

Barrio Lasier, 15 - A, 48840 Gueñes, Biscay @basquebiodesigncenter



Basque BioDesign Center

Biodiseño & Tecnología



WELCOME TO THE BASQUE BIODESIGN CENTER, WE ARE A CENTER FOR THE DEVELOPMENT OF CREATIVE PROJECTS, RECOVERING AND REGENERATING DISUSED LOCAL MATERIALS, PROMOTING THE CREATION OF INTERDISCIPLINARY SYNERGIES, DEVELOPING TALENT, PARTICIPATORY MANAGEMENT AND THE RELATIONSHIP WITH THE LOCAL.

BDC is a convergence space whose mission is to promote the digital transformation of the materials of the future through experimentation, innovation and cooperation by creating technology based solutions.

Our vision is to be an inspiring place to create, the only one of its kind in Spain, which aspires to unite the talent of our territory with those from the rest of the world and to reduce the distances between design and science. Our Center in Gueñes is a space that serves to experiment with different digital creation processes and tools, a commitment to the strategic role of creativity as a productive model, where technology, experimentation and sustainability will promote lines of action aimed at promote its integration into the objectives of the companies.

BDC is a center where design professionals, creators and professionals will be trained and advised to produce their own prototypes. Its objective is to train professionals for strategic management that facilitates the transition and redefinition of companies, businesses and services towards a sustainable and responsible economy. The BDC supports the creation and production processes, from the orientation towards innovation of the different artistic expressions, the detection and support of talent, participatory management and the relationship with the local environment.

BIODESIGN IS MAKING ITS WAY AROUND THE WORLD. UNIT DESIGN, BIOTECHNOLOGY AND INNOVATION TO REINVENT A MORE SUSTAINABLE AND REFLECTIVE FUTURE.

We are inspired by natural ecosystems to create biomaterials that can be produced on an industrial scale but that do not leave waste but biodegrade. The matter of each organism that composes it feeds the life cycle of another, there is no waste because everything has a value and a function. The architecture and construction community is at a crucial moment to rethink the future of construction. We believe it is essential to open a dialogue on long-term sustainability and efficiency.

How do we envision the buildings of tomorrow?

We explore new technologies and sustainable design practices.

We prioritize the adaptability of buildings for future needs.

We promote durable, renewable materials. We consider alternatives such as wood, bamboo and recycled concrete, biomaterials.

What characteristics do we want in the materials we use?

To promote circular and modular construction. It is crucial to consider the life cycle of materials, their durability and the possibility of building with the vision of a second and third life.

Should we adopt approaches such as circular or modular construction? What materials, besides wood, could be part of this vision?

To determine the ideal duration of materials and evaluate their origin, as well as reevaluate our waste management, water use and transportation.

Are the implementation of material passports and traceability important to consider in this dialogue about the future of architecture and construction?...



BDcamp Industrial design/Architecture

PRODUCT DESIGN AND BIOFABRICATION, exploring Creative and Sustainable Convergence

8-12/07 - 10:00/17:00

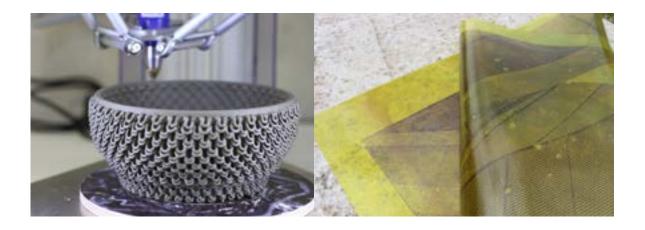
Every day the need to create microclimates in cities and filter light in our urban and built environments is more evident. To address this challenge, we consider how we can integrate this additional filter layer, whether through a double skin, curtains, lattices or low energy impact zero footprint coatings, building with nature, using biological materials, industrial waste, recycled resources, reused and transformed.

We invite local, national and international young professionals and students to join this conversation. For a week at the Basque BioDesign Center (BDC), we will create synergies between innovation and sustainability in our exclusive Product Design and Biomanufacturing Bootcamp.

This comprehensive course ranges from fundamental concepts of product design to advanced techniques, guiding participants in the creation of special and functional construction materials. In addition, we explore biomanufacturing using technologies such as 3D scanners, augmented reality and artificial intelligence, applying them comprehensively to sustainability.

Participants will not only acquire theoretical knowledge, but will also apply these technologies in practical biomanufacturing projects, promoting innovative and sustainable solutions. Upon completion, they will have developed advanced skills in product design and biofabricated technology, standing at the intersection of creativity, technology and sustainability.

During the course, together with the participants, a modular ephemeral structure will be built outside (garden) of the BDC through which the materials manufactured during the week, and materials previously produced during various BDC investigations, will be displayed. Furthermore, with this event we announce that the BDC will become a materials observatory, where materials of biological and natural origin will be exhibited, crossed and investigated, drawing connections between productive and creative industries.



TYPE PROFESSIONAL FORMATION

THEMATIC Industrial Design / Architecture

TITLE Exploring Creative and Sustainable Convergence

We research new materials based on nature and being respectful of it, from a very innovative perspective. The course is inspired by natural ecosystems to create biomaterials that can be produced on an industrial scale but that do not leave waste but rather biodegrade. It is based on the fact that, in ecosystems, the matter of each organism that composes it feeds the life cycle of another, there is no waste because everything has a value and a function. This notion of a natural cycle where everything serves and nothing is wasted is the inspiration from which the center's materials research begins.

CONTAINS Techniques to explore:

OBJETIVOS

- 3D Ceramics
- Siilkprint / Screen printing
- Laser Cutting
- Textile
- Biofabrication
- Hempcrete blocks
- Kombucha
- Crystallization

Local wood waste Mycelium

DATES 8-12 July. 5 days at BDC

DAYS AND TIME Monday to Friday: 10:00/17:00

INSTRUCTORS Zana Bosnic y Eduardo Loreto; Invited International Speaker

> Laia Mogas-Soldevila | Director DumoLab Research and Assistant Professor of Graduate ArchitectureStuart Weitzman School of DesignUniversity of Pennsylvania

TOTAL HOURS 35 hrs

COST 475€ 'Sign up before 5 April and take advantage of a 10% discount with the following code: BDCAMP10

BDC AXES

We are committed to the creative research that combines science, design, art... so that the creators of tomorrow contribute to more responsible world for the planet. We advocate creativity, as a guide to new solutions from a perspective that someone technical would not reach, and from culture to generate narratives that reach more layers of the population.

Bio_lab

Two laboratories for the materials development with living organisms, such as bacteria, fungi and algae...

Digital_lab

Digital manufacturing laboratory that includes: 3D printing, laser

Textile_lab

Textile manufacturing laboratory that includes: digital looms, sewing machines, textile printing...







Upcycling_lab

Laboratory or space dedicated to the upcycling of multiple materials, with heat plates, mixers...

Art_lab

Art laboratory with screen printing and paper printing workshop

Materioteka

Exhibition guide to innovative and sustainable design materials.







TOUR VIRTUAL:

https://www.youtube.com/watch?v=MG-uqgGVtm0





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