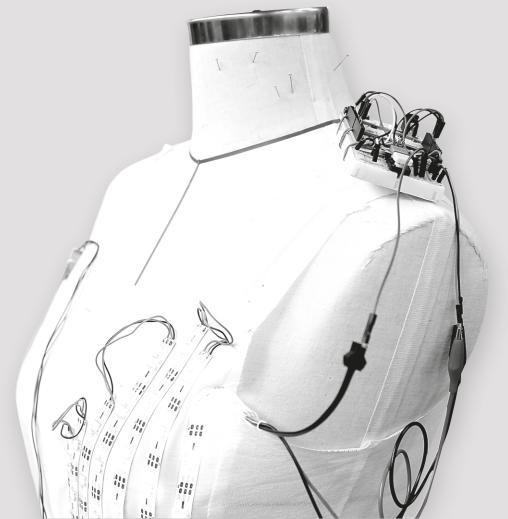
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## CRISTÓBAL BALENCIAGA MUSEOA

# Fashion and Technology

**DIY workshop** 



## Fashion and Technology

This theoretical-practical technology activity applied to fashion will offer an approximation to the study of do-it-yourself methodologies and techniques and to the digital tools required to create wearable projects.

The participants will learn how to responsibly and sustainably incorporate electronics to the different fabrics and materials, and also how to develop their creativeness by designing practical and original devices, without losing sight of the value of the design. They will also discover the possibilities offered by digital manufacturing applied to textiles, as well as the fundamentals of developing, with the prototyping phases involved, an electronic and/or smart garment or accessory.

The initiative will last for 6 sessions, with a total dedication of 42 hours. 4 of these will take place at the Kutxa Kultur Moda workshop space in Tabakalera, San Sebastian, and 2 at the installations of the Cristóbal Balenciaga Museum. The sessions will run every Saturday and Sunday from October 13 to 28, from 10:00 to 14:00 and 15:00 to 18:00.

## Fashion and Technology

## 13/10/2018 I. E-textiles and wearable technology.

CRISTOBAL BALENCIAGA MUSEOA, Getaria

Today wearables and/or technological fabrics are being developed which bring new functionality to the textile sector, and to fashion in general. In this session, the participants will be introduced to the construction of flexible circuits and to the LilyPad Arduino platform for the creation of interactive clothing accessories.

## 14/10/2018 2. DIY crafts, code and sensors

CRISTOBAL BALENCIAGA MUSEOA, Getaria

In the last decade, the well-known IoT (Internet of Things) has introduced technological improvements to our lives, and fashion has cleverly incorporated and turned this technological revolution to its advantage. In this session, the participants will take their first steps in the creation of wearable textile sensors (DIY manufacturing of potentiometer, pressure and flex, and tilt sensors). Said sensors have the ability to interact with the person wearing them and their environment, gathering information on both of them.

20/10/2018

## 3. Smart materials

KUTXA KULTUR MODA, TABAKALERA, Donostia/San Sebastián The session will take a closer look at smart materials such as nitinol and/or thermochromatic dyes. The participants will discover the myriad possibilities offered by the use and incorporation of these materials, and will experiment by means of different paper folding exercises enabling them to generate pleated structures easily applicable to fashion design.

#### 21/10/2018

### 4. Application of digital manufacturing to textiles

KUTXA KULTUR MODA, TABAKALERA, Donostia/San Sebastián In this session we will explore the possibilities of digital design and manufacturing applied to fashion. The participants will receive an introductory course on prototyping with a 3D printer. Also, thanks to collaboration with Material ConneXion Bilbao, they will take a closer look at innovative, sustainable and biodegradable materials.

### 5-6. Prototyping and design

KUTXA KULTUR MODA, TABAKALERA, Donostia/San Sebastián The last two sessions will be dedicated to development of their individual project by each participant whereby they will create an electronic and/or smart garment or accessory. They will therefore take their first steps in creating these new products using the "Design thinking" methodology. The objective of these sessions will be to offer a complete overview of the process to develop and implement an idea taking account of aspects such as functionality, aesthetics and sustainability.

