

Selection notice for the allocation of
4 scholarships for participation in:

WORKSHOP ON DIGITAL 3D HERITAGE

Exploring 3D- Modelling in Education, Documentation and Dissemination

6-13 September 2023,
Mainz, Germany

FAUP announces a competition aimed at students enrolled in FAUP courses in September of 2023 (MIARQ or PDA) for the participation in the **International Workshop on Digital 3D Heritage**, which will take place **from September 6th to 13th, 2023** at the Hochschule Mainz – University of Applied Sciences (DE).

The International Workshop is part of the Erasmus+ project "CoVHer: Computer-based Visualization of Architectural Cultural Heritage" coordinated by the University of Bologna (IT) partnered with the Hochschule Mainz – University of Applied Sciences (DE), Faculdade de Arquitectura Universidade do Porto (PT), Politechnika Warszawska (PL), Universitat Autònoma de Barcelona (ES), as well as La Tempesta: City, culture & technology (ES), Interessengemeinschaft für Semantische Datenverarbeitung E.V. (DE).

The Registration for this Competition is free, and no participation fees are required for the students attending the International Workshop.

Travel and accommodation expenses for the winning students will be partially supported by EU Erasmus+ program.

I. Purpose

To offer a group of meritorious students with a strong inclination towards 3D modeling, digital 3D reconstruction and visualization, and cultural subjects in general, the opportunity to confront with the topic in an international context. The Workshop will be organised by the Hochschule Mainz, in collaboration with colleagues and external experts in the field. Participants in the intensive course will be able to directly engage with the topic of cultural heritage 3D reconstruction, following advanced strategies and successful case studies that will foster the standardization in documentation and publication as well as further application of the 3D data sets. The highly international nature of the international Workshop also guarantees extensive cultural exchange and broader perspectives, fostering international cooperation and mobility, in line with the educational objectives of the Erasmus+ program.

II. Recipients of the Call

Regarding the candidates from FAUP: students with mastery of 3D modelling tools and parametric design (by attending UC or by experience) and that are enrolled in MIARQ-FAUP or PDA-FAUP courses in September 2023 (MIARQ and PDA Students enrolled in 2023/24 academic year, and dissertation students enrolled in 2022/23 academic year with a valid inscription until September 30th).

III. Selection Criteria

A committee composed of Dr^a Clara Pimenta do Vale and Dr José Pedro Sousa, members of the research team, will carry out the selection of the candidates from FAUP. The committee will evaluate the following criteria for the preparation of the ranking:

Admission requirements:

- To be enrolled in MIARQ-FAUP or PDA-FAUP in September 2023 (MIARQ and PDA Students enrolled in 2023/24 academic year, and the dissertation students enrolled in 2022/23 academic year with a valid inscription until September 30th).
- Language requirements: Candidates must demonstrate a **minimum B2** level of proficiency in the English language. In the absence of an official document attesting the candidate's language level, the candidate will sign an honor declaration of the language proficiency and the committee can conduct on-line interviews to assess the minimum level.
- Motivation: Candidates must express their interest in the field of cultural heritage conservation and their desire to participate in the Workshop through a motivational letter (max. 300 words).
- One representative visualization of a 3D model created by the student. 3D Model of cultural heritage buildings will be a preference factor (required resolution 1920×1080 pixels, 16:9 aspect ratio).

Preferred requirements:

- Involvement in the Erasmus+ project "CoVHer: Computer-based Visualization of Architectural Cultural Heritage".
- A classification of Very Good or Excellent level in the curricular unities of Constructive Geometry (1 or 2).
- Experience in elaboration of 3D models of Cultural Heritage Buildings (please give evidence with small portfolio).

IV. Winner of this call

The top 4 students on the ranking list prepared by the committee will be entitled to participate in the Workshop. In case of withdrawal, the candidates ranked fifth and onwards will be contacted until the expected number of 4 participants is reached.

IV. International Workshop objectives

- To delve into the topic of hypothetical digital 3D reconstruction within the European context
- To introduce new standard methods and approaches to cultural heritage reconstruction as explorative research and dissemination tool.
- To experiment through design workshops and exercises, providing a hands-on practical approach to the subject in form of further application of the digital 3d models (Augmented Reality/Virtual Reality and Rapid Prototyping/3D printing)
- To offer opportunities for interaction with prominent figures in the field of cultural digital 3D heritage at international level.
- To provide opportunities for cultural and multidisciplinary exchange in an international environment.

