COURSE DETAIL

GRAPHICS Country Netherlands **Host Institution Utrecht University** Program(s) **Utrecht University UCEAP Course Level Upper Division UCEAP Subject Area(s)** Computer Science **UCEAP Course Number** 108 **UCEAP Course Suffix UCEAP Official Title GRAPHICS UCEAP Transcript Title GRAPHICS UCEAP Quarter Units** 6.00 **UCEAP Semester Units** 4.00

Course Description

Computer graphics deals with the processing of visual images and spatial data by a computer. Lectures focus on the very basics of modeling and rendering, i.e., the mathematical description of three-dimensional scenes and how to create realistic images of such models. Foundations of computer graphics, such as transformations and projection of 3D models, hidden surface removal, triangle rasterization, shading, texture mapping, shadows, and ray tracing, and advanced topics in physically-based global illumination. A brief review of the mathematical basics needed for computer graphics, including linear algebra and other areas of higher mathematics that are important far beyond the field of graphics is included.

Language(s) of Instruction

English

Host Institution Course Number

INFOGR

Host Institution Course Title

GRAPHICS

Host Institution Campus

Utrecht University

Host Institution Faculty

Faculty of Science

Host Institution Degree

Host Institution Department

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