Media Production for Immersive Environments

Programme course

6 credits

Medieproduktion för immersiva miljöer

TNM091

Valid from: 2017 Spring semester

Determined by
Board of Studies for Computer Science and Media Technology

Date determined
2017-01-25

Main field of study
Media Technology and Engineering

Course level
Second cycle

Advancement level
A1X

Course offered for
- Media Technology and Engineering, M Sc in Engineering

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites
Programming skills in C++. Experience of 3D Computer Graphics and Video production. Experience with audio technology would be appropriate if audio is to be included in the project work.

Intended learning outcomes
To study and explore the technical and artistic considerations in the creation of media for large scale, immersive environments such as domes, cubes and curved screen environments. Such environments offer great opportunities for the creation of exciting and unusual media forms but present challenges both in the design of media and the unique methods required in its preparation.
After completion of the course the student will have:

- taken part in completing a visualization or immersive media project/demo in cooperation other partners
- applied previously acquired knowledge of content production and/or media technology and production towards the production of a demo/project
- worked production processes within the field of visualization, immersive media and dome formats.
- developed a critical as well as professional stance towards production practices of the field.
- reflected on their role, competence and knowledge in relation to the project and as to how those can be made relevant in future working roles.

Course content
The course will be based upon media technology through the use of, for example, any combination of (stereo) video, computer graphics (real time or recorded), audio or other media suitable for the presentation environment.

Teaching and working methods
A small number of lectures outlining the equipment available and technical issues affecting the production will be presented, as well as some suggested approaches to the media design. Some lab works will be made available to familiarize the students with the equipment and some basic production techniques which will be fundamental to the procedure.

The main focus of the course is, however, based on student centred learning and project work in groups. The project can contain cooperation with external producers, artists and public institutions from the fields of scientific visualization, science communication, public information and pedagogy as well as art and entertainment. Thus, the project can develop as part of existing production pipelines.

Examination

PRA1	Project	5 credits	U, 3, 4, 5
LAB1	Laboratory Work	1 credits	U, G

Examination is based on participation in the various stages of the production process and the students' individual contributions, as well as an assessment of the finished project.

Grades
Four-grade scale, LiU, U, 3, 4, 5

Department
Institutionen för teknik och naturvetenskap

Director of Studies or equivalent
Camilla Forsell

Examiner
KarlJohan Lundin Palmerius

Course website and other links

http://webstaff.itn.liu.se/~karlu20/courses/TNM091

Education components

Preliminary scheduled hours: 42 h
Recommended self-study hours: 118 h

Course literature

Additional literature

Other

This area being rather new is not well supported by textbooks though certain reference works will be indicated, supported by research literature and some tutorial works.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.