SYLLABUS

Scripting for computer graphics 7.5 credits W0028E

Programmering för datorgrafik

Course syllabus admitted: Autumn 2024 Sp 1 - Present

DECISION DATE 2024-02-15



Scripting for computer graphics 7.5 credits W0028E

Programmering för datorgrafik

First cycle, W0028E

Education level First cycle Grade scale U G# **Subject** Medieteknik Subject group (SCB) Computer Technology

Main field of study

Media Technology

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and courses corresponding with W0012E - Introduction to Computer Graphics 15 credits, W0013E - Design processes and methods for Computer Graphics 15 credits, W0019E - 3D graphics 7.5 credits and W0020E - Animation and Rigging 7,5 credits, W0021E Realtime Graphics 7,5 credits, W0024E Compositing 7,5 credits, W0026E - Advanced 3D graphics 7,5 credits and W0027E - Visual effects and simulation 7,5 credits.

Good knowledge in English, equivalent to English 6.

Selection

The selection is based on 1-165 credits.

Course Aim

On successfully completing this course students should be able to:

- 1. Demonstrate basic knowledge of programming languages and processes
- 2. Construct simple production tools to assist in everyday tasks within computer graphics
- 3. Show understanding of problem-solving through programming for computer graphics production.

Contents

The course discusses the following subject areas:

- · Basic programming concepts (variables and program states, choice, iteration, recursion)
- Introduction to scripting in production tools (e.g. Maya and Nuke)
- Programming processes for structuring code and user experience.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The course material is in English and you are expected to have good oral, written and information-seeking knowledge in that language.

The teaching is mostly based on independent work with practical tasks, and self-study of the specified material. You are expected to be able to search for information on your own to solve tasks. This is then dealt with through seminars (both internal and external), essays and other activities.



Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Formative assessments and feedback are given regularly in the course's activities. The course objectives are examined in various forms organized in test modules defined in the syllabus. The examination takes place both individually and in groups.

Each test module can in itself consist of several tasks, which appear in the study guide for the course. For all assignments, there are detailed descriptions in the course's learning platform that clarify how the assignment is to be performed and examined.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

| Code | Description | Grade scale | Cr | Status | From period | Title |
|------|-----------------|-------------|-----|-----------|----------------|-------|
| 0003 | Laboratory work | U G# | 2.5 | Mandatory | A24 | |
| 0004 | Written exam | U G# | 5 | Mandatory | A24 | |

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Robert Brännström 2024-02-15

Syllabus established

by Robert Brännström 2023-02-15

