

# OFI CINAS 2024

LAB ABERTO  
FAB LAB



**6 JAN**

Digitalização 3D de peças pequenas

Carlos Roque

parceria FAB LAB Lisboa

Digitalização 3D  
Artur Coelho

**3 E 24 FEV**

Impressão 3D em cerâmica

Sandra Casaca

Eva Caetano

Tânia Albuquerque

parceria FAB LAB Henriques Nogueira

Modelação 3D com Fusion 360

António Gonçalves

Aplicações IA em 3D Generativo

Artur Coelho

**2 MAR**

Modelação 3D com Blender

Madalena Oliveira

Impressão 3D

Mário Viana

**6 ABR**

Animação 3D com Blender

Madalena Oliveira

Modelação 3D com o Tinkercad

João Simões

**4 MAI**

Visita de estudo às empresas TETRALOGIA e EROFIO e, FAB LAB Porto de Mós

parceria FAB LAB Porto de Mós

**2 JUN**

Digitalização com Blender

Ricardo Pereira

Modelação Orgânica (a anunciar)

**20 E 21 JUL**

Lab Aberto Bootcamp 2024  
Espaços Flexíveis de Aprendizagem  
Encontro Nac. FAB LAB

**12 E 19 OUT**

Impressão 3D de instrumentos musicais

Mário Estanislau

Plotter de Corte de Vinil

Susana Esteves

Impressão 3D e acabamentos

Tiago Elias

**2 NOV**

Corte a Laser

João Simões

Manutenção de computadores

Márcio Daniel

**16 NOV**

Plantação de Árvores

Lab Aberto FAB LAB

**7 NOV**

Electrónica básica e soldadura

João Simões

Márcio Daniel



mais info: [lababerto.pt](http://lababerto.pt)

# Workshops 2024

**Don't follow the wave of consumerism, this year we offer training!!!**

This year 2024 the **main theme will be 3D**, from animation to finishing, including printing on different materials, including ceramics, modeling and scanning. But the topics of Education, 2D, Environment and Electronics will also be covered.

All workshops **are practical in nature** and take place in an informal environment with moments of contextualization and discussion of structuring concepts for the topic.

There are introductory workshops with **Free Entry** and paid workshops with advanced content: the latter are aimed at those who have already come into contact with the topics and want to go deeper.

Paid workshops are referenced with their respective value: to guarantee your place you must pay at least 50%, at the time of registration by MBWAY (914965108), PAYPAL (lababerto@gmail.com) or transfer (IBAN: PT50 0033 0000 4551 5310 1950 5).

<b>1st Semester 2024.....</b>	<b>4</b>
6 Jan, 10-4pm: 3D scanning of small parts (Carlos Roque) - 15 euros.....	4
6 Jan, 4pm: 3D Scanning (Artur Coelho).....	4
3 Feb, 10am-4pm: 3D Printing in Ceramics: principles (Eva Caetano, Sandra Casaca) - 35 euros.....	4
3 Feb 4pm: 3D Modeling with Fusion360 (António Gonçalves, Mário Estanislau).....	4
24 Feb, 10am-4pm: 3D Printing in Ceramics: development (Tânia Albuquerque) - 45 euros.....	4
Feb 24, 4pm: AI applications in Generative 3D (Artur Coelho).....	5
2 Mar, 2pm: 3D modeling with Blender (Madalena Oliveira).....	5
2 Mar, 4pm: 3D printing (Mário Viana).....	5
Apr 6, 10am-4pm: Blender: 3D animation (Madalena Oliveira) - 35 euros.....	5
6 Apr, 4pm: 3D modeling with Tinkercad (João Simões).....	5
May 4, 9-18: Study visit to the companies TETRALOGIA, EROFIO and FAB LAB Porto de Mós.....	5
1 Jun, 10-4pm: Digitization with Blender (Ricardo Pereira) - 45 euros.....	6
1 Jun, 4pm: Organic 3D modeling (to be announced).....	6
<b>2nd Semester 2024.....</b>	<b>7</b>
20 Jul, 9-18: Lab Open Bootcamp 2024, Flexible Spaces Learning - 45 euros.....	7
21 Jul, 9-16: Open Lab Bootcamp 2024, National FAB Meeting LAB.....	7
12 Oct, 10am-4pm: Musical instruments: from wood to 3D printing (Mário Estanislau) - 35 euros.....	7
Oct 12, 4pm: Vinyl Cutting Plotter (Susana Esteves).....	7
19 Oct, 10-12pm: Advanced 3D printing (Tiago Elias) - 35 euros.....	7
Oct 19, 4-6pm: 3D printing finishing (Tiago Elias) - 35 euros.....	7
2 Nov, 2pm: Laser Cutting Machine (João Simões).....	8
2 Nov, 4pm: Computer Maintenance (Márcio Daniel).....	8
Nov 16, 3pm: Planting trees (Lab Aberto FAB LAB).....	8
7 Dec, 2pm: Basic Electronics (João Simões).....	8
7 Dec, 4pm: Welding (Márcio Daniel).....	8

# 1st Semester 2024

Set of workshops to be held in the first half of 2024 Theme: 3D.

## **6 Jan, 10-4pm: 3D scanning of small parts (Carlos Roque) - 15 euros**

Carlos will talk about the work he developed with FCUL in the scope of digitalization and machining of small fossils.

