population density and social situation
> Methods for analysing building and urban design projects
> Profound comprehension of city and context

FORMAT Lectures & tutorials
COURSE LANGUAGE German (min. B1)
CREDITS 2 CP

ARCHITECTURE RECYCLING & TRANSFORMATION
RVB
OBJECTIVES
> Presentation of building projects in existing structures
> Discussion of project-specific demands and solutions
> Relating real-life projects to theoretic concepts of preservation, transformation and re-use
> Evaluation of real-life-solutions in terms of cultural impact and appropriateness

FORMAT Lecture series
COURSE LANGUAGE German
CREDITS 2 CP

ARCHITECTURAL PHOTOGRAPHY
AFO
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

IMPORTANT NOTE
Course takes place on irregular basis

FREEHAND DRAWING
FRZ
OBJECTIVES
> Advanced techniques of freehand drawing of buildings, associated interior and exterior objects, and vegetation

FORMAT Tutorials
COURSE LANGUAGE German (lectures) / English (tutorials)
CREDITS 2 CP

IMPORTANT NOTE
Intensive course with several daytrips

ARCHITECTURAL PLANNING
STB 1
OBJECTIVES
> Various approaches to urban design based on the contextual conditions of the place
> City structures according to their date of origin and cultural background
> Interdependency of housing typology, population density and social situation
> Methods for analysing building and urban design projects
> Profound comprehension of city and context

FORMAT Lectures & tutorials
COURSE LANGUAGE German (min. B1)
CREDITS 2 CP

ARCHITECTURE RECYCLING & TRANSFORMATION
RVB
OBJECTIVES
> Various approaches to urban design based on the contextual conditions of the place
> City structures according to their date of origin and cultural background
> Interdependency of housing typology, population density and social situation
> Methods for analysing building and urban design projects
> Profound comprehension of city and context

FORMAT Lecture series
COURSE LANGUAGE German
CREDITS 2 CP

ARCHITECTURAL PHOTOGRAPHY
AFO
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

IMPORTANT NOTE
Course takes place on irregular basis

FREEHAND DRAWING
FRZ
OBJECTIVES
> Advanced techniques of freehand drawing of buildings, associated interior and exterior objects, and vegetation

FORMAT Tutorials
COURSE LANGUAGE German (lectures) / English (tutorials)
CREDITS 2 CP

IMPORTANT NOTE
Intensive course with several daytrips
LANDSCAPE PLANNING

**OBJECTIVES**
- The elements of landscape architecture: floor covering, walls, hedges etc., their composition and spatial effect
- Application and needs of various plants
- Appropriate use of water, outdoor furniture and illumination
- Various types of public space
- Ecology, nature protection and landscape history
- History of garden design, European and worldwide

You will develop your own landscape design, the lectures support the project of your choice. The level of detail should correspond with the project’s complexity and group size.

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures) / English (tutorials)

**CREDITS**
2 CP

**IMPORTANT NOTE**
Course takes place on irregular basis

GRAPHICS AND LAYOUT

**OBJECTIVES**
In the design process, for effective presentation and ultimately documentation (interior architects require profound design knowledge in order to visualize complex contents with high quality. In the course you will acquire basic knowledge of the software used as well as of proportion, composition, graphics, design grids and typography. Each participant develops one or more specific print products on a selected, given topic (architecture, visual arts, performing arts, music or literature) and presents them both digitally and as a prototype.

**FORMAT**
Lectures & tutorials

**COURSE LANGUAGE**
German (lectures) / English (tutorials)

**CREDITS**
2 CP

**IMPORTANT NOTE**
Please bring your own laptop

COMMUNICATIVE SPACE

**OBJECTIVES**
»Text and Space«
Texts communicate, spaces communicate. Also with each other. Well applied and set words can make a layout visually more attractive and much more understandable. The text of an explanatory report develops its power only through the reference to visualizations and thus conveys the ideas and concepts of the architect. An intelligent combination of text and space also creates added value in a specific building project: texts in spaces can create a certain atmosphere or even just show the right direction. And when the contents of an exhibition are mediated, texts combined with exhibits and spatial contexts can create exciting performances.

The elective subject analyses the relationship between text and space and discusses how this connection can be used in different formats.

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures) / English (tutorials)

**CREDITS**
2 CP

**IMPORTANT NOTE**
Please bring your own laptop

LIGHT PLANNING

**OBJECTIVES**
This subject is about working out a sequence of rooms from a previous design project or a floor plan for the SolarDecathlon 21 and to study and present it with regard to daylight. This should take place in an interdisciplinary context of cooperation and exchange. The focus lies on the functions of dwelling and offices, whereby other uses are also possible. What characters and atmosphere should the rooms have and which requirements for daylight? With which types of daylight apertures and surface finishes can the desired room impression be achieved? Students will learn about the qualitative use of daylight in architecture and learn about tools for designing rooms with natural light.

In addition to using the Light Laboratory, it is also possible to carry out simple daylight simulations if required.

**FORMAT**
Lectures & tutorials

**COURSE LANGUAGE**
German (lectures) / English (tutorials)

**CREDITS**
2 CP
**SUSTAINABLE BUILDING**

**OBJECTIVES**

The worldwide increasing demand for raw materials with increasingly scarce resources poses growing problems for the construction sector as the largest consumer. You will learn how to handle 3D models and computer graphics to examine building procedures and design materials and grasp the basics of green building design. The lecture series shows new approaches and strategies for the construction industry. The lecture series introduces the results of the HFT building project BIM+.

**FORMAT**

Lectures & tutorials, project work

**COURSE LANGUAGE**

German (min. B1)

**CREDITS**

2 CP

**IMPORTANT NOTE**

Written essay at the end of the semester

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**B.A. & M.A. ELECTIVE COURSES**

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**BIM+**

**OBJECTIVES**

Interdisciplinary seminar in which BIM-compliant building construction planning is simulated and trained in cooperation among architects, structural and building technology engineers. The object of planning in WS_19/20 is BIM LAB HFT, a campus building with studio areas for interdisciplinary project studies. The building is designed and planned by architects, tested by structural engineers and installed by building technicians. Students work simultaneously and cooperatively on BIM models as representatives of all planning disciplines. These will be exchanged, tested and revised by 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, project work

**COURSE LANGUAGE**

German (min. B1)

**CREDITS**

6 CP

**IMPORTANT NOTE**

Requirements: CAAD 3D (ARCHICAD), high willingness to cooperate with students of TWL and building services engineering
**B.A. & M.A. ELECTIVE COURSES**

**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

**IMPORTANT NOTE**
Course takes place on irregular basis

**ARCHITECTURE & PLACE**

**OBJECTIVES**
In order to understand the complex relationship between architecture and its urban setting we will visit places in and around Stuttgart and discuss examples and design concepts for various strategies of interaction. Lectures on the history of Stuttgart as well as on the history of municipal planning will provide a background for profound discussion.

**FORMAT**
Lectures & tutorials

**COURSE LANGUAGE**
English

**CREDITS**
2 CP

**IMPORTANT NOTE**
Course takes place on irregular basis

**INTRODUCTION TO PROJECT MANAGEMENT**

**OBJECTIVES**
This course provides a profound insight into building project management and its operational methods. Main topics are: tools of project management, facility management, related law and knowledge management.

**FORMAT**
Lectures & tutorials, project work

**COURSE LANGUAGE**
German (lectures) / English (tutorials)

**CREDITS**
2 CP

**IMPORTANT NOTE**
Course takes place on irregular basis

**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 familiarizes 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)