

| | Advanced 3D |
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| Description | <ul style="list-style-type: none"> • Basics of Machine vision • 3D digitization technologies: <ul style="list-style-type: none"> ○ 3D scanners and depth mapping systems ○ Photogrammetry and applications ○ Principles of digital photography ○ 3D geometric representation through automated and semi-automated ground and aerial photogrammetry data collection ○ Approaches using GPS and GIS. • Photogrammetry software • Advanced applications in the humanities: <ul style="list-style-type: none"> ○ 3D digital copies of findings from archaeological excavations, monuments and remains from various historical periods. ○ 3D models in the context of an archaeological and historical research ○ Digital copies of exhibits and synthetic museum exhibitions. ○ Development of 3D digital museums and exhibitions. |
| Learning Outcomes | <p>After the end of the courses the student will</p> <ul style="list-style-type: none"> • be familiar with machine vision components, 3D digitization technologies and Photogrammetry software • utilize these technologies in various fields of the humanities |