Overview

This course introduces students to Parametric Design and Digital Fabrication, with emphasis on the direct relationship between Mathematics and Geometry, and how these two fields constitute the foundations of any parametric design process. Students will progressively gain skills in the creation of adaptable models using Grasshopper and will be able to explore the advantages of a flexible design compared with a rigid model done in Rhinoceros. The connection between the software and the plugin will be explained in depth, demonstrating that an efficient combination of both usually leads to a more effective solution. The rationalisation of complex geometries for fabrication is essential for the manufacture of objects, installations, façades and structures, and must be taken into account from the conceptual design and 3D modelling stage to project documentation. Based on the concepts learned in the lectures and through the development of the proposed collection of exercises in the tutorials, students will learn how to transform a complex surface into a series of buildable and connectable elements. The digital models will be then translated into physical prototypes, allowing the students to evaluate their designs empirically, exploring and working with different digital fabrication techniques, construction systems, and materials.
Faculty
Faculty of Built Environment

School
School of Built Environment

Study Level
Undergraduate

Offering Terms
Term 1

Campus
Kensington

Delivery Mode
Fully on-site

Indicative contact hours
7

Timetable
Visit timetable website for details
Course Outline

To access course outline, please visit:

BENV1012 Course Outline
Fees

Commonwealth Supported Students $1191
Domestic Students $5130
International Students $5130

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

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