

# Faculty of Architecture, Civil Engineering and Urban Planning (Germany)

## Institutional Information (Last update at: 26/04/2019)

<b>School/Department name (Native language)</b>	Fakultät Architektur, Bauingenieurwesen und Stadtplanung
<b>AESOP reg Number</b>	F-049-16
<b>AESOP Member Status</b>	Full Member
<b>University</b>	Brandenburg University of Technology Cottbus-Senftenberg
<b>Address</b>	Brandenburg University of Technology Cottbus-Senftenberg Faculty of Architecture, Civil Engineering and Urban Planning Platz der Deutschen Einheit 1 03046 Cottbus Germany
<b>Telephone</b>	0049 355 69 4209
<b>Fax</b>	0049 355 69 4210
<b>Web site</b>	<a href="https://www.b-tu.de/">https://www.b-tu.de/</a>

## Contact persons

### AESOP Contact person

<b>Name</b>	Prof. Dr. Silke Weidner
<b>Email</b>	<a href="mailto:weidner@b-tu.de">weidner@b-tu.de</a>
<b>Telephone / Fax</b>	0049 355 693350 /

## School Information

<b>Full time academic staff members</b>	96
<b>Part time staff members</b>	60
<b>Staff members engaged in research</b>	
<b>Staff members engaged in professional activities</b>	

## Degree Programmes and Educational Provision

### Undergraduate/first cycle degree(s) offered at School/Department

Bachelor of Science in Architecture

<b>Number of years normally used to complete this degree(FT)</b>	3
<b>Part time option</b>	No
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	180
<b>Teaching languages</b>	German
<b>Specialisation within in this Degree/the curriculum</b>	
<b>The degree requires an assessed period of work in practice</b>	No
<b>Programme accreditation by a professional body/other institution</b>	
<b>Curriculum/approach description</b>	<p>Architects are active in the field of architectural culture and have a responsibility to society, their clients and to the environment. Architects plan building works; their objective is the technical, environmental, and social planning and design of buildings. After the bachelor's degree programme, graduates will develop ideas and designs and plan their execution and implementation in structural and spatial form in cooperation with the responsible architect. The bachelor's degree programme at the BTU provides the specific skills required to work at the highest level in architectural firms.</p>

#### **Bachelor of Science in Urban and Regional Planning**

<b>Number of years normally used to complete this degree(FT)</b>	3
<b>Part time option</b>	No
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	180
<b>Teaching languages</b>	German
<b>Specialisation within in this Degree/the curriculum</b>	
<b>The degree requires an assessed period of work in practice</b>	No
<b>Programme accreditation by a professional body/other institution</b>	
<b>Curriculum/approach description</b>	<p>Urban and Regional Planning is about planning the viable and sustainable development of cities and regions. To meet this challenge, Urban and Regional Planning is interdisciplinary: it includes elements of urban development, law, social science, economics, engineering and environmental sciences. A major field of study in Cottbus is the close cooperation of spatial design and architecture. The role of urban and regional planners is to develop solutions for specific spatial problems as well as strategies for long-term development. In addition to technical and instrumental knowledge, spatial thinking and urban design are taught. Of equal importance for the practice of architecture as a profession is the knowledge of how to implement, mediate and coordinate planning at the administrative level as well as with experts and non-experts.</p>

## Bachelor of Science in Urban and Regional Planning

### Bachelor of Science in Civil Engineering

Number of years normally used to complete this degree(FT)

3

Part time option

No

Delivery mode

On campus

Number of ECTS

180

Teaching languages

German

Specialisation within in this Degree/the curriculum

The degree requires an assessed period of work in practice

No

Programme accreditation by a professional body/other institution

Curriculum/approach description

The aim of the course is to impart practical, but fundamental and method-oriented knowledge and skills in order to solve engineering problems and thus give graduates the necessary aptitude to independently work on such tasks as professional engineers. Beyond this professional expertise, the students will discover the range and diversity of the field of civil engineering and be inspired to supplement the broad-based bachelor's program by pursuing an advanced master's programme of their choice. The successful completion of a master's degree is equivalent to the long-term normal qualification as a graduate engineer and can lead later on in professional life to specific professional fields and career prospects in the construction industry and in research. From the fifth Semester, students can choose between the specializations of Structural Engineering, General Engineering and Energy, Environment and Building Technology.