V. Modes of carrying out activities

- i. **Pre-course with few remote meetings, planned in the beginning of July until second half of August, with instructions on:**
 - Remote reading of preparatory material provided by the organizers:
 - a) Papers on ‘Scientific Reference Model’, documentation, publication, and representation of the uncertainty, etc.
 - b) Handbook on digital 3D reconstruction (in preparation by the CoVHer partners)
 - Preparation of a short presentation on the topic and methodology, and in previous experiences.
 - Visualization of the ‘uncertainty-value-system’ (own concept) for the documentation of the hypothesis (design of an info graphic)
 - Web-based documentation and publication of the 3D model
 - Preparation of the models for the Augmented Reality and Rapid Prototyping application

ii. During (Mainz, 06.09.2023-13.09.2023):
(6 and 13 are travel days)

- Theoretical lectures / presentations on "best practices"
- On-site investigations and discussions
- Practical classes / exploring 3D data exchange formats
- Discussion on Handbook (preliminary version).
- Correction of the data set in the online 3D Repository and online Documentation Platform.
- Preparation of 3D derivatives in multiple output formats (AR/VR and 3D printing)
- Excursion/sightseeing
- Social Events in Mainz – Great Wine Capitals

iii. Post-course:

- Workshop participants have to complete the assigned work once they return home to prepare the “camera-ready” material for a access and re-use, e.g. Creative Industries, education, etc.
- Documentation of the work/experience in a Workshop-Booklet (template will be delivered/designed during the Workshop in Mainz)

VI. Contents

- Hypothetical architectural and archaeological reconstruction
- Standardization and good practices for the Digital 3D Reconstruction
- Documentation, publication, and dissemination of Digital 3D Heritage

VII. Participation modalities in the selection process

The application for [registration](#), filled out in its entirety and signed, must be accompanied by:

1. A valid identification document of the applicant.
2. Certificate of Language requirements: Candidates must demonstrate a minimum B2 level of proficiency in the English language (or the candidate honor declaration of the language proficiency).
3. Motivational letter containing a self-presentation and a description of the personal motivations (300 words).
4. One representative visualization of a 3D model created in by the student (resolution 1920×1080 pixels, 16:9 aspect ratio).
5. The preferred requirements that apply in each case.

All the listed documents, including the application for registration, must be submitted in the registration link: <https://form.jotform.com/231923755753362> by **16th July 2023, at 11:59AM** (noon).

The application for participation, complete with all its attachments, must be submitted in a single submission. Candidates are reminded that the priority in submitting the application does not constitute a score and does not influence the ranking process in any way. Incomplete applications or those containing documentation that does not comply with the specifications in this call will not be considered. Hand-delivered applications will not be accepted. An automatic confirmation of receipt of the application and attachments will be sent by jotform (please check spam). An email with additional instructions will be sent latter.

VIII. Ranking Publication

The ranking of the top 4 students, valid for admission to the International Workshop, will be sent by email in the morning of the **17th July 2023** and also **published** on FAUP website (www.arq.up.pt) along with instructions.

Online unity about the accessibility of student's digital 3D reconstruction project will take place on the 17th (18:00 to 19:00 GMT).

The ranking for positions beyond the four will not be published, unless there are withdrawals that require a revision of the participants' names. However, it will still be possible to request via email, using the address (clara_vale@arq.up.pt), one's position in the ranking.

IX. Participants' duties

During the training period, each student is required to:

- actively participate in all proposed activities.
- comply with the indicated safety and behavioral rules.

X. Titles/Credits

At the end of the Workshop on Digital 3D Heritage, a certificate of participation will be issued. Home university students will have ECTS granted. Foreign students can ask for the recognition in their own universities with the certificate.

XI. Insurance and costs

There are no registration fees for participating in the Workshop.

- Insurance will be covered by FAUP.
- Travel costs are partially covered by the Erasmus+ EU Program (275 euros per student).
- Accommodation will be covered by Erasmus+ EU Program (booked by FAUP).
- Food costs are partially covered by the Erasmus+ EU Program (175 euros per student).