

MASTER'S DEGREE IN

Biodigital Architecture



Universitat Internacional de Catalunya
School of Architecture







Discover Biodigital Architecture & Design

Join this pioneering Master's programme, which has been running since 2000 and is the first to explore architecture and design from a biological and digital perspective.

It puts an avant-garde syllabus and a new 21st-century architecture and design concept at your fingertips, providing you with the opportunity to apply advanced technology to architecture and design. By giving you access to a whole new world of tools, you can enhance your professional qualifications and job skills.

Are you ready to learn more about the opportunities awaiting you in the field of biodigital architecture and design?

Centre Responsible

UIC Barcelona School of Architecture

Dates and times

— Classes

January 2024 to June 2024

Monday-Friday, 10:00 h. - 14:00 h.

— Master Thesis Presentation Jury: 26th September 2024

Language

English

Lenght

1 academic year, 9 months, 1.800 hours

Contact details

National and international students

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Who can apply?

- University degree holders (with or without work experience), preferably with a degree in Architecture, Engineering, Fine Arts, Design, Landscaping, Biology or Genetics. There is no need for prior specialist knowledge of information technology or biology.
- Professionals from various areas who have an interest in new cyber-digital and ecologicalenvironmental project techniques based on an innovative architectural and design perspective.

Facilities

Digital Architecture Laboratory and Biological Architecture Laboratory.

ACADEMIC TEACHING STAFF

Director

Alberto T. Estévez

Teaching Body

All of the international team of teachers on the programme have made significant contributions to cutting-edge areas of biodigital architecture.

Teaching staff and lecturers since 2000:

Yomna Abdallah

Pablo Baquero

Ezio Blasetti

Dragos Brescan

Mark Burry Bernard Cache

Karl S. Chu

Josep Corcó

Matias del Campo

Dennis Dollens

Evan Douglis

Alberto T. Estévez

Gabriel Fernández

Agustí Fontarnau

Effimia Giannopoulou

Mark Goulthorpe

Marwan Halabi

Michael Hensel

Neil Leach Duncan Lewis

Pablo Lorenzo-Eiroa

Greg Lynn

Sandra Manninger

Achim Menges

Marcos Novak

Kas Oosterhuis

Affonso Orciuoli

Claudia Pasquero

Ignasi Pérez Arnal

Marco Poletto

François Roche

Lars Spuybroek

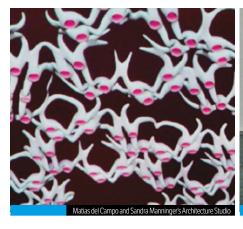
Judith Urbano

Ariel Valenzuela

Angad Warang

Mike Weinstock

(among others)







CURRICULUM - 60 ECTS

Introduction to Genetics and Biodigital Architecture (10 ECTS)

Seminars and conferences on:

- Metaphysics and Computation
- Theories of Emergence
- The Fundamentals of Genetics
- The Emergent Character of Life
- Eco Manipulation & Eco Materials
- Genetic vs. Generative
- Digital Tools and Organic Forms
- New Bio & Digital Techniques
- The Work of Antoni Gaudí and Salvador Dalí, source of Biodigital Architecture

Information Systems (10 ECTS)

— Digital Tools and Organic Forms

Practical classes to train students in digital tools(e.g. generative software, associative-parametric software, scripting, CAD-CAM production and mechanisation tools linked to product development).

Genetic and Biodigital Architectural Design (30 ECTS)

Studios and workshops with personalised tutorials in order to carry out the respective projects and research.

Master's Thesis (10 ECTS)

Final presentation: September.

WHY CHOOSE BIODIGITAL ARCHITECTURE?

- Innovative education. Experiment with genetic-driven software, evolutionary processes, emerging systems and scripting.
- New vision of biological and digital processes for architecture & design.
 Explore concepts such as biolearning and morphogenesis.
- International approach and premier academic staff. Learn with international teaching staff who have made significant contributions to this new cutting-edge field of biodigital architecture.
- Small groups. The small group size allows for more intense learning, in which students work closely alongside teachers.
- Advanced knowledge. The advantage of this background in architecture and design has helped the majority of our graduates to achieve teaching positions at universities around the world, and undertake cutting-edge architecture and design projects.



In the city of Gaudí, a pioneering, international and interdisciplinary environment, work related to the research and teaching of Nature & Computation applied to Architecture and Design can be mentioned, including concepts such as Natural Intelligence & Artificial Intelligence, Bio-Learning & Machine-Learning, Bio-Manufacturing & Digital-Manufacturing.

Designs from Professor Karl Chu's Studio





STUDYING IN BARCELONA

Start the most important learning experience of your life in one of the main European cities. Barcelona is a cultural and financial role model and a city where your knowledge can adapt to multiple professional opportunities.

UIC BARCELONA, OUR CAMPUSES

Classes are held on our Barcelona campus and also our Sant Cugat campus, which has a total area of more than 52.000 m². Each Faculty has the best facilities and latest generation equipment for both theoretical and practical classes.

Find out more about the admissions procedure, reserving a place and enrolment here **uic.es/masters**.

Click on <u>uic.es/grants</u> for information about financial aid, discounts and grants.

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