## (Post)Graduate/masters or second cycle degree(s) offered at School/department

### Master of Science in Architecture

Number of years normally used to complete this degree(FT)

2

Part time option

No

Delivery mode

On campus

Number of ECTS

120

Teaching languages

German

Specialisation within in this Degree/the curriculum

The degree requires an assessed period of work in practice

No

Programme accreditation by a

**professional body/other institution**  
**Master of Science in Architecture****This is an Erasmus mundus programme** No**Curriculum/approach description**

Architects plan building work. Their task is the preliminary, technical, environmental and social planning of buildings. They are instrumental in shaping architectural culture and have a responsibility to society, to their clients and to the environment. Graduates are capable of formulating concepts both by hand and on the computer and then are able to develop and independently implement the designs in structural and spatial form. They are trained to work on complex construction projects and to coordinate the various fields of expertise involved in construction.

**Master of Science in Urban and Regional Planning****Number of years normally used to complete this degree(FT)** 2**Part time option** No**Delivery mode** On campus**Number of ECTS** 120**Teaching languages** German**Specialisation within in this Degree/the curriculum****The degree requires an assessed period of work in practice** No**Programme accreditation by a professional body/other institution****This is an Erasmus mundus programme** No**Curriculum/approach description**

Urban and Regional Planning is about planning the viable and sustainable development of cities and regions. To meet this challenge, Urban and Regional Planning is interdisciplinary: it includes elements of urban development, law, social science, economics, engineering and environmental sciences. The master's study course addresses issues of social development that are relevant in towns and regions across the globe. With the aim of actively contributing to the design of attractive and sustainable spaces, skills of analysis and evaluation are taught, creative and strategic thinking skills trained, and formal and informal methods for managing planning processes are learned as well as how to engage in successful communications processes. The training is based on the spatial aspect of neighbourhoods, cities and regions. Study focal points can be individually set.

**Master of Science in Building and Conservation****Number of years normally used to complete this degree(FT)** 2**Part time option** No

**Delivery mode** On campus

**Master of Science in Building and Conservation**

**Number of ECTS** 120

**Teaching languages** German

**Specialisation within in this Degree/the curriculum**

**The degree requires an assessed period of work in practice** No

**Programme accreditation by a professional body/other institution**

**This is an Erasmus mundus programme** No

**Curriculum/approach description**

These days construction is to a large extent carried out within existing building fabric. This trend of restoring and, where appropriate, converting existing buildings rather than demolishing them and building anew, is set to increase in the near future. It is estimated that two thirds of all building work will be carried out within existing fabric. This reflects the tendency of a more careful approach to the built environment.

The reasons for this trend are not only the conservation principles of heritage preservation or the public's desire to preserve the identity of old settlements, but more generally, it is due to the finite nature of available land and other resources and the necessity to use them in a rational and economical way.

The promotion of expertise in this area is therefore on the one hand in the public interest, and at the same time opens up promising new career fields. However, a satisfactory approach to historic buildings requires knowledge and skills that go beyond those normally taught in the study of architecture or civil engineering.

**Master of Science in Civil Engineering**

**Number of years normally used to complete this degree(FT)** 2

**Part time option** No

**Delivery mode** On campus

**Number of ECTS** 120

**Teaching languages** German

**Specialisation within in this Degree/the curriculum**

**The degree requires an assessed period of work in practice** No

**Programme accreditation by a professional body/other institution**

**This is an Erasmus mundus programme** No

'There will always be building' - but building is changing. The more standard tasks tend to occur in the background, whilst new, highly sophisticated planning and building methods are becoming increasingly important. Building has become a highly complex process -

