



## Composites materials and applications for building industry

OPEN ALL YEAR ROUND

Fiber-reinforced plastics (FRP) are advanced materials that combine different individual materials to achieve higher strength and flexibility characteristics.

FRPs have experienced widespread expansion in multiple industrial sectors, as they produce high-quality, cost-effective, and durable products. The FRP market for construction is driven by the growing demand for products in the building and construction sector due to their long service life and low maintenance cost.

According to a report by the Architects Council of Europe, most architects have not received any training in FRP. In addition, construction workers with primary or secondary education also have no knowledge of FRP. In addition, the partnership has identified a lack of initial and continuing VET training in the use of FRP in the construction sector that limits the introduction of these materials.

With the drafting of the new Eurocode on composite materials that will come out in a few years. It is necessary to know these materials in order to better understand their behavior and their constituent elements.

### Plazo preinscripción

Hasta el 27 de diciembre 2024 o hasta completar aforo



#### Fecha y horario

Del 16 de ene al 31 de dic 2024



#### Duración

80 horas lectivas



#### Ubicación

Online



#### Precio

Empresa asociada:  
600€

Empresa no asociada:  
750€

Unemployed - 600 € 10% discount for the 2nd or more attendees from the same company.

## Objetivos

- Acquire an overview of composite materials, resins, additives, fillers and reinforcements, as well as their properties and applications in the construction sector.
  - Know how to determine the main properties of composite materials.
  - Knowing how to interpret the information on the safety data sheet.
  - To know the transformation processes of composite materials for construction: their advantages, disadvantages and description of the system.
  - To learn more about quality infrastructures in the construction sector, as well as the different CE marks that exist, what they are and how to obtain them.
  - Know how to source materials and products, including reinforcements and matrix resins, taking into account the requirements of the final application.
  - Have an overview of the use of composite materials in various construction elements.
  - Identify where composite materials are currently used and the specifications that need to be incorporated into a project using such materials.
  - Understand the differences in manufacturing processes and when it is best to use one or the other.
  - Learn the different ways in which a composite can be repaired.
  - Understand how the circular economy can bring benefits to improve the sustainability of buildings.
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## ¿A quién va dirigido?

- Architects, Technical Architects, Engineers, Site Managers and workers in the construction sector who wish to learn more about these materials.
  - Priority registration will be given to associated industrial companies and clients.
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## Temario

### MATERIALS

- > Composite Materials
- > Material´s Properties
- > Tecnical Data Sheets and SDS

### PROCESSES

- > Processes
- > CE Marking
- > Searching Products

### CALCULUS AND DESIGN

- > Introduction Calculus and Design
- > Calculus and Design

### MANUFACTURING

- > Manufacture of composite materials for construction
- > Examples of manufacturing
- > Circular economy

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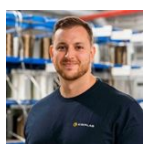
## Convocatorias abiertas

**Del 16 de ene al 31 de dic 2024**

📍 Online

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## Profesorado



**Jaime Lozano Barrachina**

Personal investigador de AIMPLAS /  
AIMPLAS Researcher

## Metodología

- The course has been designed to be delivered online through AIMPLAS Plastics Academy, providing flexibility to follow it at any time and from anywhere.
  - This course is modular and consists of interactive multimedia content. AIMPLAS professional technicians collaborate in its development and implementation.
  - From the moment you start the course, you will have two months to complete it.
  - At the end of the course, you will be able to request a question and answer session by videoconference with a maximum duration of one hour.
  - **PRICES**
  - Associated companies - 636€.
  - Non-member companies - 795€.
  - Unemployed - 636€.
  - 10% discount for the 2nd or more attendees from the same company.
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## Organiza:

