

COURSE DETAIL

VIRTUAL REALITY

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

125

UCEAP Course Suffix**UCEAP Official Title**

VIRTUAL REALITY

UCEAP Transcript Title

VIRTUAL REALITY

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course provides an introduction to virtual reality. Topics: 3D sound technology; space tracker, motion tracker: mechanical, optical, ultrasound, magnetic; head mounted display (HMD), retina display; force feedback devices; modeling (prototyping, building large models, physically based modeling, motion dynamics); global illumination algorithms (radiosity, volume rendering, scientific visualization); texture mapping and advanced animation; graphics packages: OpenGL , DirectX; and high performance graphics architectures (Pixel-Planes, Pixel Machine), SGI reality engine, PC graphics (nVidia, ATI), accelerator chips and cards).

Language(s) of Instruction

English

Host Institution Course Number

CSIE7633

Host Institution Course Title

VIRTUAL REALITY

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computer Science and Information Engineering

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