Course syllabus

Programmering för arkitekter
Programming for Architects

ASEF01, 7,5 credits, G2 (First Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED A
Date of Decision: 2023-03-28

General Information

Main field: Digital Architecture and Emergent Futures.
Compulsory for: MAEF1
Elective for: A4
Language of instruction: The course will be given in English

Aim

The course aims to provide students with training in and knowledge of programming for design in the architectural profession. The student learns the basics of programming with a clear focus towards applied uses in CAD environments. The course provides students the opportunity to practice and analytically discuss the featured tools.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

• Demonstrate knowledge of the potential of programming in architectural design.

• Demonstrate understanding for the relationship between programing and archteictetural processes and results.

• Demonstrate understanding for how different programming languages can be used to connect, modify, or control different softwares and hardwares.

Competences and skills
For a passing grade the student must

• Demonstrate ability to program in both CAN environment and independently.

• Demonstrate ability to use programming in creative design projects.

Judgement and approach
For a passing grade the student must

• Demoinstrate ability to chose appropriate progreamming tools in relation to the architectural creation.

Contents

Specific programming löanguages may vary between semesters. The course will teach the basics of a main programming language, and how this is integrated into CAD software and visual programing tools such as Grasshopper 3D. In addition, students till be given examples of other programming languages and their use. The course consists of lectures, seminars, theoretical and practical exercises and focused intense modules (workshops).

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)
Assessment: Approved assignments and at least 80% active attendance at seminars and lectures. Compulsory attendance at reviews. In the case of non-pass the student has the right to a new examination opportunity after any necessary amendment or re-formulation of the project. The examiner informs the student as to what is required in order to achieve a pass. The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

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Admission

Admission requirements:

• AAHF20 Architecture - In Time and Space or AAHF25 Architecture - In Context or AAHF26 Architecture - In Urban Contexts

Assumed prior knowledge: The Creative Tools of Architecture I
The number of participants is limited to: 30
Selection: Completed university credits within the program. Within programmes where the course is given as a mandatory or elective mandatory course students are guaranteed admission. There after priority is given to students enrolled in programmes that include the course in the curriculum.

Contact and other information

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