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Hochschule Konstanz
University of Applied Sciences

Course number: AIN 18210
Computer Graphics
Study Level: Bachelor /
Undergraduate

Prof. Dr. Georg Umlauf
Language of Instruction: English
ECTS Credits: 6

Objectives:

This course will introduce the basic techniques from computer graphics to enable the students to design and implement the various stages of the rendering pipeline.
In the practical assignments some of these techniques are implemented by the students, e.g. affine transformations in 3d, Phong shading, ray-tracing, etc.

Contents:

- Hardware Basics
- Rasterization
- Transformations and projections
- Representation and modelling of objects
- Visibility
- Rendering (illumination, shading, ray-tracing, etc.)
- Mapping techniques (texture-maps, bump-maps, etc.)

Assessment:

Assessment of this course will be based on a final oral examination.