**Monitoring Heritage 2018**

**International Summer School**

Monday, 30 July – Friday, 3 August 2018

**Aim**

The summer school is an interdisciplinary course offering teaching of 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 focuses 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 Centre for Heritage Conservation Studies and Technologies (KDWT) 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**, Digital Technologies in Heritage 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 sekretariat.ddt@uni-bamberg.de (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

**Student information**

- 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.ddt@uni-bamberg.de or till.sonnemann@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.