Course

Computational Design Theory 3

CODE2110  |  6 Units of Credit
Overview

This course is part of the practice orientated teaching trajectory 'Calibrating' in the Path 1: Computational Design Theory. The course is situated in the 'Beginner Level' in the CoDe student specialisation journey and therefore available for enrolment as an elective for all other UNSW undergrad students.

In the early nineties, the concept of the paperless studio and the integration of digital media into design practice; the 'digital turn', were considered to be merely experiments undertaken by the avant-garde. Today, computation is embedded in all aspects of design practice from conception to construction. New digital design techniques have been joined by new methodologies and formal outcomes. The representation of design has greater sophistication and we understand more about the effects of digital imagery. Computation has also infiltrated the construction of our built environment, from materiality to management. Highly complex information systems process, analyse and integrate components in 3D virtual spaces.

Computation is ubiquitous in our built environment, and its integration has had significant effect on the culture of the design and built environment. The interest we have in technology has moved beyond merely the creation of blob architecture into the new possibilities and challenges it offers to parametrics, sustainability and fabrication. This course will explore the elaborate relationship between computer, the designer and the design and construction of our built environment. The semester's lectures will help in better understanding the relationships and effect of the continual change and evolution on the social and cultural aspects of our design practices. A range of bridging theories essential to the 'digital turn' in building information management, information modelling, as well as the agency for simulation and optimization will be introduced. For example, pre-BIM design concepts; agency in architecture; visualization; materiality and material practice; robotics and making, BIM in practice and so on.

Students will have an opportunity to develop their understanding of ideas and issues through their participation in a critical discussion group. Theoretical understanding will be expanded and formalised through online activities and through illustrated writing exercises, which will be presented in class. The teaching strategy of the course positions students to the concept and theoretical formation of the digital design.
Faculty
Faculty of Built Environment

School
School of Built Environment

Study Level
Undergraduate

Indicative contact hours
4

Timetable
Visit timetable website for details
Course Outline

To access course outline, please visit:

CODE2110 Course Outline
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
© UNSW Sydney (CRICOS Provider No.: 00098G), 2019. The information contained in this Handbook is indicative only. While every effort is made to keep this information up-to-date, the University reserves the right to discontinue or vary arrangements, programs and courses at any time without notice and at its discretion. While the University will try to avoid or minimise any inconvenience, changes may also be made to programs, courses and staff after enrolment. The University may also set limits on the number of students in a course.

Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179