Det Teknisk-Naturvidenskabelige Fakultet Første Studieår AALBORG UNIVERSITET Arkitektur Og Design

MATEMATIK OG FORM

17 February 2014 - Vector operations in Grasshopper

12:30-13:45 Lecture

Lecturer: Dario Parigi

14:00-16:00 Lecture exercise at group room

Teachers: Dario Parigi, Jesper Christensen, Esben Nørgaard

-All students are expected to come at the lecture with their laptop with Rhinoceros and Grasshopper installed.

Note: Grasshopper is available for Rhino running on windows machines only.

Please find below the links for download:

Rhino 5.0 Evaluation Download for Windows:

http://www.rhino3d.com/download

Grasshopper for Rhino 5

http://www.grasshopper3d.com/page/download-1

- Before the lecture all students are expected to read the "Grasshopper Learning Material" document found in the lecture material

Aims and contents:

The lecture goal is to perform the basic vector operations with Grasshopper, and to create an architectural component using vector data taking advantage of the potential of the parametric modelling environment.

Lecture schedule

- -Getting started and introduction to Grasshopper
- -Vector operations
- -Architectural applications

Tasks

group room task: see document

home assignment: taking inspiration from the group room exercise, create an architectural facade in Grasshopper using vectors components and/or vector operations.

Literature

R. Issa, Essential Mathematics for computational design, 2nd ed. (pages 1-12)

Woojae Sung, Grasshopper Learning Material

Grasshopper Primer_Second Edition_090323 (pages 1-22)