Artificial Intelligence for Interactive Media

Programme course

6 credits

Artificiell intelligens för interaktiv media

TNM095

Valid from: 2017 Spring semester

Determined by
Board of Studies for Computer Science and Media Technology

Date determined
2017-01-25

Offered for the last time
Autumn semester 2022

Replaced by
TNM114

Main field of study

Information Technology, Computer Science and Engineering, Media Technology and Engineering

Course level

Second cycle

Advancement level

A1X

Course offered for

- Computer Science and Engineering, M Sc in Engineering
- Media Technology and Engineering, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering
- Computer Science, Master's programme

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

3D Computer Graphics, Artificial Intelligence

Intended learning outcomes

This course focuses on describing artificial intelligence techniques that can be employed for computer graphics. After the course the student will be able to explain and discuss artificial intelligence concepts for computer graphics and apply well known artificial intelligence techniques.

Course content

Course content includes:
- Declarative techniques in scene modeling
- Computational creativity
- Intelligent methods of exploring virtual worlds
- Artificial Life for Virtual Worlds
- Behavioral animation
- Virtual human
- Computer graphics and learning
- Intelligent visualization
- Interactive storytelling

Teaching and working methods

The course consists of a series of lectures devoted to theory and project work where different AI techniques are practiced using C++ or Java.

Examination

PRA1	Project work	6 credits	U, 3, 4, 5

Grades

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

Department

Institutionen för teknik och naturvetenskap

Director of Studies or equivalent

Camilla Forsell

Examiner

Pierangelo Dell'Acqua

Course website and other links

Education components

Preliminary scheduled hours: 12 h
Recommended self-study hours: 148 h

Course literature

Additional literature

Other

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.