# Otto-Friedrich-Universität Bamberg



The object of interest:

Bamberg Cathedral

# MONITORING HERITAGE 2018

INTERNATIONAL SUMMER SCHOOL

Monday, 30 July – Friday, 3 August 2018

#### Aim

Institut für

Kunstgeschichte

Archäologische Wissenschaften

Denkmalwissenschaften und

The summer school is an interdisciplinary course offer teaching geophysical applications and digital heritage technologies at the University of Bamberg's Institute of Archaeology, Heritage Conservation and Art History,

in Bamberg, Germany. The summer school is supported through central funding of the university. The summer school offers hands-on experience as well as introduces theoretical background to non-invasive structural analysis and the recording of historic buildings.

#### Recipients

The Monitoring Heritage 2018 – International Summer School is meant to address students from German and international universities interested in expanding their understanding of digital technologies in surveying, as well as geo-archaeological methods, their evaluation and visualisation. We encourage applications from students with a background in archaeology, digital humanities, geography, geomatics, cultural heritage or historic preservation. The course is taught in English.

#### Programme

The course offers both theoretical and practical sessions delivered via lectures and hands-on introductions to the different technologies. The fieldwork focusses on the application of the various techniques in and around Bamberg cathedral, a historic monument and part of the UNESCO world heritage site of Bamberg, and will include on-site introductions by specialists regarding the construction and history of the building. The recorded data will be processed and discussed each day, and the course concludes with a group presentation on the last day of the workshop.

This year's methods and techniques include:

- Ground-penetrating radar (GPR) to investigate and visualise subsurface and interior structures.
- Micro seismic monitoring to detect potential structural weaknesses
- Structure from Motion (SfM), structured light scanning to visualise objects, 3D terrestrial laser scanning (TLS) & drones (SfM) for recording architecture

## Social Programme

The social programme includes a guided tour through Bamberg on Sunday afternoon (July 29), an icebreaker party on Monday (July 3), an introduction to a typical local beer garden ("Keller") on Tuesday (July 31), and a farewell BBQ on Friday (August 3).

#### Location:

The summer school takes place at the new facilities of the recently opened <u>Centre for Heritage Conservation Studies and Technologies (KDWT)</u> at the Otto-Friedrich University of Bamberg, offering working space and a computer cluster equipped with the latest software. All course participants are encouraged to bring their own laptop and a digital camera.

#### Tutors:

- Prof. Dr. Till Sonnemann, Digital Geoarchaeology, Otto-Friedrich University of Bamberg
- Prof. Dr. Mona Hess, <u>Digital Technologies in Heritage</u> Conservation, KDWT, Otto-Friedrich University of Bamberg.
- Special Invitee: **Dr. Jesús Pacheco Martínez**, Universidad Autónoma de Aguascalientes, Mexico.

#### Maximum number of Participants: 20.

10 places are open to applications from national and international students, while 10 places are reserved for students from the University of Bamberg.

#### Fee

120 EUR (50 EUR deposit with registration, rest at arrival) for external students (the fee includes housing at the local youth hostel).

# Registration

To apply, please contact <u>sekretariat.dt@uni-bamberg.de</u> (Mrs Doris Ehrentreich) before **15 May 2018** with the subject header "International Summer School 2018". Please include the following information in your message:

- first name & surname
- university / research institution
- current studies / education
- postal address & country

- phone / mobile phone
- email address
- short letter explaining your motivation for applying

Upon acceptance, we will ask for a deposit of EUR 50 to be paid via bank transfer to the university to secure your place.

## Student information

Please check with your school regarding accepted credit points. The summer school is worth 3 ECTS points (2 SWS) and will be transferable to other universities. We will issue a certificate of participation through the University of Bamberg.

# Important dates

- Deadline for Registration: 15 May 2018.
- Communication of acceptance: 1 June 2018.
- The course takes place from 30 July 2018 to 3 August 2018

#### Accommodation

We have reserved accommodation for 10 participants at the local Bamberg Youth Hostel (breakfast incl.). If you require different accommodation or need travel advice, please write to sekretariat.dd@uni-bamberg.de

For information regarding course content, please contact: mona.hess@uni-bamberg.de or till.sonnemann@uni-bamberg.de



We are looking forward to welcome you in Bamberg, Franconia.

https://www.uni-bamberg.de/ddt/news/monitoring-heritage-2018/