



**Programme:** CITAstudio: Computation in Architecture

**Title:** Relational Strategies: Performance/Making/Modelling

<p><b>Semester:</b> Autumn semester 2018</p> <p><b>Semester Theme (architecture):</b> Theory, Medium, Technology &amp; Project*</p>	<p><b>Period:</b> 3. september 2018 – 25. januar 2019</p> <p><b>ECTS-points:</b> 30</p>
<p><b>Contents:</b></p> <p>The semester focuses upon introducing students to the theories, technologies and practices that have helped define (historical) and currently define the current paradigms and state-of-the-art within the field of digital architecture. Theoretical appreciation and engagement with the field occurs through the study of given texts in association with design-led, group-based project work [theory]. Skill building design projects are structured to introduce tools and methods for addressing issues of scale and dependencies between scales, material performance and its steering, site, context, climate and programme [medium &amp; project]. Knowledge of appropriate concepts, research, and applied techniques is introduced throughout the semester via courses and research-led workshops. The semester culminates with the writing of a programme of study that critically reflects upon the work to date in order to identify a personal territory of architectural interest and appropriate methods of investigation for the following semester.</p> <p>The semester will include the following courses:</p> <ul style="list-style-type: none"><li>-Flexible Modelling and Simulation will introduce students to parametric modelling concepts and techniques, and build skills in various types of comfort / environmental simulations (including daylight, sunlight, glare) and visualizing weather data (e.g. wind, temperature, humidity, rain, solar radiation, cloud cover etc.).</li><li>-Digital Fabrication and Performance Assessment introduces students to core concepts and techniques for digital fabrication, performance-led design, Lidar scanning and sensing techniques, and methods of experimentation.</li><li>-Perspectives on Computation in Design and Theory offers theoretical frameworks through which students may begin to conceptualize and critically reflect on the use of computation within their own design practice, through the discussion of relevant readings.</li></ul>	<p><b>Learning Outcomes (Knowledge, skills and competences)</b></p> <ul style="list-style-type: none"><li>Knowledge of relevant architectural theory related to digital practice</li><li>Knowledge of simulation techniques, their assumptions, abstractions, limits and opportunities within design contexts</li><li>Knowledge of methods for testing and evaluation of material performance</li><li>Ability to apply core concepts of digital practice related to design, analysis, simulation and fabrication.</li><li>Skill in deploying appropriate digital design strategies for addressing architectural, structural, fabrication, programmatic and site-based issues.</li><li>Can work effectively within a group-working context</li><li>Can critically reflect upon architectural issues through direct material engagement</li><li>Can use appropriate fabrication technologies to support design investigation and synthesis</li><li>Competence in integrating material performance data with design concept</li><li>Competence in developing appropriate representational methods and tools</li></ul>



<p><b>Attendance requirements:</b> Full attendance and participation in all activities is expected.</p>	<p><b>Submission requirements:</b> Comprehensive design portfolio that records and reflects upon the semester's work (including representations, photographs, drawings, models, 1:1 prototypes, time-based media, etc) Written programme of prospective study. Verbal presentation of prospective study.</p>
<p><b>Syllabus:</b> 200 pages minimum (titles given in the semester plan).</p>	<p><b>Method of assessment:</b> Oral examination <b>Grading:</b> Danish 7-point grading scale <b>Censor:</b> Internal</p>

**Kommenterede [NG1]:** ...representations/images of 1:1 prototypes?

**Kommenterede [PN2R1]:** The intention of this list is to describe types of production, not the targets of production. Representations, images and 1:1 prototypes are included on the list, and they might indeed have representational relationships with one another.