<b>Master of Science in Civil Engineering</b>	whether in construction and civil engineering, transport planning, or in air conditioning and energy optimization. For a while now this
<b>Curriculum/approach description</b>	has not only concerned new building but also the customized development of existing and historic buildings has increasingly become the particular trademark of German engineers. The basic skills provided by bachelor's degrees are not sufficient to meet these challenges; what is needed are well-educated civil engineers at master's level. The Master's Degree in Civil Engineering of the BTU CS offers the necessary skills. Building on the basic research-oriented bachelor's programme, it leads to a further professional and research qualifying university degree, which is equivalent to the old 'Diploma in Engineering' of a technical university. The master concept at Cottbus offers the option of setting individual priorities. There is the possibility of carrying out a semester abroad, a longer engineering internship or further opportunities of building an individual profile through participation in the current research activities of the University. As with the bachelor's programme, the master's programme at the BTU CS is project-oriented. Sophisticated methods, creativity and social skills are taught and trained through practical concrete assignments. As a result, in addition to technical and social skills, graduates gain the fundamental and methodological knowledge necessary to structure, organize and implement interdisciplinary construction tasks and successfully engage in an international work environment.

<b>Master of Arts in Heritage Conservation and Site Management</b>	
<b>Number of years normally used to complete this degree(FT)</b>	2
<b>Part time option</b>	No
<b>Delivery mode</b>	On campus
<b>Number of ECTS</b>	120
<b>Teaching languages</b>	English
<b>Specialisation within in this Degree/the curriculum</b>	
<b>The degree requires an assessed period of work in practice</b>	No
<b>Programme accreditation by a professional body/other institution</b>	
<b>This is an Erasmus mundus programme</b>	No

<b>Curriculum/approach description</b>	<p>The joint Master's programme Heritage Conservation and Site Management is run by the Brandenburg University of Technology Cottbus-Senftenberg in conjunction with Helwan University in Cairo and in cooperation with the German Archaeological Institute and the Ministry of State Antiquities in Egypt.</p> <p>The programme is focused on transferring the knowledge and methodologies necessary for the administration and management of archaeological sites, which includes the following academic fields: conservation strategies and methods, strategic heritage management and planning, presentation and interpretation, tourism and visitor management.</p> <p>As part of their application, students are required to choose a home university which is either BTU Cottbus-Senftenberg or Helwan University. Later on, they have to complete a mandatory exchange semester at the partner university. Therefore, the structure of the study programme is as follows: 1st semester at the home university; 2nd semester at BTU Cottbus-Senftenberg; 3rd semester at</p>
--	---

## Master of Science in Urban Design - Revitalization of Historic City Districts

Number of years normally used to complete this degree(FT)

2

Part time option

No

Delivery mode

On campus

Number of ECTS

120

Teaching languages

English

Specialisation within in this Degree/the curriculum

The degree requires an assessed period of work in practice

No

Programme accreditation by a professional body/other institution

This is an Erasmus mundus programme

No

Curriculum/approach description

The development of historic cities in Europe and in the MENA region is until today one of the most important challenges for a sustainable urban development. A vivid inner city with a historic core is shaping the image and the identity of the city and initializing developments in the whole town. The benefit of renewal and revitalization of inner cities areas is never reduced just to inhabitants and stakeholders of the certain quarter. Accordingly, in urban development nothing is more sustainable than a vital inner city. This thesis is correct for both, shrinking cities in Germany and metropolitan areas in the MENA region. Rehabilitation processes need an integrated approach, finally fixed in an urban form and guidelines that guarantee stability and continuity for all further developments.

## Master of Arts in World Heritage Studies

Number of years normally used to complete this degree(FT)

2

Part time option

No

Delivery mode

On campus

Number of ECTS

120

Teaching languages

English

Specialisation within in this Degree/the curriculum

The degree requires an assessed period of work in practice

No

Programme accreditation by a

This is an Erasmus mundus  
programme

No

**Curriculum/approach description**

The international Master's programme World Heritage Studies equips students with knowledge and skills needed for the identification, protection, management and presentation of cultural and natural heritage sites. Established in 1999, World Heritage Studies is the first study programme in the world to design its curriculum around the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, reflecting diverse approaches to the concept of heritage, such as the links between culture and nature, tangible and intangible values, or conservation and development. The programme is based on a holistic, multi-disciplinary approach. Through a belief that heritage can and should be understood and protected from a wide range of perspectives, the curriculum integrates the academic studies of humanities, architecture, conservation, ecology, cultural geography, management, tourism, marketing, public relations and beyond.