

STUDY GUIDE

Visualisation Special Issues

Organised by

**Brandenburg University of Technology
Cottbus-Senftenberg**

| 1. IDENTIFYING DATA. | | |
|----------------------------------|---|----------|
| • Course Name. | Visualisation Special Issues | |
| • Coordinating University. | Brandenburg University of Technology Cottbus-Senftenberg | |
| • Partner Universities Involved. | | |
| • Course Field(s). | Architecture, Civil Engineering and Urban Planning | |
| • Related Study Programme. | Master "Architecture", Master "Urban and Regional Planning" | |
| • ISCED Code. | ISCED Code 7 / 8 (Master's or equivalent level / Doctoral or equivalent level) | |
| • SDG. | SDG 4 Quality Education, SDG 5 Gender Equality, SDG 11 Sustainable cities and communities, SDG 13 Climate Action, SDG 17 Partnership for the Goals | |
| • Study Level. | Master (M) / Doctorate (D) | |
| • EUNICE Key Competencies | [Indicate the Key Competencies required for the course.] | |
| | <ul style="list-style-type: none"> • Green – strongly • Orange - moderately • Red – partially • Blank cell - not at all | |
| | Problem solving | strongly |
| | Teamworking | strongly |
| | Communication | strongly |
| | Self-management | strongly |
| | Cognitive flexibility | strongly |
| | Digital competence | strongly |

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| | Technical competence | strongly |
| | Global intercultural competence | strongly |

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| · Number of ECTS credits allocated. | 6 |
| · Mode of Delivery. | Online synchronous |
| · Language of Instruction. | English |
| · Course Dates. | 16 April - 23 July, 2026 |
| · Precise Schedule of the Lectures. | Weekly Thursday 10am – 1 pm |
| · Key Words. | Architecture, Visualisation, 3D Modeling, Visual Representation |
| · Catchy Phrase. | The seminar deals with the topics of project representation and project communication. |

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| · Prerequisites and co-requisites. | <ul style="list-style-type: none"> - Knowledge in 3D, renderings and graphic software - Master (M) / Doctorate (D) |
| · Number of EUNICE students that can attend the Course. | 100 – 10 per university |
| · Course inscription procedure(s). | Eunice platform |

2. CONTACT DETAILS.

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| · Department. | Chair "Architektur und Visualisierung" |
| · Name of Lecturer. | Univ.-Prof. Dipl.-Ing. Dominik Lengyel, Architekt M.Sc. Jacopo Spinelli |
| · E-mail. | spinelli@b-tu.de |
| · Other Lecturers. | Dr.-Ing. Björn Reder |

3. COURSE CONTENT.

The seminar deals with the topics of project representation and project communication, in particular with CAD drawing, three-dimensional modelling and its visualisation. The focus of the course is the representation of uncertainty. Tasks are either the study and analysis of relevant buildings or a personal design proposal through the development of graphic material.

4. LEARNING OUTCOMES.

After participating in the module, students are able to understand complex issues and to reproduce them using visual representation methods in architecture and urban planning.

5. OBJECTIVES.

Evaluate and select different methods of representation
Development of possible translation methods of non-visual contents into visual representations
Technical implementation of the representation method

6. COURSE ORGANISATION.

UNITS

- | | |
|----|----------------------------------|
| 1. | Introduction |
| 2. | Group work, review, Presentation |
| 3. | Group work, review, Presentation |
| 4. | Final deliverable |

LEARNING RESOURCES AND TOOLS.

Students are free to choose which 3D modelling, rendering and graphics editing software they will use for the project. Our chair works primarily with the 3D modelling software Rhinoceros.

PLANNED LEARNING ACTIVITIES AND TEACHING METHODS.

Seminars, group work, project.

7. ASSESSMENT METHODS, CRITERIA AND PERIOD.

Semester project with presentations and deliverable.

OBSERVATIONS.

8. BIBLIOGRAPHY AND TEACHING MATERIALS.

On the Visualisation of Archaeological Hypotheses, Dominik Lengyel and Catherine Toulous. From the book "Innovation in der Bauwirtschaft / Innovation in the Building Industry", Editors: Eva-Maria Seng and Frank Göttmann, De Gruyter, 2021.

Atlas of Digital Architecture: Terminology, Concepts, Methods, Tools, Examples, Phenomena; by Ludger Hovestadt, Urs Hirschberg, Oliver Fritz; Birkhäuser, 2020.

Projecting Spaces, Conference on architectural visualisation, 9th international eaea conference, Editors: Lengyel, Dominik and Toulouse, Catherine, Thelem Universitätsverlag, Dresden, 2011.