FAB LAB Lisbon Partnership

## **6 Jan, 4pm: 3D Scanning (Artur Coelho)**

Introduction to 3D scanning using mobile media: captures via photogrammetry and Lidar on mobile phones, or NeRF/Gaussian Splat using Artificial Intelligence.

## **3 Feb, 10am-4pm: 3D Printing in Ceramics: principles (Eva Caetano, Sandra Casaca) - 35 euros**

Eva and Sandra will give participants a first look at 3D printing in ceramics

FAB LAB Henriques Nogueira Partnership

## **3 Feb 4pm: 3D Modeling with Fusion360 (António Gonçalves, Mário Estanislau)**

António will introduce basic 3D modeling techniques with software that allows modeling in professional contexts. In the second part, Mário will present the musical instruments he builds using 3D printing.

## **24 Feb, 10am-4pm: 3D Printing in Ceramics: development (Tânia Albuquerque) - 45 euros**

Tânia will show the applications of the 3D ceramic printing machine in her professional context of restoring ceramic pieces.

## **Feb 24, 4pm: AI applications in Generative 3D (Artur Coelho)**

Introduction to 3D content generation with Generative AI with Luma AI: NeRF and Gaussian Splat; Luma AI Genie: Text to 3D; CSM: Imaging for 3D. Integration of LLM output into 3D image generation.

## **2 Mar, 2pm: 3D modeling with Blender (Madalena Oliveira)**

Madalena will guide us through Blender, a software that just doesn't make coffee! In this case, you will focus on the 3D modeling component, although this software can perform simulations and animation.

## **2 Mar, 4pm: 3D printing (Mário Viana)**

This workshop is dedicated to those who have never printed in 3D and want to understand the fundamentals of the process as well as what should be avoided when using these tools.

## **Apr 6, 10am-4pm: Blender: 3D animation (Madalena Oliveira) - 35 euros**

In this workshop Madalena will introduce the rudiments of 3D animation with the Blender software.

## **6 Apr, 4pm: 3D modeling with Tinkercad (João Simões)**

In this workshop, João will introduce the basic procedures for using Tinkercad, an online software that allows 3D modeling from geometric solids.

## **May 4, 9-18: Study visit to the companies TETRALOGIA, EROFIO and FAB LAB Porto de Mós**

Study view of the industrial environment of 3D printing in resin (Tetralogia) and metal (EROFIO) and the FAB LAB project in Porto de Mós, to find out what they are doing in the lands of the Lena River.

## **1 Jun, 10-4pm: Digitization with Blender (Ricardo Pereira) - 45 euros**

Ricardo will connect Blender with 3D scanning, so that, by manipulating the files generated by scanning, it is possible to improve the final results.

## **1 Jun, 4pm: Organic 3D modeling (to be announced)**

# 2nd Semester 2024

Set of workshops to be held in the second half of 2024  
Themes: 3D, Education, 2D, Environment and Electronics.

## **20 Jul, 9-18: Lab Open Bootcamp 2024, Flexible Spaces Learning - 45 euros**

At this international conference we will have contact with practices of using flexible and informal learning environments in school contexts, including universities and also taking into account the municipality's perspective.

## **21 Jul, 9-16: Open Lab Bootcamp 2024, National FAB Meeting LAB**

FAB LAB national meeting to share and discuss topics that matter to these spaces.

## **12 Oct, 10am-4pm: Musical instruments: from wood to 3D printing (Mário Estanislau) - 35 euros**

Mário will show how he made the transition between wood and 3D printing when building his musical instruments.

## **Oct 12, 4pm: Vinyl Cutting Plotter (Susana Esteves)**

Susana will introduce basic 2D drawing techniques with application to vinyl cutting machines.

## **19 Oct, 10-12pm: Advanced 3D printing (Tiago Elias) - 35 euros**

This workshop is a technical conversation between Tiago and the participants, in which they will raise their doubts, printing problems and, in collaboration, find specific solutions.

## **Oct 19, 4-6pm: 3D printing finishing (Tiago Elias) - 35 euros**

As in the previous year, this workshop aims to address the problem of finishing 3D printed parts.

## **2 Nov, 2pm: Laser Cutting Machine (João Simões)**

João will introduce basic concepts of how a laser cutting machine works and discuss the use of 2D drawing in the context of this technique.

## **2 Nov, 4pm: Computer Maintenance (Márcio Daniel)**

Márcio will show how we can maintain our computers in House.

## **Nov 16, 3pm: Planting trees (Lab Aberto FAB LAB)**

This will be a day dedicated to the environment with a brief presentation of the importance of trees in the current context of warming issues and the practical planting of a group of trees in a location to be announced.

Carlos da Câmara, climatologist and FCUL professor, “The importance of trees for the climate?” (to confirm)

Clara Araújo, Forestry Engineer, “How to make a tree germinate before planting it?” (to confirm)

## **7 Dec, 2pm: Basic Electronics (João Simões)**

João will discuss electronic circuits so that the basic concepts can be understood.

## **7 Dec, 4pm: Welding (Márcio Daniel)**

The basic principles of welding in the context of electronic systems are introduced here, in a practical way, by Márcio.