

Non-invasive structural and subsurface analysis of a historic landmark

- Be introduced to methodologies, data collection and processing
- Learn about implementations into landscape archaeological studies
- gain hands-on technical experience about
  - ground-penetrating radar (GPR)
  - 3D terrestrial laser scanning
  - structure from motion (SfM)
  - drone photogrammetry
  - LiDAR visualization

### Important dates

- Deadline for Registration: **May 31, 2020.**
- Communication of acceptance: **June 15, 2020.**
- Arrival date for external participants: **August 2, 2020.**

UNIVERSITÄT BAMBERG



### Coordinators:

**Prof. Dr. Till F. Sonnemann**

Digital Geoarchaeology  
University of Bamberg

**Prof. Dr. Mona Hess**

Digital Technologies in Heritage Conservation  
University of Bamberg

Interdisciplinary Course on Geophysical  
Applications & Digital Heritage Technologies

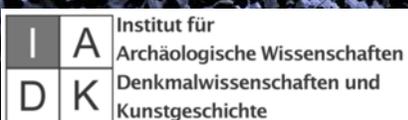
# MONITORING HERITAGE 2020

~~3rd International~~ Summer School  
due to corona

Monday, August 3 – Friday, August 7, 2020

Investigate the ruins of a  
medieval castle in the  
Franconian  
Alps

Scan me for updates:



Web: <https://www.uni-bamberg.de/ivga/monitoring-heritage-2020/>



The 3<sup>rd</sup> *Monitoring Heritage – International Summer School* is an interdisciplinary course teaching non-destructive documentation techniques at the University of Bamberg's *Institute of Archaeology,*

*Heritage Conservation and Art History* in Franconia, Germany. The course provides an introduction to non-invasive analysis and recording of historic buildings, including hands-on technical experience.

### Recipients

The course is taught in English and 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.

### Programme

The course offers theoretical and practical sessions, delivered via lectures and hands-on introductions to the different techniques. A fieldwork of two days is followed by data processing and discussing the results. The summer school will conclude with group presentations.

This year's techniques include introductions to:

- ground-penetrating radar (GPR) to investigate and visualise subsurface and interior structures.
- structure from motion (SfM) & structured light scanning to visualise objects

- 3D terrestrial laser scanning (TLS) & drone photogrammetry (SfM) for recording architecture
- Visualizing and interpreting LiDAR imagery of the surrounding landscape

### Location

This year's fieldwork will focus on Burg Neideck, a ruined castle in the Franconian Alps. The course work of the summer school takes place at the facilities of the *Centre for Heritage Conservation Studies and Technologies* (KDWT) at the 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.

### Social Programme

The programme includes a pre-course guided tour through Bamberg on Sunday afternoon (August 2), an icebreaker party on Monday (August 3), an introduction to a typical Franconian beer garden "Keller" on Tuesday (August 4), and a farewell BBQ on Friday (August 7).

### Maximum number of Participants: 16

Spots are open to applications from national and international students, while 8 spots are reserved for students from the University of Bamberg.

### 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 after completion of the course.

### Registration

To apply, please contact the secretary office of IVGA ([matthias.stockinger@uni-bamberg.de](mailto:matthias.stockinger@uni-bamberg.de)) before **May 31, 2020** with the subject header "Monitoring Heritage 2020". 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.

### Accommodation

We will res ~~erved~~ based accommodation for up to 8 external participants at the ~~local Bamberg Youth Hostel~~ (breakfast incl.). If you require different accommodation or need travel advice, please contact the IVGA secretary office.

### Fee

120 EUR (50 EUR deposit with registration, remaining 70 EUR at arrival) ~~for external students~~. The fee includes housing at the local youth hostel.

For information regarding the course content, please contact:

[till.sonnemann@uni-bamberg.de](mailto:till.sonnemann@uni-bamberg.de)