## Paola Guimerans



Paola Guimerans is an artist, educator and creative technologist. She took the MFA Design and Technology at the Parsons School of Design, New York, and worked at the NY Fashion Technology Lab. In 2017 she defended her doctoral thesis at the Complutense University in Madrid with the title "Technology as a creative material: E-textiles and their derivatives in the field of visual arts." This work proposes new teaching methods from a multidisciplinary approach also focussed on emerging artistic opportunities, both linked to the field of wearables and e-textiles in a participatory and collaborative cultural framework typical of the digital era.

Paola is an advisor on educational innovation and participates in developing new and interdisciplinary curricular contents adapted to school and university education. She is an author on the PrototipadoLAB resources platform and founder of the Aula STEAM initiative. For the last decade she has participated in national and international forums and conferences including the Make Education New York World Maker Faire, the Conference on Tangible, Embedded, and Embodied Interfaces TEH3 or the IATED International Academy of Technology, Education and Development, among others.

paolaguimerans.com aulasteam.com prototipadolab.com

## Material ConneXion



Material ConneXion is the most important international centre specialising in the search for and consultancy on innovative and sustainable materials, and on transformation processes. Founded in 1997 in New York, with its first library of physical materials, in time it has spread to seven locations in the United States, Asia and Europe. Today it manages the biggest materials library in the world, with more than 7,000 references.

Material ConneXion Bilbao was born in 2015 as an initiative headed by Material ConneXion Italia, located in Milan and founded in 2002 as the European institution with the longest background. Its mission is to transfer knowledge and improve competitiveness by innovating in materials, enabling the creation of better products and solutions with higher added value.

It advises and collaborates with a wide range of entities including independent professionals, designers, research centres, R&D departments, universities, etc. It also, in turn, constitutes an excellent platform lending world visibility to locally-generated materials and processes. The point is that Material ConneXion Bilbao was born with the mission to act as a channel for identifying and turning the spotlight on the creative, scientific and technological potential of our milieu, and to facilitate improved reach on the market of new materials and innovative, sustainable transformation technologies.

Material ConneXion Bilbao, located in the centre of Bilbao, currently has a selection of more than 1,000 materials which continues to grow and update. It is an open space where workshops, conferences and training initiatives are organised. DATES Every Saturday and Sunday from 13-28 October 2018.

<u>TIMES</u> 10:00 - 14:00 / 15:00 - 18:00

#### PARTICIPANTS

This activity is intended for all people interested in learning technological methodologies and practices applied to fashion

#### REQUIREMENTS

No prior knowledge of electronics is required; these are sessions organised in small groups with exercises using methodologies which are adapted and accessible for everyone and where the participants can create and experiment.

### PLACES LIMITED

#### REGISTRATION REQUIRED

In the event of failing to meet the minimum number of participants, all of those who have registered will be informed of the activity cancellation and will receive a refund where appropriate. A certificate of attendance will be issued at the end of the activity.

#### REGISTRATION

Registration will be open from the date on which the activity is published until October 7 (inclusive), or until all places are taken. There are 16 places which will be filled on a strict first come, first served basis. Those interested must complete the Museum's online registration form or send an email.

#### LANGUAGE

Spanish.

### PRICE

#### 230€

The price includes the materials (costing approximately 50 euros per student), except for a laptop which each participant must bring with them.

#### CONTACT

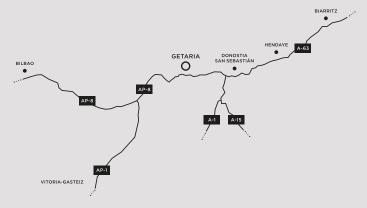
T 943 008 840 didaktika@cristobalbalenciagamuseoa.com



**kutxa kultur** moda kutxa fundazioa B

#### CRISTÓBAL BALENCIAGA MUSEOA

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Biarritz — 71 km Bilbao — 81 km Donostia / San Sebastián — 25 km Iruña-Pamplona — 97 km Vitoria-Gasteiz — 83 km

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